Bowling Green State University provides equal educational and employment opportunity regardless of race, sex, color, national origin, geographical area, religion, creed, age, marital status, physical handicaps or veteran status. The University will not knowingly cooperate with, support or employ the services of other organizations that discriminate against persons on such grounds.
Offering degrees in the colleges of:

- Arts and Sciences
- Business Administration
- Education and Allied Professions
- Health and Human Services
- Musical Arts
- Technology

Jerome Library houses more than 4 million items and serves as the focal point of the university's intellectual activity.
University Organization

Administrative Officers

Paul J. Olscamp, University President
Eloise E. Clark, Vice President for Academic Affairs
J. Christopher Dalton, Vice President for Planning and Budgeting
Mary M. Edmonds, Vice President for Student Affairs
Robert L. Martin, Vice President for Operations
Philip R. Mason, Vice President for University Relations
Louis I. Katzner, Associate Vice President for Research and Dean of the Graduate College
Winifred O. Stone, Associate Dean of the Graduate College and Director of Graduate Admissions
Denise M. Trauth, Associate Dean of the Graduate College

McFall Center houses the Graduate College.

Questions? Who to call

Address Correspondence to:
Office of the Graduate College
Bowling Green State University
Bowling Green, Ohio 43403-0180

Telephones:
The Graduate College (419) 372-2791
Graduate Admissions (419) 372-2793
Research Services Office (419) 372-2481

Address specific inquiries to the following offices:

Office
Counseling and Career Development Center
Financial Aid
Graduate Registration
International Programs
Off-Campus Housing
Placement Office
Registrar
Student Employment

Location
320 Student Services Bldg.
450 Student Services Bldg.
120 McFall Center
403 South Hall
425 Student Services Bldg.
360 Student Services Bldg.
110 Administration Bldg.
460 Student Services Bldg.

Telephone
(419) 372-2081
(419) 372-2651
(419) 372-7970
(419) 372-2247
(419) 372-2458
(419) 372-2356
(419) 372-8441
(419) 372-2651

Changes

While every effort is made to provide accurate and up-to-date information, the University reserves the right to change without notice statements in the *Bowling Green State University Graduate Catalog* concerning rules, policies, fees, curricula, courses, or other matters.

Courses may be closed because of limited resources or facilities, or cancelled because of unavailability of faculty or insufficient enrollment.

The Graduate Council has the authority to make policy and curriculum changes that do not appear in this publication. The Council — elected by the graduate faculty and chaired by the dean of the Graduate College — is responsible for advising the dean regarding the goals and direction of graduate education and establishing regulations that govern all graduate programs at the University.
It is difficult for a catalog -- mere paper and ink -- to convey the atmosphere and quality of Bowling Green State University because our real image lies in our people. Let me tell you a little bit about them.

On our campus you will find increasing numbers of graduate students from diverse backgrounds seeking to expand the scope and level of their expertise. You will find a superior staff dedicated to providing efficient and effective service in a personal and caring way. You also will discover a superb faculty working vigorously to push back the frontiers of knowledge and understanding through their scholarship, research, and creative efforts. Ours is a faculty that sets very high standards for its students and then works tirelessly to help them achieve their goals.

Most of our students would probably agree that BGSU is the ideal size for a university. It is large enough to offer a rich array of graduate programs supported by top-notch libraries, laboratories, and computer facilities. Yet it is small enough to allow for and encourage the warm, personal interaction that is characteristic of small institutions.

While it cannot substitute for a chat with a professor or visit to our campus, this Catalog uses its tools - words and photographs - to provide you with a road map. It offers information about the courses, degree programs, and resources available at BGSU, as well as the policies and regulations that govern our programs. We at BGSU are all very proud of the outstanding programs and resources represented in the pages of this Catalog.

The coming decade will see an increasing need, both in the workplace and in academe, for individuals with advanced degrees. Bowling Green State University will continue to define, as part of its primary mission, the providing of advanced educational opportunities for those who are going to assume leadership roles in our complex modern world.

Paul J. Olscamp
President
Accreditation

The University is fully accredited at the bachelor's, master's and doctoral levels by the North Central Association of Colleges and Secondary Schools. The University is a member of the National Association of State Universities and Land Grant Colleges, the Midwest Association of Graduate Schools, the Council of Graduate Schools and the Central States Universities, Inc.

Above: Jerome Library is located on the east side of campus.

Above: Jaak Panksepp, Distinguished Research Professor of psychology, chats with colleagues.

Above: Martha Tack, professor of Educational Administration and Supervision, discusses career strategies with students.

Top left: Members of the African-American Graduate Student Association prepare to meet new graduate students at the professional development program.

Above: The Graduate Catalog was designed and edited by Karen J. Christy with the assistance of Deborah Burris under the supervision of Denise M. Trauth.
# Table of Contents

- The University ................................................................. 6
- The Graduate College ......................................................... 10
- Registration ........................................................................ 11
- Admission ........................................................................... 15
- Costs and Financial Aid ......................................................... 19
- Academic Regulations ......................................................... 25
- Degree Programs .................................................................. 31
- Summary of Degree Fields and Specializations ....................... 49
- Index of Fields and Specializations ........................................... 50

## Graduate Programs and Courses ........................................... 52
- Accounting & Management .................................................. 52
- American Culture Studies .................................................... 53
- Applied Human Ecology ....................................................... 56
- Applied Statistics & Operations Research ........................... 58
- Art ....................................................................................... 59
- Arts & Sciences ................................................................. 61
- Biological Sciences ............................................................ 62
- Business Education ............................................................ 66
- Career & Technology Education ......................................... 67
- Chemistry ............................................................................ 69
- College Student Personnel .................................................. 71
- Communication Disorders .................................................. 73
- Computer Science ............................................................. 74
- Economics ............................................................................ 77
- Educational Administration & Supervision ......................... 78
- Educational Curriculum & Instruction ................................... 81
- Educational Foundations & Inquiry ....................................... 85
- English ............................................................................... 87
- Geography ............................................................................ 91
- Geology ............................................................................... 93
- German, Russian & East Asian Languages .............................. 95
- Gerontology ......................................................................... 97
- Graduate Business Administration ....................................... 98
- Graduate College ................................................................ 101
- Health, Physical Education & Recreation ............................. 101
- History ............................................................................... 103
- Interpersonal & Public Communication ................................ 106
- Mass Communication ......................................................... 108
- Mathematics & Statistics ..................................................... 110
- Mathematics Supervision Program ...................................... 114
- Music ................................................................................... 115
- Organization Development .................................................. 117
- Philosophy (Applied) ........................................................... 118
- Photochemical Sciences ....................................................... 121
- Physics & Astronomy .......................................................... 122
- Political Science ................................................................. 123
- Popular Culture ................................................................. 126
- Psychology .......................................................................... 128
- Rehabilitation Counseling .................................................. 131
- Romance Languages ........................................................... 132
- Sociology ............................................................................. 134
- Special Education ............................................................... 138
- Technology ......................................................................... 142
- Theatre ............................................................................... 144
- Women's Studies ............................................................... 146
- Index .................................................................................... 148
- Campus Map ....................................................................... inside back cover
Bowling Green State University is situated on a 1,250-acre campus with more than 100 buildings. The University offers more than 170 undergraduate degree programs, 12 master's degrees in 69 fields, two specialist degree programs, and Ph.D. programs in 14 fields with more than 60 specializations.

At the center of the University’s academic community are the 730 full-time faculty members, who are engaged in teaching, research, and public service activities. Bowling Green has faculty who are national and international experts in their fields, traveling throughout the country and the world to share their knowledge with other professionals. Many have won awards for both their research and their teaching. They are authors, having written texts on topics as diverse as the subjects they teach, and their writings have appeared in the top journals in their field. Faculty expertise is in demand from business, government, education and social agencies, providing a link between the University and the publics which support it. A diversified faculty committed to improving the quality of the learning environment is recognized as one of the University’s major resources.

Established in 1910 as a teacher-training institution, Bowling Green State University retains the personalized small school atmosphere of its early years while the range of educational opportunities is that expected of a large University. When Bowling Green opened its doors in 1914, there were 15 faculty members and all 158 students were studying to be teachers. Today the University has more than 730 full-time faculty and 18,000 students on its main campus, including about 2,200 graduate students. Degree programs are offered through the Colleges of Arts and Sciences, Business Administration, Education and Allied Professions, Health and Human Services, Musical Arts, Technology, and the Graduate College.
More than half of the University's 100 buildings have been constructed since 1960. Any of the older structures have been extensively remodeled and most facilities are equipped to accommodate students with handicaps.

The nine-story Jerome Library is the focal point of the University's intellectual activity. Located in the center of campus, the library houses more than 4 million items, including books, journals, periodicals, microforms, government documents and other materials. Special sections of the library include the Institute for Great Lakes Research containing materials on the shipping industry's past and present, the Sound Recordings Archives and the Popular Culture Library which contain a vast assortment of books, posters, magazines, and other materials of popular appeal. In addition, the Center for Archival Collections houses primary source material on northwest Ohio and the University, rare books and special collections.

The Ogg Science and Health Library in the Mathematical Sciences Building houses a collection of material related to the physical sciences, health, computer science, medical technology, mathematics and technology.

In addition to its libraries, the University provides research facilities and equipment to serve students in a wide range of disciplines. The science complex features modern laboratories and sophisticated equipment as well as an experimental animal research facility and the Physical Sciences Laboratory Building - including a 118-seat planetarium and observatory. BGSU's Electron Microscopy Center is one of the finest in Ohio, and in 1985 acquired a state-of-the-art transmission electron microscope.

Art facilities are located throughout the campus with specialized studios including an electronic art studio offering computer assistance to artists. An art gallery located in the Fine Arts Building annually features works by students and faculty, as well as traveling exhibits. Photography laboratories are available at several campus locations. A mass communication building houses the campus daily newspaper The BG News and two campus radio stations - WBGU-FM, a non-commercial educational station, and WFAQ-AM, a commercial station. The University also maintains WBGU-TV, a Public Broadcasting Service affiliate.

The Moore Musical Arts Center houses two concert halls, and free concerts, many featuring internationally known performers, are scheduled throughout the year. Also located in the center are practice rooms, rehearsal halls, studios and an electronic recording studio. For the fitness-minded, a Student Recreation Center houses 14 handball/racquetball courts, a running track, two swimming pools and basketball/volleyball courts. Other recreational facilities include an 18-hole golf course, an outdoor fitness trail and 25 tennis courts.

The University provides students, faculty and staff with access to diverse computing capabilities through several large-scale, mini and microcomputers. DEC VAX 780, 785 and 8530 are available for interactive use with FORTRAN, PASCAL and other popular computer languages from terminals located in the Mathematical Sciences building and other areas on campus.

An IBM 4381 is available for batch processing from computing service centers in the University Union, Technology, Business Administration and other remote locations on campus. An IBM 4341 is available for interactive statistics.

There are 17 laboratories equipped with IBM, Apple II and Apple Macintosh microcomputers. Access to the Cray Y-MP 8/64 at the Ohio Supercomputer Center is available through an inter-campus network.

A consultant is available in Hayes 102 to help users with microcomputer or mainframe software (such as statistical packages) supported by the University Computer Services. The University Computer Services' Facilities Guide contains a complete overview of the University's computing resources. This guide is available in Hayes 102.

The Graduate Student Senate supports scholarly research and student development through its Professional Development Fund. Grants are made to graduate students to encourage attendance and participation at conferences, conventions, and workshops. A large number of the awards are made to graduate students who are giving papers at regional and national conventions. The grants to persons making presentations are at a higher rate than for students attending conferences as an auditor. The grants are reviewed on a funds-available basis assuming that documentation is submitted in the prescribed manner. Additional information and application forms can be obtained at the Office of the Graduate Student Senate, 300 East McFall Center (372-2426).

The Graduate College also provides research support for graduate students through its thesis/dissertation fund. Grants are awarded on a competitive basis, and the proposal is assessed for quality and completeness. These grants are intended to help meet unusual expenses required by thesis or dissertation research.

Any applicant whose research involves collection of any kind of information from or about people by survey, interview, testing, observation, examination, specimen collection or review of records must obtain prior approval from the Human Subjects Review Board. Application forms are available in the Research Services Office and assistance in preparing an application can be sought.
The University

from an adviser or Research Services staff member. Proposals for thesis/dissertation support are submitted and approved by the Research Services Office prior to beginning the research activities for which support is requested.

**Centers and Institutes**

**Center for Archival Collections**

Located on the fifth floor of the library, the CAC preserves and makes available to researchers archival and manuscript material relative to northwest Ohio and the University. Much of this is maintained through an extensive microfilm program.

Among the materials are local government records, newspapers, census records, photographs and rare works concerning the 19 counties served by the Center. The archival collections include all BGSU institutional records deemed of historical value, including *The BG News*, yearbooks, and other University publications. Also included are special collections reflective of the academic interests of faculty and established graduate programs at BGSU.

**Center for Governmental Research and Public Service**

The CGRPS is designed to enhance the quality of education and information available to local governments in northwest Ohio and their elected, appointed and administrative officials. It is responsible for conducting a variety of projects either through applied research, technical assistance, or management training and development. Applied research projects are those that faculty and staff participate in on a state or federal level which have a direct impact upon local government policies in northwest Ohio. Technical assistance projects provide a direct management or service benefit to client local governments or nonprofit agencies. As part of management training and development effort, the Center conducts workshops, conferences, and seminars for local government administrative personnel and elected and appointed officials.

**Center for Photochemical Sciences**

This is a prototype research/teaching entity crossing traditional disciplinary boundaries to create a unique interdisciplinary approach to the photochemical sciences - the interaction of light with matter. Research concentrations include photochemistry, photophysics, photobiology, photopolymer science and spectroscopy. The educational programs of the Center prepare students at all levels for careers in academia and industry. The Center also provides a vital link between academia and industry in the development of new technologies. Advances in imaging sciences, medicine, and stereolithography are dependent on the photochemical sciences. The Center also serves as a clearinghouse for information relevant in the photochemical sciences.

**Center for the Study of Popular Culture**

The Center is the national headquarters for the Popular Culture Association and the American Culture Association. The Center also houses the Popular Press which publishes, among other works, *The Journal of Popular Culture*, *The Journal of American Culture*, *Journal of Cultural Geography* and *Clues: A Journal of Detection*. The editorial offices of the *Journal of Popular Film and Television* also are housed in the Center.

**Electron Microscopy Center**

The Electron Microscopy Center provides support for instructional and research activities of the University faculty, staff and students, and also serves the research needs of industrial and academic users in the surrounding area. The Center has two transmission electron microscopes, two scanning electron microscopes, energy-dispersive X-ray analyzers and other optical and microanalytical instrumentation. In addition, the Center houses a light optics laboratory and a computer terminal linked directly to the University's mainframe computers for applications in image analysis. The Center also houses the necessary ancillary equipment for specimen preparation and photographic reproduction. Technical staff are available to provide information and services to users.

**Institute for Psychological Research and Application**

The IPRA facilitates interdisciplinary collaborative educational, research, training, demonstration projects, and consultation in a wide range of business, industry, and other public and private organizations. The Institute is grounded in the diverse areas of expertise of psychology faculty, including industrial/organizational, developmental, clinical, aging, and experimental. The Institute has assisted clients in such areas as personnel selection and evaluation, staff training and development, drug abuse prevention and intervention, program evaluation, employee safety, EEO/Affirmative Action, retirement, health psychology, and nursing home programming. Projects are designed to fit individual needs of client organizations.

**Management Center**

A division of the College of Business Administration, the Center offers educational training, management development, consulting and research assistance to business, industry and other public and private institutions. The Center has assisted clients in such areas as strategic planning, market
analysis, feasibility studies, acquisition analysis, regional economic development, profit improvement, management development, sales forecasting and inventory management.

Mid-America Drosophila Stock Center
Since 1966, the Center has been a repository of the world's largest collection of the fruit fly species Drosophila melanogaster. Funded by the National Science Foundation, the Center annually supplies quantities of the species to accommodate nearly 1,000 requests from scientists around the world.

National Drosophila Species Resource Center
The Center contains 400 species of fruit flies in 4,000 strains and is the largest scientific facility of its kind in the world. Flies are bred and supplied for international research in basic genetics, genetic engineering, evolution and cancer.

National Institute of Physical Education for Children
The Institute is dedicated to improving physical education experiences for all children, including the pre-school child, and encourages research on such topics as movement and motor learning and ways in which attitudes and values are affected by physical education. In-service opportunities and regular summer graduate seminars for teachers and others are sponsored by the Institute.

Philosophy Documentation Center
The Documentation Center collects, stores and disseminates bibliographic and other types of information in philosophy. The Center's major publication is The Philosopher's Index, a subject and author index with abstracts of all major philosophy journals in English, French, German, Spanish, Italian and other selected languages and other related interdisciplinary publications.

Population and Society Research Center
The PSRC is engaged in interdisciplinary studies in sociology, psychology and institutional research. Staff members conduct surveys for external clients on questions of social concern and the quality of life in northwest Ohio, such as attitudes on the use of nuclear power, energy conservation, motor vehicle fuel usage and vehicle purchasing plans.

Productivity and Gainsharing Institute
The Institute assists organizations in the study, evaluation, installation and maintenance of productivity, gainsharing and measurement systems. Through the College of Business Administration, the Institute provides formalized education programs for managers and employees during the installation and first and subsequent years of operation.

Social Philosophy and Policy Center
An exciting development in current philosophy is a renewed interest in the traditional questions of ethics, political philosophy, and in the contribution that philosophers, working in concert with lawyers, economists, political scientists, and other social scientists, can make to the formation of public policy. The SPFCC, founded in 1981, focuses on the ethical aspects of public policy questions. Ethical analysis is informed by the results of economics, jurisprudence, and political science.

The Center sponsors a wide variety of programs in pursuit of its objectives. The Visiting Scholars Program brings to the campus outstanding scholars to pursue research in philosophy and the social sciences. They are given offices and clerical support, and the Center maintains a library and a staff of graduate assistants to aid in their research.

The Center's Interdisciplinary journal, Social Philosophy & Policy, is published by Basil Blackwell of Oxford, England. The Center also sponsors a continuing series of conferences at the University and elsewhere in the United States. Papers presented at these conferences are published in Social Philosophy & Policy or in other journals such as the University of Chicago Law Review. The Center's book series, Studies in Social Philosophy and Policy is co-published with Transaction Press, Rutgers University.

Statistical Consulting Center
The primary objective of the Statistical Consulting Center (SCC) is to provide statistical assistance to faculty and graduate students in support of research. The assistance provided can involve one or more of the following: design of the study, selection of the appropriate statistical method to analyze the data, writing of necessary statistical programs needed to perform the analysis, and the interpretation of the results.

The SCC operates primarily on an appointment basis. The initial appointment is with the director and a graduate student who works with the project for its duration. The type of assistance needed is determined at the initial meeting, and as much specific assistance as can be given at that stage is provided. Most projects require at least one more appointment, and many require several consultations before the project is completed. The graduate student's adviser must indicate (in writing) the level and amount of assistance to be rendered.

The Statistical Consulting Center is located in 240 Mathematical Sciences Building (372-2580).
The major function of the Graduate College is to motivate and educate a person at an advanced level to be an independent intellectual leader in his profession and in research. The ultimate purpose is to develop the resourcefulness and responsibility of such an individual by furthering in her the ability to handle effectively, and at first hand, the materials and affairs of life and to use critically the reports of others, judging both their value and their limitations.

Graduate study involves a level of complexity and generalization that reflects and extends the knowledge and intellectual maturity of an accomplished baccalaureate degree holder. Moreover, graduate study must occur in the company of students interested and capable enough to analyze, explore, question, reconsider, and synthesize old and new knowledge and skills.

Graduate work is, therefore, much more than the passing of a number of courses and the fulfillment of certain minimum requirements. The graduate student should learn, as distinguished from being taught. The main function of the Graduate College is to help the student make the best use of the University's resources in pursuit of a mature and thorough understanding of significant problems. Each student should consider himself a co-worker with other students, scholars, and teachers in cooperative intellectual endeavor on a high level.

The degree of Doctor of Philosophy is offered in American culture studies, biological sciences, communication disorders, educational administration and supervision, English, history, interpersonal and public communication, mathematics, mass communication, philosophy (applied), photochemical sciences, psychology, sociology, and theatre. Master's degrees are awarded in almost all academic departments and several interdepartmental areas.

development of those members of the University faculty who are actively engaged in research and teaching at the graduate level. Membership therein constitutes recognition of scholarly excellence and professional creativity.

Members of the Graduate Faculty may teach courses at the 500 through the 700-level, serve as members of master's and doctoral committees, direct master's theses and doctoral dissertations, vote in Graduate College elections, and serve on the Graduate Council. Duties and privileges of Graduate Faculty are described in Article VIII of the Academic Charter.

In order to maintain the Graduate Faculty as a viable body, the qualifications of the members are reviewed periodically. A list of Graduate Faculty is provided in each program's listing.

The Graduate Student Senate (GSS) is an elected body composed of, and administered by, graduate students with the objective of representing the interests of graduate students at Bowling Green State University. GSS serves an important role as liaison between the Graduate College and graduate students. Each graduate program is afforded representation in the Graduate Student Senate. In addition to its involvement in academic and financial issues, GSS coordinates a variety of cultural and recreational events throughout the year.

GSS maintains representation on the various standing committees of the University.

An important component of the Senate's responsibility is the administration of a Professional Development Fund to enhance the career opportunities of BGSU graduate students. GSS disburses funds for conferences, professionally-related travel, and other related needs.

The GSS holds open meetings once a month. Its office is located in 300 East McFall Center; telephone: 372-2426.

The Graduate Student Professional Development Program has many positive influences on the careers of graduate students. An outstanding feature of the program offerings is a one-week series of workshops and seminars held prior to the fall semester. The focus is on teaching, research, and higher education. This experience is required as a contractual condition for new graduate assistants and fellows. All graduate students, as well as faculty, are invited to attend these sessions.

The Cooperative Education Program provides an opportunity to serve in a series of professionally relevant cooperative work assignments in business, industry, government, and nonprofit organizations. Academic credit may be awarded for the off-campus work experience, subject to approval from the academic area and the Graduate College.
The Office of Registration and Records, Graduate Division, is located at 121 McFall Center. All graduate students' registrations and schedule changes are completed in this office.

A student must make formal application for admission to the Graduate College prior to registering for classes in order to receive graduate credit. The Office of Graduate Admissions is located at 120 McFall Center.

Graduate students must register during the announced registration period each term. Graduate students who are funded as graduate assistants or doctoral fellows are required to register during Advance Registration as a condition of their contract.

An Advance Registration period is available to continuing students for fall and spring semesters only. Registration materials are mailed to currently enrolled students. Requests for courses are made one semester in advance, and serve as the basis for section registration. Students who fail to request courses must wait for open (in-person) registration to register. Students are later notified of schedules and billing.

Prior to each semester, a schedule of classes is published listing course offerings for that semester. The schedule is available from departmental graduate coordinators and from the Graduate College Office.

A student may obtain a Summer School schedule by writing to Summer Programs, 300 McFall Center, by April 15.

Academic Year
The academic year is divided into two semesters of approximately 16 weeks each and a summer session.

The summer session is conducted as a regular part of the academic program. While some courses are offered for the full session, most are offered in one of two consecutive terms, each complete within itself so that the student may enroll for one term or for both terms.

Students who do not take advantage of the Advance Registration may still register through the seventh calendar day of the term. Students who register during Advance Registration will be billed by the bursar. In-person registrations after fees are due must be paid for by the last working day prior to the start of the term. Registration after the start of the term must be prepaid, that is, must be accompanied by a clearance from the bursar.

A student whose registration fee is not paid by the first day of classes risks cancellation of her schedule. Students registering after the start of the term are subject to a late registration fee, graduated from $25 to $75 and a late payment fee of $5 per day.

A graduate student who uses the University services must be regularly registered for credit. This would include the student who uses the University library or laboratory facilities or who consults with a faculty member while working on a thesis or dissertation, or while preparing for a master's or doctoral examination. See "Degree Programs" in this Catalog for additional information.

Deadlines

Schedules
## Changes in Registration

Adds and drops (including those for audited courses) are allowed at the discretion of the student (with adviser's approval) for the first seven calendar days of a semester. Approval of the instructor is required for entry into a class. A student may not add a class, nor change to or from audit, nor have a course removed from his record after the seventh day. Similarly, changes in a Summer Session registration may be made through the third day of the term.

A student may drop a course or withdraw from the University between the second and ninth week of a semester and be eligible for a "WP" (withdraw passing), contingent upon satisfactory performance in the course. The signatures of each instructor and the adviser are required. After the ninth week, a student who withdraws from a course receives a "WF" (withdraw failing) unless a "WP" is authorized by the graduate dean for serious documentable contingencies such as induction in the military service.

Similarly, there are deadlines for "WP" terminations during the Summer Term. A student may drop a course or withdraw from the University during the Summer Term and receive a "WP" (withdraw passing) contingent upon satisfactory performance in the course if the drop or withdrawal occurs prior to the following deadlines:
- 10-week session during the sixth week
- 8-week session during the fifth week
- 5-week session during the third week

See the calendar published by the Office of Registration and Records for specific deadlines for withdrawing from a course during a particular summer term.

## Dismissal/Withdrawal

### Dismissal from a Course

The University reserves the right to withdraw any graduate student from any course when the student's continuance is not in the interest of the student, the class, or the University. The dismissal of a graduate student from a course and the grade and/or notation in the official record are determined by the dean of the Graduate College and the vice president for academic affairs, after consultation with the instructor in the course. A student has the right of appeal as prescribed by the Graduate College.

### Withdrawal from the University

A student who wishes to withdraw from the University in good standing must obtain the permission of the dean of the Graduate College. After classes begin, a student who drops all classes (even if enrolled for only one class) must withdraw from the University at the Office of the dean of the Graduate College. If a student leaves the University without proper notice and permission, he receives a grade of "WF" in all courses and is not entitled to any refund of fees.

## Audit

An attempt and is not counted toward minimal registration loads; moreover, audit registration cannot be processed after the drop/add deadline for a term has been passed.

A student who wishes to attend a class without receiving credit for it may register to audit that course. A per-hour instructional fee is charged as if the student had registered for the course for credit. Audits do not count toward minimal registration loads; moreover, audit registration cannot be processed after the drop/add deadline for a term has been passed.

## Outdated Courses

A completed course is valid toward the master's degree for six years plus one term; toward the doctoral degree for eight years plus one term. Courses which exceed these time limits must be revalidated or retaken - whichever the department decides necessary - if they are to count in a degree program.

Revalidation (where appropriate) is accomplished by retaking the course or by special examination determined by the department on each outdated course. A charge of $15 is assessed for revalidating a course by examination. Problems courses, reading courses, etc., cannot be revalidated by examination. Only course work taken on this campus may be revalidated by a proficiency examination. If the examination is satisfactory, (i.e., passed by a "B" grade or better), then the original course grade will be re-
An official transcript of a student's record is issued only for transferring credits to other colleges and universities, and for the information of certifying agencies and employers. An official transcript is issued only at the written request of the student. A charge of \$3 is made for each transcript; payment should be included with the request. A transcript is not released for a student who is delinquent on any financial obligation to the University. Requests should be submitted at least 24 hours in advance to the Office of Registration and Records, 110 Administration Building.

The graduate student who is in good standing and who has not been in continuous enrollment during the past academic year only needs to register in order to activate her academic file. A master's or specialist degree student is considered in good standing if he has at least a 3.0 grade point average; a doctoral student must have at least a 3.2 GPA to be in good standing.

The graduate student who is not in good standing and has not been in continuous enrollment during the past academic year must reapply to the Graduate College prior to registration. This reapplication process involves filling out an application form and requesting transcripts of all work that was completed at another university during the absence from BGSU. There is no reapplication fee.

It is important that all requests to update student records be accompanied by all names that may have appeared on previous records, i.e., married or maiden names.

Once admitted to Graduate College, the student must always register for all courses as a graduate student. Students may choose to withdraw from graduate status with the approval of the graduate dean. Students who have withdrawn from graduate status need to reapply to the Graduate College in order to take graduate-level courses.

"External" or "nonresident" courses are those offered by accredited universities or colleges at sites other than the main or central campus. The policy of Bowling Green State University specifies that graduate students may, on their own recognizances, take any course for personal or professional development that is offered or sponsored by another institution. The transfer of credit received for such external courses to satisfy requirements of a degree program at BGSU depends upon the following:

1. The course is sponsored or given by a regionally accredited graduate college or university. This of itself, however, does not assure acceptance of the course.

2. A formal, written petition by the student is required for the transfer of credit. The petition is submitted to the major department for its consideration and recommendation. The recommendation of the department is forwarded to the dean of the Graduate College for a decision.

3. Documentation is required on courses that are "external" or "nonresident" offerings of another university if acceptance of them for degree credit is requested from BGSU. Minimally, the graduate school offering college or university credit must be fully accredited. The course must be listed and described in the catalog offerings or other official publications of the institution. The content of the course must satisfy a requirement in a graduate degree program at the offering institution and be able to satisfy a degree requirement at BGSU. An official transcript is required at BGSU.

4. Petitions for acceptance of "summer tour" or "travel" type courses must be fully documented so that their academic integrity can be judged. Promotional literature from a tour or travel agency or institutional sponsor is not considered documentation of the academic character of the course. Minimal documentation submitted by the student should include the following:

   a. A photocopy of the course description from the graduate catalog or other official literature of the sponsoring institution.
   b. A statement in the institution's graduate catalog or signed by the dean of the graduate school that specifies the graduate degree programs in which the course satisfies professional or other degree requirements in the institution offering the course. A viable alternative is a copy of an evaluative statement concerning the course from the department(s) in which it is used to satisfy degree credit.
   c. An official transcript from the sponsoring institution following completion of the course.

The minimal documentation on "tour courses" is necessary to evaluate the quality of the course and to determine its applicability to a student's degree program. Many accredited graduate schools offer courses for personal and professional development that carry graduate credit but are not applicable to their degree programs. Official assurance is required.
5. Bowling Green State University, as a fully accredited university, has a long standing custom of approving the transfer of credit from other fully accredited institutions. It is necessary for a student to petition, in writing, through the academic department for such transfer after the course has been completed. Prior guarantees of any type that a course will be transferable cannot be given. Any prior assurances given by faculty members or staff of Bowling Green State University must be regarded as estimates or opinions. They do not commit the University to a course of action.

Credit-Hour Load

A full-time graduate student, for purposes of classification for financial aid or veterans' benefits, is defined as a student registered for eight hours. A full-time graduate student, as defined by the Bursar's Office for issuing validation cards, is one registered for a minimum of 10 hours. The unlimited use of the Recreation Center depends upon payment of the maximum general fee.

A graduate assistant or graduate fellow is required to register for a minimum of 12 hours of credit per semester during the fall and spring semesters of the academic year unless otherwise exempted by the departmental graduate coordinator and the graduate dean. Graduate assistants or graduate fellows completing the master's thesis or doctoral dissertation should consult their advisers for appropriate registration requirements.

Summer registration is limited as follows:

10-week session  15 hour maximum
8-week session  10 hour maximum
5-week session  2 courses

Excess credit hour loads (beyond 18 hours in an academic semester or beyond the above limits for summer) require approval from the graduate dean. An excess credit fee of $50 is charged beginning with the 19th hour and continuing for every hour thereafter.
Graduate Admission

Suggested Timeline for Application

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>Request information and application.</td>
</tr>
<tr>
<td>Oct</td>
<td>Submit application for admission and assistantship programs.</td>
</tr>
<tr>
<td>Nov</td>
<td>Arrange for transcripts and recommendations to be sent.</td>
</tr>
<tr>
<td>Dec</td>
<td>Take required tests.</td>
</tr>
<tr>
<td>Jan</td>
<td>Submit portfolio (if necessary).</td>
</tr>
<tr>
<td>Feb</td>
<td>Submission of GRE/GMAT/TOEFL official score report(s), official transcripts from each accredited college and university attended, appropriate GRE/CAT/MAT/TOEFL official score report(s), and the $10 application fee. Some departments require a supplementary application and a portfolio, manuscript, or an audition or a tape recording.</td>
</tr>
<tr>
<td>Mar</td>
<td>Admission decisions made through August.</td>
</tr>
<tr>
<td>Apr</td>
<td>Graduate assistantships offered through May.</td>
</tr>
<tr>
<td>May</td>
<td>Submit health form.</td>
</tr>
<tr>
<td>Jun</td>
<td>Start classes.</td>
</tr>
</tbody>
</table>

The admission process takes time and organization. At left is a suggested timeline covering the details of the application process.

An enrolled graduate student is defined as one who (a) is fully admitted to the Graduate College, (b) is registered and attending classes and (c) has paid the appropriate fees, or has had the fees paid by the University or by a grant, contract or scholarship. A student is considered eligible for admission to a degree program when the following are received by BGSU: a completed application, official transcripts from each accredited college and university attended, appropriate GRE/GMAT/TOEFL official score report(s), and the $10 application fee. Some departments require a supplementary application and a portfolio, manuscript, or an audition or a tape recording.

There are four graduate admission categories.

Regular Admission
A person of high scholarship in previous academic work, especially in the field of study in which he wishes to specialize, is eligible for regular admission to the Graduate College contingent upon compliance with application procedures, and approval of the program area and the Graduate College.

Conditional admission
This status may be assigned to a student admitted to a degree program with deficiencies in the quality of course work submitted, contingent upon the recommendation of the program area and the approval of the Graduate College. A minimum grade point average of 3.0 (B) with no grades lower than a B must be earned during the first nine hours of graduate enrollment to qualify for regular status. A student with conditional admission status is not eligible for assistantships or fellowships until regular status is achieved.

Special Standing for Advance Study
This represents a non-degree status within the Graduate College. This classification allows students to develop personal or professional goals by taking graduate courses but without pursuing a graduate degree. Special standing does not indicate acceptance to a degree program; however, students admitted with special standing status can notify the Office of Graduate College at any time and request that their files be forwarded to designated departments for evaluation of admisibility into graduate degree programs. Upon acceptance to a degree program, students’ admission classifications are changed to regular or conditional status.

Some courses earned on special standing may later be applied toward a degree program, contingent upon the approval of the department offering the degree and the dean of the Graduate College. A maximum of nine hours of graduate credit taken under special standing status may be applied toward a graduate program of study. In high demand academic areas, degree candidates will have priority over special standing students in registering for courses.

Transient Admission
A student enrolled in a graduate degree program at an accredited institution other than BGSU or the University of Toledo who wishes to take courses at BGSU may be admitted as a graduate transient student. A transient student is limited to enrollment in a maximum of two courses.
### Application Procedures

A person seeking admission to the Graduate College as a degree student must submit an application for admission to the Graduate College with a $10 (nonrefundable) application fee. Students seeking admission under the special standing for advanced study category are not required to pay the $10 application fee.

Two official transcripts from each institution attended (except BGSU) must be requested to be forwarded directly from the institution(s) to the Office of Graduate Admissions. Applicants for special standing status need only provide official transcripts showing the highest degree earned. Copies or official transcripts issued to students are not acceptable. Failure to indicate institutions attended may result in refusal of admission, no transfer of credit and/or expulsion from the University if discovered subsequently.

### Deadlines

For admission to a Ph.D. program, one should allow at least six months for necessary documents to arrive on campus and to be processed by the appropriate department and the Office of Graduate Admissions. For admission to a master's program, one should allow at least three months. Applicants for special standing and transient status may be admitted more quickly. International students should allow more time for the application process. Students interested in fellowships and assistantships should apply even earlier. Prospective students should check with the appropriate program for specific deadlines.

### Transient procedures

A student who desires graduate transient status must obtain a graduate transient student application from the BGSU Graduate College and have the dean of her own graduate school certify that the applicant is in good standing. The application must be forwarded directly from the home institution to the Office of Graduate Admissions and be received at least one month before the planned first enrollment. Transcripts are not required.

### Cooperative Registration Applications

BGSU and the University of Toledo sponsor a cooperative graduate program through which graduate students enrolled at one institution may enroll and receive graduate credit for classes offered at the other institution. Approval by the graduate dean and the program graduate coordinator of the student’s home institution is required for each registration. Credit and grades earned count as resident credit (not as transfer credit) at each of the participating institutions.

### Health Form

All graduate students at BGSU are required to meet all health regulations in effect at the University. A health history form is sent to applicants by the Office of Graduate Admissions when tentative or full admission is achieved. The form must be completed and returned to the University Health Center. Graduates of BGSU who have a health history form on file need not complete another form.

### Admission Requirements

Graduate work is not merely a continuation of undergraduate work. It demands scholarship which is at a higher level; it emphasizes research and creativity; and it requires student initiative and responsibility. The possession of a bachelor's degree from an accredited college or university is required, but it is not the only determinant for admission. The student must have a purpose which the Graduate College may promote, and must present evidence not only of interest, but also of a broad and thorough undergraduate preparation that indicates probable success in graduate study. Since faculty facilities and other resources are limited, it is impossible to admit every qualified person. Some areas are highly selective in admitting students because the demand for ad-
GRE/GMAT

The Graduate Record Examination (GRE) is required from all applicants seeking admission to a degree program (other than in business administration, accounting and organization development) in the Graduate College.

The Graduate Management Admission Test (GMAT) is required of students seeking admission to graduate programs leading to the degrees of Master of Business Administration, Master of Accountancy and Master of Organization Development.

Applicants must have submitted all of the following:
1. a completed application
2. three letters of recommendation
3. an official copy of the GRE/GMAT scores
4. an official transcript from all colleges attended
5. and any papers and portfolios of work or audio/video tapes

A $15 application fee is required if granted regular or conditional status.

TOEFL/MELAB

English as a Foreign Language (TOEFL) administered by the Educational Testing Service, or if the TOEFL is unavailable, the Michigan English Language Assessment Battery (MELAB). This is required of international students issued immigrant visas, of those transferring from another American college or university, of those with English as a foreign language coming from U.S. territories (e.g., Puerto Rico) and of those granted U.S. citizenship within recent years.

After admission, these students must also take the on-campus English Proficiency Tests before planning the first-semester academic program with the graduate coordinator. The TOEFL/MELAB score and the scores of the on-campus tests are evaluated by the coordinator and staff of the English as a Foreign Language Program to determine if additional work in written and spoken English is required.

Addresses:
GRE:
Educational Testing Service
Box 955
Princeton, New Jersey 08540

GMAT:
Educational Testing Service
Box 6103
Princeton, New Jersey 08541-6103

TOEFL:
Test of English as a Foreign Language
CN 6155
Princeton, New Jersey 08541-6155

MELAB:
English Language Institute
Testing and Certification Division
The University of Michigan
Ann Arbor, Michigan 48109

Transferring to Another Degree Program

The following conditions must be met before a file can be forwarded for program evaluation:
1. If initial application for admission to the Graduate College is more than one year old, an "updated" application for admission to the Graduate College must be completed (unless a transfer within a college is requested). The $10 application fee and the $15 admission fee will be required upon transfer from special standing to degree status.
2. All transcripts not previously submitted (or no longer on file), except BGSU transcripts, must be submitted.
3. If a transfer from one degree program to another is requested, the graduate coordinator of the program from which the transfer is being made must be notified by the student. When acceptance to a degree program is granted, the change in admission status will become effective the semester during which the request for transfer was made.
Above: Students and faculty can display art at the several galleries around campus.

Right: A musician and his saxophone make a lovely silhouette against the window at Moore Musical Arts Center on the north side of campus.

Below: BGSU enjoys a close relationship with the Xi'an Foreign Language Institute. A representative of the Institute (left) shares a laugh with Les Barber, professor of English, and President Paul Olsamp (right).

Below right: Neccles Leontis, assistant professor of chemistry, works with a student in the lab.
Graduate assistantships and graduate fellowships are available in the programs offering graduate degrees. These positions give students financial aid as well as the opportunity to acquire valuable experience. As of January 1, 1990, a doctoral student may be eligible for a stipend up to $9,200 for the academic year. Positions at the master's level pay between $3,350 and $7,900 with a registration for 12 hours of graduate credit each semester. Renewal of assistantship and fellowship awards are possible.

Funding as a graduate student is available for a maximum of two academic years at the predoctoral level and for a maximum of four years at the doctoral degree level. A maximum of six years of funding is specified for a student who completes both a master's degree and a Ph.D. degree at this university.

A student is subject to termination of an assistantship, fellowship or other form of funding through failure to make satisfactory progress toward a graduate degree and/or inadequate performance of the duties associated with the assistantship or fellowship. A student's funding is also terminated if a student is suspended for ethical or legal misconduct as specified in the Student Code.

The instructional, nonresident and automobile registration fees are paid by the University during the period of the appointment for graduate assistants and graduate fellows. These fee payments may also be extended as a professional courtesy for the following summer contingent upon availability of funds and approval of the graduate dean.

Each graduate student except a non-service doctoral fellow must pay the general fee from his own resources.

Application forms for assistantships or fellowships and letters of recommendation should be submitted to the chair of the major department at least eight months before the academic year for which the appointment is desired. At the same time, an application for admission to the Graduate College should be filed. Applications are available on request from the major department. The bachelor's degree is a prerequisite for funding of graduate assistantships and fellowships. Official certification from the degree-granting institution is required to document completion of all requirements for the baccalaureate degree.

Residence hall directorships are also available as a means of financial support for graduate students. Further information about such a directorship can be obtained from the vice president for student affairs.

It is expected that no person will apply for an appointment unless she is free to accept it, that a person will not engage in other employment while holding the position, and that one will fulfill the complete term for which the appointment has been granted. In accordance with a resolution adopted by the major graduate schools of the country, a student who indicates acceptance of an appointment before April 15 has freedom through April 15 to reconsider and to accept another appointment.

To retain an appointment, a graduate assistant or graduate fellow must be appropriately enrolled as a student, must make satisfactory progress toward a degree and must perform duties satisfactorily according to the terms of the appointment.
Non-service Fellowships
The University awards non-service fellowships to outstanding doctoral students. These awards provide an annual stipend and payment of the instructional, nonresident, general and automobile registration fees for the term of the fellowship. The recipient must be a full-time doctoral student (16 hours) who is engaged in graduate study and not otherwise employed. The fellow is expected to live and work within daily commuting distance of the University campus, with full access to the resources of the University. Where the special needs of dissertation research or cooperative study require that the student should live and work elsewhere, that must be stated at the time of application for the fellowship. Acceptance of other employment, or a decision to move to another region after the fellowship has been granted, requires the student to resign the fellowship.

Loans and Employment
Graduate students can apply for employment and loans. The College Work-Study program is available to students with financial aid eligibility. A Financial Aid Form must be completed and forwarded to College Scholarship Service to determine eligibility. Regular employment is funded by the University and is available to graduate students registered for at least four credit hours regardless of financial aid eligibility.

Two long-term loan programs are also available. The Perkins Loan and Stafford Loan are available to students with financial need eligibility. A Financial Aid Form must be filed to determine eligibility. Students must be fully admitted into the University and be registered for at least four credit hours for the Stafford, eight credit hours for Perkins Loan consideration.

Short-term loans are available to students who have a need to borrow money for fees, books or miscellaneous expenses. Repayment is required within 45 days. Students can apply for a short-term loan at the Office of Financial Aid and Student Employment.

For more information about financial aid, contact the Office of Financial Aid and Student Employment, 450 Student Services Building, 1-419-372-2651.

Basic Fees and Charges
The fees and charges described below are the rates for the 1989-1990 academic year and are subject to change without notice by the Board of Trustees. Such changes take precedence over the printed fees.

Instructional and General Fees
Graduate students pay an instructional fee and a general fee. The instructional fee for Ohio residents registering for 11 or more semester hours is $1,478 per semester. Ohio residents registering for less than 11 semester hours pay the instructional fee at the rate of $137 per credit hour. Students registering for more than 18 credit hours pay an excess credit fee of $50 per credit hour.

A student classified as a nonresident of Ohio, for fee purposes, is assessed a nonresident fee of $150 per credit hour, up to a maximum of $1,580 per semester, in addition to the instructional and general fees.

Graduate students who register for 10 or more hours of credit pay a general fee of $241 per semester. Students who register for 9 or less hours of credit in a given semester pay a general fee at the rate of $24 per credit of registration. The general fee finances the many student services and activities on campus, and a portion is used for capital improvements.

The student's class schedule may be canceled if the fees and charges are not paid by the deadline specified by the bursar.

A previously enrolled student may be denied readmission after prepayment of fees for several reasons. In such cases, a full refund is made of all fees paid.

### FULL-TIME GRADUATE STUDENTS
Minimum Estimated Cost for 2 semesters (Fall and Spring)
(Based on 1989-90 Rates)

<table>
<thead>
<tr>
<th>Fixed costs:</th>
<th>Fellows/Assistants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional fee: $1,478 x 2 =</td>
<td>$2,956 exempt</td>
</tr>
<tr>
<td>General Fee: $241 x 2 =</td>
<td>$482</td>
</tr>
<tr>
<td>Nonresident fee: $1,580 x 2 =</td>
<td>$3,160 exempt</td>
</tr>
<tr>
<td>Auto registration fee</td>
<td>$25</td>
</tr>
<tr>
<td>Application fee</td>
<td>$10</td>
</tr>
<tr>
<td>Admission fee</td>
<td>$15</td>
</tr>
<tr>
<td>Transcript charge</td>
<td>$3 each</td>
</tr>
<tr>
<td>Master's thesis binding fee</td>
<td>$20</td>
</tr>
<tr>
<td>Dissertation binding fee</td>
<td>$65</td>
</tr>
<tr>
<td>Estimated costs:</td>
<td></td>
</tr>
<tr>
<td>Books and supplies</td>
<td>$470</td>
</tr>
<tr>
<td>Room and meals</td>
<td>$5,500</td>
</tr>
<tr>
<td>Transportation and personal expenses</td>
<td>$2,750</td>
</tr>
<tr>
<td>Estimated minimum total</td>
<td>$13,811</td>
</tr>
</tbody>
</table>

|                                      | $9,270             |
Costs and Financial Aid

Summer Session Fees
As of June 30, 1989, Ohio residents enrolled for 11 or more hours during the summer pay an instructional fee of $1,478 and a general fee of $151. A resident enrolled in fewer than 10 hours during the summer pays $152 per hour. Students who are not Ohio residents and who enroll for 10 or more credit hours pay a nonresident fee in addition to the instructional and general fees. The nonresident fee is $1,580 per semester for an enrollment of 11 or more credit hours or $150 per hour for an enrollment of less than 11 credit hours.

Mandatory fees
* An application fee of $10 is charged to all students seeking admission to the Graduate College; it is nonrefundable.
* An admission fee of $15 is also nonrefundable. This $15 is charged and payable at the time of initial registration.

Other possible charges
* A change of registration (drop/add) fee of $2 per transaction is charged for each change requested after the initial registration is filed.
* A late payment fee is charged for paying fees after the last day designated for this purpose at the opening of a semester (including summer). The fee is $5 for each late day including Saturdays and Sundays to a maximum of $25.
* An excess credit fee of $50 is charged for each hour of enrollment in excess of 18 hours.
* A $10 return check service charge is assessed for each check returned by the bank as uncollectible.
* An automobile registration fee of $25 is required of each student when registering an automobile with the Parking Services Office. Each automobile on campus must be registered and its decal displayed in accordance with instructions.

Other Fees and Charges

During any semester when a student is registered for a combination of main campus (including extension) and/or branch or resident credit center courses, fees are determined as follows: if the number of main campus (including extension) credit hours equals or exceeds the off-campus credits, the main campus fees are charged for all courses. Off-campus rates apply when branch and resident credit center credit hours exceed the main campus credits.
Costs and Financial Aid

Payment of Fees

Fees are payable at the Bursar's Office on the first floor of the Administration Building between 8 a.m. and 5 p.m. Monday through Friday.

For a student desiring to utilize a credit card, MasterCard and Visa are honored by the University.

Prior to the beginning of classes in each semester a graduate assistant or graduate fellow must pay the general fee from her own resources, or make arrangements with the Bursar's Office for a payment plan.

A student's financial account must be paid in full, including fees and current charges, before a registration request will be honored for any semester or term. Students should note that payments are applied chronologically to University debts. Therefore, if traffic or library fines, bookstore charges or other fees have been put on a student's account before the general fee was assessed, they will be paid off first and the general fee will still be outstanding.

Exemptions

A graduate assistant, graduate fellow, or non-service doctoral fellow also receives a fee scholarship covering the instructional fee ($1,478 per semester), the nonresident fee ($1,580 per semester) and the automobile registration fee ($25 per year) for the period stated in the contract.

A graduate assistant in the College of Musical Arts is also entitled to a credit for applied music fees (approximately $200 per year).

A non-service doctoral fellow or a recipient of a governmental award does not have to pay the general fees.

The Graduate College office makes arrangements with the Bursar's Office to credit appropriate fees for students under contract.

Refund of Fees

In case of a student's voluntary withdrawal from the University in any semester, fees are refunded on the following basis:

- prior to the start of class: 100%
- week in which classes begin: 90%
- second calendar week: 80%
- third calendar week: 60%
- fourth calendar week: 40%
- after the fourth week: no refund

A student withdrawn under discipline forfeits all rights to the return of any portion of fees. No reduction is granted because of late entrance. In a change of program involving the dropping of a course in which a special course fee has been paid, such a fee is refunded in accordance with the schedule given above.

Refunds take approximately four weeks to be processed.

Summer Session

Summer school fees for students enrolled for the entire summer session are refunded according to the above schedule. However, in the case of withdrawal for a student enrolled only in one summer term, fees are refunded by the following schedule:

- prior to the start of class: 100%
- within first two class days: 90%
- within first five class days: 80%
- within first 10 class days: 60%
- after 10 class days: no refund

Housing

Graduate students should send a stamped, self-addressed 9"x12" manila envelope to the Off-Campus Student Housing (OCSH) office at 425 Student Services Building for information about renting apartments or houses in the area. OCSH keeps up-to-date prices and listings of available houses, apartments, rooms in homes and subleases. They also operate a roommate locator service to help students find compatible roommates, and can provide move-in inventory forms and information on public utilities.

Students should arrange their own housing before starting classes. BGSU does not own or operate any apartment or family-type housing, nor does it maintain any residence hall solely for graduate students. OCSH sponsors an annual Housing Fair where students meet landlords and other community agencies.

Nonresident Regulations

The student is responsible for indicating proper residence at the time of registration. Since the residence must be declared at registration, this determination is not retroactive. If a student has any questions regarding state of residence, he should bring the case to the attention of the Registrar's Office, 110 Administration Building, which may refer the matter to an appropriate committee for review.

Any student who registers improperly with respect to legal residence under the rules indicated below shall be required to pay all applicable nonresident fees. A student who fails to pay this fee within 30 days after having been notified of the assessment may have registration in the University nullified.

The University reserves the right to make a final decision in any case of disputed residence of a student as a condition of the student's admission. In determining the student's proper residence, University officials utilize the following regulations as established by the Ohio Board of Regents.
Ohio Student Residency Qualifications

The following standards are used in determining residency surcharge purposes:

1. A resident of Ohio for all other legal purposes means 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 welfare benefits, 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/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 which are not related to the recipient.

3. An "institution of higher education" as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college or private medical or dental college which receives a direct subsidy from the state of Ohio.

4. A "domicile" as used in this rule is a person's permanent place of abode; there must exist a demonstrated intent to live permanently in Ohio, and a legal ability under federal and state law to reside permanently in the state. For the purpose of this policy, only one domicile may be maintained at any time.

5. An individual's immigration status will not preclude a person from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

C. Residency for subsidy and tuition surcharge purposes

The following persons shall be classified as residents of the state of Ohio for these purposes:

1. A dependent student, at least one of whose parents or legal guardians has been a resident 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 her/his enrollment in an institution of higher education, and who is not receiving, and has not received, any state subsidy for the preceding 12 consecutive months, financial support from persons or entities who are not residents of Ohio for any other legal purposes.

D. Additional criteria which may be considered in determining residency for the purpose 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 state welfare benefits.
   d. If a person has an Ohio driver's license and/or car 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 welfare benefits 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 of receipt of welfare benefits.

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 U.S. military service while a resident of Ohio for all other legal purposes and the 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 U.S. military service who is stationed and resides in Ohio and the dependents shall be considered residents of Ohio for these purposes.

4. A person who is transferred by an employer beyond the territorial limits of the 50 states of the U.S. and the District of Columbia while a resident of Ohio for all other legal purposes and the dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile and as long as such person has fulfilled her/his tax liability to the state of Ohio for at least the tax year preceding enrollment.

5. A person who has been employed as a migrant worker in the state of Ohio and the 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.

F. Procedures

1. A dependent person classified as a resident of Ohio for these purposes and who is enrolled in an institution of higher education when his/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 her/his 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. Any person once classified as a nonresident, upon the completion of 12 consecutive months of residency, must apply to the institution 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/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. Evidence 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.

4. 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.

5. 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/her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavit and other documentary evidence which it may deem necessary to a full and complete determination under this rule.
BGSU has many distinguished and nationally-recognized scholars on its faculty. Among these are (left to right):
- Gary Hess, Distinguished Research Professor of history and chair of the department,
- Douglas Neckers, Distinguished Research Professor of chemistry and chair of the department,
- Chen Hahn, Owens-Illinois Professor of management.

Above: Allen Kepke, professor and chair of the department of theatre, performs the lead role in a campus production of The Music Man.

Right: Younghee Kim, associate professor of applied human ecology, spells out some terms for her students.
Academic Regulations

The University attempts to offer degree programs that have integrity and stability. Accordingly, students may expect the programs to be implemented basically as described. However, because higher education is a dynamic enterprise, the University has the authority to make changes in policies, degree programs, requirements, course offerings, class schedules, assignment of instructors, fees and other aspects of its educational and other programs at any time, sometimes without prior notice. Such alterations supersede the specifications appearing in the Graduate Catalog and other official publications of the University.

Requirements in degree programs cannot be waived. In addition to the minimums specified by the Graduate Council of the Graduate College, academic departments/schools also have the authority to prescribe degree requirements and policies. Students already studying in graduate degree programs may be required to comply with alterations in the curriculum when major revisions occur. Prospective students should consult with the departmental graduate coordinator concerning the degree program of interest, current offerings and the precise requirements. Ignorance of degree requirements and regulations is not a justification for an exemption or waiver. It is a responsibility of graduate students to familiarize themselves with the rules and regulations of their academic department as well as the policies presented in the Graduate Catalog and Student Code. Only students who satisfactorily complete all the requirements in a program will be recommended for the appropriate graduate degree.

Academic honesty is particularly important in graduate education. Plagiarism - representing someone else's work or thoughts as one's own - is considered to be a major breach of academic honesty and will result in a penalty according to the specific circumstances of the offense, and can include dismissal from the University. The University Policy on Academic Honesty, which is found in the Student Code, contains strict sanctions for plagiarism and other forms of dishonesty.

A student found guilty of violating or dishonoring University regulations or of being involved in moral or ethical misconduct may be dismissed. When, in the judgment of University officials, a student's actions are injurious to others or threaten the orderliness and well-being of the campus, he also may be dismissed.

Courses for Graduate Credit
All courses numbered 500 through 700 carry graduate credit. Some 400-level courses are approved for graduate credit; the approved 400-level courses are listed in this catalog under the respective departmental descriptions. As a matter of policy, no courses numbered lower than 400 carry graduate credit. Courses not approved for graduate credit cannot be taken and then added to a student's degree program for graduate credit. A graduate student who is enrolled in a graduate class open to undergraduates is required to do additional work of an individual nature to earn graduate credit for the course. The instructor is responsible for designating the type and amount of such work, but the graduate student must take the initiative in arranging for it within the first week of the term.

Unit of Credit
The unit of credit is the semester hour, which is ordinarily earned by one recitation or lecture a week for a semester. Two or three hours of laboratory work, depending upon the amount of outside preparation required, carry the same credit as one hour of recitation or lecture.

Grading System
The following system of marks is used in reporting and recording a graduate student's proficiency in courses:
- A excellent 4.0 points
- B acceptable 3.0 points
- C below standard 2.0 points
- D failure 1.0 points
- F failure 0.0 points

A course taken for graduate credit in which the grade of D or F is received may not be used to meet the minimum hour requirements for a graduate degree. Some academic departments prohibit the use of courses with C grades for degree requirements; consult the student handbook in your program area.

A few courses are graded on an S/U (satisfactory/unsatisfactory) basis and are so indicated in the individual course descriptions. A grade of S is defined as being equivalent to a letter grade of B or higher. If a graduate course has been approved for S/U grading, then a graduate student is not eligible to receive a letter grade in that course.

Courses selected to meet Options B or C of the language requirements for the Ph.D. degree as well as ENG 500, FREN 500, GERM
Academic Regulations

500, SPAN 500, CS 500, and CDIS 500 are to be taken by the student on a P/U (pass/unsatisfactory) basis. Such courses will not contribute to hours earned or grade points. A grade of P in these courses is defined as being equivalent to a letter grade of B or higher. Satisfactory completion of ENG 500 and CDIS 500 is mandatory for graduation when students are required to enroll in these courses.

Grades for courses numbered 599, 699, and 799 are reported as I (incomplete) until the completed thesis or dissertation is approved when the final grade of S (satisfactory) is substituted.

Grading Options
Students and instructors do not have an option concerning the grading system for a course. Each graduate course is approved for either letter or S/U grading. Unlike undergraduate grading, it is the University's decision, not the student's option, which determines the grading system to be used.

Undergraduate Courses
Those 400-level courses approved for graduate credit must be taken for a letter grade unless listed for S/U credit in the catalog. Those undergraduate courses not approved for graduate credit must be taken on a P/U basis, unless otherwise approved by the graduate dean within the first two weeks of the academic term. A grade of P in these courses is defined as being equivalent to a letter grade of C or higher.

Incomplete Grades
With the exception of research project courses (599, 699, and 799), an Incomplete is given only when, for some approved reason, a student fails to take the final examination or to meet some other definite requirement in a course.

The I can be removed and a grade substituted if the student completes course requirements to the satisfaction of the instructor prior to the deadline established by the Graduate College. The deadline for removal of Incompletes for the respective academic semesters are:

- Fall Semester: June 1
- Spring Semester: September 1
- Summer Session: January 1

Once the deadline has passed, the instructor has the option of assigning a grade based upon the work completed or leaving the grade as a permanent Incomplete on the record.

The graduate dean has the authority to extend the deadline for an Incomplete for serious, documentable reasons contingent upon petition from the instructor to the graduate dean prior to the expiration of the deadline.

Once the deadline has expired for removal of an incomplete, the only way a student can redeem a course with an I is to take the course again. The course is entered twice on the transcript with the original course remaining on the transcript as an I grade. The reregistration involves the payment of appropriate fees.

Faculty members do not routinely assign Incompletes in their courses. It is a prerogative of the instructor of a course to authorize an Incomplete for a student. Students are graded on what they achieve in the regular time period of a course. In courses other than thesis or dissertation research (599, 699, 799), an I is assignable only when the student can document serious contingencies that prevent completion of the course requirements.

Grade Appeals
The procedure for grade appeals at the graduate level involves following a sequence of consultations. An appeal may be settled during an early stage, but the complete process includes five steps:

1) Student meets with course instructor.
2) Student meets with departmental faculty member who serves as grade appeal agent.
3) Student meets with the departmental chair.
4) Graduate College grade appeal committee reviews the student's grade appeal.
5) Graduate dean reviews the due process procedures.

It is the student's responsibility to follow the steps in the procedure according to the sequence outlined above. Grade and absence grievances may not be appealed beyond the college level.

Deadlines
The grade appeals procedure must be started by the end of the fifth week of the spring semester for grades received during fall semester, and by the end of the fifth week of fall semester for grades received during the spring or summer session. All actions for grade changes must be completed during the semester in which the grade is appealed.

Standards of Work
In order to remain in good standing and to graduate, a student must make satisfactory progress toward a degree. Satisfactory progress includes the maintenance of a 3.0 grade point average at the master's and specialist's level and a 3.2 at the doctoral level; the accumulation of not more than two incomplete grades in other than approved research project hours (i.e., 599, 699, 799); and completion of other departmental requirements by established deadlines. A graduate degree student who is not making satisfactory progress toward the degree is subject to termination from the Graduate College.

While a course taken for graduate credit which a D was received may not be used to meet the credit hour requirements for a graduate degree, the hours and grade are used to compute the cumulative grade point average. If a graduate student repeats a
course, each grade received is counted in computing GPA, the total number of points (on the 4.0 scale) are divided by the total number of hours undertaken for graduate credit, excluding courses in which the marks I, P, S, U, W, or WP are recorded.

Conditional status
A student admitted conditionally must obtain a minimum grade point average of 3.0 (B) and earn no grades lower than a B in the first nine hours of enrollment as a condition to achieve regular status. A student may be placed on academic probation or may be dropped from the Graduate College on the recommendation of the major department if that student's cumulative GPA falls below 3.0 for master's students or 3.2 for doctoral students.

Special standing
Satisfactory progress for students studying under special standing for advanced study is defined as achieving and maintaining an accumulative GPA of at least 3.0 (B). Students failing to maintain the 3.0 GPA may subject to probationary status or termination.

A graduate student who is not making satisfactory progress toward a degree can:
1. be placed on probation for one or more semesters contingent upon the recommendation of the academic program and the decision of the Graduate College dean;
2. have her assistantship or fellowship contract canceled;
3. be dismissed from the graduate degree program and the Graduate College.

Academically deficient students' progress is reviewed by the program's graduate committee at the end of each semester. Master's students who achieve less than a 3.0 GPA or doctoral students who achieve less than a 3.2 GPA in their graduate work must be recommended for probationary status or dropped from the program. A program's decision to drop a student results in the student also being dropped from the Graduate College, contingent upon concurrence from the graduate dean.

The program's and Graduate College's decision to terminate a student for academic reasons, or to cancel an assistantship or fellowship, can place a student in serious jeopardy with respect to off-campus contractual obligations such as leases. To safeguard students' abilities to meet their responsibilities, programs ordinarily follow these steps:
1. Before the semester's end: Termination decisions will be made prior to the end of the semester after which it is to become effective. The student will be told of the decision in an expedient manner and will have until the end of the term to complete all course work.
2. At the end of the semester: The graduate coordinator will confer with the probationary student's instructors at the end of the semester to obtain progress reports or will wait to secure grades as soon as they are sent by the instructors to the Registrar.
3. After the grade reports: If the grades indicate a student has not made adequate progress during the semester, the program graduate committee will recommend to the Graduate College continuation of the student's probationary status or termination.
4. After the program recommends: The decision to discontinue a student and the subsequent recommendation that the student be dropped from the Graduate College will be brought directly to the attention of the graduate dean.
5. The dean's action: The dean will promptly approve or disapprove the recommendation and notify the student by letter of his status in the Graduate College before the beginning of a new semester.
6. Deadlines: If the decision to terminate a student for academic deficiencies is made after the starting date of the term, it will not become effective before the end of that term.
7. Reapplication: A student who has been dropped from a degree program because of academic deficiencies may resubmit an application to the Graduate College for admission into another degree program. This reapplication privilege, however, will be granted only once.

The graduate dean makes the final decision regarding the timing of a termination.

Students who have been fully admitted into graduate degree programs at BGSU may petition for transfer of credit from another accredited graduate school once they have satisfactorily completed eight hours of graduate work in BGSU degree programs. Credit may be transferred only for courses in which the student received the grades of A or B. Credit for an S grade may be transferred only if the grade is regarded by the grading school as B or better. Transfer of credit is not appropriate for nondegree students studying under special standing for advanced study since by definition they have no graduate degree program toward which credit is to be transferred. The transfer of credit for any graduate student for purposes of consolidating transcripts is not allowed. If a special standing student later becomes admitted to a graduate degree program, transfer of credit can be requested in consultation with the graduate coordinator of the program. Conditionally admitted students must achieve regular status before petitioning for transfer of credit.

Final approval for transferred credit is granted only by the graduate dean. An official transcript must be received by the dean.
Academic Regulations

Before credit can be approved for transfer, the time limits for completion of a master's degree and a specialist degree (six years) and for a doctoral degree (eight years) apply also to transferred credit. That is, all credits within a master's and specialist program must fall within the six-year period dating from the end of the first semester in which the student was enrolled; similarly, all credits within a Ph.D. program must fall within the eight-year period.

Once the request for transfer of credit has been approved by the academic program and the dean of the Graduate College, and official transcripts are received, the credit hours – not grades – for the courses are transferred into the student's degree program. Since the grades are not officially recognized, they cannot and will not be counted into a student's cumulative grade point average.

Courses equivalent to those at BGSU cannot be transferred for credit and also taken for credit here (course duplication is not allowed). Only graduate-level courses qualify for transfer to graduate degree programs.

The maximum number of transferable hours in a master's degree program varies according to the degree program. BGSU policy specifies that a student must complete 2 semester credit hours of a master's program in residence at BGSU, so about 6 or 8 hours may be transferable, depending on the program. In a specialist degree program a maximum of 20 credit hours are transferable. In doctoral programs transfer credit is limited to a maximum of one-third of the total number of credit hours beyond the bachelor's degree required for the doctoral degree and approved by the graduate dean; so the transferable Ph.D. maximum is usually about 30 hours. The transferable credit limits for the specialist and doctoral degrees refer to the number of postbaccalaureate credits that are required for the degrees; in other words, the master's degree credits must be included in these transferred credits.

Transient students should not register at BGSU with the intention of transferring graduate credits to another institution without first obtaining the written permission of the dean of the college to which they wish to have the credit transferred.

No credits by correspondence can be transferred to a graduate degree program.

Student Records

The Family Educational Rights and Privacy Act of 1974 provides for student access to educational records which include personally identifiable information, permits students to challenge such information about themselves and limits the release of such information without the student's explicit consent.

BGSU has developed a policy governing the inspection, review and release of such information obtained in a student's educational record. This policy is based upon regulations issued by the federal government. Students may inspect this policy in the Student Code upon request at the Office of Student Affairs, 305 Student Services Building.

Directory Information

Certain information about any student will be provided by the University to anyone upon request. This information – commonly called "directory information" – includes a student's name, campus address, telephone number; home address and telephone number; parents' name, address, telephone number; class schedule; date and place of birth; major field of study; class standing; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance at BGSU; degrees and awards received; and most recent previous educational institution attended by the student.

Any student who desires that any or all of this information not be released by the University must notify the Office of Student Affairs, 305 Student Services Building, in person or in writing requesting a form to withhold this information. The completed form must be returned to the Office of Student Affairs.

Student Use of Automobiles

Students who operate a motor vehicle while enrolled in the University must comply with state and University motor vehicle regulations. A brochure containing these regulations is available at the Parking and Traffic Division, 104 Commons.

Any motor vehicle owned or operated by a student, faculty or staff member must be registered if the owner wants to park it on any property owned or leased by the University. No cash is necessary at the time of registration; the fee is charged to the student's bursar account. To register a motor vehicle, the student must, within 48 hours after the vehicle is initially brought to the campus, present to the Parking Services Office:

1. social security number;
2. license plate number;
3. year and make of car.

Non-registration can result in fines and/or towing. There is an evening permit for students who attend only night classes.

Equal Access to Programs

While BGSU provides equal educational and employment opportunity, if any student with a physical disability requires special individual services or equipment, the student will be responsible for the expenses. This policy includes the expense of providing personal tutors, personal attendants, medical technicians and other services. The University will assist such students in communicating with proper community or government agencies to secure any available financial assistance to meet their needs.
Individual programs may establish earlier deadlines for some of these events, as well as deadlines for associated activities (e.g., signing up for comprehensive exams or submitting preliminary drafts of theses and dissertations). The appropriate program handbook, or graduate coordinator, should be consulted. Students are reminded that it takes time to read theses, dissertations and examinations with the rigor and care they deserve. The following deadlines involve the filing of appropriate materials in the Graduate College Office.

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission to candidacy (approval of dissertation topic)</td>
<td>6 months before commencement</td>
</tr>
<tr>
<td>Approval of thesis topic</td>
<td>10 weeks before commencement</td>
</tr>
<tr>
<td>Graduation application (commencement program deadline)</td>
<td>10 weeks before commencement</td>
</tr>
<tr>
<td>Deposit of approved, error-free copy of dissertation</td>
<td>6 weeks before commencement</td>
</tr>
<tr>
<td>Deposit of approved, error-free copy of thesis</td>
<td>4 weeks before commencement</td>
</tr>
<tr>
<td>Comprehensive exam for (non-thesis) masters degree (except M.Ed.*)</td>
<td>4 weeks before commencement</td>
</tr>
</tbody>
</table>

*M.Ed. comprehensive exam deadlines are established by the College of Education and Allied Professions.
Right: Students walk through a breezeway near University Hall.

Above, left: M. Neil Browne, master teacher and professor of economics, instructs a class.

Above, right: JoAnn Kroll, director of placement, talks with graduate students during Professional Development activities.

Right: The Falcon's Nest in the student union provides a place for students to eat, meet, snack, chat or study.
Clear charting of a degree program is important for all graduate students, and especially vital for those who spread graduate work over more than one year. For this reason, incoming graduate students should realize their responsibilities as well as those of the program and the Graduate College.

**Student Responsibilities**

Each student is responsible for meeting the specific degree requirements outlined in this Catalog and the deadlines published under "Academic Regulations," also in this Catalog.

**Graduate Adviser**

Students are assigned a personal graduate adviser (also called a major professor). This adviser and the graduate student are primarily companions in the zealous pursuit of knowledge and research. Theirs is an in-depth relationship on academic matters. The graduate student obtains constant guidance from this adviser, and from the examining and thesis or dissertation committee when appropriate.

**Graduate Coordinator**

In addition, each program has a graduate coordinator. This person assists the student during the several steps toward achieving a graduate degree that require various kinds of written certification of their completion. These are used to post a student's progress toward a degree in the official records of the Graduate College and Office of Registration and Records. Specific requirements of this kind are available from the program's graduate coordinator and the Graduate College Office.

**Graduate College**

The Graduate College serves primarily as a monitor of the student's progress toward a degree and is the coordinator of activities that are beyond the scope of the program.

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It should be noted that achieving professional certification (such as in education and clinical areas) is commonly a course of study separate from the completion of a graduate degree. It is quite possible to earn a graduate degree but not be certified to teach or practice in a given area. Consequently, it is the student's responsibility to consult with the certifying agency and the appropriate program director on campus concerning requirements for a particular certificate including course requirements, teaching, or administrative experience, and successful completion of the state-prescribed examination. The Graduate College bears no responsibility for an individual's completion of professional certification.
Degree Programs

Workshops and Nontraditional Courses

The total number of credit hours of graduate credit earned in conferences, institutes, lecture series, workshops, and other nontraditional modes that may be counted toward a graduate degree at BGSU shall not exceed 11 credit hours. This credit-hour limitation is designed to provide an appropriate balance among the various types of learning experiences within a student’s graduate degree program. These nontraditional modes offer a distinctive learning experience that is self-contained and telescoped in nature. Their emphasis on in-class content differs from the context of regular courses where independent study and research is required of the student on an out-of-class basis.

Tentative Degree Program (TDP)

The key step in planning course work is securing approval of the tentative degree program (TDP) made out on the official form and filed in the Graduate College office. The signed TDP is an agreement that successful completion of the proposed plan of study will culminate in achievement of the degree. It is certification that the department has approved the degree program for a student. Courses approved on this form serve as a guide but may be altered upon approval of the graduate coordinator and graduate dean. However, degree requirements may not be modified or set aside without the approval of the dean or Graduate Council. The TDP should show work which may be required by the department to make up any deficiencies.

It is the responsibility of the student to make an appointment with his graduate adviser or with the departmental graduate coordinator whichever is appropriate in order to complete the TDP form. Departmental graduate coordinators monitor the progress of students and encourage early completion of the TDP.

For master's degree students in non-thesis programs, the TDP form should be prepared after 12 hours of course work are completed. The TDP form for thesis students and aspirants to the Ph.D. degree should be prepared promptly after 15 hours of work are completed.

All TDPs must be submitted to the dean of the Graduate College for approval.

Transcript Notations

Transcript designations for specializations can be made on a graduate student's record only when the following conditions are fulfilled:

1. the specialization has been formally approved by the Graduate Council;
2. the academic specialization has been explicitly formulated on the TDP form; and
3. in any case, the TDP form with the specialization so formulated has been approved by the academic program and the Graduate College no later than the beginning of the second semester of full-time graduate study, or in the case of part-time students prior to the completion of 10 hours of graduate credit.

Student Research Projects

A graduate student collecting data or carrying on correspondence in connection with a thesis or dissertation may not use the name of the University without special written permission of the dean of the Graduate College. Any questionnaires or other materials distributed outside the University must receive the prior approval of the instructor or adviser in charge of the study before a student seeks approval by the dean. In addition, the graduate dean may require that a given student research project be reviewed by the BGSU Human Subjects Review Board.

These policies concerning student research projects apply particularly to master's theses and doctoral dissertations. For projects involving collection of any kind of information from or about people by survey, interview, testing, observation, examination, specimen collection, or review of records, graduate students should consult with their department's representative of the BGSU Human Subjects Review Board. This consultation should take place during the design stage of the research project. The identity of this individual may be obtained from the departmental graduate coordinator or by calling the Graduate College. The Graduate College office reviews all thesis and dissertation proposals with a view toward human subject implications prior to approval of the research topic.

Additional Information concerning the policies applicable to student research projects can be obtained from the Research Services Office in the Graduate College.

Application for Graduation

To become a candidate for a graduate degree—master's, specialist, or doctoral—the student must file an application for graduation a minimum of ten weeks prior to graduation.

Students take a break during the Professional Development program in August.
In addition to graduate degrees, Bowling Green State University offers a graduate certificate. Students may enroll only in the Certificate Program, or may complete the Certificate in conjunction with a graduate degree at BGSU.

The 15-semester hour Graduate Certificate in Gerontology was designed by the College of Health and Human Services to prepare students to help promote successful aging among the elderly. Adopting a multidisciplinary approach, the Certificate curriculum acknowledges the role of biological, psychological, and social influences on older adults' well-being. The Certificate Program is appropriate for professionals who occupy positions in agencies and institutions that directly administer and deliver services to the elderly, but who have not received recent formal training in gerontology; for students pursuing academic and/or research careers that focus on the elderly; and for students who anticipate their chosen profession (e.g., business, health care) will bring them into contact with older adults. Regardless of a student's career goals, the Certificate Program provides knowledge of gerontology that is applicable to all business, professional, and personal situations involving older adults.

**Suggested Timeline for 1-Year Master's Students**

| Start classes | Major professor assigned | Thesis topic approved | Apply for graduation | Give final thesis draft to committee | Exam Plan I: take Comprehensive Exam | Plan II: take thesis oral exam | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | GRADUATE |
|---------------|--------------------------|-----------------------|----------------------|------------------------------------|-----------------------------------|----------------------------------|

**Types of Programs**

The specific requirements for the respective master's degrees are stated under the subheadings of Master of Accountancy, Master of Applied Human Ecology, Master of Arts, Master of Arts in Teaching, Master of Business Administration, Master of Education, Master of Fine Arts, Master of Industrial Technology, Master of Music, Master of Organization Development, Master of Rehabilitation Counseling, and Master of Science.

In several of the programs, a student may pursue the degree under either a thesis (Plan I) or comprehensive examination track (Plan II). Students present their intention to pursue either a Plan I or Plan II master's degree program at the time of submission of the TDP form to the Graduate College.

**Credit Hours**

All master's degree programs of the University require at least 30 semester hours of graduate course work. Specific hour requirements are listed under the degree and major area.

Students must be enrolled for at least one hour of credit in the semester in which they expect to receive a degree.

**Level of Work**

At least 18 hours of credit in the student's master's degree program must be on the 500-level or higher. Only the 400-level courses listed in the Graduate Catalog carry graduate credit; moreover, a graduate student must register for the graduate section of an approved 400-level course.

**Residence Requirements**

A minimum of 24 hours toward the master's degree must be earned at BGSU. Credits earned at the Firelands extension branch may apply toward the requirements for the master's degree only when the extension course is specifically given for graduate credit. Transfer credit must be in addition to the minimum of 24 hours earned in residence.

Unless a degree program has been specif-
Degree Programs

Plan I:
Master's Thesis

The steps involved in completing a thesis include: proposal submission, proposal approval, research and analysis of findings, preliminary draft submission to committee, changes and corrections, final draft submission and approval by committee, thesis defense, and submission of original, error-free copy to the Graduate College.

Thesis Committee
Official appointment of the thesis committee must be sought by the department at the same time approval of the thesis topic is requested. The committee is composed of the thesis adviser and a minimum of one other member from the graduate faculty of the department of major concentration. Not all professors are members of the graduate faculty; students should consult the faculty listing in this Catalog and their department to determine who is eligible to be on or chair a committee.

Approval of the Thesis Topic
A thesis is required under Plan I for the degrees of Master of Accountancy, Master of Applied Human Ecology, Master of Arts, Master of Education, Master of Fine Arts, Master of Industrial Technology, and Master of Science. A thesis may be required for graduation that semester. The manuscript must conform with specifications in the Handbook for Theses and Dissertations. The thesis is then microfilmed, bound, and placed in Jerome Library. A $20 charge covers the microfilming and binding.

Final Examination
A candidate for a thesis degree has a final written and/or oral examination conducted by the committee not less than four weeks prior to commencement. This examination does not in any way release the student from the regular examinations in courses for which the student has registered.

Minimum/Continuous Registration
A student working on an approved topic for a master's thesis is required to register for the course numbered 599 or 699. A Plan I master's degree student must register for a minimum of three credits of thesis research (599 or 699) as a degree requirement. A minimum of six hours of thesis research may be credited toward a master's degree, but a student is expected to register for as many additional hours as are necessary to complete the work.
Degree Programs

Students who register for thesis research (599 or 699) are required to maintain continuous registration from one semester to another, excluding summer session, regardless of whether they are in residence at the University until the research is completed and the thesis is accepted by the dean of the Graduate College. However, students who plan to graduate summer session must be enrolled that term. The minimum continuous registration for a thesis student is one hour per semester.

Plan II: Comprehensive Examination

Any student who fails in the comprehensive examination may, upon recommendation of the program's adviser and approval of the dean of the Graduate College, be granted permission to take a second examination. Upon failing a second examination, the student is dropped from the Graduate College.

Under specified conditions, it is possible to develop interdisciplinary master's degree programs in order to fit the career goals of individual students. In other words, a student can fashion a degree program based on courses and seminars currently offered in departments which have approved master's degree programs. The degree itself, however, must be awarded under one of the existing degree designations. The student's resume and supporting letters from the faculty will indicate the multidisciplinary nature of the student's program to other educational institutions and prospective employers. An interdisciplinary program can be developed under either a Plan I (thesis supervised by interdepartmental committee) or Plan II (comprehensive examination) basis.

Plan I

The program must include a core field consisting of a minimum of 12 hours and one or two cognate areas, plus a thesis. To qualify in a cognate area a minimum of eight hours of graduate credit must be completed in a given field. A typical program is constructed as follows:

| Cognate area #1 courses | 8 hours |
| Cognate area #2 courses | 8 hours |
| Thesis | 6 hours |
| **Total** | 34 hours |

If a student selects only one cognate area, then the total number of hours for the base degree core and cognate area are adjusted upward to 16 hours and 12 hours, respectively.

Plan II

The program must include a core field consisting of a minimum of 16 hours and one or two cognate areas, plus a comprehensive examination. A cognate area must include at least 8 hours in the field. A typical program is:

| Base degree core courses | 16 hours |
| Cognate area #1 courses | 8 hours |
| Cognate area #2 courses | 8 hours |
| **Total** | 32 hours |

If a student selects only one cognate area, then the total number of hours for the base degree core and cognate area are adjusted upward to 21 hours and nine hours, respectively.

A student may design a program of study incorporating two major, related graduate curricula leading to the simultaneous award of two master's degrees. The purpose of the student's program must be directed to developing competencies in two collateral fields of inquiry or to building a special interdisciplinary specialization which integrates the knowledge and analytical skills of the two disciplines.

To demonstrate a capacity for effective integration of the two fields, the student must complete the basic core requirements for each curriculum with a minimum 3.0 GPA and successfully defend a thesis on a topic which is related to the two areas of major
Degree Programs

concentration or successfully complete a comprehensive examination drawn from the two fields. The thesis will be supervised by a faculty committee of four members drawn equally from the two departmental programs in which the degree will be awarded.

Typically, the dual degree program with a thesis will consist of approximately 22 credit hours drawn from each curriculum and a thesis of 6 credit hours. The nonthesis option will generally consist of approximately 24-27 credit hours in each discipline. In no case will the dual degree be awarded if the student has not completed the core requirements of each curriculum and a program of study of at least 50 credit hours, including a maximum of six credit hours for the thesis and no more than eight hours of independent study/readings/special programs registrations.

The rationale and program of study must be approved in advance by the respective departmental programs and the Graduate College by the submission of a TDP before the student has accumulated more than 24 credit hours. The dual degree option is not available to students who already have a master's degree or who do not present an acceptable program of study prior to the completion of 24 credit hours. These students, however, may pursue a course of study leading to the awarding of a second master's degree as specified in the following section.

Second Master's Degree

A student who has completed a master's degree at BGSU may wish to pursue a second master's in another discipline. Provided that there is some congruity between the curricula of the two disciplines and that the elective or other courses from the first program, offered as part of the second degree program, have been completed within the prescribed six-year period, a student may be permitted to count up to six credit hours toward the second degree. At the time the student enters the second program, the program offering the curriculum leading to the second degree shall review and recommend by the submission of a tentative degree program to the office of the Graduate College the courses and credits which may appropriately be included in the second master's degree program. Thesis credit and independent study in the first program may not be used as part of the six hours of credit for the second master's degree. The two degrees may be completed under thesis or nonthesis plans or some combination of thesis and nonthesis. This second master's degree is not open to students who have completed the first master's degree at another institution.

Master of Accountancy

A professional master's degree program offered in the Department of Accounting and Management Information Systems leads to the Master of Accountancy degree (M.Acc.) and constitutes the fifth year of study desirable for professional qualification. The objective is to prepare a student to function as a professional accountant in society, whether in public accounting, private industry, a governmental agency, or a service organization. The master's degree has become an important criterion in determining professional competence in accounting. The laws of Ohio, as well as those of other states, permit the holder of a qualified master's degree who has passed the Certified Public Accountant (C.P.A.) examination to receive the C.P.A. certificate after one year of public accounting experience. This compares to a two-year requirement for a person holding a bachelor's degree.

The time required to complete the M.Acc. program varies from one to two years. For the student who has little or no business and accounting, two years is required. For the student who has majored in accounting, the degree program may be completed in an academic year.

Applicants are required to take the Graduate Management Admission Test supplied by the Educational Testing Service, Box 966, Princeton, New Jersey 08540.

They also must submit evidence that they have an appropriate academic foundation for this program. This foundation must include undergraduate preparation in business administration and economics or intensive graduate work equivalent to phase I of the M.B.A. program plus additional work in accounting as prescribed by the graduate coordinator. An individual program is designed for each student after evaluation of his/her academic background. Holders of degrees in economics or business administration have little or no work required in phase I, but may be required to take additional undergraduate accounting unless approximately 18 semester hours have been completed.

Specific requirements include:
1. a minimum of 18 semester hours of ACCT courses or approved substitutes (15 hours at the 600 level);
2. a minimum of 18 hours of work in courses open to graduate students only (other than GBA phase I);
3. GBA 663, Quantitative Business Analysis, must be completed or equivalent minimum competency demonstrated;
4. GBA 681, Business Information Systems, must be completed or equivalent minimum competency demonstrated;
5. at least six hours of non-accounting courses must be completed.

Non-accounting electives are available in economics, statistics, operations research, information systems, management, finance, marketing, international business and of approved graduate areas. Selections will be made, in consultation with the graduate coordinator, in accordance with the student's individual needs and objectives and particu-
lar interests within the total accounting profession.

**Plan I**

A candidate under Plan I must complete a minimum of 12 hours of credit in 600-level courses in ACCT and a formal thesis. GBA courses applied to meet this requirement must be phase II or 600-level. A minimum of 30 hours is required for the completion of the degree including 24 hours of course work. The student must pass an oral examination on the thesis.

**Plan II**

This requires completion of a minimum of 30 hours of approved credit. A minimum of 18 hours must be courses open to graduate students only. This minimum must include three hours of credit in ACCT 697 and an additional 15 hours in accounting of which at least 12 hours must be in 600-level courses.

The Master of Applied Human Ecology degree is planned for graduate students to specialize in human development/family studies; human nutrition/foods; or textiles/clothing. The degree is designed to meet the growing need for specialists in a wide variety of occupations in business and industry, research, government, or educational agencies. The minimum of 37 credit hours includes either a research option or an applied option; the choice will depend on the professional goals of the student.

**Master of Applied Human Ecology**

The Master of Arts degree is the usual one chosen by a student seeking deeper experience in the subject matter of the arts and sciences. See major field description for any additional requirements. Two plans are offered for this degree.

**Plan I**

A Plan I candidate presents an approved program of not less than 16 hours of credit in the major field of study and a formal thesis in a minimum 30-hour degree program. Any exception to the major requirement must be approved by the graduate coordinator and the dean of the Graduate College. A department must require a written and/or oral examination, not necessarily on the thesis, for a student in Plan I of a master's degree program.

**Plan II**

This plan requires completion of an approved course of graduate study with at least 30 semester hours of credit. Of the 30 hours, 21 must be in the student's major field and must include at least the equivalent of two semester credit hours of research methods course work. It may also include a nine semester-hour minor or cognate field outside of the major field or department. An interdepartmental major may be composed of graduate courses in two or more departments.

The Master of Arts degree is for the person who plans to continue a teaching career who is unable to fulfill professional needs through other graduate programs at the University. The program is available only to individuals who hold a valid teaching certificate.

It is designed to meet the needs of classroom teachers who:
1. may not require the type of academic preparation currently provided in programs leading to the M.A. or M.S. degrees in their teaching area;
2. desire to pursue course work in a discipline in order to improve teaching proficiency;
3. can profit from additional professional course work in pedagogy, curriculum development, and educational foundations;
4. want to update their knowledge and proficiency in the use of research as it relates to their teaching area.

**Eligibility**

The person seeking the M.A.T. degree must have had at least one year's teaching experience and must hold a valid teaching certificate from the state in which he is teaching.

**Requirements**

The M.A.T. degree requires the candidate:
1. to complete 21-27 semester hours of credit in a major. In certain cases this may be an interdisciplinary major. At least one of the courses in the major must be a seminar
Degree Programs

at the 500-level or above;
1. to complete 8-13 semester hours of credit in professional education, including one course in pedagogy. The candidate who wishes a strong supporting area in reading may elect appropriate courses at the 500-level in education to meet this objective;
2. to complete 35 semester hours of credit of acceptable graduate course work with an accumulative grade point average of 3.0 or better.
3. to accumulate not more than seven semester hours of credit for course work with grades less than "B";
4. to write a research paper which requires study beyond the usual writing requirements for courses and which demonstrates ability to apply research findings in a classroom situation. This paper will usually be written in conjunction with the required course in pedagogy (for example, EDCI 545, EDCI 546, or EDCI 547).

6. to pass a final written comprehensive examination in his/her major area.

Participating Areas
M.A.T. degree candidates may major in the following areas: American culture studies, biological sciences, chemistry, economics, English, French, geography, geology, German, history, interpersonal and public communication, mass communication, mathematics and statistics, physics, physics and astronomy, political science, sociology, and Spanish.

The following courses are recommended as electives in education for M.A.T. students: EDIS 505, EDFI 569, EDFI 573, EDFI 596, EDFI 594, EDFI 500, EDFI 501, EDFI 502, EDFI 507, EDCI 420, and EDSE 431.

Candidates electing to specialize in the professional area in the field of reading may elect to take courses from the following: EDCI 521, EDCI 523, and EDCI 525.

Master of Business Administration

The basic objective of the Master of Business Administration degree program is to qualify a person for creative leadership in an increasingly complex and dynamic business society by enlarging his knowledge, managerial skill, vision, and perspective. The broad, integrated curriculum provides the candidate with an understanding of the major facets of business operations. This four-fold program includes work in the theoretical and historical foundations of business, quantitative controls and research methodology, decision making through the development of advanced functional skills, and the social environment of business. Throughout the program, a candidate must appraise logically the social, political, and economic implications of business decisions.

The Master of Business Administration program offers a broad, integrated curriculum that provides the student with an understanding of the major facets of business operations. Tool courses (managerial accounting, statistics, organizational behavior, and operations research) prepare candidates for management courses in the functional areas: marketing, finance, and production. Synthesizing courses in economic policy and business policy and a business research project complete the core. Beyond the core, students may design their program to meet their career objectives by pursuing electives in accounting, economics, finance, organizational development, management, marketing, operations research, management information systems, and international business. An opportunity exists for specializations in industrial marketing, operations research, operations/materials management, and management information systems.

The Executive M.B.A. program is a rigorous and concentrated program that results in the M.B.A. degree after completion of six 2-week sessions over a three-year period. Candidates must be nominated by their employer and should hold substantial responsibility in their organization. (A variation on the M.B.A. is the Master of Organization Development described below.)

The program is designed to serve graduates from a recognized college of business as well as graduates in liberal arts, science, engineering, or other fields desiring to undertake professional studies in the area of business administration. An undergraduate degree in business is not required. The M.B.A. degree may be terminal for a graduate, or he/she may pursue doctoral study.

The time required to complete the M.B.A. program varies from one to two academic years. For a student who has had little or no previous work in business administration or economics, two years is required. A student who has majored in business or economics may be able to complete the degree in one academic year.

An applicant is required to take the Graduate Management Admission Test supplied by the Educational Testing Service, Box 966, Princeton, New Jersey 08540. See the Office of Graduate Admissions for information regarding the GMAT.

Each applicant has to submit evidence that she has an appropriate academic foundation for this program. This foundation includes the completion of academic courses in calculus, introduction to the computer, introductory and intermediate economics, accounting, statistics, finance, marketing, business law (or the legal environment of business), production, and organization behavior/theory at an accredited institution. A candidate without the minimal academic foundation is required to take all or part of phase I, which consists of a maximum of 30
semester hours in business and economics, and may be required to complete course work in calculus and introductory economics.

Each candidate for the M.B.A. degree must include the following phase II core courses in the degree program (unless waived on the basis of strong undergraduate preparation): STAT 511 or GBA 663, 628, 630, 636, 640, 650, 695, and 698; and ECON 509, plus approved electives to make a total of 33 semester hours.

The primary purpose of the Master of Education degree program is to enable students to achieve a high level of competence in fulfilling various professional roles in education and allied fields. Fields of study include administration and supervision, business education, career and technology education, college student personnel, elementary education, guidance and counseling, health, physical education pedagogy, recreation and leisure, reading, school psychology, secondary education, and special education. Specific requirements of each field are described in individual program descriptions. Each student's course of study is planned individually with an adviser under one of the following plans:

**Plan I**
A candidate under Plan I must present an approved major of 18-21 semester hours, including a formal thesis experience, totaling a minimum of 30 semester hours of credit which may include three courses in related disciplines.

The student must pass a final written and/or oral examination on the thesis. The individual program descriptions have more specific degree requirements.

**Plan II**
A candidate must present an approved major of 18-21 semester hours. Also required is an approved course in research methodology. A minimum of 33 semester hours must be completed. This may include three courses in related disciplines. The individual program descriptions have specific requirements.

The candidate must pass a final written comprehensive examination covering studies included in the major not later than four weeks before the awarding of the degree. The examination may be taken when the student has achieved a minimum accumulative GPA of 3.0 and has nearly completed all course work in the major.

Any student who fails the comprehensive examination may, upon recommendation of the graduate committee and the approval of the dean of the Graduate College, be granted permission to take a second examination. Upon failing a second examination, the student is dropped from the Graduate College.

**M.F.A. in Art**
This program is designed to produce a professionally competent artist who is aware of the great traditions in art and related cultural fields. The intent is to produce a graduate who is something more than a mere technician in art. Whether the student becomes a professional artist or a teacher of art after receiving the degree, she has training in the basic fundamentals and has achieved a level of competence to contribute in the field of art.

**Studio Major**
A candidate presents 20-26 semester hours in one studio area, 12-18 semester hours in other studio areas, 15 hours in art history (with six hours in graduate seminars in two different areas or periods in art history), two or three hours in related course work outside the School of Art, three hours of aesthetics, one hour in research techniques, and three hours of thesis exhibition, for a total of 61-62 semester hours. In addition, the candidate must demonstrate proficiency recognized beyond the School of Art (acceptance in a juried show, receipt of a major commission, gallery representation, etc.), as approved by the area head and the Graduate Review Board. Awarding of the degree is contingent upon recommendation for graduation by the Graduate Review Board after a final review of work submitted by the candidate.

Total hour requirements can be reduced for a student who can apply credit from previous graduate work. In all cases, a student is required to complete a minimum of two full-time semesters in residence.

**Major Studio Areas**
Ceramics, design, drawing, glassworking, graphics (which must include drawing, photography, and prints), jewelry, painting, printmaking, sculpture, and weaving are the approved studio areas of specialization.

**M.F.A. Thesis Exhibition**
The thesis exhibition required of each student is the culmination of the candidate's work in more than one studio discipline. The exhibition is a major show including both written and photographic documentation, accompanied by proper brochure and advertising, recorded in thesis form. The exhibition may be either an individual show or part of a group exhibition and must be approved by a faculty committee.

**Thesis**
The thesis is the result of research in the area of art theory, art criticism, art history, or a problem involving some aspect of studio work. For an M.F.A. candidate who has completed a thesis for the M.A. in art at BGSU, no additional thesis is required for the M.F.A. In a special case, the thesis requirement may be waived at the discretion of the Faculty Review Committee with an appropriate substitute requirement.
Degree Programs

M.F.A. in Creative Writing

The program in creative writing is designed to provide developing fiction writers or poets with training in the techniques of their genre, continuous practice in writing, and detailed criticisms of their work. Students are expected to develop their own writing style as fully as possible under the direction of competent and experienced instructors. Before completing degree work, they should produce a book-length thesis comparable in quality to the published work of serious contemporary professional poets and fiction writers.

Hour Requirements

The two-year program consists of 40 semester hours, of which 16 must come from the workshop in the area of specialization; three in the study of techniques in this area; six in thesis hours; and the remainder (15 hours) in either recommended courses or electives.

A typical student's program might include: Writer's Workshop (in the area of specialization) 16 hours; Poetry or Fiction Techniques (determined by specialization) three hours: Thesis hours - six hours; electives - 15 hours. Total 40 hours.

The Master of Industrial Technology degree is designed to prepare the student with a high level of professional, technical and management knowledge and skills to plan, facilitate, and integrate technology and business operations in leadership functions in the enterprise system. The degree is planned to meet the growing need for specialists in a wide variety of careers in business, industry, and government. Competencies of technical personnel are augmented through advanced technology courses, selected business operations courses, and relevant experiences in other supporting disciplines.

Advanced technical and managerial preparation is possible under the degree in the area of specialization of manufacturing technology.

The program is designed to serve graduates of recognized bachelor's degree programs in industrial technology and engineering technology, as well as graduates of other degree programs who may desire to undertake professional studies in technology. Undergraduate transcripts should evidence an appropriate foundation in mathematics, science, technology, and business operations.

The time required to complete the Master of Industrial Technology program varies from one to two years of full-time study. Part-time students must adjust their time for completion accordingly.

Plan I

A candidate must complete a minimum of 33 semester hours and a thesis equivalent to six semester hours. The 33 semester-hour program, plus thesis, is distributed as follows: nine hours core (research, statistics, communication); 15 hours advanced technology; and nine hours advanced business operations. Within this distribution opportunities exist for internships and research in industry. The thesis (six hours) is intended to develop the student's ability to do applied technical research. Problems derived from the work place are encouraged. The student must pass a final written and/or oral exam.

Plan II

The candidate must complete a minimum of 33 hours and a major project equivalent to six semester hours. The 33 semester-hour program, plus major project, is distributed as follows: nine hours core (research, statistics, communication); 15 hours Advanced Technology; and nine hours Advanced Business Operations. Within this distribution, opportunities exist for internships and research in industry. The major project (six hours) allows the candidate to apply knowledge derived from the work place. Typically, projects may involve the development and application of prototype mechanisms or systems, or the integration of technology and business operations to the solution of human, machine, or technical management problems. The student must pass a final written and/or oral examination.

Students who fail the written and/or oral examination may, upon recommendation of the graduate coordinator and approval of the dean of the Graduate College, be permitted to take a second exam. A student may not change from Plan II to Plan I after having the major project synthesis examination. Upon failing a second examination, the student is dropped from the Graduate College.

Total hour requirements may be reduced for an outstanding student who is able to apply credit from previous graduate work. However, approval for the transfer of hours must happen prior to enrollment. In all cases, a student must take at least 30 hours in residence with a minimum of one workshop in the area of specialization per semester.

No student who has done work in other programs at BGSU is allowed to complete work toward an M.F.A. in creative writing if he or she has not completed 30 semester hours of graduate work after being accepted into the M.F.A. program.

Admission Requirements

Admission to the writing program is based primarily on the evaluation of sample manuscripts submitted at the time of application. A student interested in fiction should submit a portfolio of 50 pages; a student interested in poetry, a portfolio of 30 pages to: Director, M.F.A. Program, Department of English, BGSU, Bowling Green, Ohio 43403, before February 15 prior to the fall semester he wishes to enter. The applicant should also be prepared to meet both Graduate College and English Department admission requirements.
Degree Programs

It is the purpose of the College of Musical Arts to prepare a graduate for professional service through an in-depth understanding of the major field, a broad exposure to other aspects of the art, and research experience in the area of specialization. The program is designed for a person who has completed an appropriate undergraduate degree or its equivalent, and who is qualified for advanced study by reason of musical and intellectual abilities and achievements.

The College offers degrees in the fields of music composition, music education, music history, music performance, and music theory. The music education emphasis features four options: basic, Plan I; basic, Plan II (comprehensive exam); elementary; and conducting. Performance majors have the following options: choral conducting, orchestral conducting, voice, keyboard instruments, orchestral instruments, and instrumental specialization – the last a concentration, within the brass, string, or woodwind areas, in a major instrument and at least two minor instruments. Considerable flexibility is permitted within an individual program so that the special needs of a student can be met.

Hour and Course Requirements

A candidate in all programs except music education, Plan II, will complete a minimum 34-hour program, with 15 hours specified as core requirements appropriate to the student's concentration. An additional 12 hours are devoted to studies in music outside the major. The final seven hours comprise the research component. The instrumental specialization requires three additional hours because of the instruction in two minor instruments.

A candidate in music education, Plan II, will complete a minimum 34-hour program including a 14-hour core, eight-hour electives, and 12 hours of other studies in music which are chosen from academic courses in music and applied study or ensemble activities. A written and oral comprehensive examination will be administered following the completion of all course work. A minimum of one year of teaching experience is required of all students entering the program.

Students should obtain specific degree requirements from the graduate coordinator in the College of Musical Arts.

Final Project Requirements

At the culmination of the degree program, each student is expected to present a research project appropriate to the student's area of specialization. Credit for this requirement is given under the course number MuGS 599. The student may enroll for up to nine hours of credit, but no more than three hours will be counted toward the degree. All submissions must follow the schedule of deadlines published by the Graduate College.

Candidates in performance are expected to fulfill the thesis requirement by presenting a public recital or recitals according to the degree specifications. In addition, all performance majors are expected to submit a written research document, usually on a topic related to the recital. A reel-to-reel magnetic tape recording of the recital(s), a copy of the program(s), and one copy of the research document are to be submitted to the Graduate College office.

A conducting major is expected to compile on magnetic tape 30-45 minutes of music consisting of repertory approved by the appropriate conducting faculty. Ensembles used by the candidate will be assigned by the faculty from standing college ensembles, or approved by the faculty.

Plan I music education students are expected to submit a substantive issue in music education. Music education majors who are excellent performers may, with the approval of the area performance faculty and the chair of Music Education, fulfill the thesis requirement by means of a recital and document. Plan II music education students must pass a written and oral comprehensive examination at the completion of all course work.

Students in music history and theory must submit a thesis as part of the degree requirements. Composition students fulfill the thesis requirement with a musical composition. Specific guidelines regarding the length and instrumentation of the composition are available through the College office.

Students whose final projects require the use of magnetic tape must comply with the College of Musical Arts criteria in recording and editing. Further information is available in the CMA Handbook for Theses, Documents and Comprehensive Examinations.

Master of Music

Designed for managers, owners of small businesses, personnel and training professionals, consultants and recent college graduates, the program is for part-time or full-time participation depending on the student's interests. It is a program designed to develop new management skills in building and changing organizations, thereby helping the student meet the changing demands of today's work force.

For full-time students who have an undergraduate degree in business, the program represents a one and one-half to two-year resident period requiring at least 30 hours for graduation. For part-time students, it represents a two and one-half to three-year nonresident period requiring at least 30 hours for graduation. Students without an undergraduate degree in business are required to demonstrate proficiencies in economics (micro and macro), statistics, accounting, operations management, organization behavior, marketing, finance, calculus, computers, and business law. Such background proficiencies are required in accordance with accreditation standards of...
the American Association of Collegiate Schools of Business. Course requirements may be satisfied by transfer from an accredited university, by examination, or through correspondence courses.

Full-time students will attend approximately eight weekend classes during the fall and spring semester of the first year. Part-time students will attend four weekend classes for each of the first two years in the program. Weekend classes will be concentrated in learning modules similar to full-day adult education seminars. The program begins with a five-day session in September. Students will follow a sequence of courses through the program in accordance with a

Durarr Programs

prearranged schedule depending on whether they are full-time or part-time students.

Admission requirements for the master’s degree program in organization development are as follows:
1. bachelor’s degree;
2. participation endorsed by employer (for part-time students);
3. three letters of recommendation attesting to interest or value of training in organization development;
4. satisfactory score on Graduate Management Admissions Test (GMAT);
5. satisfactory accumulative GPA;
6. approval by a screening committee of the College of Business Administration.

Master of Rehabilitation Counseling

The degree is designed to enable a student to achieve a high degree of competence in counseling theory and practice, rehabilitation practices, and the coordination of services. These skills can be applied to a variety of agencies, that is, those serving persons with psychiatric, physical and social/cultural disabilities. The classroom and practicum experiences are combined with work experiences in agencies. The student is able to choose from a number of agencies in the local area or nationally. Each student’s course of study is planned individually with an adviser under one of the following plans:

Plan I
A candidate must present an approved major of 27-40 semester hours, including a formal thesis experience, for a minimum of 48 semester hours of credit. The student must pass a final written and/or oral examination.

Plan II
A candidate under Plan II must have a minimum of 48 semester hours of credit of which 27-40 semester hours must be presented in an approved major. The candidate must also pass a final written comprehensive examination covering studies included in the major. The examination may be taken when the student has achieved a minimum cumulative grade point average of 3.0 and has approached completion of all course work in his/her major.

Any student who fails the comprehensive examination may, upon recommendation of the graduate coordinator and the approval of the dean of the Graduate College, be granted permission to take a second examination. Upon failing a second examination, the student is dropped from the Graduate College.

Master of Science

The Master of Science degree is the usual one chosen by a student seeking professional experience in certain subject matter fields in the sciences. See major field description for any additional requirements. Two plans are offered for this degree.

Plan I
A candidate under Plan I presents an approved major of not less than 16 hours of credit and a formal thesis in a 30-hour minimum degree program. Any exception to the major requirement must be approved by the graduate coordinator and the dean of the Graduate College. A department must require a written and/or oral examination, not necessarily on the thesis, for a student in Plan I of the master’s degree program.

Plan II
This plan requires the completion of an approved course of graduate study with a minimum of 30 hours of credit. The required minimum must include 20 additional hours in the student’s major field. It may also include an eight-hour minor or cognate field outside the department. An interdepartmental major may be composed of graduate courses in two or more departments.

The candidate must pass a final written comprehensive examination covering studies included in the major not later than four weeks before the awarding of the degree. The examination may be taken when the student has achieved a minimum accumulative grade point average of 3.0 and has approached completion of all course work in the major.

Any student who fails the comprehensive examination may, upon recommendation of the graduate committee and approval of the dean of the Graduate College, be granted permission to take a second examination. A student may not change from Plan II to Plan I after having attempted the comprehensive examination. Upon failing a second examination, the student is dropped from the Graduate College.

Fields for the Master of Science degree are the following: applied statistics, biological sciences, chemistry, communication disorders, computer science, geology (Plan I only), mathematics and statistics, and physics and astronomy.
Degree Programs

Specialist in Applied Biology

The program is co- or post-master's work designed to provide advanced preparation in highly specialized fields of biological laboratory sciences. The degree is approved for study in immunohematology.

Admission
Each applicant for admission to the Specialist in Applied Biology program must comply with all requirements for admission to the Graduate College and must have completed or be co-enrolled in a master's degree program or its equivalent.

Completion of Work
A candidate must complete all requirements for the degree within six years of the date of initial enrollment in the program.

Time spent in the armed forces, during which the student is not enrolled for courses, is exempted in applying this limitation. An appropriate advisory committee is appointed by the department to supervise and examine a student's progress and performance in the program.

Degree Requirements
For completion of the program the student is required to complete a minimum of 63 hours of course work beyond the bachelor's degree, including a thesis, specified courses, and any requirements for eligibility to take the examination for certification in the specialized area.

Specific requirements include:

- Major Field: BIOL 502 and BIOL 599 or their equivalents; CHEM 445-446 or their equivalents.
- Area of Specialization: A minimum of 24 hours of courses applicable to the specialty.
- Practicum or Field Service: Service appropriate to the area of specialization.
- Cognate Fields: Appropriate graduate-level courses in areas such as chemistry, management, or computer science may be applied to the degree if approved by the student's committee.

Residence Requirement
A student is considered to be in residence whenever she is registered on campus as a graduate student. The student shall meet one of the following three alternatives:

1. Satisfactory completion of a minimum of four hours of study in each of two semesters;
2. Full-time study for one semester with a minimum of eight hours;
3. Full-time study for two consecutive five-week terms or for a summer session with a minimum of eight hours.

Comprehensive Examination
In addition to the regular course examinations, each student is required to pass a comprehensive oral examination during the final period of registration for course work.

Certification
When certification by a professional society is sought in an area of specialization, the requirements for eligibility for certification are necessary requirements for the specialist degree. In immunohematology-blood banking, certification is granted by the American Society of Clinical Pathologists in cooperation with the American Association of Blood Banks.

Application for the Degree
Application for the degree shall be made at least ten weeks prior to the commencement at which the student expects to receive the degree. The student shall achieve a minimum accumulative grade point average of 3.0 in all graduate work to be eligible for the degree.

Transfer Credit
A maximum of 30 semester hours of graduate work taken elsewhere may be applied toward the degree. At least 33 hours in this program shall be completed at BGSU.

The two-year Specialist in Education program is post-master's work designed primarily to provide advanced preparation in educational administration, supervision, and reading.

Admission
Each applicant for admission to the Specialist in Education program must comply with all requirements for admission to the Graduate College. A student should have a planned program on file early in the Ed.S. program.

Each applicant must present evidence of satisfactory experience as a teacher or of experience appropriate to the field of specialization. Each applicant must take the appropriate admission tests and must be interviewed by a faculty committee.

Completion of Work
A candidate must complete all requirements for the Ed.S. degree within six years of the date of initial enrollment in the degree program. Time served in the armed forces is exempted in applying this limitation.

Degree Requirements
For completion of the program, the student is required to complete a minimum of 63 hours of course work beyond the bachelor's degree including all specific requirements for the degree and for certification where relevant.

Specific requirements include:

- Education Courses: EDAS 521, EDAS 525, EDCI 511, EDFI 571, EDFI 596, and EDFI 597 or their equivalents are required.
- Area of Specialization: A minimum of 24 hours of course work in the area of specialization must be taken.
- Practicum or Field Service Experience: This phase of the program must be appropriate to the area of specialization.
- Cognate Field: Any specific requirements are stated under the desired field of specialization.

Residence Requirement
The student must meet one of the following four alternatives:

1. A student who is awarded a graduate
Degree Programs

fellowship must satisfactorily complete a minimum of 12 hours of study fall semester and a minimum of eight hours of study in the spring.

2. A student must participate in full-time study for one semester with at least eight hours.

3 A student must participate in full-time study for two consecutive five-week terms or for a summer session with at least eight hours.

4. A student must complete at least 51 percent of his or her graduate course work on the main campus (with the exception of state-approved degree programs carrying off-campus degree authority).

Comprehensive Examination

In addition to the regular course examinations, each student is required to pass an oral comprehensive examination during the final period of registration for course work.

Application for the Degree

Application for the degree must be made at least ten weeks prior to the commencement at which the student expects to receive the degree. The student must achieve a minimum cumulative grade point average of 3.0 in all graduate work to be eligible for the degree.

Transfer Credit

A minimum of 63 post-baccalaureate semester credits are required for the specialist degree. Typically, 33 of these credits are acquired while completing a master's degree in a related field; hence, a minimum of 30 post-master's semester credits are usually needed for completion of the specialist degree. Up to six semester credits of graduate work may be transferred into the post-master's component of the specialist degree with the approval of the program area and Graduate College. Under no circumstances, however, may graduate credits be transferred into the 30-hour post-master's component of the specialist degree if they are also applied toward another degree.

Suggested Timeline for Doctoral Students

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<th>60 hours of course work</th>
<th>Deposit dissertation at Graduate College</th>
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<tr>
<td>Complete TDP</td>
<td>Application for preliminary exam</td>
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<td>Grad College appoints faculty rep</td>
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<td>Take preliminary exam</td>
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<td>Dissertation topic is approved</td>
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<td>Apply for graduation</td>
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<td>Fall</td>
<td>Oral Defense</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>START CLASSES</td>
<td>GRADUATE</td>
</tr>
</tbody>
</table>

Doctor of Philosophy

The degree of Doctor of Philosophy is conferred in recognition of outstanding ability and scholarship in a recognized field of learning after an extended period of study and investigation. Much of the work of the student is in a selected field of learning in which the student has gained mastery of the method of advanced study as demonstrated finally in a doctoral dissertation. While a well-prepared student of outstanding ability may secure the degree upon the completion of three years of study beyond the bachelor’s degree, time is secondary to maturity and achievement of the student as a scholar.

Admission

After completion of the master's degree or equivalent, a student may be admitted as a doctoral applicant upon approval by the departmental doctoral committee and the dean of the Graduate College. Admission as a doctoral applicant does not imply admission to candidacy.

Residence/Credit Hour Requirements

A student is considered to be in residence when registered on campus as a graduate student. The minimum residence requirement beyond the master's degree or equivalent may be met by satisfactorily completing 16 hours of course work (not 799 research) on the main campus in no more nor fewer than two consecutive semesters with no fewer than three hours of registration in either of the two semesters.

The residence requirements of individual departments may exceed this minimum requirement.

The minimum program for the Ph.D. degree requires the completion of 90 hours of approved graduate credit beyond the bachelor's degree including a minimum of 16 and a maximum of 30 hours of registration for dissertation research (799) and the completion of a dissertation. The program ordinarily re-
Degree Programs

requires a minimum of three academic years, but a student frequently finds that more time is necessary to complete all requirements for the degree.

Unless a degree program has been specifically approved by the Ohio Board of Regents as an off-campus graduate degree program, the individual student must complete at least 51 percent of the graduate course work on the main campus of BGSU, as distinguished from Firelands branch campus or an extension center.

The policy concerning transfer of credit from other institutions into graduate degree programs at BGSU is described in this Catalog under "Academic Regulations."

400-Level Courses

For doctoral-level students, the number of 400-level credits which may be counted toward the minimum required hours (90) for the Ph.D. shall not exceed 10 hours or three courses in post-master's studies.

Major and Minor

A student working toward the doctorate declares a major field of study and may take work in minor or cognate fields outside the major department acceptable to the departmental doctoral committee and the dean of the Graduate College.

Time Limit for Completion of Work

A candidate for the Ph.D. degree must complete all work beyond the master's degree within eight years from the time he first registers as a doctoral student. Course credits older than eight years will not apply to the degree requirements unless revalidated by formal examination or retaken, whichever the department decides is necessary. Time spent in the armed forces is exempt from this time limitation.

The minimum foreign language requirement for the Ph.D. degree may be met by fulfilling one of three options. However, courses used to satisfy degree requirements at BGSU or another institution may not be used to satisfy the requirement. A student may not transfer credit from another college or university to fulfill the Ph.D. language requirement.

Option A: the demonstration of a dictionary knowledge of one foreign language.

Option A may be met by satisfactory performance on an examination administered by one of the language departments. Students may take the examination on an individual basis after consultation with the appropriate examiner well in advance of the examination date, or may opt to take it at the conclusion of the courses FREN/GERM/LAT/SPAN 500. (Note: FREN/GERM/LAT/SPAN 500 are service courses for graduate students in other fields who desire to develop a reading knowledge of the language. Attending and completing one of these courses does not by itself satisfy the graduate language requirement.)

A student whose native language is not English may request English as a Foreign Language (EFL) to satisfy Option A of the language requirement for the Ph.D., contingent upon the approval of the major department. To implement this request, the coordinator of the EFL Program will, first, review the student's on-campus proficiency test results obtained either upon arrival here or after the satisfactory completion of English 500 and will, secondly, arrange for the student to write an essay related to her field of study. Further details are available at the office of the EFL Program, 404A Moseley Hall.

Option B: the demonstration of a proficiency in computer programs and language.

Option B may be fulfilled by satisfactory performance on a proficiency examination administered by the Department of Comput-
er Science or by completing one of the following course options: CS 500 (grade of P) or GBA 580 (grade of A or B) or both CS 101 and CS 102 (grades of P) or both CS 101 and CS 205 (grades of P).

Option C: the satisfactory completion of an integrated program of three tool courses selected from outside the student's major or minor (not less than six hours).

Courses selected in Option C are to be tools in the sense that they are to train the graduate student in research skills over and above those usually required of all candidates in the discipline (including skills taught outside the program or department) and which will be useful in dissertation research. Option C may be met from courses taken on this campus, or, in exceptional circumstances, by highly specialized courses taken elsewhere. Courses selected to meet option C are in addition to courses used to meet the other requirements for the Ph.D. degree. The courses in option C are not to contain a mixture of computer courses and statistics courses. The computer option is met by fulfilling the requirements under B.

The selection of Option C carries with it the requirement that the graduate student submit with the request for prior approval of the option a written explanation of how the selected courses are to be used in the dissertation research of the student. This statement, submitted to the graduate dean, must be endorsed by the departmental graduate coordinator or the student's major professor.

Courses selected to meet Option C as well as CS 500, ENG 500, CDIS 500, FREN 500, GERM 500, LAT 500 and SPAN 500 are to be taken by the student on a P (pass) - U (unsatisfactory) basis. Such courses will not contribute to hours earned or grade points.

The department concerned has the option of prescribing A, B or C, plus other requirements.
Examinations

All doctoral students must take preliminary examinations. Some departments also require students to take qualifying examinations at an earlier stage in the doctoral process. Students must contact their department or departmental graduate coordinator for specific details.

**Preliminary Examination**

This examination is both written and oral. The student may request permission to take this examination after having:

1. satisfactorily completed the language requirement;
2. removed any conditions upon admission;
3. completed or approached completion of at least 60 hours in the approved course of study beyond the bachelor's degree; and
4. achieved a cumulative grade point average of at least 3.2 on work beyond the master's degree. The request to take the examination, approved by the graduate coordinator, must be filed in the office of the Graduate College at least two weeks prior to the date of the examination. It is expected that the Graduate College appoints a graduate faculty representative to participate in the examination and dissertation.

**Re-examination**

If the student fails the preliminary examination, she/he may (after a lapse of six months or more) take a second examination upon the recommendation of the departmental doctoral committee. The student may not continue with the program of graduate studies for the Ph.D. if the second examination is failed. May be included on the student's doctoral committee in addition to the graduate faculty representative appointed by the dean.

In general, the graduate faculty representative to a Ph.D. committee has two primary responsibilities:

1. to assure the University that all minimum standards of the Graduate College, both written and implied, have been met in all aspects of the preliminary examination process and in the writing of the dissertation;
2. to ensure that the student is treated fairly and equitably in all aspects of the exam and dissertation processes.

**Examinations and Dissertation**

The appointment of the graduate faculty representative should be made before the preliminary examination is taken in order that the representative can assist in the preparation of the examination.

The graduate faculty representative is responsible for monitoring both the content and form of the material under review. This monitoring includes an assessment of the academic quality of the written examination, the oral examination, and the dissertation manuscript.

The procedures associated with the administration of the examination and defense are also the province of the graduate faculty representative. Under this procedural category are included such considerations as appropriate scheduling and notification of committee meetings, distribution of material in advance of committee meetings, and the protection of the student's rights.

The graduate faculty representative on preliminary examination and dissertation committees is a full member and must be a participant in all deliberations and actions. As it is for any member of the committee, results of examinations conducted without participation of the representatives are not acceptable. The representative is expected to contribute to the examinations of a candidate in order to ensure the Graduate College of the satisfactory quality of the student's...
A dissertation committee is recommended for each candidate by the departmental doctoral committee and is appointed by the dean of the Graduate College. The committee consists of at least four members including a representative of the graduate faculty. Depending upon program guidelines, the composition of this committee may be similar to or different from the preliminary examination committee. However, in all instances, the graduate faculty representative appointed to the preliminary examination committee also serves on the dissertation committee.

The dissertation is to be a mature piece of writing embodying the results of significant research by the student in a specialized area. A student working on an approved topic for a doctoral dissertation is required to register for course number 799. A student who registers for dissertation research (799) is required to maintain continuous registration from one semester to another, excluding summer sessions, regardless of whether he is in residence, until the research is completed and the dissertation is accepted by the dean of the Graduate College. However, students who plan to graduate in summer must enroll that term. The minimum continuous registration for a dissertation student is one hour per semester. A student who has completed the hours designated for dissertation research in the tentative degree program but has not completed the dissertation is required to register for at least one hour each semester until the degree is granted.

A Ph.D. student must register for a minimum of 16 credits of dissertation research (799) as a degree requirement.
**Final Examination**
Each candidate ordinarily passes a final oral examination, also called a dissertation defense, administered by the dissertation committee. The examination covers the dissertation and also may cover directly related fields of study. A written examination may also be required at the discretion of the committee.

Since this is traditionally a public defense of research, the student is required to publicize the date by notifying The Monitor, the in-house weekly newsletter for faculty and staff, about three weeks before the final oral examination is to be held.

**Retaking the Final Exam**
In case a student does not pass the dissertation defense, she may take a second examination upon the recommendation of the dissertation committee four months or more after the date of the first examination. No student is permitted to take the final examination more than twice.

**Deadlines**
Students must be aware of deadlines established by the Graduate College and published in the Graduate College calendar. Specifically, the following procedures should be followed:

1. Formal application for graduating with the doctoral degree should be filed at least 10 weeks prior to the commencement at which the student expects to receive the degree.
2. Copies of the final draft of the dissertation (defined as the manuscript with content embodying all corrections requested by the committee) should be submitted to the dissertation committee sufficiently prior to the date set for the final examination to allow for a rigorous and careful reading of the manuscript by the committee. The graduate coordinator or program handbook should be consulted for this deadline.
3. An error-free copy of the completed dissertation must be deposited with the Office of the Graduate College not later than six weeks prior to the commencement at which the degree is to be conferred.
4. A student should be registered at the time he takes the oral examination.
5. The report of the dissertation committee must be filed in the Office of the Graduate College by the chair of the dissertation committee not later than six weeks prior to the commencement at which the degree is to be conferred.

**Publication of Dissertation**
The dissertation committee, upon accepting the dissertation and the abstract, certifies approval for publication by University Microfilms International. The student is charged $65 for microfilming and binding. After the degree has been granted, the Graduate College has the dissertation microfilmed twice. The bound dissertation and one microfilmed copy is placed in Jerome Library, the master microfilm negative remains on deposit with University Microfilms International at Ann Arbor, Michigan. Copies of the microfilmed or paper dissertation are available from University Microfilms International at nominal costs.

A student may make other arrangements for publication, provided such publication does not interfere with publication by University Microfilms International. If a student wishes to copyright her dissertation, she must pay an additional charge of $20. Copyrighting is not required by the Graduate College.

*Winifred Stone, associate professor of ethnic studies and associate dean of the Graduate College, is the featured speaker at graduation.*

*Sharing ideas and information is an important aspect of the graduate student experience.*
Summary of Degree Fields and Specializations

Doctoral degrees are available in these fields and specializations:

- American Culture Studies - English, History, Mass Communication, Popular Culture, Sociology
- Biological Sciences - Behavioral Biology, Biochemistry, Cell and Developmental Biology, Ecology, Evolution, Genetics, Immunology, Microbiology, Molecular Biology, Organismic Biology, Physiology
- Communication Disorders - Speech-Language Pathology, Audiology
- EDAS - Educational Supervision, Elementary and Secondary Administration, Higher Education Administration
- English - American Literature, Creative Writing, Modern and Contemporary British Literature, Rhetoric and Composition
- History - East Asian History, European History Since 1750, History and Contemporary Policy, Latin American History, U.S. History Since 1750
- Interpersonal and Public Communication - Interpersonal/Organizational Communication, Rhetorical Theory/Criticism
- Mass Communication - International Communication, Law and Policy, New Communications Technology, Theory and Methodology
- Mathematics - Algebra, Analysis, Probability, Statistics
- Philosophy (Applied) - Environmental Philosophy, Moral and Political Philosophy, Philosophy and Medicine, Philosophy and Law, Philosophy and Business, Philosophy of Mind
- Photochemical Sciences - Biophysical Chemistry, Electron and Energy Transfer, Electronic Spectroscopy, Fast Reaction Kinetics, Molecular Excited States, Nucleic Acid Oxidation and Photochemistry, Photoelectrochemistry and Applications, Photopolymerization Science, Photosynthesis, Vibrational Photochemistry
- Psychology - Clinical Psychology, Developmental Psychology, Experimental Psychology, Industrial Psychology, Social Psychology
- Sociology - Criminology/Deviance, Population Studies/Demography, Social Psychology, Sociology of Conflict
- Theatre - Directing and Staging, Theatre History, Theory and Criticism

Master's degrees are available in these program areas:

- Master of Arts - American Culture Studies, Art, College Student Personnel, Economics, English, Geography, German, Guidance and Counseling, History, Interpersonal and Public Communication, Mass Communication, Mathematics, Philosophy (Applied), Political Science, Popular Culture, Psychology, Romance Languages, Sociology, Theatre
- Master of Arts in Teaching - American Culture Studies, Biological Sciences, Chemistry, Economics, English, French, Geography, Geology, German, History, Interpersonal and Public Communication, Mass Communication, Mathematics, Physics and Astronomy, Political Science, Sociology, Spanish
- Master of Science - Applied Statistics, Biological Sciences, Chemistry, Computer Science, Communication Disorders, Geology, Physics and Astronomy
- Master of Accountancy
- Master of Applied Human Ecology - Food and Nutrition, Textiles and Clothing, Human Development and Family Studies
- Master of Business Administration
- Master of Fine Arts - Art, Creative Writing
- Master of Industrial Technology
- Master of Music - Music Composition, Music Education, Music History, Music Performance
- Master of Organization Development
- Master of Rehabilitation Counseling

Other graduate programs include:

- Education Specialist - Administration and Supervision, Mathematics Supervision, Reading
- Specialist in Applied Biology
- Certificate in Gerontology
At right are the fields and specializations possible for study in a master's, specialist's, or doctoral program. See the page number indicated for more information about the studies, including exactly which areas are available to master's and which to doctoral students.

<table>
<thead>
<tr>
<th>Accountancy (p. 53)</th>
<th>Ecology (p. 62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra (p. 110)</td>
<td>Economics (p. 77)</td>
</tr>
<tr>
<td>American Culture Studies (p. 53)</td>
<td>Educational Administration &amp; Supervision (p. 78)</td>
</tr>
<tr>
<td>American Culture/English (p. 53)</td>
<td>Educational Supervision (p. 78)</td>
</tr>
<tr>
<td>American Culture/History (p. 53)</td>
<td>Electron and Energy Transfer (p. 121)</td>
</tr>
<tr>
<td>American Culture/Mass Communication (p. 53)</td>
<td>Electronic Spectroscopy (p. 121)</td>
</tr>
<tr>
<td>American Culture/Popular Culture (p. 53)</td>
<td>Elementary Education (p. 81)</td>
</tr>
<tr>
<td>American Culture/Sociology (p. 53)</td>
<td>Elementary Education: Curriculum (p. 81)</td>
</tr>
<tr>
<td>Analysis (p. 110)</td>
<td>Elementary Education: Computer Education (p. 81)</td>
</tr>
<tr>
<td>Applied Human Ecology (p. 56)</td>
<td>English (p. 87)</td>
</tr>
<tr>
<td>Applied Statistics (p. 58, 110)</td>
<td>English: Teaching English as a Second Lang. (p. 87)</td>
</tr>
<tr>
<td>Art (p. 59)</td>
<td>Experimental Psychology (p. 128)</td>
</tr>
<tr>
<td>Art History (p. 59)</td>
<td>Family Studies (p. 56)</td>
</tr>
<tr>
<td>Art: Studio (p. 59)</td>
<td>Fast Reaction Kinetics (p. 121)</td>
</tr>
<tr>
<td>Astronomy (p. 122)</td>
<td>Fiction (creative writing) (p. 87)</td>
</tr>
<tr>
<td>Audiology (p. 74)</td>
<td>Food &amp; Nutrition (p. 56)</td>
</tr>
<tr>
<td>Behavioral Biology (p. 62)</td>
<td>French (p. 132)</td>
</tr>
<tr>
<td>Biochemistry (p. 62)</td>
<td>Genetics (p. 62)</td>
</tr>
<tr>
<td>Biological Sciences (p. 62)</td>
<td>Geography (p. 91)</td>
</tr>
<tr>
<td>Biology: Evolution (p. 62)</td>
<td>Geology (p. 93)</td>
</tr>
<tr>
<td>Biophysical Chemistry (p. 121)</td>
<td>Geophysics (p. 93)</td>
</tr>
<tr>
<td>Business Education (p. 66)</td>
<td>German (p. 95)</td>
</tr>
<tr>
<td>Career &amp; Technology Education (p. 67)</td>
<td>Gerontology (pp. 33, 97)</td>
</tr>
<tr>
<td>Cell &amp; Developmental Biology (p. 62)</td>
<td>Gifted Education (p. 138)</td>
</tr>
<tr>
<td>Ceramics (p. 59)</td>
<td>Glassworking (p. 59)</td>
</tr>
<tr>
<td>Chemistry (p. 69)</td>
<td>Graduate Business Administration (p. 98)</td>
</tr>
<tr>
<td>Clinical Psychology (p. 128)</td>
<td>Graphics (p. 59)</td>
</tr>
<tr>
<td>College Student Personnel (p. 71)</td>
<td>Guidance &amp; Counseling (p. 85)</td>
</tr>
<tr>
<td>Communication: Mass Communication (p. 108)</td>
<td>Health (p. 101)</td>
</tr>
<tr>
<td>Communication Disorders (p. 73)</td>
<td>Health Education (p. 101)</td>
</tr>
<tr>
<td>Computer Science (p. 74)</td>
<td>Health, Physical Education &amp; Recreation (p. 101)</td>
</tr>
<tr>
<td>Computer Science: Operations Research (p. 74)</td>
<td>Higher Education Administration (p. 78)</td>
</tr>
<tr>
<td>Computer Science: Data Telecommunication (p. 74)</td>
<td>History (p. 103)</td>
</tr>
<tr>
<td>Conducting: Choral (p. 115)</td>
<td>History: East Asian (p. 103)</td>
</tr>
<tr>
<td>Conducting: Orchestral (p. 115)</td>
<td>History: European since 1750 (p. 103)</td>
</tr>
<tr>
<td>Creative Writing (p. 87)</td>
<td>History: Latin American (p. 103)</td>
</tr>
<tr>
<td>Criminology/Deviance (p. 134)</td>
<td>History: Public (p. 103)</td>
</tr>
<tr>
<td>Data Telecommunication (pp. 74, 122)</td>
<td>History: U.S. since 1750 (p. 103)</td>
</tr>
<tr>
<td>Design (p. 59)</td>
<td>History and Contemporary Policy (p. 103)</td>
</tr>
<tr>
<td>Developmental Psychology (p. 128)</td>
<td>Human Development &amp; Family Studies (p. 56)</td>
</tr>
<tr>
<td>Drawing (p. 59)</td>
<td>Immunohematology (p. 43, 62)</td>
</tr>
<tr>
<td>Immunology (p. 62)</td>
<td>Industrial Marketing (p. 98)</td>
</tr>
<tr>
<td>Industrial Psychology (p. 128)</td>
<td>International Mass Communication (p. 108)</td>
</tr>
<tr>
<td>Industrial Technology (p. 142)</td>
<td>Interpersonal and Public Communication (p. 106)</td>
</tr>
<tr>
<td>International Communication (p. 106)</td>
<td>Interpersonal/Organizational Communication (p. 106)</td>
</tr>
<tr>
<td>Jewelry (p. 59)</td>
<td>Literature: American (p. 87)</td>
</tr>
<tr>
<td>Literature: Modern &amp; Contemporary British (p. 87)</td>
<td>Management Information Systems (p. 98)</td>
</tr>
<tr>
<td>Manufacturing Technology (p. 142)</td>
<td>Mass Communication (p. 108)</td>
</tr>
<tr>
<td>Mass Communication Law &amp; Policy (p. 108)</td>
<td>Mass Communication Theory &amp; Methodology (p. 108)</td>
</tr>
<tr>
<td>Master's of Business Administration (p. 98)</td>
<td>Mathematics (p. 110)</td>
</tr>
<tr>
<td>Mathematics (applied): Scientific Computation (p. 110)</td>
<td>Mathematics &amp; Statistics (p. 110)</td>
</tr>
<tr>
<td>Mathematics Supervision (p. 114)</td>
<td>Microbiology (p. 62)</td>
</tr>
<tr>
<td>Molecular Biology (p. 62)</td>
<td>Molecular Excited States (p. 121)</td>
</tr>
<tr>
<td>Music (p. 115)</td>
<td>Music Composition (p. 115)</td>
</tr>
<tr>
<td>Music Education (p. 115)</td>
<td>Music History (p. 115)</td>
</tr>
<tr>
<td>Music History (p. 115)</td>
<td>Music Performance (p. 115) (instrumental specialist)</td>
</tr>
<tr>
<td>Music: Voice (p. 115)</td>
<td>Music: Instrumental Performance (p. 115)</td>
</tr>
<tr>
<td>Music: Piano (p. 115)</td>
<td>Music Theory (p. 115)</td>
</tr>
<tr>
<td>Music Theory (p. 115)</td>
<td>Music: Voice (p. 115)</td>
</tr>
<tr>
<td>New Mass Communication Technology (p. 108)</td>
<td>Molecular Biology (p. 62)</td>
</tr>
<tr>
<td>Nucleic Acid Oxidation &amp; Photochemistry (p. 121)</td>
<td>Organismic Biology (p. 62)</td>
</tr>
<tr>
<td>Operations/Material</td>
<td>Organization Development (pp. 41, 117)</td>
</tr>
</tbody>
</table>
## Index of Fields and Specializations

<table>
<thead>
<tr>
<th>Field</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>132</td>
</tr>
<tr>
<td>Management: Elementary</td>
<td>101</td>
</tr>
<tr>
<td>Physical Education</td>
<td>87</td>
</tr>
<tr>
<td>Physical Education Pedagogy</td>
<td>101</td>
</tr>
<tr>
<td>Physical Education Secondary</td>
<td>101</td>
</tr>
<tr>
<td>Physics &amp; Astronomy</td>
<td>122</td>
</tr>
<tr>
<td>Physiology</td>
<td>62</td>
</tr>
<tr>
<td>Probability</td>
<td>110</td>
</tr>
<tr>
<td>Public Administration</td>
<td>123</td>
</tr>
<tr>
<td>Radiological Physics</td>
<td>122</td>
</tr>
<tr>
<td>Reading</td>
<td>81</td>
</tr>
<tr>
<td>Reading: Learning Disabilities</td>
<td>81</td>
</tr>
<tr>
<td>Recreation/Leisure: Facility Management</td>
<td>101</td>
</tr>
<tr>
<td>Recreation/Leisure: Leisure Services</td>
<td>101</td>
</tr>
<tr>
<td>Recreation/Leisure: Program Management</td>
<td>101</td>
</tr>
<tr>
<td>Outdoor Recreation/Education</td>
<td>101</td>
</tr>
<tr>
<td>Rehabilitation Counseling</td>
<td>131</td>
</tr>
<tr>
<td>Rehabilitation Counseling (pp. 42, 131)</td>
<td></td>
</tr>
<tr>
<td>Rhetorical Theory/Criticism</td>
<td>106</td>
</tr>
<tr>
<td>Rhetoric &amp; Composition</td>
<td>87</td>
</tr>
<tr>
<td>Romance Languages</td>
<td></td>
</tr>
<tr>
<td>• Physical Education: Adapted</td>
<td>101</td>
</tr>
<tr>
<td>Physical Education: Adapted</td>
<td>101</td>
</tr>
<tr>
<td>Psychology</td>
<td>128</td>
</tr>
<tr>
<td>Psychology: Moral &amp; Political</td>
<td>118</td>
</tr>
<tr>
<td>Philosophy of Mind</td>
<td>118</td>
</tr>
<tr>
<td>Photochemical Sciences</td>
<td>121</td>
</tr>
<tr>
<td>Photocatalysis</td>
<td>121</td>
</tr>
<tr>
<td>Photopolymerization Science</td>
<td>121</td>
</tr>
<tr>
<td>Photosynthesis</td>
<td>121</td>
</tr>
<tr>
<td>Poetry</td>
<td>87</td>
</tr>
<tr>
<td>Political Science</td>
<td>123</td>
</tr>
<tr>
<td>Popular Culture</td>
<td>126</td>
</tr>
<tr>
<td>Population Studies/Demography</td>
<td>134</td>
</tr>
<tr>
<td>Prints</td>
<td>59</td>
</tr>
<tr>
<td>Psychology: Adapted</td>
<td>101</td>
</tr>
<tr>
<td>Secondary Education:</td>
<td>134</td>
</tr>
<tr>
<td>Secondary Education: Curriculum</td>
<td>81</td>
</tr>
<tr>
<td>Secondary Education: Computer Education</td>
<td>122</td>
</tr>
<tr>
<td>Sociology</td>
<td>134</td>
</tr>
<tr>
<td>Sociology of Conflict</td>
<td>134</td>
</tr>
<tr>
<td>Spanish</td>
<td>132</td>
</tr>
<tr>
<td>Special Education</td>
<td>138</td>
</tr>
<tr>
<td>Speech-Language Pathology</td>
<td>73</td>
</tr>
<tr>
<td>Statistics</td>
<td>58, 110</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>87</td>
</tr>
<tr>
<td>Technology</td>
<td>142</td>
</tr>
<tr>
<td>Textiles &amp; Clothing</td>
<td>56</td>
</tr>
<tr>
<td>Theatre</td>
<td>144</td>
</tr>
<tr>
<td>Theatre: Directing &amp; Staging</td>
<td>144</td>
</tr>
<tr>
<td>Theatre History</td>
<td>144</td>
</tr>
<tr>
<td>Theatre Theory &amp; Criticism</td>
<td>144</td>
</tr>
<tr>
<td>Vibrational Photochemistry</td>
<td>121</td>
</tr>
<tr>
<td>Weaving</td>
<td>59</td>
</tr>
</tbody>
</table>
Graduate Programs and Courses

Many of these courses are also offered in the summer. For a complete list of courses offered during the summer session, see the Summer Bulletin. Numbering System for Courses

Courses numbered 500-799 are for a graduate student only; courses numbered 400-499 are open to a graduate student as well as to an advanced undergraduate, provided the courses are listed in the Graduate Catalog. Courses open to an undergraduate require additional individual work for graduate credit.

Symbols in Course Descriptions

*The Arabic number in parentheses immediately following the title of the course indicates the number of hours of credit.

**The Roman numeral indicates the semester in which the course is offered with I indicating the fall semester; II, the spring semester.

Accounting and Management Information Systems

Thom Evans, Chair, 332 College of Business Administration
Wayne Johnson, Graduate Coordinator, 338 College of Business Administration
Phone: 419-372-2767

Graduate Faculty

Professors - Thomas G. Evans, Ph.D.; Ronald Hartley, Ph.D.; Park Leathers, Ph.D.; Blaine Ritts, Ph.D.; Timothy L. Ross, Ph.D.

Associate Professor - Norman Eckel, Ph.D.

Assistant Professors - Kun Young Chung, Ph.D.; Robert Kirsch, Ph.D.; Simha Magal, Ph.D.; Kenneth C. Sned Jr., Ph.D.; Dennis Strouble, Ph.D.; Hung-Lian Tang, Ph.D.

Graduate Degree Offered

Master of Accountancy

Prerequisites to Graduate Work

A candidate may enter the program at the beginning of any semester. Entrance requirements include an acceptable undergraduate cumulative grade point average as part of a baccalaureate degree from an accredited school and a satisfactory score on the Graduate Management Admissions Test. Foreign students must establish English proficiency and take the Test of English as a Foreign Language (TOEFL). A program is individually planned in consultation with the graduate coordinator.

The following Graduate Business Administration courses are used where the undergraduate background is less than adequate as a foundation for advanced study: STAT 510-Statistical Methods for Business; GBA 520-Accounting Methods in Business; GBA 536-Management Function; GBA 540-Marketing Function; GBA 550-Finance Function; GBA 580-Introduction to the Computer; and GBA 590-Legal Environment of Business.

In addition, depending upon the candidate's prior preparation, undergraduate accounting courses may be prescribed, especially ACCT 321-322, ACCT 331-332, and ACCT 441 and 451. In addition to these background courses the student, as a prerequisite for admission to the program, is assumed to have elementary knowledge of economics and calculus. Admission can be granted on a conditional basis without economics and calculus background but the candidate would have to make up the deficiencies early in his or her program of study.

Requirements for the Master's Degree

The Master of Accountancy degree is offered under two plans which are summarized as follows:

<table>
<thead>
<tr>
<th>Plan I</th>
<th>Plan II</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-level courses approved for graduate credit</td>
<td>0-9</td>
</tr>
<tr>
<td>600-level accounting</td>
<td>9-18</td>
</tr>
<tr>
<td>Graduate level* non-accounting</td>
<td>6-12</td>
</tr>
<tr>
<td>600-level research in accounting</td>
<td>4-6</td>
</tr>
<tr>
<td>Total</td>
<td>30 hrs</td>
</tr>
</tbody>
</table>

*GBA courses here must be Phase II, 600-level.

The candidate must also attain minimal competence in quantitative business analysis equivalent to GBA 663, Operations Research I. Competence in business information systems equivalent to GBA 681 is also required.

A formal thesis of 4-6 hours is required for plan I. The student must pass an oral examination on the thesis.

Courses for Graduates

ACCT 622. Contemporary Accounting Theory (3). Analysis and evaluation of current accounting thought relating to nature, measurement, and reporting of financial conditions and results of operations. Special attention to controversial issues. Prerequisite: 15 hours of accounting.

ACCT 623. Income Theory (3). Historical development of income concepts and income theory. Measurement and communication problems; nature of income. Accounting income and role in resource allocation. Prerequisite: 16 hours of accounting.

ACCT 631. Seminar in Managerial Accounting (3). Advanced topics in managerial accounting including information economics, data support for modern manufacturing firms, cost allocation methods, decision support systems, CVP analysis under uncertainty, capital budgeting, alternative variance systems for control, evaluation of ROI, and transfer pricing systems. Prerequisite: ACCT 332 and GBA 663 or equivalent.

ACCT 643. Seminar in Tax Accounting (3). Examination and use of
the administrative, legislative and judicial sources of current tax laws and regulations; tax planning, the effects of taxation on the managerial decision process. Emphasis on use of research techniques in finding a competent and professional conclusion to a tax problem. Prerequisite: ACCT 441 or permission of the instructor.

ACCT 654. Seminar in Auditing (3). The nature of auditing and its role in society and business, with emphasis on financial auditing. An overview of audit planning, the evaluation of audit risk and materiality, and audit evidence-gathering. Emphasis on official pronouncements in auditing, the auditor's report, ethics, legal responsibility, and current issues in auditing and the public accounting profession. Prerequisite: ACCT 451 or equivalent.

ACCT 670. Readings in Accounting (1-3) On demand. Independent study and research in accounting. Proposed program of study must be approved by instructor and graduate coordinator prior to registration. May be repeated with consent of graduate coordinator.

ACCT 680. Seminar in Accounting (1-3) On demand. Study of special topics in accounting. Content varies over time. May be repeated with consent of graduate coordinator.

ACCT 697. Research Seminar in Accounting (1-3). Research procedures and techniques in accounting.

ACCT 699. Thesis Research (1-9). Credit for thesis study. Enrollment in excess of six hours is acceptable for plan I master's degree, but no more than six hours creditable towards degree. Minimum acceptable total for degree is four hours.

Courses for Graduates and Undergraduates

ACCT 421. Advanced Financial Accounting (3) I. Theory and practice for business combinations and consolidations, partnerships, branch and home office accounting, financial reporting for multinationals including foreign currency translation. Prerequisite: Grade of C or better in ACCT 322.

ACCT 422. Contemporary Financial Accounting Topics (3) II. Theory and implications for accounting practice of selected contemporary financial accounting topics. Topics vary with governmental and professional bodies' pronouncements impacting on financial accounting. Prerequisite: Grade of C or better in ACCT 322.

ACCT 423. Accounting for Non-Profits (3) II. Methods and problems of controlling and reporting on resources (funds) segregated for conducting specific activities of nonprofit-seeking entities; budgetary control. Prerequisite: Grade of C or better in ACCT 322 or consent of the instructor.

ACCT 424. Financial Reporting for Multinationals (3) II (Alternate years). Case study of worldwide accounting control and reporting problems, impact of cultural and legal constraints, and objective appraisal of various accounting principles and pronouncements. Prerequisite: Grade of C or better in ACCT 322.

ACCT 429. Role of the Financial Executive (3) II. Comprehensive review and integration of accounting theory and practice using problem method. Prerequisite: 12 hours of accounting and grade of C or better in ACCT 322.

ACCT 430. Thesis in Accounting Practice (3) II. Comprehensive review and integration of accounting theory and practice using problem method. Prerequisite: Grade of C or better in ACCT 332 or in ACCT 337 or consent of the instructor.

ACCT 442. Advanced Federal Taxation (3) II. Determination of taxable income and reporting requirements unique to corporations, partnerships, and Subchapter S corporations. Application of federal tax laws to special problems of corporations including stock redemption, capital structure, liquidation, and corporate accumulations. Overview of federal taxation of gifts, estates, and trusts. Prerequisite: Grade of C or better in ACCT 441.
American Culture Studies

goals, and (4) three letters of recommendation from individuals familiar with the applicant's scholarly and professional potential. Ph.D. applicants may also submit two papers as evidence of scholarly aptitude and writing and research skills. Non-native speakers of English are required to produce evidence of English language skills.

Master of Arts in American Culture Studies

The interdisciplinary Master's degree is designed around the concept of culture, which serves as a device to unify study of the many discrete aspects of our historical, social, intellectual and artistic heritage. Courses in Methods and Theories of American Culture Studies and Culture and Personality studies in the interdisciplinarily component of the curriculum assure a common experience and enrichment of their understanding of American culture. While the American Studies component of the curriculum assures a common experience in culture study, the remainder of the courses allow an individualized educational experience.

Requirements for the Master's Degree

Individual programs are designed in consultation with the Graduate Coordinator and based upon a combination of courses in American Culture Studies and related fields according to the interests, needs and background of the student, his/her future plans and goals, and the interdisciplinary philosophy of the program. Thirty-three (33) semester hours are required for the degree, of which a minimum of 12 must be in American Culture Studies; the remaining hours are selected from appropriate courses in American Culture Studies, art history, English, geography, history, philosophy, political science, popular culture, radio-television-film, sociology and other related fields. A total of 15 hours in American Culture Studies courses may be counted towards the degree; of the remaining hours no more than 12 should be taken in a single department or program.

ACS 581, ACS 582 and ACS 507 are required for the master's degree in American Culture Studies.

Plan I

The candidate must write an interdisciplinary thesis in keeping with the philosophy of the program. For the accepted thesis, the candidate receives three hours of credit toward the degree. Total for major: 33 hours, of which 30 are in course work.

Plan II

The basic requirements remain the same except that there will be 33 hours of course work. Toward the end of the student's residence and after the completion of at least two semesters, the student electing Plan II will sit for a four-hour written examination, covering periods in American cultural history, the student's content course work, the relationship of American Culture Studies to the traditional disciplines, American Culture Studies methodology, and important themes in American culture. The examination will be broad enough to cover each student's individual course of study.

Ph.D. in American Culture Studies

The Ph.D. in American Culture Studies combines the strengths of graduate programs in American Culture Studies, English, history, mass communication, popular culture, and sociology into an interdisciplinary program for the study of American culture. Recognizing that American culture is complex and multifaceted, this program requires work in a variety of subject areas which encourage reflection on both the historic heritage and contemporary expression of our national experience. Flexible as to both methods and goals, the Ph.D. in American Culture Studies can meet the diverse needs of a variety of students who seek advanced graduate study as preparation for careers in academic fields, museums, cultural and historical organizations, or similar institutions requiring both breadth and depth of understanding of American culture.

Among the elements in this program specifically designed to acquaint students with non-academic career options are the required internship and practicum, each of which stresses practical applications of culture study. Each candidate's individualized course of study is based upon consideration of the student's personal interests and career goals.

Requirements for the Ph.D. Degree in American Culture Studies

General Requirements

There are four general requirements for the doctoral program in American Culture Studies: (1) the completion of at least 68 semester hours beyond the master's degree (including a maximum of 16 hours of credit for research on the dissertation); (2) at least two consecutive semesters beyond the master's degree in full-time residence at the University; (3) completion of a computer science skills requirement consisting of CS 530 or its equivalent; and (4) completion of a foreign language requirement by demonstration of dictionary knowledge of one foreign language, or demonstration of proficiency in a computer language by completion of CS 500 or its equivalent, or successful completion of three integrated courses outside the student's area of concentration (minimum of 6 hours) leading to the acquisition of specific skills needed for completing the dissertation.

Course Requirements

Each candidate will be required to complete successfully at least one regularly scheduled content graduate course each in American Culture Studies and popular culture. If the student has had adequate course work in American Culture Studies or popular culture, or can demonstrate competency through another means, substitute courses will be arranged upon request.

Each candidate's program is planned individually in consultation with the Director of the program. All candidates are required to complete an Area of Concentration consisting of 18 hours of doctoral-level courses in either English, history, mass communication, popular culture, or sociology. An Integrating Core comprised of three graduate level courses in one of the above disciplines other than the one offered for the area of concentration or in American Culture Studies is also required.

Public Lecture

Before completing his/her formal course work, each student is required to prepare and present a scholarly paper at a professional meeting with in his/her area of concentration or professional interest or at an appropriate interdisciplinary professional conference. A topic of broad general interest, and the use of more than one
American Culture Studies

medium (e.g., audio or video tape, slides, film, etc.) in the presentation is encouraged. A student may, with the approval of the Director, have the option of an on-campus presentation.

Examinations

Successful completion of two (2) five-hour examinations, a core examination in American Culture Studies and a general Preliminary Examination in an area of concentration, are required for formal advancement to candidacy.

The Core Examination in American Culture Studies is offered annually and designed and evaluated by the Executive Committee. It covers (1) culture theory and (2) core course work in American Culture Studies and popular culture in order to test students on relevant theories of culture and the ability to apply those theories. The Core Examination also tests the student's ability to develop integrative patterns among the core courses and to relate this material to the larger cultural context.

The Preliminary Examination will be an interdisciplinary examination based upon the Ph.D. concentration (English, history, mass communication, popular culture or sociology) and the courses taken for the integrating core. This examination consists of two parts: (1) a five-hour written examination, and (2) a two-hour oral examination. The written examination must be completed within one week; the oral examination must be completed within two weeks after notification of successful completion of the written examination.

The Internship

Each candidate is required to complete successfully at least a ten-week non-academic internship at an institution (such as a museum, restored house or village, arts council, historical society, social agency, special library, film or television studio, archive, or business) of his/her choice in consultation with the Director of the program. Internships are arranged through the Office of Cooperative Education.

Dissertation

The dissertation should be consistent with the candidate's planned profession. Dissertation proposals and committees are subject to the approval of the Executive Committee.

Examination and Dissertation Committees

Doctoral committees in the American Culture Studies Program will consist at a minimum of one faculty member from either the American Culture Studies Program or the Department of Popular Culture, two faculty members from cooperating schools/departments, and a representative of the Graduate College. Other appropriate faculty may be included with the approval of the Advisory Committee. All appointments to these committees are subject to approval by the Advisory Committee and the Dean of the Graduate College.

Further details of the requirements for completion of the Ph.D. are included in the program Handbook available from the program secretary.

Courses for Graduates

ACS 570. Readings in American Culture Studies (1-3) I, II. May be repeated.

ACS 580. Topics in American Culture Studies (3) I, II. Study of selected topics or subject areas which are particularly suited to an interdisciplinary approach and treatment. May be repeated.

ACS 581. Seminar in American Culture Studies (3) I, II. Annually in rotation by departments in program. May be repeated.

ACS 582. Culture and Personality (3) II. Study of major personality theorists from Freud to Kohut with particular reference to theories of culture derived from psychological traditions and their applicability to American culture studies.

ACS 589. Internship (1-6). Supervised experience within setting or institution related to an area of American Culture Studies. Must be approved by graduate coordinator prior to registration. Graded on S/U basis.

ACS 595. Workshop on Current Topics in American Culture Studies (1-4) I, II. Summer on demand. Workshops designed for current topics and issues of an interdisciplinary nature. Topics vary from semester to semester.

ACS 597. Methods and Theories (3) I. Historical perspectives on American Culture Studies; theories and concepts of culture relative to American Culture Studies; new trends and directions in scholarship.

ACS 599. Thesis Research (1-12) I, II. Credit for thesis study. Students may enroll in up to twelve credit hours; however, only three hours are counted toward the M.A. degree.

ACS 635. Interdisciplinary Seminar (1) I, II. Professional seminar synthesizing American Culture Studies goals, topics and techniques. May be repeated up to three credit hours. Graded on S/U basis.

ACS 670. Special Problems in American Culture (1-3) On demand. Individual or group study of some phase of American Culture not ordinarily offered in curriculum. Prerequisite: consent of instructor and consent of Executive Committee. (Doctoral-level credit).

ACS 680. Topics in American Culture Studies (3). Examination of selected topics or subject areas which are especially appropriate for an interdisciplinary approach and treatment. May be repeated.

ACS 689. Internship (1-6) I, II. Summer on demand. Supervised experience within a setting related to one's academic specialization. Proposed field placement registration must be approved by Director prior to registration. May be repeated on approval. Graded on S/U basis.

ACS 730. Seminar in Theories of American Culture Studies (3) II. Examination of theories of culture as applicable to study of American culture. Review of American culture scholarship.

ACS 750. Practicum in American Culture (2) II. Field work or other applied approach to American culture.

ACS 770. Problems in Research (1-3) On demand. Individual problems in advanced research not involved in dissertation and ordinarily not offered in curriculum. Prerequisite: consent of instructor and approval of Executive Committee. S/U grading only.

ACS 780. Seminar in American Culture Studies (3). An examination of a topic in American culture studies which is particularly appropriate for an interdisciplinary approach and treatment. May be repeated.

ACS 799. Dissertation Research (1-16). Students must register for minimum of 16 hours in this course while working on doctoral dissertation.

Courses for Graduates and Undergraduates

ACS 400. The Literature of American Studies (3) II. Study of the dominant paradigms of American Culture Studies as reflected in key works of American studies scholarship. Emphasis on the development of the discipline, its characteristic methodologies and its relationship to traditional humanities and social science disciplines.
Applied Human Ecology

Deanna J. Radeloff, Chair. 206 Johnston Hall
Phone: 419-372-7823
Kathleen Campbell, Graduate Coordinator, 217 Johnston Hall
Phone: 419-372-2026

Graduate Faculty

Professors - Sally Kilmer, Ph.D.;
Elsa McMullen, Ph.D.
Associate Professors - Dorothy
Behling, Ph.D.; Kathleen Campbell,
Ph.D.; Patricia Cunningham, Ph.D.;
Bill Forisha, Ph.D.; Younghiee Kim,
Ph.D.; Deanna Radeloff, Ph.D.; Lois
Renker, Ph.D.; Ronald Russell, Ph.D.;
David Weis, Ph.D.; Julian Williford,
Ph.D.;
Assistant Professors - Diane Frey,
Ph.D.; Susan Voso Lab, Ph.D.; W. Eddie
Parish, Ph.D.

Graduate Degrees Offered

The Department of Applied Human
Ecology offers the Master of Applied
Human Ecology (M.A.H.E.) and the
Master of Education (M.Ed.) in Career
and Technology Education. The M.Ed.
is designed to serve the needs of stu-
dents interested in home economics
education. The Master of Applied Hu-
man Ecology provides the opportu-
nity to obtain a research-oriented or an
applied degree.

Graduate students who pursue the
Master of Applied Human Ecology
have a variety of interests such as
life-span human development, child
development, marriage and family
counseling, human nutrition, dietet-
ics, pre-kindergarten education, ap-
parel design, historic textiles, and
family studies.

Requirements for the Degree

The 37 semester credit hour (mini-
mum) curriculum consists of four
components within either of two op-
tions: Plan I, the Research Option or
Plan II, the Applied Option. These
parts are:

1. An integrative professional
   seminar (3 hours)
2. Research methodology (10
   hours, minimum)
3. Applied human ecology courses
   (15 hours, minimum) in one of three
   concentrations: (a) Food and Nutri-
tion, (b) Human Development and
   Family Studies, or (c) Clothing and
   Textiles.
4. Supporting cognate (9 hours,
   minimum)

The research component includes
statistics and a research methodology
course, as well as an empirical the-
sis. In addition to statistics and a re-
search methodology course, the ap-
plied option includes more opportu-
nity in supervised field experience or
professional projects and the com-
pletion of a comprehensive examina-
tion.

Students interested in training in
marriage and family counseling are
couraged to pursue a dual-degree
option leading to a Master of Applied
Human Ecology (M.A.H.E.) degree and
a Master of Arts degree in Guidance
and Counseling.

Prerequisites to Graduate Work

A bachelor's degree related to one of
the three major areas of concentra-
tion or in a related professional area
(business, social sciences, etc.) is the
preferred foundation. Prerequisites
may be required if course deficiencies
are assessed.

Courses for Graduates

HDFS 501. The Young Child
On demand. Analysis of the role of
play and of ecological variables on
the competencies of young children,
two through seven years. Prerequisite:
Child Development or consent of
instructor.

HDFS 503. Young Children and
Their Affective Development
On demand. Development of self-
concept and general areas of affective
growth in young children. Models and
strategies for prompting social com-
petence in young children will be
studied. Prerequisites: Work in devel-
opmental psychology or basic child
development courses or consent of
instructor.

HDFS 504. Understanding Fam-
ily Process
I. A survey of the vari-
ous theoretical approaches to family
development and family interaction.
Emphasis on the importance of theo-
ry in research design and in working
with families in applied settings.
Prerequisites: undergraduate work
in family studies or consent of in-
structor.

HDFS 505. The Child Develop-
ment Center: Interaction and
Management
On demand. An in-
depth study of the structure and func-
tion of early education settings and
the concomitant dynamics of the
Teaching-Learning process. Prerequi-
tive: HDFS 501 or consent of instruc-
tor.

HDFS 506. Facilitation of Mar-
ital Interaction
I. Major educa-
tional and treatment approaches
used to intervene in the interactional
patterns of the marital dyad. Empha-
sis on providing the family specialist
with knowledge and practice in the
facilitation of effective couple com-
munication. Prerequisite: HDFS 504
or consent of instructor.

F&N 507. Family and Commu-
ity Nutrition
On demand. Funda-
mental nutrition needs for the family
and community at all social levels. A
survey of various community related
nutrition problems and their role in
human nutrition. Prerequisite: basic
nutrition or consent of instructor.

F&N 508. Perinatal Nutrition
On demand. Identification of compet-
tencies required of the perinatal
health professional. In-depth review
of current research and literature
pertaining to the quality of life during
the perinatal period. One two-hour
clinical per week. Prerequisite: basic
nutrition or consent of instructor.

F&N 509. Micronutrients
Through the Life Span
On demand. Emphasis on human needs
and food sources of vitamins and
minerals during health and disease
conditions. Identification and dis-
cussion of the chemical and physical
properties of these micronutrients in
foods and human systems. Prerequi-
tive: advanced nutrition or consent of
instructor.

F&N 510. Macronutrients for
Human Nutrition
On demand. Emphasis on metabolism of
the structural and energy furnishing nu-
trients as applied to the nutritional
requirements and food supplies of
people; current literature and re-
search in proteins, carbohydrates
and lipids. Prerequisite: advanced
nutrition or consent of instructor.

F&N 511. Clinical Nutrition
On demand. Application of nutritional
principles in the treatment of hu-
man disease. 2 one-hour lectures, 1
four-hour in-hospital laboratory. Prere-
quisites: courses in Advanced Nu-
trition. Diet Therapy, Biochemistry,
Physiology, or consent of instructor.

AMID 512. Current Issues in
Clothing and Textiles
On demand. Explore sources of information and
discuss current trends, problems, and research in the areas of clothing and textiles and develop research
topic.

AMID 513. History of Textiles
On demand. The history of textiles
emphasizing social, aesthetic, religi-
ows, economic and political forces
associated with textile technology
and design in various periods and ar-
eas of the world which relate to textile
design and technology in the modern
world. Prerequisite: An introductory
textiles course or consent of instruc-
tor.

AMID 514. Fashion Change:
Theory and Analysis
On de-
mand. The study of fashion change as a cultural force and implications for industry. Emphasis on theoretical development as well as current research on fashion change.

AMID 515. World Folk Costume (3) On demand. Multi-cultural studies in traditional forms of dress which are identified with customs of peasant life, regions, nations, religions or subcultures throughout the world. Prerequisites: AMID 401 or consent of instructor.

HDFS 521. Behavior in Infancy (3) On demand. Examination of research relative to conception through the first two years of life; traces ontogenesis of developmental processes, provides a practical application of research findings with emphasis on the neonatal period. Prerequisites: child development or consent of instructor.

AHE 570. Independent Study (1-3) On demand. Supervised study, selected problems and selected readings. Proposed program of study must be developed by student and AHE graduate faculty. May be repeated to 6 hours with approval of graduate coordinator. Graded S/U.


AHE 589. Internship (3-6) On demand. Placement within the student's academic major area to provide opportunities for planning and practicing leadership roles. Placement must be approved by instructor/supervisor prior to registration and approved by AHE graduate coordinator. Prerequisites: 12 hours of graduate courses. May be repeated but only 6 hours may count toward degree plan. Graded S/U.

AHE 595. Workshop (1-4). Workshop on current topics and issues within discipline. May be repeated.

AHE 598. Directed Research (1-3) On demand. Supervised independent research on delimited topic. Generation of new knowledge as contrasted with private reading course. The proposal for a directed research must be approved by the instructor prior to registration. Graded S/U.

AHE 599. Thesis Research (1-2). Credit for thesis study. Enrollment in excess of nine hours acceptable but no more than six hours creditable toward degree. Minimum for degree is also six hours. Graded S/U.

HDFS 601. Programs and Issues in Early Childhood Education (3) On demand. A comparative analysis of early childhood education programs and a study of the results of research regarding their effectiveness. Exploration of current issues in early education. Prerequisite: HDFS 505 or consent of instructor.

HDFS 602. Facilitation of Familial Interaction (3) II. Investigation of theory, research, and practice of the major educational and treatment approaches to facilitating change in family interaction patterns. Emphasis will be given to the communication, general systemic, and ecological approaches. Prerequisite: HDFS 506 or consent of instructor.

Courses for Graduates and Undergraduates

AMID 404. Tailoring (3) On demand. Specialized techniques of professional tailoring used in the construction of a suit or coat. Analysis of quality in ready-to-wear tailored garments. Prerequisites: AMID 202 or consent of instructor. Lab fee.

HDFS 408. Investigations in Family Life of Minority Groups (3) II. Directed investigation of family life of racial and cultural minority groups in the United States. Prerequisite: Junior or Senior standing.

AMID 412. Advanced Apparel Design (3). II. Creative expression and application of principles of apparel design through the media of flat pattern and draping. Development of original design from sketch to finished garment. Prerequisite: AMID 202. Lab fee.

AMID 414. Experimental Clothing Construction (3) I. Experimental approach to study of factors influencing construction of apparel. Prerequisite: AMID 202 or consent of instructor.

HDFS 421. Parenting and Parent Education (3) I I. Theories related to process of parenting and interactive effects of parent-child relationships including impact on roles of professionals. Strategies for working with parents explored.

HDFS 422. Cognitive Development of the Young Child (3) I. Contemporary theories of intellectual development of young children; research pertaining to specific concept areas and the development of related experiences. Prerequisite: HDFS 320 or HDFS 321 or consent of instructor.

HDFS 423. Organization of Program for Young Children (3) II. Factors in organization and administration of programs for young children. Prerequisite: HDFS 322 or consent of instructor. C/F hours: 20

HDFS 426. Studies in Individual and Family Potential. (3) I. Theories of human behavior and family interaction which promote fully functioning individuals and families. Family communication; various patterns of family adjustment to internal and external stress. Prerequisite: HDFS 105 or HDFS 302, or consent of instructor.

F&N 431. Experimental Foods (3) I, II. Experimental methods of quality control and product development. Scientific reasoning applied to the methods of food preparation. Subjective and objective evaluation criteria will be practiced. Two hours of lecture and three hours of lab. Prerequisites: F&N 210, CHEM 306, or consent of instructor. Lab fee.

F&N 432. Advanced Nutrition (3) II. Topics in normal nutrition, nutrient interrelationships, and nutritional assessment. Analysis of current literature and validity of content. Prerequisites: BIOL 332 and CHEM 116 or equivalent.

F&N 434. Diet Therapy (3) I. Diseases and dietary modifications they necessitate. Determination of rationale for inclusion or exclusion of specific foods in prescribed diets; clinical dietitian's roles. Two hours of lecture and four hours of clinical experience. Prerequisite: F&N 402. Professional liability insurance required.

F&N 435. Nutrition for Infants and Young Children (3) I. Nutrition of infants and children in health and disease, from prenatal period to adolescence. Two hours lecture and two hours of lab. Prerequisite: F&N 207 or F&N 307. Professional liability insurance required.

F&N 436. Nutrition for the Aging (3) II. Psychological, physiological and socio-economic factors affecting dietary practices and nutritional needs of the elderly in group and individual situations. Two hours of lecture and two hours of clinical experience. Prerequisites: F&N 207 or F&N 307, and BIOL 332, or consent of instructor. Professional liability insurance required.
Applied Statistics and Operations Research

James Sullivan, Chair and Graduate Coordinator, 344 Business Administration Building
Phone: 372-2363

Statistical Program Committee
- Ralph St. John, Chair, 347 Business Administration Building, James Albert, Nancy Boudreau, Arjun Gupta, Truc Nguyen, James Sullivan.

Graduate Faculty
- Professors - Robert Patton, Ph.D.; Wei Shih, Ph.D.; Ralph St. John, Ph.D.; James Sullivan, Ph.D.
- Associate Professors - Nancy Boudreau, Ph.D.; B. Madhu Rao, Ph.D.
- Assistant Professors - Dipankar Bandopadhyay, Ph.D.; Alice Chuang, Ph.D.; Danny C. Myers, Ph.D.

This is a joint program of the Department of Applied Statistics and Operations Research and the Department of Mathematics and Statistics.

Graduate Degrees Offered
- Master of Science

Prerequisites to Graduate Work
In addition to satisfying the general entrance requirements of the Graduate College, a student must have satisfactorily completed courses in differential and integral calculus, including multivariable calculus, a course in advanced calculus, and a course in linear algebra. At BGSU, these requirements are equivalent to the completion of MATH 233, MATH 430, and MATH 432. These prerequisites may be waived for entry into the program but must be fulfilled early in the program. Although no background in statistics is required for entrance into the program, it would be beneficial for students to have completed an introductory two-course sequence in probability and statistics. If a student has not completed the calculus requirement, these courses will be prescribed as remedial work and will not count in the degree program. This program is normally intended for students with a background in mathematics or statistics. The student without this background should intend to take longer to complete the degree requirements.

Requirements for a Master of Science Degree
- Work may be planned under either Plan I or Plan II. Required in the program under either plan are MATH 541, 542, STAT 402, 406, 410, at least one course from MATH 550, STAT 550, STAT 597, at least six hours in an approved cognate area, and three elective courses in statistics, at least one at the 500 level, from the offerings of either the Department of Applied Statistics and Operations Research or the Department of Mathematics and Statistics. Any of these courses can be waived at the graduate level for the student who can document equivalent undergraduate or graduate training. The cognate courses are selected by the student, subject to the approval of the graduate coordinator, to tailor the program to the individual needs of the student.
- Plan I requires a minimum of 35 hours of course work and an approved thesis of 3 hours. The student under plan I need not take MATH 550, STAT 550, or STAT 597. Plan II requires a minimum of 35 hours of course work. Students under either plan must pass a written and/or oral examination over the course work.
- Under either plan, the general requirements of the Graduate College must be satisfied.
- Courses listed below are in the Department of Applied Statistics and Operations Research. For other courses in mathematics and statistics, see course listings under mathematics.

Courses for Graduates

STAT 510. Statistical Methods (3). Accelerated coverage of descriptive statistics, probability, normal and binomial distributions, sampling distributions, confidence interval estimation, and hypothesis testing with applications to business problems; designed for the student without undergraduate preparation in statistics. Credit not applicable toward degree in applied statistics. Prerequisite: MATH 126 or equivalent.

STAT 511. Regression and Design (3). Regression analysis, analysis of variance, and topics in the design of experiments. Credit not applicable toward degree in applied statistics. Prerequisites: STAT 510 or equivalent.

STAT 520. Experimental Design II (3) Summer. Split-plot and repeated measures designs; unbalanced ANOVA; analysis of covariance. Prerequisite: STAT 410 or consent of instructor.

STAT 530. Applied Multivariate Analysis (3). Multivariate normal distribution; multivariate procedures for estimation and inference. Prerequisite: STAT 410 and MATH 442, or consent of instructor.

STAT 531. Linear Models (3). Distribution of quadratic forms; estimation and statistical inference for regression and analysis of variance models. Prerequisites: STAT 402 a, MATH 442, or consent of instructor.

STAT 550. Statistical Consulting (1-3). Individualized instruction and in-depth experience in all phases of statistical consulting. Prerequisite: background in mathematical statistics, regression, and design of experiments. Same as MATH 550. Graded S/U.

STAT 570. Independent Study in Statistics (1-3). Individual or group study of problem area in statistics. Prerequisite: consent of graduate coordinator.

STAT 597. Research Methods in Statistics (3). Training in research methodology in statistics through lectures, seminars, consulting, and individual projects. Prerequisite: consent of graduate coordinator.


STAT 599. Thesis Research (1-12). Credit for thesis study. Minimum acceptable total for degree is three hours. Prerequisite: consent of graduate coordinator.

Courses for Graduates and Undergraduates

STAT 402. Regression Analysis (3). I. Linear, nonlinear, and multiple regression and correlation analysis. Prerequisite: STAT 315 or MATH 441 or consent of instructor.

STAT 404. Time Series Analysis (3). Stochastic stationary and nonstationary models; use in forecasting seasonal and nonseasonal discrete time series; fitting models to time series data. Prerequisite: STAT 315 or MATH 441 or consent of instructor.

STAT 405. Sample Design (3) II. Sampling as a tool of scientific inference in research and management. Planning surveys; sample size; stratified, systematic, and cluster sampling; sources of error in surveys. Prerequisite: STAT 315 or MATH 441 or consent of instructor.

STAT 410. Experimental Design (3) II. Constructing statistical designs and analyzing resulting data; basic experimental design and analysis of variance. Prerequisite: STAT 315 or MATH 441 or consent of instructor.

STAT 412. Applied Nonparametric Statistics (3). Nonparametric approach to testing hypotheses: contingency tables, goodness of fit, procedures based on ranks. Prerequisites: STAT 315 or MATH 441 or con-
Applied Statistics and Operations Research - Art

sent of instructor.

STAT 414. Statistical Quality Control (3). Statistical process control; Shewhart control charts (variables and attributes); acceptance sampling (single, double, and sequential); Dodge-Romig Tables. Prerequisite: STAT 212 or MATH 441 or consent of instructor.

Operations Research
Operations research concentrations are available in the Master of Science in computer science and the MBA programs. See computer science and graduate business administration, respectively, for information or requirements and prerequisites. The operations research courses listed below are offered by the Department of Applied Statistics and Operations Research.

Courses for Graduates
OR 547. Network Analysis (3). Network techniques for modeling and analysis of industrial and management problems: project management and resource allocation with PERT/CPM; transportation, trans-shipment, assignment, shortest path and minimal spanning tree models; maximal flow problems in single and multi-commodity networks; out-of-kilter algorithm; advanced topics in network analysis. Prerequisite: GBA 663 or OR 380 or CS 440.

OR 549. Applied Nonlinear and Dynamic Programming (3). Modeling decision problems in business and public administration via nonlinear and dynamic programming. Topics include quadratic and separable programming, penalty function, search methods, geometric programming, dynamic programming with discrete and continuous variables. Prerequisite: GBA 663 or OR 380 or CS 440.

OR 550. Mathematical Programming and Applications (3). Special topics in linear and nonlinear programming and their applications in business, industry and the public sector: upper bounding technique, special algorithms in integer and zero-one programming, goal programming, reduced gradient method, convex simplex method and linear fractional programming. Prerequisites: MATH 332 and one from OR 380, CS 440, GBA 663.

OR 555. Stochastic Models and Applications (3). Topics to be selected from introductory, intermediate and advanced queueing models and their applications to inventory, production and computer systems; stochastic models for reliability studies and their analysis and applications; modeling and analysis of probabilistic inventory systems. Prerequisites: MATH 441 or STAT 315.

OR 570. Independent Study in Operations Research (1-3). Individual or group study of problem area in operations research. Prerequisite: consent of graduate coordinator.


Courses for Graduates and Undergraduates
OR 480. Linear and Integer Programming (3). Modeling industrial and public administration problems via linear, goal and integer programming; sensitivity analysis, dual, parametric programming; cutting-plane and branch and bound method; Balas additive theorem; current topics in integer programming. Prerequisite: OR 380 or CS 440.

OR 485. Introduction to Stochastic Models (3). Problems of incorporating risk into decision models; queuing theory; stochastic inventory models; Markov chains; stochastic mathematical programming. Prerequisite: OR 380 or CS 440, STAT 315 recommended.

OR 488. Inventory Models (3). Theory and techniques of constructing and analyzing mathematical models of inventory systems; models under stochastic conditions. Prerequisite: OR 380 or CS 440, STAT 315 recommended.

Art
Thomas Hilty, Director, School of Art, 116 Fine Arts Building
Ron Bandy, Graduate Coordinator, 116 Fine Arts Building
Phone: 419-372-2786

Graduate Programs and Standards Committee
Three members of the graduate faculty and the graduate coordinator (a rotating faculty committee).

Graduate Faculty

Graduate Review Board
Every student majoring in a studio area works with the graduate coordinator to compose a five-member Graduate Review Board. The Graduate Review Board consists of the director of the School of Art, the graduate coordinator, the major professor, one graduate faculty member chosen by the student, and either the chair of the 2-D or 3-D Division.

Graduate Degrees Offered
Master of Arts with concentration in studio art; Master of Arts with concentration in art history; Master of Fine Arts.

Prerequisite to Graduate Work
A course of graduate study leading to the degrees of Master of Arts with a concentration in studio art and Master of Fine Arts usually requires the equivalent of a B.F.A. The requirements may be altered at the discretion of the School of Art. Any graduate student wishing to enroll in a class outside of his/her field of specialty must display a proficiency in the chosen area. The instructor may require remedial undergraduate study before approval to take the graduate course is given. A portfolio of actual works, or preferably color slides of works, emphasizing the desired major field should be submitted at least one half semester before the date of which entrance is requested; there is no summer review of portfolios. Some examples of the applicant's drawing should also be included in the portfolio.

For prospective art history majors (M.A. program), an undergraduate background in fine arts, art history, or humanities is highly recommended. Deficiencies in art history may have to be corrected prior to formal acceptance into the M.A. program. The candidate in art history is required to demonstrate a reading proficiency in
Art

one of the approved languages of scholarship.

Requirements for the Master of Arts

The M.A. in studio art and the M.F.A. are two separate degree programs. The M.F.A. candidate is not required to earn the M.A. en route to the M.F.A. A student may elect to pursue both degrees, but he/she will have to fulfill all requirements for both (including the completion of two theses—a written one and the Thesis Exhibition). Approval for any change in the pursuit of a degree must be given by the graduate coordinator, the school division, and the Graduate College.

The student working toward a Master of Arts degree with studio concentration must complete a minimum of 33 semester hours of work, distributed as follows: 20 semester hours of studio courses (14 of which must be in a major studio area); 9 semester hours of art history (6 in graduate seminars in two different areas or periods of art history); 1 hour research techniques; and 3 hours written thesis.

In addition, the candidate must provide evidence of proficiency recognized beyond the School of Art (acceptance in a juried show, receipt of a major commission, gallery representation, etc.), as approved by the area head and the Graduate Review Board. Awarding of the degree is contingent upon recommendation for graduation by the Graduate Review Board of the School of Art after a final review of work submitted by the candidate. Further information concerning the policies and procedures of the Graduate Review Board may be obtained from the graduate coordinator.

The student concentrating in art history must complete a minimum of 32 semester hours of work distributed as follows: 24 semester hours of art history, at least 6 of which shall be in graduate seminars in two different areas or periods in art history; 4 hours in studio or in related courses outside the School of Art; 1 semester hour of research techniques and 3 semester hours of written thesis. In addition, as a prerequisite to thesis work, the student must satisfactorily complete a comprehensive examination in art history after successful completion of 18 semester hours of art history courses.

Major Studio Areas

Ceramics, design, drawing, glassworking, graphics (which must include drawing, photography and prints), jewelry, painting, prints, sculpture, and weaving.

Thesis

The written thesis in the studio program can be the result of research in art theory, art criticism, art history, or studio experimentation, and should include a photographic record of the candidate's own work.

Requirements for the Master of Fine Arts

The Master of Fine Arts degree program is designed to produce a professionally competent artist who is aware of the great traditions in art and related cultural fields. The intent is to produce a graduate who is something more than a mere technician in art. Whether the student becomes a professional artist or a teacher of art after receiving the degree, the training in the broader foundational skills should provide for a higher order of competence and effective contribution in the chosen field.

A student entering the M.F.A. degree program has probationary status during the first 15 semester hours of work. In the semester immediately following the completion of this work (summer excepted), the student should apply to the Graduate Review Board for permission to continue in the program. Acceptance into the program is not final approval for the degree. All candidates (M.A. and M.F.A.) are subject to periodic review by the Graduate Review Board, which evaluates and summarizes the efforts of the candidate. Applicants with an M.A. degree earned at another school or M.F.A at this University may not repeat for graduate credit those courses in Art History which were taken at the undergraduate level.

Courses for Graduates

ART 506. Drawing from Life (3) 1, II. Advanced problems in drawing and composition. Six studio hours. May be repeated to 18 hours.

ARTD 511. Advanced Study in Design (3) I, II. Advanced exploration and professional development in graphic, computer and environmental design. Six studio hours. May be repeated to 18 hours.

ART 515. Glassworking (3) I, II. Advanced level studies of artistic glass production techniques. Aesthetic and technical research. Studio glass equipment construction. Six studio hours. May be repeated to 18 hours.

ART 521. Jewelry Design, Enameling, and Metalsmithing (5, 1, II. Use of metals in jewelry making; design and development of skill in
manipulation of tools and materials. Six studio hours. May be repeated to 18 hours. Lab fee.

ART 525. Advanced Problems in Creative Photography (3) I, II. Advanced level assignments in creative photography; development and growth of individual creative expression. Six studio hours. Prerequisite: ART 425 or consent of the instructor.

ARTH 543. American Art Seminar (3) I, II. Intensive study of period or problem in American Art. Prerequisite: ART 441 or 442.

ART 546. Sculpture (3) I, II. Development of abstract forms, figure modeling, and advanced sculptural media. Six studio hours. May be repeated to 18 hours.

ART 563. Ceramics (3) I, II. Correlation of technical research and personal concepts. May be repeated to 18 hours. Prerequisite: Six hours in ceramics, including glaze calculation. Sculpture experience is strongly recommended.

ART 565. Weaving (3) I, II. In-depth study of fiber/weaving techniques for their potentials in conceptual and functional forms. Six studio hours. May be repeated to 18 hours.

ART 570. Art History Problems (3) I, II. Individual research problems in any part of art history. May be repeated to 6 hours. By permission only.

ART 571. Watercolor Painting (3) I, II. Exploration of techniques, formal and expressive possibilities of watercolor medium. Six studio hours. May be repeated to 18 hours.

ART 573. Oil Painting and/or Acrylic Painting (3) I, II. Exploration of techniques, formal and expressive possibilities of oil and/or acrylic medium. Six studio hours. May be repeated to 18 hours.

ART 577. Printmaking (3) I, II. Aesthetic potentials of graphic techniques. Six studio hours. May be repeated to 18 hours.

ART 579. Individual Studio Problems (3) I, II. Supervised individual problems in selected studio areas. Six studio hours. May be repeated to 9 hours. Permission of instructor and graduate coordinator.

ARTH 580. Seminar in Art History (3) I, II. Reports and discussion in areas of art theory, art history, and art criticism. May be repeated to 9 hours.

ARTH 581. Seminar in American Studies (3) II. An interdisciplinary seminar coordinated in rotation by faculty members of School of Art and Departments of English, History, Philosophy, Political Science, and Sociology, using lectures and subsequent discussion and papers to study problems, themes, or era.

ARTH 582. Seminar in Ancient Art (3) I. Selected topics normally in Aegean or Green art; occasionally, Near Eastern or Roman art.

ARTH 583. Seminar in Recent Art (3) II. Topics in nineteenth and twentieth-century art; schools, movements, trends, artists, or concepts.

ARTH 595. Workshop on Current Topics in Art (1-4) On demand. Workshop designed for current topics and issues in art, art education, and art therapy; topics vary from semester to semester.

ARTH 597. Research Techniques (1-2). Introduction to graduate study in art and applied study of materials and methods of research; emphasis on those appropriate to fields of art, art education, and art history. Must be taken as early during student's academic program as practicable, preferably during second semester in residence.

ARTH 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of four hours acceptable for Plan I master's degree, but no more than three hours creditable toward degree. Minimum acceptable total for degree is three hours.

ARTH 680. Advanced Study in Studio Art (3) I, II. Advanced studio research and development within the specialized fields of art (ceramics, design, drawing, glassworking, jewelry, painting, prints, sculpture, and weaving). Student fees may vary according to specialized areas of study. May be repeated to 12 hours. Prerequisite: permission of instructor.

Courses for Graduates and Undergraduates


ARTH G441. American Art to the Civil War (3) I. Painting, sculpture, and architecture of the colonial era and the United States to 1860. Emphasis on the interrelationship between the visual arts and significant issues in American culture.

ARTH G442. American Art Since the Civil War (3) II. Painting, sculpture, architecture, and photography of the United States from 1860 to the present. Special attention given to artists and developments prior to W.W.II frequently overlooked in surveys of modern art.

ARTH G445. Ancient Art I (3) I. Art and archaeology of prehistoric Aegean and of Greece to the Persian Wars.

ARTH G446. Ancient Art II (3) I. Art of Greece from the Persian Wars and of Rome from the Late Republic to Constantine.

ARTH G449. Medieval Art (3) I. Alternate years. Art and architecture from the Medievalization of the Roman Empire through the High Gothic period.

ARTH G451. Renaissance and Baroque Art in Southern Europe (3) I. Alternate years. Painting, sculpture and architecture in Italy and Spain from the early 14th through the 17th century.

ARTH G453. Northern Renaissance Art (3). Alternate years. Painting, sculpture, and graphic arts of Flanders, France, Germany, England and Spain during the 15th and 16th centuries. Graduate students to complete appropriate graduate-level project for graduate credit.

ARTH G454. Renaissance and Baroque Art in Northern Europe (3) II. Alternate years. The art of England, Flanders, France, Germany, and Holland between 1400 and 1750, with primary emphasis on painting, iconographic analyses as well as studies of stylistic developments will be stressed.

ARTH G455. Art of the 19th Century (3) I. Painting and sculpture in the 19th century, from neoclassicism through post-impressionism.

ARTH G456. Art of the 20th Century (3) II. Painting and sculpture in 20th century Europe and America, from Fauvism to the present.

ARTH G458. Art of India and S.E. Asia (3) I. Art and architecture in India and S.E. Asia from the earliest times to the present.

ARTH G459. Art of China & Japan (3) II. Art and architecture of China and Japan from the earliest cultures to the present.

ARTH G487. Student Teaching Practicum (3) I, II. Clinical teaching experience in Division of Art Education/Art Therapy Children's Program. Prerequisite: permission of program director.

ARTH G495. Special Topics in Art History (1-3) On demand. Innovative and intensive group studies in selected art historical research. Prerequisites announced for each offering. May be repeated.
transcripts, GRE test scores (including the advanced test in biology) and three letters of recommendation as indicated above for the master's program applicants. Students with a GPA of at least 3.3, GREs at or above the 60th percentile, and evidence of research ability, may enter directly into the Ph.D. program following completion of the baccalaureate degree. All other applicants to the Ph.D. program must have completed a master's degree in one of the biological sciences. Students completing a master's degree in this department are required to submit a formal application in order to advance to the Ph.D. program.

Requirements for the Master of Science

**Plan I:** This plan requires the completion of an original research program and a thesis. The research is carried out with the help and supervision of a graduate faculty adviser designated by the student. Laboratories in the department are well-equipped for carrying out original research. Students intending to go on to a Ph.D., as well as students who want to pursue a career involving biological research, should choose Plan I (thesis) option.

The Plan I student must complete at least 30 semester hours of graduate credit, including one hour of BIOL 580 and 3-6 hours of BIOL 599. The rest of the student's course of study will be designed with the advice of the student's doctoral committee, to meet the student's doctoral committee, to meet the student's needs and interests. The final examination for the degree is an oral exam which covers both the contents of the thesis and general biological knowledge.

**Plan II:** This non-thesis plan is designed to meet the needs of those students whose career goals do not require a research-oriented course of study. Plan II students are required to complete 34 semester hours of graduate credit including one hour of BIOL 580 and one hour of BIOL 582. The rest of the program is designed with the advice of the student's doctoral committee, to meet the student's needs and interests. In lieu of a thesis, a Plan II student must complete both a paper (which can be based either on original research or on a literature search), and a comprehensive written examination. A final oral exam will cover the student's written work as well as general biological knowledge.

Requirements for the Master of Arts in Teaching

Requirements are listed in the "Degree Programs" section in the front of this catalog.

Requirements for Specialist in Applied Biology

Requirements are listed in the "Degree Programs" section in the front of this catalog.

Requirements for the Doctor of Philosophy

At least 60 hours of graduate credit beyond the master's degree (or 90 hours beyond the bachelor's degree) are required. These hours must include at least 16 hours of BIOL 799 (no more than 30 are applicable to the degree). There is also a language requirement which may be fulfilled either by a dictionary reading knowledge of a foreign language, or by proficiency in computer language and programming. The rest of the student's course of study will be designed, with the advice of the student's doctoral committee, to meet the student's needs and interests.

The student is expected to complete a preliminary exam. It is recommended that this exam be completed by the end of the second year of study. This is a comprehensive written and oral exam covering general biological knowledge. Students successfully completing this exam are considered to be candidates for the Ph.D. degree. Each doctoral candidate must complete an independent research project acceptable to the student's doctoral committee. This research is to be described and evaluated in the dissertation. The final exam for the degree is oral and consists of a defense of the dissertation and may cover related fields of study.

The following areas are presented as areas of strength within the doctoral program and thus represent broad areas within which doctoral dissertations are being written: Bio-
logical Sciences, Behavioral Biology, Biochemistry, Cell and development Biology, Ecology, Evolution, genetics, Immunology, Microbiology, Molecular Biology, Organismic Biology, and Physiology.

Courses for Graduates


BIOL 513. Molecular Biology Laboratory (3) II. Recombinant DNA methods: experiments on gene expression, cloning vectors, restriction analysis and determination of base sequences. Two 4-hour laboratories, and one 2-hour laboratory. Prerequisites: BIOL 447 or 552 (past or concurrent enrollment), microbiology or biochemistry recommended.

BIOL 515. Advanced Animal Physiology (3) I. Alternate years. An in-depth consideration of the physiological function of selected animal systems. Three 1-hour lectures. Prerequisite: BIOL 407 and 411 or equivalents and organic chemistry; or consent of instructor.

BIOL 516. Protozoology (3) I. Study of major groups of Protista: their natural habitats, collection, staining, structure and physiology. Two 1-hour lectures, one 3-hour laboratory. Prerequisite: four semesters of biology. BIOL 313 or 421 recommended.

BIOL 519. Advanced Plant Physiology (3) I. Alternate years. Advanced studies of plant physiological processes including reproductive development, unique metabolic processes and herbaceous effects on plants. Three 1-hour lectures. Prerequisite: BIOL 407 or consent of instructor.

BIOL 522. Experimental Animal Physiology and Cellular Development (3) I. Alternate years. Experimental design and modern methods for the quantitative evaluation of selected physiological and/or developmental processes. One hour of lab discussion, one 4-hour laboratory. Prerequisite: BIOL 515 or consent of instructor.

BIOL 526. Transmission Electron Microscopy (4) I. Theory and practice of techniques in transmission electron microscopy applicable in biological research. Instruction and practice in fixation, thin sectioning, negative staining, computational analysis of data and vacuum evaporation. Two 1-hour lectures and two 3-hour laboratories. Prerequisite: consent of instructor. BIOL 407 strongly recommended.

BIOL 536. Scanning Electron Microscopy (4) I. Theory and practice of techniques in scanning electron microscopy applicable to biological research. Critical point drying, sample coating techniques, energy-dispersive x-ray microanalysis, and computational analysis of data. Two 1-hour lectures and two 3-hour laboratories. Prerequisites: consent of instructor. BIOL 407 strongly recommended.

BIOL 540. Aquatic Ecology (3) II. Alternate years. Integrated investigations of population and community ecology of freshwater organisms. One 2-hour lecture and one 3-hour laboratory. Prerequisites: BIOL 425 and consent of instructor.

BIOL 543. Helminthology (3) II. Alternate years. Zoological classification, structural characteristics, life cycles, geographical distribution, methods of transmission, pathology, and physiology of helminths. Two 1-hour lectures, one 3-hour laboratory. Prerequisites: BIOL 403 and consent of instructor.

BIOL 549. Cytogenetics (3) II. Alternate years. Cellular and molecular organization of eukaryotic chromosomes; their epigenetic activities and phylegenetic and oncogenetic functions. Modern chromosome techniques: theory and practice. Two 1-hour lectures and one 2-hour laboratory. Prerequisites: BIOL 350, or consent of instructor.

BIOL 551. Developmental Genetics (3) I. Alternate years. The manner in which genetic control or modulate the process of development. Three 1-hour lectures. Prerequisite: BIOL 350.

BIOL 552. Biochemical Genetics (3) II. Molecular structure, replication and genetics of plasmids and bacterial viruses. Gene expression and recombinant DNA technology. Three 1-hour lectures. Prerequisite: BIOL 447 or BIOL 350 or consent of instructor.

BIOL 553. Population and Ecological Genetics (3) II. Alternate years. Development and assessment of genetic theory of evolution: kinds and amounts of genetic variability in natural populations and evolutionary mechanisms which maintain and eliminate that variability. Three 1-hour lectures. Prerequisite: BIOL 451 or consent of instructor.

BIOL 554. Drosophila Genetics (3) II. Alternate years. Advanced genetics of Drosophila in classical and molecular research. Three 1-hour lectures. Prerequisite: BIOL 350.

BIOL 555. Mutagenesis (3) I. Alternate years. Advanced topics in mutagenesis, including mechanisms of spontaneous and induced gene and chromsome mutations, repair, transposable DNA elements, genetic toxicology, mutations and cancer, molecular mutagenesis, and the evolutionary implications of mutations. Three 1-hour lectures. Prerequisite: BIOL 350.

BIOL 560. Theoretical Population and Community Ecology (4) I. Alternate years. Theoretical models of single species ecology and their application to natural populations; biological interactions among populations and their effects on the structure of natural communities. Three one-hour lectures and one two-hour recitation/laboratory.

BIOL 562. Virology (4) I. Alternate years. Properties, functions, and replication of viruses; interactions with cells and hosts; fundamental principles of methods commonly used for handling and studying animal viruses. Two 1-hour lectures and two 3-hour laboratories, plus arranged time. Prerequisite: consent of instructor.

BIOL 565. Eukaryotic Molecular Biology (3) I. Alternate years. Current research in molecular biology of yeast and other selected eukaryotes. Gene structure, expression and regulation, RNA processing, organelle biogenesis, protein targeting and genetic engineering. Three hours of lecture. Prerequisite: BIOL 447 or equivalent or CHEM 445 or equivalent, or consent of instructor.

BIOL 570-576. Problems in Biology (2-8). No more than 8 hours may apply to degree program. Prerequisite: consent of staff member involved.

BIOL 570. Problems in Genetics, Evolution or Behavior.

BIOL 571. Problems in Morphology or Developmental Biology.

BIOL 572. Problems in Physiology, Cell Biology or Molecular Biology.

BIOL 573. Problems in Taxonomy.

BIOL 574. Problems in Ecology or Limnology.

BIOL 575. Problems in Microbiology or Parasitology.

BIOL 576. Problems in Invertebrate Zoology or Entomology.

BIOL 577. Graduate Research in Marine Science (2-6). Opportunities are available for graduate research in botany, ecology, microbiology, morphology, microscopy, biological oceanography, parasitology and zoology.
BIO 5702. Microbiology.
BIO 5703. Parasitology.
BIO 5704. Ecology.
BIO 5705. Evolution or Systematics.
BIO 5706. Molecular Biology.
BIO 5707. Entomology.
BIO 5708. Developmental Biology.
BIO 5709. Genetics.
BIO 5710. Marine Biology.
BIO 5711. Behavior.
BIO 5721. Seminar in Biology (1). Graded S/U.
BIO 5799. Dissertation Research (1-16). Student must register for minimum of 16 hours in this course while working on the doctoral dissertation. A maximum of 30 hours may be counted toward degree program.

Courses for Graduates and Undergraduates
BIO 404. Human Genetics (3) II. Alternate years. Essential principles of modern genetics with special emphasis on humans. Methods of human genetic analysis: screening and counseling; genetic aspects of public health; genetics and cancer. Two one-hour lectures and one two-hour laboratory. Prerequisites: BIO 350 or consent of instructor.
BIO 405. General Parasitology (4). I, II. Morphologic, taxonomic, economic and other biological aspects of parasites. Three 1-hour lectures and one 2-hour laboratory. Prerequisites: BIO 204 and 205 or consent of instructor.
BIO 406. Arthropod Vectors and Parasites (3) II. Biology and identification of disease-carrying, toxic, and parasitic arthropods. Two 1-hour lectures and one 2-hour laboratory. Prerequisites: BIO 204 and 205.
BIO 407. Cell Biology (4) I. The structure and physiology of cells, integrating the dynamics of cellular structures with metabolic functions and control. Two 1-hour lectures and one 4-hour laboratory. Prerequisites: BIO 204 and 205 or consent of instructor.
BIO 409. Invertebrate Zoology I (3) I. Classification, biology, and physiology of lower invertebrates. Two 1-hour lectures and one 2-hour laboratory. Prerequisite: one course in biology or consent of instructor.
BIO 410. Invertebrate Zoology II (3) I. Classification, biology, and physiology of invertebrates through lower chordates. Two 1-hour lectures and one 2-hour laboratory. Prerequisite: one course in biology or consent of instructor.

Biological Sciences
Biological Sciences

Physiological, metabolic actions of endocrine secretions with emphasis on mammals. Three one-hour lectures and one three-hour laboratory. Prerequisites: BIOL 411 and organic chemistry or consent of instructor; biochemistry recommended.

BIOL 439. Immunobiology (4) II. Immune state in animals; laboratory work on detection and quantitatian of antigens and antibodies. Two 1-hour lectures, one 3-hour laboratory and one 1-hour laboratory-recitation. Prerequisites: BIOL 204 and 205. BIOL 350 and biochemistry recommended.

BIOL 442. Plasmid Biology (3) I. Mechanisms of plasmid replication, copy number control and compatibility. Methods used to isolate and purify plasmid DNA. Procedures used to transfer plasmids to new hosts. Consent of the instructor or BIOL 313 is required.

BIOL 443. Microbial Physiology (4) I. Chemical composition, metabolic activities and nutrient requirements of microorganisms. Two 1-hour lectures and two 2-hour laboratories. Prerequisites: BIOL 313 and CHEM 308 or consent of instructor.

BIOL 447. Microbial Genetics (2) I. Molecular biology and genetic phenomena of bacteria and bacteriophage with emphasis on mutagenesis and recombination. Three 1-hour lectures. Prerequisites: four semesters of biology or consent of instructor. General genetics or biochemistry is recommended.


BIOL 472. Ichthyology (3) I. Alternate years. Life histories, systematics, physiology, ecology, evolution and biogeography of major groups of freshwater and marine fishes. Two 1-hour lectures and one 3-hour laboratory. Saturday and/or weekend field trips required. Prerequisites: BIOL 204 and 205.

BIOL 473. Mammalogy (3) I. Alternate years. Identification, natural history, evolution, zoogeography, ecology, physiology, behavior, with emphasis on Ohio mammals. Two 1-hour lectures and one 3-hour laboratory. Prerequisites: BIOL 204 and 205.

BIOL 476. Herpetology (3) II. Alternate years. Amphibian and reptile identification, habitats, distribution, behavior. Two 1-hour lectures and one 3-hour laboratory or equivalent field work, all day and/or weekend field trip. Prerequisites: BIOL 204 and 205.

BIOL 477. Ornithology (3) II. Structure, physiology, behavior, ecology and migration of birds; identification in field and laboratory. Two 1-hour lectures and one 3-hour laboratory or equivalent field work, all day or weekend field trip. Prerequisite: 7 hours of biology.

BIOL 478. Parasites of Marine Animals (6) Summer. Study of parasites of marine animals. Prerequisite: 16 hours of biology including parasitology. Taught at Gulf Coast Research Laboratory.

BIOL 479. Marine Microbiology (5) Summer. Role of microorganisms in the ecology of oceans and estuaries. Prerequisites: general microbiology or bacteriology and consent of instructor. Taught at Gulf Coast Research Laboratory.

BIOL 481. Marine Botany (4) Summer. Survey, based upon local examples, of principal groups of marine algae and marine flowering plants, treating structure, reproduction, distribution, identification, and ecology. Prerequisites: BIOL 204 and 205 or consent of instructor. Taught at Gulf Coast Research Laboratory.

BIOL 484. Marine Invertebrate Zoology (6) Summer. Anatomy, life history, distribution, and phylogenetic relationships of free-living marine invertebrates with emphasis on fauna of the Carolinian Region. Laboratory and field work included. Prerequisites: 16 hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

BIOL 485. Marine Vertebrate Zoology and Ichthyology (6) Summer. Marine Chordata, including lower groups and mammals and birds with emphasis on fishes. Prerequisites: 16 hours of biology and junior standing. Taught at Gulf Coast Research Laboratory.

BIOL 488. Topics in Marine Science (3-6) Summer. Various marine courses such as marine ecology, salt marsh ecology, marine fisheries management, aquaculture, and others offered when taught by the Gulf Coast Research Laboratory staff. May be repeated for different titled topics as approved by the departmental marine science coordinator.

BIOL 490. Seminar (1). Review of literature to acquaint student with research techniques and important work in various fields of biology. May be repeated, but only two hours may be applied toward a biology major. Prerequisite: 10 hours of biology.
Business Education

David J. Hyslop, Chair and Graduate Coordinator, 242 Business Administration Building
Phone: 419-372-2901

Robert G. Berns, Marketing Education Graduate Coordinator, 250 Business Administration Building
Phone: 419-372-8039

Graduate Faculty
- Associate Professor - Robert Berns, Ph.D.
- Assistant Professor - Inge Kloppin, Ph.D.

Graduate Degree Offered
Master of Education
(Cognate in Educational Administration and Supervision)

Prerequisite to Graduate Work
A bachelor's degree with a major or background in business or marketing education is required. Students with deficiencies are admitted on a conditional basis until the deficiencies are removed.

Requirements for the Master's Degree
Plan I
Thirty semester hours of graduate credit are required which includes the program core (BUSE 501, BUSE 502, BUSE 528, BUSE 597, EDFI 596) and one of the following program options.

1) Master Teacher - Business Education (12 hours): BUSE 553, BUSE 455 and 6 hours in selected content area

2) Master Teacher - Marketing Education (12 hours): BUSE 463, BUSE 553 and 6 hours in selected content area

3) Postsecondary (12 hours): GBA 692 or BUSE 553 and 9 hours in selected content area

4) Vocational Supervisor - Business Education: follow approved vocational education certificate checklist

5) Vocational Supervisor - Marketing Education: follow approved vocational education certificate checklist

6) Training and Development (12 hours): BUSE 589, C&TE 559, TECH 662 or TECH 663, TECH 533 or ENG 573

The remaining 6 hours can be selected from related graduate level courses with graduate coordinator approval. A final written comprehensive examination is required.

Cognate for Doctor of Philosophy
A cognate area in business education may be taken as part of the requirements for the Ph.D. degree in educational administration and supervision (see the Ph.D. program in educational administration and supervision).

Courses for Graduates


BUSE 504. Review of Secretarial/Administrative Functions (3) Alternate years. Latest technological advances affecting secretarial and administrative office careers.

BUSE 528. Computers and Business Education (3) I. Business computers applications and their growing impact on secondary school programs in business/marketing education; computer concepts; software; development of instructional materials for software evaluation.

BUSE 553. Procedures for Teaching Business Subjects (3) II. Procedures and trends in teaching business and marketing education evolving from research.

BUSE 561. Seminar in Marketing Education (3) On demand. Problems and issues in marketing education through intensive investigation of research materials.

BUSE 562. Supervision in Vocational Education (3) Summer. Principles of supervision as they apply to business and vocational education.

BUSE 570. Independent Study in Business and Marketing Education (1-4). Selected problems and readings. Proposed program of study must be approved by instructor prior to registration. Graded S/U.

BUSE 589. Internship, Field Placement, or Practicum in Business Education (1-4) On demand. Supervised experience within setting related to student's academic specialization. Proposed internship must be approved by instructor prior to registration. Graded S/U.


BUSE 595. Workshop on Current Topics in Business Education (1-4) On demand. Study, readings, activities, and development of materials related to needs of practitioner. Graded S/U.

BUSE 597. Research in Business Education (3) Summer. Components of research methodology; written research proposal in area of interest.

BUSE 598. Directed Research (1-4) On demand. Supervised independent research on delimited topic within discipline. Generation of new knowledge developed through research projects. Proposal for directed research must be approved by instructor prior to registration.

BUSE 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for Plan I master's degree, but no more than six hours may apply toward degree. Minimum acceptable total for degree is three hours.

BUSE 660. Seminar in Business Education (1-4) On demand. Systematic study of advanced topics within
Business Education - Career and Technology Education

discipline. May be repeated upon approval of graduate coordinator. Prerequisite: consent of instructor.

Courses for Graduates and Undergraduates


BUSE 455. Administrative Management (3) I, II. Principles and practices of managing office personnel and operations. Selecting, developing, motivating, and appraising office employees. Office layout and design, work measurement, and work standards.

BUSE 461. Development of Instructional Materials in Marketing Education (2) I, II. Methods of developing instructional guides and materials in marketing education.

BUSE 462. Coordination in Cooperative Marketing Education (2) II. Coordination in high school, postsecondary school, and adult education programs for marketing education. C/F hrs: 14.

BUSE 463. Community Planning in Adult Vocational Education (3) I. Identification of adult needs, procedures for organizing and promoting adult programs in vocational education, selecting and training adult leaders, and financing adult programs.

BUSE 465. Development and Administration of Vocational Education (3) II. Vocational education as sponsored by federal, state, and local legislation.


BUSE 469. OWA Curriculum and Instructional Procedures (3) On demand. Curriculum development for vocational work experience programs including instructional learning packets, course of study, teaching methodology, and techniques.

BUSE 470. Studies in Business and Marketing Education (1-2) I, II. Offered on individual, seminar or lecture basis. Treatment of selected areas as in depth depending on student needs and nature of material. May be repeated up to four hours. Prerequisite: consent of instructor. Graded S/U.

Career and Technology Education

Jerry Stretchier, Dean, College of Technology
Ernest N. Savage, Graduate Coordinator, College of Technology
Deanna Radeloff, Chair, Department of Applied Human Ecology
Kathleen Campbell, Graduate Coordinator, Applied Human Ecology

Graduate Degree Offered

Master of Education in career and technology education with concentrations in: teaching and training, curriculum and instructional systems development; administration and supervision, or research and evaluation. The Master of Applied Human Ecology is also offered by the Department of Applied Human Ecology. The Master of Industrial Technology is also offered by the College of Technology.

Career and Technology Education can also be pursued as a cognate area for the Educational Specialist and Doctor of Philosophy degree in educational administration.

Prerequisite to Graduate Work

A bachelor's degree in education or in a related technical or professional area is required. If the graduate coordinator assesses deficiencies in a student's background, additional undergraduate or graduate work will be prescribed.

Graduate study in career and technology education (CTE) is designed for persons with a commitment to those areas of education that prepare learners for careers and/or teach about some phase of a specialized area of technology. Within the program, students may pursue a broad program in career and technology education or may pursue an emphasis in a component area.

Graduate study in career and technology education is designed to develop a plan for the career development of the student. The curriculum is designed to provide a structured sequence of courses that facilitate the career development processes in various areas of technology education.

The Master of Applied Human Ecology is designed to provide a rigorous and individualized professional degree program that facilitates career roles of teacher or trainer, curriculum and instructional systems development, administration-supervision, or research and evaluation.

Requirements for the Doctor's Degree

A candidate may pursue the Master of Education degree under one of two plans. Plan I is the research-centered degree program. The student must take a minimum of 33 hours of course work, write a thesis, and pass a final oral examination. A research methodology course and three to six semester hours of thesis research are required.

Plan II is the course-centered degree program which also requires a minimum of 33 semester hours including a research methodology course, a seminar, and a final written comprehensive examination.

Courses for Graduates

C&TE 501. Principles of Career Education (3) I. Summer, on demand (Even years). Principles and purposes of career development and education in adult, special, vocational and technical education in public and private agencies: impact of federal and state legislation on such programs.

C&TE 550. Instruction of Career and Technology Subjects (3) I. Summer (Odd years). Planning, con-
Career and Technology Education

trolling, mediating and evaluating learning activities; use of instructional systems and appropriate laboratory management techniques for programs in public schools, college, business and industry.


C&T 553. Theory of Industrial Education (3) I, Summer (Even years). Current practice and theory of industrial education related to technological, societal and educational influences and placed in historical perspective.

C&T 554. Curriculum in Career and Technology Education (3) II. Critical review of existing and theoretical comprehensive career and technology education curricula.

C&T 555. Curriculum Development in Home Economics Education (3) On demand. Critical analysis of existing curriculum patterns and trends in general, vocational, secondary and higher education with a system's approach emphasis.


C&T 557. Facilities Planning in Career and Technology Education (3) I (Odd years), Summer (Even years). Architectural, equipment and industrial facilities are considered in developing and applying criteria to design, modify and manage facilities in career and technology education.

C&T 558. Technology in America (3) On demand. Nature of technology, development, effects upon society and likely impact on future.

C&T 559. Training in Industry and Business (3). Design, production and evaluation of training programs for industry and business. Task analysis, system design, and cost analysis in development of training programs. (For advanced training courses, see TECH 662 and TECH 663).

C&T 570. Readings and Problems in Career and Technology Education (1-3). Supervised study, selected problems and/or tailored readings. Proposed program of study must be approved by Instructor prior to registration. May be repeated to six credit hours.

C&T 580. Topics in Career and Technology Education (1-3) On demand. This course will address selected topics such as regulations, legislation, curriculum, instructional technology, or personnel issues. May be repeated on approval of adviser.

C&T 589. Internship (3). Placement within setting related to student's academic specialization: teaching, curriculum-instructional systems development, administration-supervision or research-evaluation. Proposed field placement registration must be approved by instructor/supervisor prior to registration. May be repeated to six credit hours. Graded S/U.

C&T 595. Workshop in Career and Technology Education (1-4). Workshops on current topics and issues within discipline. May be repeated.

C&T 597. Research in Career and Technology Education (3) I, II (Odd years). Summer (Even years). Identification of problem areas and specific problems in career and technology education. Within current theories, research design and techniques, individual student problems are defined and developed. Prerequisite: consent of graduate coordinator.

C&T 598. Directed Research (1-3). Supervised independent research on delimited topic. Generation of new knowledge as contrasted with private reading course. May run for longer than single semester. Proposal for directed research must be approved by instructor/supervisor prior to registration. May be repeated to six credit hours. Graded on S/U basis.

C&T 599. Thesis Research (1-12). Credit for thesis study. A student may register for unlimited thesis credits with a maximum of six credits allowable toward degree requirements. The minimum acceptable total is three credit hours.

C&T 611. Curriculum Development in Career and Technology Education (3) II (Odd years), Summer (Even years). Develops competencies in the process of curriculum development; includes preparation of curricular language, occupational analysis techniques, instructional procedures, implementation and evaluation, diffusion and adoption techniques.

C&T 658. Evaluation in Career and Technology Education (3) Summer (Odd years). Principles and procedures in measuring and evaluating programs, courses, student and teacher behavior in career and technology education.

C&T 666. Theories of Vocational Behavior (3) I (Even years), II (Odd years). Review of contemporary vocational development theories, related literature, and research in education and business and industry. Implications for structuring career education programs and personal career development are stressed.

C&T 675. Administration and Supervision in Career and Technology Education (3) II. On demand. Responsibilities and administrative relationships in career and technology education. Supervisory techniques, personnel relations, program development, processing proposals, interpretation of pertinent legislation, and in-service programs.

C&T 680. Seminar in Career and Technology Education (3) I, Summer. On demand. Directed study, investigation and research in selected fields in career and technology education. May be repeated. Prerequisite: consent of graduate coordinator.

Technology Courses for Graduates

TECH 533. Visual Communication for Business and Industry (3). An accelerated inquiry into the theories and processes of systematic communication problem solving, slide presentation, desktop publishing, presentation graphics, and non-broadcast television production.

TECH 662. Analysis, Design and Development in Training (3) I, II. Extensive examination and development of competencies in training needs assessment, training proposal development, techniques and competencies in training systems, trouble-shooting and subject matter analysis, design techniques and training material development. Prerequisite CTE 559 or permission.

TECH 663. Implementing Training Systems (3) I, II. Examine the organization and placement of the training and development departments within business and industry and develop competencies in organizing, implementing, and evaluating training systems. Prerequisite CTE 559 or permission.

Technology Courses for Graduates and Undergraduates

TE 462. Career and Technology Education in Elementary Schools (3) II. On demand. Development and evaluation of instructional activities to facilitate career development and understanding of technology among elementary children.

TE 470. Coordinating Cooperative Education Programs (3) II (Odd years). Prepares coordinator of cooperative work education programs in
all phases of career and technology education. Readings, discussions, and field experiences designed to develop understanding of various types of cooperative programs, role of coordinator, and related instruction.

NOTE: Students wishing to pursue additional technical courses may do so with permission of their adviser. Technical courses are listed under the Master of Industrial Technology degree program.

Chemistry

Douglas C. Neckers, Chair, 132 Overman Hall
David S. Newman, Graduate Coordinator, M.A.T. Degree, 512 Physical Sciences, Phone: 419-372-8398
Thomas H. Kinstle, Graduate Coordinator, 409 Physical Sciences, Phone: 419-372-2658
Deanne Snavely, Graduate Coordinator, Ph.D. Degree, 509 Physical Sciences, Phone: 419-372-2664

Department Phone: 419-372-2031

Graduate Faculty


Assistant Professors - John Cable, Ph.D.; Neocles Leontis, Ph.D.; W. Robert Midden, Ph.D.; Deanne Snavely, Ph.D.

Graduate Degrees Offered

Ph.D. in Photochemical Sciences (see Photochemical Sciences) Master of Science, Master of Arts in Teaching.

The Master of Science degree program offers thesis research opportunities in the traditional areas of organic, inorganic, analytical, physical and biochemistry. Through the Center for Photochemical Sciences at Bowling Green, the Department also offers opportunities to combine the traditional disciplines with other sciences to explore basic and applied research problems in photochemical science.

Prerequisites to Graduate Work

Completion of an undergraduate major in chemistry as defined by the American Chemical Society is desirable. Three years of chemistry, one year of college physics, and mathematics through calculus are required. The programs in biochemistry and photochemical sciences also consider applicants from other undergraduate degree specializations. Such applicants are considered on an individual basis, and enrollment in some undergraduate courses is sometimes necessary to attain prerequisites for graduate work.

All candidates for a Master of Arts in Teaching must have had at least one year's teaching experience and hold a valid teaching certificate.

Requirements for the Master of Science Degree

All new graduate students must take an orientation examination in the fields of organic and physical chemistry just prior to the first registration. These are nationally standardized tests at a difficulty level similar to the final undergraduate examinations in each of these areas. The results are used to counsel students in their initial course registration.

Two degree alternatives are offered. Plan I requires completion of a thesis; plan II does not require a thesis.

Plan I
Completion of a thesis plus completion of the following courses for their equivalents is required: CHEM 406 and CHEM 408; at least one course from CHEM 513, 514, 521; CHEM 580 or CHEM 581 registration is required each semester of residence. The student must complete four of the following six area choices, or have previously had their equivalent:

List I
I. CHEM 454 or 525 (Analytical) II. CHEM 514 or 521 (Physical) III. CHEM 442 or 513 (Organic) IV. CHEM 463 or 515 (Inorganic) V. CHEM 445 or 447 or any two from 541-4 (Biochemistry) VI. Approved Courses in Biological Sciences, Mathematics, Physics

Two of the four areas must be completed with a 500-level course. The student must have a minimum of 30 semester hours with no more than six hours of CHEM 599, two hours of CHEM 580 (and/or 581), two hours of CHEM 583, and three hours of CHEM 610-616 creditable toward the degree. Courses such as CHEM 580, 583, 595, and 596 include a wide range of topics and specialized training sessions in laboratory and instrumentation research techniques, thereby affording students opportunities to broaden their knowledge outside their chosen specialization area.

Plan II candidates are required to pass a written examination in their major field of research specialization at least three months prior to submitting their thesis for approval, unless their grade point average is at least 3.30/4.00 in the courses from List I which the student has taken at the time they first completely satisfied the four-area requirements and two 500-level course requirements. If two or more courses from List I are taken during the semester in which the area requirement is satisfied, all of the courses will be used to compute the GPA. For example, if a student completes his/her area requirement with 454, 521, 513 and 515 and the GPA is 3.30/4.00 or better, they will be exempt from the comprehensive exam.

Finally, each plan I degree candidate must pass an oral examination defending his/her thesis research and covering closely allied areas.

Plan II
Completion of the following courses (or their equivalents) is required: CHEM 406, 408, and 596, plus three from among CHEM 442, 445, 454, and 463. CHEM 580 or CHEM 581 registration is required each semester of residence. A student who has taken equivalent courses as an undergraduate may not receive credit for these courses.

Each candidate for the Master of Science in chemistry degree (Plan II) must complete four of the following six area choices, or have previously had their equivalent:

I. CHEM 454 or 525 (Analytical) II. CHEM 514 or 521 (Physical) III. CHEM 442 or 513 (Organic) IV. CHEM 463 or 515 (Inorganic) V. CHEM 445 or 447 or any two from 541-4 (Biochemistry) VI. Approved Courses in Biological Sciences, Mathematics, Physics

A student in plan II must complete 33 hours (20 hours minimum in CHEM) of course work, of which no more than two hours may be in CHEM 580 or 581 and no more than four hours in CHEM 583. No credit for CHEM 599 or CHEM 610-616 is creditable to the Plan II masters degree. Each plan II student must present two departmental seminars as part of their graduation requirement.

Every plan II student must pass a written comprehensive examination covering the areas of chemistry included in their degree program not later than three weeks prior to the awarding of the degree. Students are normally allowed only one attempt to pass the comprehensive examina-
Chemistry

Hormones

CHEM 406, Department of Chemistry, surveys theories of reaction mechanisms. Prerequisite: CHEM 342 and CHEM 408.

CHEM 514. Quantum Chemistry and Spectroscopy (3) I. Application of quantum mechanics to atomic and molecular structure and chemical bonding. Survey of atomic and molecular spectroscopy; theoretical treatment and applications. Prerequisite: CHEM 406.

CHEM 515. Organometallic Chemistry (3) II. Alternate years. A study of bonding theories, stereochemistry, mechanisms, and reactions found in organometallic chemistry. Prerequisite: CHEM 463 or consent of instructor.

CHEM 518. Synthetic Chemistry (2) II. Methodologies and strategies for synthesis of organic, organometallic, and biological molecules. Emphasis on research described in current chemical literature. Prerequisite: CHEM 342.


CHEM 525. Chemical Analysis (3) I. A detailed coverage of complex equilibria in aqueous and nonaqueous solutions. The principles of chemical separations; chromatographic principles; theory and practice of sampling for chemical test purposes. Prerequisite: CHEM 406.

CHEM 541. Biochemistry of Inherited Metabolic Diseases (1) I. Alternate years. Alternate pathways of metabolism resulting from mutations and hereditary diseases. Prerequisite: CHEM 447 or consent of instructor.

CHEM 542. Biochemistry of Hormones (1) I. Alternate years. Structure, function, metabolism, and interrelationships of peptide, steroid, fatty acid, and aromatic hormones. Prerequisite: CHEM 447 or consent of instructor.

CHEM 543. Biochemistry of Nucleic Acids (2) II. Alternate years. Current concepts and mechanisms of replication, transcription, and translation. Prerequisite: CHEM 447 or consent of instructor.

CHEM 544. Biophysical Chemistry (2) II. Alternate years. Conformational studies of biological macromolecules, including nucleic acids, proteins, and carbohydrates; studies of membrane structure; techniques used for the study of structure and function of biological molecules; chemical behavior of biological molecules. Prerequisite: CHEM 447 or consent of instructor.

CHEM 580. Seminar in Chemistry (1) I. Selected topics in chemistry. Every graduate student in chemistry required to register for this course or CHEM 581 each semester in residence. No more than two hours of credit in this course may be counted toward degree.

CHEM 581. Research Seminar in Chemistry (1). Selected research topics in chemistry. Every Plan I graduate student required to register for this course fall semester of their second year. A seminar encompassing the formulation of a research proposal and the development of a relevant bibliography will be presented by each registrant. Oral seminars presented.

CHEM 583. Advanced Topics in Chemistry (1-2). Study at advanced level of specific topics in chemistry of current interest. May be repeated for total of no more than four credit hours with clearly different topics.

CHEM 595. Workshop on Current Topics in Chemistry (1-4). On demand. Workshop on current topics and issues within discipline; topics vary from semester to semester.

CHEM 596. Advanced Laboratory (2). Individual projects of advanced nature to supplement previous laboratory experience and to prepare for independent research. Prerequisites: CHEM 342 and CHEM 406.

CHEM 599. Thesis Research (1-12). Thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is four hours.

CHEM 610-616. Research Topics in Chemistry (1-4). Advanced seminars covering topics of current research and historical background in specialized fields of chemistry. A maximum of 3 hours creditable toward degree. Prerequisite: consent of instructor. May be repeated. Graded S/U.

CHEM 610. Topics in Coordination Chemistry.

CHEM 611. Topics in Regulation of Enzyme Function.

CHEM 612. Topics in Computational Chemistry.

CHEM 613. Topics in Organic Synthesis and Natural Products.

CHEM 614. Topics in Biophysical Chemistry.

CHEM 615. Topics in Thermodynamics.

CHEM 616. Topics in DNA Protein Interactions.

Courses for Graduates and Undergraduates

CHEM 402. Numerical Methods in Chemistry (2) II. Use of computers and numerical methods in chemistry; survey of computer graphics and microcomputer-based instrumentation in chemical research. Prerequisite or corequisite: CHEM 405.

CHEM 405. Physical Chemistry (4) I. Thermodynamics and quantum chemistry. Prerequisites: CHEM 201 (or CHEM 136) and MATH 232, and either PHYS 212 or PHYS 202.

CHEM 406. Physical Chemistry (4) II. CHEM 405 continued. Electrochemistry, kinetics, spectroscopy and molecular structure. Prerequisite: CHEM 405.

CHEM 407. Integrated Analytical and Physical Laboratory (2) I. Principles of measurement; spectral, chromatographic and electroanalytical techniques; thermodynamic and kinetic measurements; computerized data acquisition. Two-hour laboratory. Prerequisite or corequisite: CHEM 405.

CHEM 408. Integrated Analytical and Physical Laboratory (2) II. Continuation of CHEM 407. Prerequisite: CHEM 407; prerequisite or corequisite: CHEM 406. Lab fee.

CHEM 413. Special Problems (1-3). Independent study and research. Three to nine hours of laboratory, one half-hour course each week. Not applicable toward the minimum requirements of the M.S. degree.


CHEM 445. General Biochemistry (3) I. Structure, function, chemical and physical properties of bioorganic molecules. Prerequisites: CHEM 342 and either CHEM 352 or CHEM 406 or permission of instructor.

CHEM 446. Biochemistry Laboratory (1) I. Experimental techniques in biochemistry. Three-hour
Chemistry - College Student Personnel

laboratory. Prerequisite or corequisite: CHEM 445. Lab fee.

CHEM 447. General Biochemistry (3) II. Metabolism, energetics, and regulation of bioorganic molecules. Prerequisite: CHEM 445.

CHEM 449. Advanced Biochemistry Laboratory (2) II. Research techniques in biochemistry. Two three-hour laboratories. Prerequisite: CHEM 446 or permission of instructor. Lab fee.

CHEM 453. Environmental Chemistry (2) I. Alternate years. Sources, reactions, transport, and fates of chemical species in water, soil and air environments. Prerequisites: CHEM 136 (or CHEM 201), CHEM 306 (or CHEM 342), and CHEM 352 (PHYS 202).

CHEM 454. Instrumental Methods of Analysis (3) II. Theory of instrumental methods of analysis including electroanalytical, spectroscopic and chromatographic methods. Prerequisite: CHEM 408 or consent of instructor.

CHEM 463. Advanced Inorganic Chemistry (4) I. Chemical bonding, stereochemistry, acid-base chemistry, periodicity, nonmetal and transition metal chemistry, organometallic and bioinorganic chemistry. Prerequisites: CHEM 342, CHEM 406.

CHEM 466. Spectroscopic Methods in Organic Chemistry (2) I. Organic structure determination by spectroscopic techniques, with emphasis on infrared, ultraviolet, and nuclear magnetic resonance spectroscopy, and mass spectrometry. Also includes a brief introduction to related spectroscopic methods. Prerequisite: CHEM 342. Prerequisite or corequisite: CHEM 405.

College Student Personnel

Carney Strange, Chair and Graduate Coordinator, 330 Education Building
Phone: 419-372-7382

Graduate Faculty

Professors - Audrey Rentz, Ph.D.; Gerald Saddlemire, Ed.D.
Associate Professor - C. Carney Strange, Ph.D.

Assistant Professors - Michael D. Coomes, Ed.D.; Patricia King, Ph.D.; Fiona MacKinnon-Slaney, Ph.D.

Graduate Degrees Offered

Master of Arts, Master of Education. The program offered by the Department of College Student Personnel is designed to prepare individuals interested in employment within the general area of student affairs or student development services in post-secondary education. A candidate completing the master's degree is prepared as a generalist and is qualified for positions in such areas as admissions, orientation, residence life, student activities and organizations, counseling and career development, financial aid, and placement. Through elective course work a candidate may also complete a specialized emphasis focusing on the needs of returning adult learners.

College student personnel may be elected as a cognate within the Higher Education Administration program of the Educational Administration and Supervision Doctor of Philosophy degree.

A candidate who successfully completes the requirements for the doctorate is prepared to assume a position of leadership in a specific area of student personnel administration in a large institution or a position with comprehensive responsibilities in a small institution.

Prerequisites to Graduate Work

No specific undergraduate major is required, although it is helpful for the applicant to have completed at least 12 semester hours in the behavioral sciences (e.g., psychology, sociology). The quality of the undergraduate program, reference statements, and employment or other experiences are important factors in determining the admissibility of the candidate. A candidate must also be approved for an internship assignment before a recommendation is made to the Graduate College for admission to the program as a full-time student.

Requirements for the Master's Degree

An applicant should begin the program either in the summer or fall term. The degree program allows flexibility in planning based on the individual student's needs and goals.

Courses in the College Student Personnel Department emphasize the social, psychological, and philosophical foundations of student affairs practice in post-secondary institutions. Although most of the course requirements are met by offerings in the College of Education and Allied Professions, a candidate is encouraged to take advantage of appropriate courses in the College of Arts and Sciences, the College of Technology, and the College of Business Administration. The required 45 semester hours include a series of five core courses in the College Student Personnel Department, one course each in statistics and research methodology, and additional courses from multidisciplinary sources in consultation with a departmental adviser. The student may select courses that provide a concentration in such areas as counseling or administration, or that focus on the needs of special student populations, such as returning adult learners.

Appointment to an internship for each candidate is arranged through the College Student Personnel Department. These internships include positions on the Bowling Green campus and at nearby cooperating institutions.

A candidate for plan I of the master's degree program completes a thesis compatible with his/her background and interests. A comprehensive examination required for plan II is prepared and scheduled by the department.

Requirements for the Ph.D. Degree

The Department of College Student Personnel can furnish a statement which outlines specific requirements for the student personnel administration specialization offered as a cognate with the Higher Education Administration doctoral program in Educational Administration and Supervision.

Courses for Graduates

CSP 501. Foundations and Functions of College Student Personnel (3) I, Summer. History, philosophy, and goals of student affairs units in colleges and universities; emphasis on practitioner roles and responsibilities.

CSP 502. Theory and Assessment of College Student Development (3) I, Summer. Examination of theories describing patterns of growth and development during the college years. Implications for the design of educational practice on the college campus.

CSP 503. Issues in College Student Personnel (3) II, Summer. Examination of current and emerging issues in student development and student personnel programs.
CSP 504. Student Development Programs in Two Year Colleges (3) Summer. Student, staff, and institutional characteristics in two-year colleges. Analysis of institutional characteristics and community relationship patterns and effect upon student development.

CSP 505. Basic Documents in College Student Personnel (3) II. Summer. Intensive study of selected professional literature describing historical and philosophical bases of contemporary student personnel practices.

CSP 506. Theory and Assessment of Educational Environments (3) I, II. Application of environmental theory to the assessment of human environments. Special emphasis on the study of selected campus environments, and their influence on students.

CSP 507. Educational Outcomes of American Colleges and Universities (3) I, II. Examination of the impact of post-secondary educational institutions on students; exploration of barriers to student development and role of student affairs in reducing these barriers and increasing the beneficial impacts.

CSP 570. Readings in Application of College Student Personnel Concepts and Procedures (1-3). Independent study, supervised study of selected problems, and tailored readings. Proposed program of study must be approved by instructor prior to registration. May be repeated upon approval of student's adviser.

CSP 576. Supervised Counseling Practicum for College Student Personnel Majors (3) II. Summer. Individual and group counseling under supervision. Intake observation and multiple counseling experience arranged. Prerequisite: EDPI 575 and consent of the instructor.

CSP 580. Graduate Seminar in College Student Personnel (1-3). Generic seminar on selected topics and concerns in college student personnel. May be repeated upon approval of graduate coordinator.

CSP 590. Teaching of College Student Personnel at Post-Secondary Level (1-3). Focus on post-secondary education. Techniques and strategies for teaching CSP concepts and principles are examined. Emphasis on application to classroom environments.

CSP 595. Workshop on Current Topics in College Student Personnel (1-2). Study, readings to provide professional development activities. Topics vary from semester to semester. May be repeated on approval of student's adviser.

CSP 598. Directed Research in College Student Personnel (1-4). Supervised independent research on delimited topic related to college student personnel. Proposal for directed research must be approved by instructor prior to registration.

CSP 599. Thesis Research (1-12). Credit for thesis option selected under plan I of the master's degree program. Minimum acceptable total for completion of degree is four hours.

CSP 601. Seminar on Women in Higher Education (3) II. An exploration of issues, research and practices affecting women's roles as students, faculty and staff. Topics include: cultural influences on achievement; motivation; self-esteem; psychosocial moral development; leadership; career and professional advancement.

CSP 603. Moral and Ethical Development of College Students (3) I, II. Examination of moral development theory, research and assessment techniques. Special emphasis on principles and strategies used to design and evaluate educational interventions intended to promote moral development in higher education settings.

CSP 604. Intervention Strategies for Promoting Student Development (3), II. An examination of the process of intentionally promoting student development in the college years, with special attention given to theory-to-practice models of program development in student affairs contexts. Prerequisites: CSP 501, 502, 506, 585.

CSP 605. A Developmental Perspective on the Adult Learner (3) I. Examination of adulthood as a dynamic period of continuing change and learning by exploring theories and research on adult development. Special emphasis on psycho-social characteristics of adults and on developmental life tasks as they impact on the returning adult learner. Departmental permission required.

CSP 606. Facilitating Adult Learning (3). Overview of the nature, theory and process of adult learning, and its facilitation in educational contexts. Focus on the characteristics of adult learners, their cognitive development and learning styles. Implications for program planning are studied and practiced. Departmental permission required.

CSP 607. Student Services and the Adult Learner (3). I. Overview of student service functions in higher education as they relate to the increasing population of adult learners on campus. Particular emphasis upon motivations for learning and special characteristics of these 'non-traditional' students, and upon the design and evaluation of program models to meet their learning needs. Departmental permission required.

CSP 670. Advanced Readings in College Student Personnel (1-4). Independent supervised study of selected problems through extensive readings. Proposed plan of study must be approved by instructor prior to registration. May be repeated upon approval of student's adviser.

CSP 676. Supervised Field Experience in College Student Personnel (1-3). Advanced study of a selected topic within the discipline. Topics may vary from one semester to another. Instructor's permission required for registration. May be repeated on approval of graduate coordinator.

CSP 685. Advanced Supervised Field Experience in College Student Personnel (1-3). Experiential learning associated with the second year of graduate assistantship is documented through assigned papers and seminars. On-site supervisor will also submit reports to verify the nature of the learning accomplished.

CSP 689. Advanced Practicum in College Student Personnel (1-4). Supervised experience in student affairs for advanced graduate students. Approval of supervisor is required prior to registration. May be repeated upon approval of student's adviser.
Communication Disorders

Linda Petrosino, Acting Chair, 338 South Hall
Larry Small, Graduate Coordinator, 338 South Hall
Phone: 419-372-2515

Graduate Faculty
Professors - Herbert Greenberg, Ph.D.; Michael Rashatter, Ph.D.; Clyde Willis, Ph.D.
Associate Professors - Roger Cordcord, Ph.D.; Bonita Greenberg, Ph.D.; Faith Jackson, Ph.D.; Linda Petrosino, Ph.D.
Assistant Professors - Elizabeth I. Burroughs, Ph.D.; Larry Small, Ph.D.

Graduate Degrees Offered
Master of Science and Doctor of Philosophy

Prerequisites to Graduate Work
Admission to graduate study in communication disorders at the master's level normally requires 36 quarter hours or 24 semester hours of undergraduate work in communication disorders fields. A student planning to study communication disorders may be permitted to substitute certain undergraduate credits in biology, English, and psychology. Students with undergraduate majors in fields other than communication disorders areas will be considered for admission on an individual basis. The graduate coordinator will review the records of all incoming graduate students in accordance with their declared interests and, if necessary, the student may be required to take undergraduate course work, as a part of his/her program. A student who has obtained a master's degree in communication disorders from an accredited institution may be admitted to advanced graduate study beyond the master's level if, in the judgment of the department, the record indicates potential for successful advanced work.

Requirements for the Master's Degree
A plan I master's degree program requires a minimum of 30 graduate credits of course work and an additional 6 graduate credits of thesis research (for a total of 36 credits). Alternately, in plan II, a student may meet the requirements for the degree by completing a minimum of 36 hours of academic course work. Plan II approval is not granted after the student has requested and received official approval of a thesis topic. In both plan I and plan II, details of expected course sequences in CDIS may be obtained from a CDIS graduate adviser and are found in the department's Master's Degree Handbook. Prior to either writing comprehensive exams or pursuing a thesis topic, a CDIS student must attain a 3.0 GPA in communication disorders major courses, as well as demonstrate adequate clinical performance.

In the final examination for the master's degree, the candidate is expected to show a knowledge of the principal historical factors, philosophical concepts, and accepted methodology in CDIS. The student who presents a thesis undergoes an oral final examination. The student who does not present a thesis undergoes a written examination, which may be followed by an oral examination when deemed appropriate.

Requirements for the Ph.D. Degree
The doctorate is granted after the candidate passes an oral defense of the dissertation. The dissertation must be an appropriate culmination of the candidate's program of study, and represents scholarly research appropriate in method and subject to the degree program. The doctoral program requires a minimum of 60 semester hours beyond the master's degree, including dissertation credit; successful completion of a written and oral preliminary examination related to the candidate's program of study; and completion of the appropriate language option or alternate. Details of expected course sequences and dissertation directions may be obtained from the CDIS graduate coordinator.

The following areas are presented as areas of strength within the doctoral program and thus represent broad areas within which doctoral dissertations are being written: Communication Disorders, Speech-Language Pathology, and Audiology.

Courses for Graduates
CDIS 500. (1-4). For graduate students in other fields who wish to refine their skills in speech, language, and hearing. Does not count toward degree requirements. (P/NP grading). Additional fee: $25.
CDIS 501. Speech Science (3) I. II. Acoustics, physiology of speech mechanism, acoustics of speech, and speech perception. Prerequisite: CDIS 301 or equivalent.
CDIS 502. Administration and Supervision of Therapy Programs

in Educational Settings (2) On demand. Public school programs at state and local level. Techniques of supervision for state, local, and university supervisors. Prerequisite: experience in public school speech and hearing therapy.

CDIS 503. Medical Aspects of Speech and Hearing (2) On demand. Relationship between medical fields and speech and hearing pathology. Weekly visits to physicians' offices, hospitals, and treatment centers.

CDIS 504. Practicum in Audiology (1-3). Clinical experience in diagnostic and rehabilitative audiology. May be repeated. Prerequisite: consent of instructor. Graded S/U.

CDIS 505. Practicum in Speech-Language Pathology (1-3). Supervised clinical experience in Speech-Language Pathology. May be repeated. Prerequisite: consent of instructor. Graded S/U.


CDIS 515. Diagnostic Audiology I (3) I. Advanced theory and administration of differential diagnostic hearing tests. Investigation of diseases which affect hearing and their audiological results. Prerequisites: CDIS 361, 461, or equivalent.


CDIS 525. Diagnostic Audiology II (3) II. Continuation of CDIS 515. Additional diagnostic hearing tests. Prerequisite: CDIS 515 or consent of instructor.

CDIS 531. Advanced Studies in Aphasia and Related Neuropathologies (3) I. Neurological bases of aphasia and neurogenic speech disorders; nature, etiology, diagnosis, and treatment of the aphasias and apraxia of speech. Prerequisite: CDIS 331 or consent of instructor.

CDIS 535. Diagnostic Audiology III (3) Summer. Continuation of CDIS 525. Additional diagnostic hearing tests. Prerequisite: CDIS 525 or consent of instructor.

CDIS 541. Advanced Studies in Stuttering (3) I. Analysis of research and clinical application related to etiology, onset, development, and maintenance of stuttering. Prerequisite: CDIS 541.

CDIS 545. Auditory Rehabilitation
Communication Disorders - Computer Science

**CDIS 551. Advanced Studies in Oral Facial Anomalies** (3) I. Etiology, diagnosis, habilitation of cleft palate, rehabilitation of oral cancer and tongue thrust. Prerequisite: CDIS 461 or consent of instructor.

**CDIS 555. Auditory Rehabilitation and Hearing Aids** (3) II. Continuation of CDIS 545. Amplification systems and fitting techniques. Prerequisite: CDIS 545 or consent of instructor.

**CDIS 558. Internship** (1-9) On demand. Supervised experience within a setting related to specializations in communication disorders. Must be approved by the instructor / supervisor prior to registration. Graded S/U.

**CDIS 595. Workshop on Current Topics in Communication Disorders** (1-3) On demand. Readings and experiences; topics vary from semester to semester. May be repeated with approval of the graduate coordinator.

**CDIS 597. Research Methods in Communication Disorders** (3) I. Introduction to research, research strategies and techniques, and implications of research in communication disorders.

**CDIS 598. Research Problems in Communication Disorders** (1-3). Independent studies and research problems in communication disorders for master's degree students. Each registration must be approved by department chair. May be repeated with approval of adviser and graduate coordinator.

**CDIS 599. Thesis Research** (1-12). Credit for thesis study. Enrollment in excess of six hours is acceptable for plan I master's degree, but no more than six hours are credited toward the degree. Minimum acceptable for degree is three hours.

**CDIS 601. Topics in Communication Disorders** (3). Advanced seminar in speech-language pathology or audiology. May be repeated with permission of adviser and graduate coordinator.

**CDIS 610. Communication Disorders and Aging** (3) I. Survey of research and theory of speech and language abilities of older adults, and factors that influence developmental changes. Prerequisite: GER 501 or consent of instructor.

**CDIS 611. Advanced Studies in Language Development** (3) I, II. The developmental stages and interaction of language form (syntax), content (semantics), and use (pragmatics). Prevention Issues (language workshops) and methods of language sampling. Prerequisite: CDIS 551 or equivalent, or consent of instructor.

**CDIS 621. Advanced Studies in Language Disorders** (3) Summer. Survey of pediatric and adolescent language disabilities; nature and scope of language identification and description of language deviance; formulation of remedial approaches. Prerequisite: CDIS 611 or equivalent.

**CDIS 651. Physiological Acoustics** (3) I, II. Characteristics of speech, laboratory techniques of acoustical analysis of speech. Prerequisite: CDIS 501 or consent of instructor.

**CDIS 671. Neurophysiology of Auditory System** (3) On demand. Advanced study of the anatomy and physiology of auditory mechanism. Prerequisite: consent of instructor.

**CDIS 681. Seminar in Psychoacoustics** (3) On demand. Critical study of selected research in psychoacoustics. Prerequisite: consent of instructor.

**CDIS 688. Internship** (1-5) On demand. Supervised experience within a setting related to specializations in communication disorders. Must be approved by the instructor / supervisor prior to registration. Graded S/U.

**CDIS 691. Seminar in Physiological Acoustics** (3) On demand. Critical study of selected research in physiological acoustics. Prerequisite: consent of instructor.

**CDIS 692. Teaching Communication Disorders** (1). Problems which arise in day-to-day teaching assistant/fellow activities. Includes observations by regular faculty. Graded S/U. Must be taken by graduate assistants/fellows each semester they have an assignment.

**CDIS 698. Research Problems in Communication Disorders** (1-3). Independent studies and research problems in communication disorders for doctoral degree students. Registration must be approved by department chair. May be repeated with approval of adviser and graduate coordinator.

**CDIS 799. Dissertation Research** (1-16). Student must register for a minimum of 16 hours in 799 while working on the doctoral dissertation; may be repeated to 30 hours in degree program.

**Courses for Graduates and Undergraduates**

**CDIS 471. Introduction to Communication Disorders for the Classroom Teacher** (3) I, II, Summer. Identification, etiologies, and characteristics of communication disorders. Suggestions for classroom management of communication disorders. Not open to students with credit for CDIS 223.

**CDIS 481. Organization and Management of School Speech-Language-Hearing Programs** (3) I, II. Planning and implementing programs in schools for speech-language and hearing-handicapped pupils. Clinician's roles and responsibilities. Grade of "C" or better in this course to qualify for student teaching. Prerequisites: all CDIS courses.

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**Computer Science**

Ann-Marie Lancaster, Chair. 246 Mathematical Sciences Building Leland R. Miller, Graduate Coordinator. 200C Mathematical Sciences Building Phone: 419-372-2337

**Graduate Faculty**

Associate Professors - Larry Dunning, Ph.D.; Ann-Marie Lancaster, Ph.D.; Ronald Lancaster, Ph.D.; Walter Maner, Ph.D.; Leland Miller, Ph.D.; Barbree Mynatt, Ph.D.

Assistant Professors - David Chilson, Ph.D.; Albert Copper, III, Ph.D.; Mohammad Dadfar, Ph.D.; Laura M. Leventhal, Ph.D.; Subramaniam Ramakrishnan, Ph.D.

**Graduate Degree Offered**

Master of Science

**Prerequisites to Graduate Work**

Students entering the master's program should have a background in computer science equivalent to that
provided by the core undergraduate curriculum. (This does not apply to students with a concentration in operations research, as indicated below.) The prerequisite may be satisfied by courses actually taken as an undergraduate, by remedial course work taken while a graduate student, or by substantial practical experience in the computer field. Also, entering students should have some mathematical background including, at a minimum, differential calculus, integral calculus, and discrete mathematics. Additional courses in mathematics and statistics are also desirable. Deficiencies in mathematics may be made up at the beginning of graduate study.

Requirements for the Master's Degree

The Master of Science program is available to both day and evening division students. All candidates must complete at least 33 hours of graduate-level coursework, including 15 hours of regular computer science course work at the 400 level, 3 hours of either CS 598 or CS 599, and 15 additional hours. These additional hours may include computer science course work at the 400 or 500 level or 0-3 hours chosen from the following: CS 570, CS 589, or approved graduate-level course work in other departments. All candidates must complete at least two of the following courses unless they have equivalent background as a result of prior course work or practical experience: CS 408, CS 464, CS 512. Candidates must maintain a 3.0 grade point average overall, as well as a 3.0 average in computer science courses. Further requirements depend upon whether the candidate chooses to pursue Plan I or Plan II.

Plan I is the thesis option. Students must prepare a formal thesis while enrolled in CS 599 or at least 3 credits. At most 3 hours of CS 599 may be included in the required total of 33. The proposal and the thesis must be defended at a public meeting. Enrollment in CS 599 is restricted to students who have completed at least 18 hours of their program and who have an overall grade point average of 3.5 or better.

Plan II is the non-thesis option. Students must complete a project while enrolled in CS 598 for at least 3 credits, and must pass a comprehensive examination in computer science during the last semester of the program. Only 3 hours of CS 598 may be included in the required total of 33 hours. Enrollment in CS 598 is restricted to students who have completed at least 18 hours of their program and who have an overall grade point average of 3.0 or better.

The comprehensive examination which is required of all Plan II candidates is taken in the final semester of the degree program. The examination is given on the first Saturday of each semester. Students should register for this examination by contacting the graduate coordinator prior to the announced deadline.

Concentration in Data Telecommunications

This specialized program is designed for students who want to integrate software development with data telecommunications. The program provides intensive studies in data communications, signal processing, computer organization and hardware, and microcomputer interfacing. The prerequisites for this program are the same as for the general computer science program, plus a full year of physics and a full year of calculus.

The following courses are required of all students with this specialization:

1. CS 408, 428, 429, 507, 529; PHYS 401, 428, 507, 517
2. A graduate project (CS 598) or a thesis (CS 599)
3. At least 33 hours of graduate-level credit

Concentration in Operations Research

Students desiring to concentrate in operations research should have a full-year sequence in programming using a higher-level language, plus one course in assembler. Additional prerequisites are a full year of calculus, a course in linear algebra, a course in statistics, and an introduction to operations research. Deficiencies in background may be made up at the beginning of graduate study.

The following courses are required of all students with this specialization:

1. CS 442, 512, 547, 549; OR 550, 555
2. A graduate project (CS 598)
3. Three of the following: CS 202 (Systems Programming), 305 (Data Structures), 360 (COBOL Programming), 425, 428, 462, 464
4. One of the following: STAT 402, 404, 410, 414
5. At least 33 hours of graduate-level credit

Courses for Graduates

CS 500. Computing for Graduate Students (3) I, II, Summer. Problem solving and computer programming techniques. Introduction to microcomputer software (e.g., word processing). Applications in the student's area of interest. Credit not applicable toward a degree in computer science. Graded P/U.

CS 503. Statistical Packages (3) II, Summer. Use and comparison of various statistical packages, with emphasis on SPSS and SAS. Credit not applicable toward a degree in computer science. Prerequisite: Graduate-level course in statistics.


CS 508. Advanced Operating Systems (3) I. Survey of major operating systems. Sequential and concurrent processes; storage management; scheduling algorithms; resource protection, management, and security. Prerequisite: CS 408.

CS 509. Advanced Compiler Design (3) II. Programming language grammars and normal forms, parsing algorithms and semantics specification, optimization, error recovery. Translator writing systems and extensible languages. Prerequisite: CS 403.

CS 511. Automata and Computability Theory (3) Summer, even-numbered years. Mathematical models for algorithmic processes, such as finite automata and Turing machines. Limitations of such models.

CS 512. Analysis of Algorithms (3) I. Algorithms for solving problems that occur frequently in computer applications. Basic principles and techniques for designing analyzing algorithms. Prerequisite: CS 205 and MATH 222.

CS 514. Program Specification and Correctness (3) II, even-numbered years. Techniques for specifying and realizing correct programs using axiomatic approaches to formal semantics and verification of programs; automated verifiers, n-version programming, and parallel computation models. Prerequisites: CS 305 and CS 410, or consent of instructor.

CS 520. Advanced Topics in Artificial Intelligence (3) Summer, even-numbered years. Intensive study of a major sub-field such as neural networks, expert systems, machine learning/tutoring, natural lan-
Computer Science

guage processing, pattern recognition, robotics or others. Prerequisite: A reading knowledge of LISP.


CS 530. Microcomputer Packages (3) Summer. The use of microcomputer packages as a tool for solving problems in the student's discipline. Packages covered include word processors, spreadsheets, bibliographic, and database packages. Intended primarily for students in the humanities and social sciences. Credit not applicable toward a degree in computer science. Graded S/U.

CS 531. Programming for Educators (3) On demand. A conceptual introduction to programming using microcomputers, with a view toward instructional computing. Programming as problem solving: Elements of style and structure. Use of subroutines and graphics. Credit not applicable toward a degree in computer science. Prerequisite: prior teaching experience.

CS 547. Network Analysis (3) I. Network techniques for modeling and analysis of industrial and management problems: project management and resource allocation with PERT/CPM; transportation, transshipment, assignment, shortest path and minimal spanning tree models; maximal flow problems in single and multicommodity networks; out-of-kilter algorithm, advanced topics in network analysis. Prerequisite: OR 380 or CS 440 or GBA 663.

CS 549. Applied Nonlinear and Dynamic Programming (3) II. odd-numbered years. Modelling decision problems in business and public administration via nonlinear and dynamic programming. Topics include quadratic and separable programming, penalty function, search methods, geometric programming, dynamic programming with discrete and continuous variables. Prerequisite: OR 380 or CS 440 or GBA 663.

CS 552. Techniques of Database Organization (3) I. Physical aspects of database processing; database design objectives; survey of the alternate physical structures and their trade-offs. Prerequisite: CS 462.

CS 564. Software Engineering (3) II, odd-numbered years. Advanced topics related to the analysis, design, and development of large software projects. Prerequisite: CS 464.

CS 565. Human Issues in Computing (3) II, even-numbered years. Behavioral aspects of computing, including topics such as programming style, language features, specification formats, documentation, computer-aided instruction, computer science expertise, training, computing for handicapped users. User-interface design. Research methodology. Prerequisite: CS 570. Research in Computer Science (1-4). Supervised study and/or projects in any area of computer science, including computer systems design, automata theory, operations research. This course does not apply to the 15-hour requirement for 500-level CS courses. Graded S/U. Prerequisite: consent of instructor. May be repeated.

CS 580. Graduate Seminar (1-4). Special course offering on topic of current interest. Content varies with each offering. Prerequisite: consent of instructor. May be repeated.

CS 589. Internship (1-3). Supervised professional experience within an occupational setting for the graduate student majoring in computer science. The student is required to prepare both written and oral reports on the experience. Credit hours assigned after completing the work. This course does not apply to the 15-hour requirement for 500-level CS courses. Graded S/U. Prerequisite: consent of instructor. May be repeated.

CS 598. Directed Research (1-4). Graded S/U. Prerequisite: consent of instructor. May be repeated to total of six hours.

CS 599. Thesis Research (1-12). Prerequisite: consent of instructor. May be repeated.

Courses for Graduates and Undergraduates


CS 409. Language Design and Implementation (3) I. Fundamental concepts of languages. Processors, data, operations, sequence control, data control, storage management, syntax, translation. Prerequisites: CS 202 and CS 306.

CS 410. Formal Language Theory (3) I. Various types of languages (context-sensitive, context-free, regular). Discussion of recognition devices such as pushdown automata, linear bounded automata, and Turing Machines. Some topics of current interest. Prerequisite: MATH 222 or consent of instructor.

CS 420. Artificial Intelligence Methods (3) Summer, odd-numbered years. Intermediate AI programming with application to representative problems requiring searching, reasoning, planning, matching, deciding, parsing, seeing and learning. Prerequisite: elementary knowledge of LISP.

CS 425. Computer Graphics (3) I, every year; Summer, even-numbered years. Graphic I/O devices; 2-dimensional and 3-dimensional display techniques; display processors; clipping and windowing; hidden line removal; data structures for graphics. Prerequisites: CS 201, 205 and MATH 222.

CS 428. Microprocessor Systems (3) II, even-numbered years; Summer, odd-numbered years. Architectures of microprocessors and microcomputers; I/O and data transmission techniques; addressing techniques; interrupt handling. Detailed study of a specific microcomputer system. Prerequisite: CS 307.

CS 429. Data Communication and Networks (3) II. Communication equipment; device protocols; network configurations; encryption; data compression and security. Private, public, local and satellite networks. Prerequisite: CS 202. Prerequisite or corequisite: CS 307.

CS 440. Optimization Techniques (3) II, odd-numbered years. Linear programming, game theory, PERT, network analysis; duality theory and sensitivity analysis; applications. Computer programs written to implement several techniques. Prerequisite: CS 101 and MATH 222.

CS 442. Techniques of Simulation (3) II, even-numbered years. Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisites: CS 205 and MATH 247.


CS 452. Numerical Analysis (3) II. Study of numerical methods for algebraic eigenvalue problem, solutions of ordinary differential equations; and topics from approximation theory, numerical solution of partial differential equations, optimization...
Computer Science - Economics

Economics

J. David Reed, Chair, 3002 Business Administration Building
Bevars Mabry, Graduate Coordinator, 3004D Business Administration Building
Phone: 419-372-2646

Graduate Faculty


Associate Professors - Richard Douglas, Ph.D.

Assistant Professors - Richard P. Numrich, Ph.D.; Mark Wheeler, Ph.D.

Graduate Degree Offered

Master of Arts. The goal of the program is to prepare economists for careers in business or government, or for further graduate study in economics. Successful completion of the program should enable graduates to function as professional economists and economic analysts in the corporate, government, and academic sectors.

Prerequisites to Graduate Work

The requirements for admission to the graduate program in economics are a minimum of 18 semester hours of undergraduate study in economics courses, including courses in introductory economics, intermediate theory, and statistics; or in courses in cognate fields wherever such courses are determined to be appropriate. A student with less background may be accepted provided he/she is willing to make up the deficiencies specified by the graduate coordinator. A student should have at least one semester of calculus before beginning graduate studies in economics.

Requirements for the Master of Arts Degree

Candidates for the master's degree are required to earn a minimum of 30 semester hours of graduate credit, of which at least 18 hours must be at the 500 level. Depending on the student's needs, the student may enroll under plan I or plan II.

The following core courses in economic theory or their equivalents are required of each student in the program: ECON 510 and ECON 511. In addition, all students must have training in mathematics and econometrics. The minimum mathematics requirement may be satisfied by ECON 400 or its equivalent. The minimum econometrics requirement may be satisfied by ECON 402 or its equivalent. The graduate adviser may waive these requirements for a student who has an adequate background in mathematics or econometrics. Each student enrolled under plan II also is required to complete the economics research seminar: ECON 597.

Up to nine hours of cognate courses may be taken under plan I or plan II in MATH, GBA, STAT, or in such allied social sciences as GEOG, HIST, POLS, PSYC, or SOC.

Interdisciplinary Programs in Economics

A formal interdisciplinary master's degree program in economics may be designed by the student in consultation with the graduate coordinator. Interdisciplinary programs may be taken under plan I or plan II options. The basic departmental core as outlined above also applies to the interdisciplinary programs.

Under the plan I option, the interdisciplinary program requires a minimum of 34 hours of graduate level work. These shall consist of a minimum of 19 hours in economics, a minimum of nine hours in a cognate field, and a six-hour thesis. Under the plan II option, the interdisciplinary program requires a minimum of 32 hours of graduate level work. These shall consist of a minimum of 20 hours in economics and a minimum of 12 hours in a cognate field or fields. Of the 12 cognate hours at least nine hours must be taken in one department. Courses in fields such as STAT, GBA, FIN, MGMT, public administration, GEOG, and others may be incorporated into the Interdisciplinary program.

Courses for Graduates

ECON 500. Economic Analysis

(4). Accelerated course in economic principles and analysis with application to business decisions; for first-year graduate student without undergraduate preparation in economics. Not applicable toward master's degree.

ECON 501. Price Theory (3). The theory of the firm and applications to business administration. Prerequisite: principles of economics or consent of instructor.

ECON 502. Income Analysis (3). Measurement and determinants of gross national product. Analysis of public economic policies to control price levels, employment, and economic growth. Prerequisite: principles of economics or consent of instructor.


ECON 505. Quantitative Economics (3). Application of statistical and mathematical concepts to behavior of firms, markets, and aggregate economy. Prerequisite: ECON 400 or consent of instructor.


ECON 510. Advanced Microeconomic Theory (3) I. Economic analysis of product and factor markets, general equilibrium analysis, and introduction to welfare economics. Prerequisite: ECON 302 or ECON 501 or consent of graduate coordinator.

ECON 511. Aggregative Economics (3) I. Macroeconomic analysis: measurement of gross national product; determinants of aggregate employment and national income, price levels and economic growth. Prerequisite: ECON 303 or ECON 502 or consent of graduate coordinator.
ECON 512. Monetary Theory and Policy (3) II. Modern monetary theory and policy. Synthesis of monetary and macroeconomic theory. Prerequisite: ECON 303 or ECON 311 or ECON 502.

ECON 523. Seminar in Labor Relations (3) I. Uniqueness of contemporary labor relations problems. Development of collective bargaining units in public and private sectors, labor negotiations, and labor disputes involving professional personnel.

ECON 524. Seminar in Economic Problems of Labor (3). Theoretical and empirical analysis of current problems in labor market including relative wage structure, labor mobility, technology, employment, business cycle, and government policies.

ECON 531. Economics of Public Sector (3). Examines theoretical foundations of taxes, expenditures, and public debt in a market economy.

ECON 551. Seminar in International Economics (3). International resource allocation, commercial policy, balance of payments, and foreign exchange markets. International economic institutions. Prerequisite: ECON 351 or consent of instructor.

ECON 552. Economic Problems of Less-Developed Countries (3). On demand. Transformation of less-developed countries into modern economic societies, definitional problems, theories of economic development, historical evidence, international framework and policy aspects of development.

ECON 561. Seminar in Regional and Urban Economic Analysis (3). On demand. Analysis of regional and urban studies and research. Prerequisite: ECON 450 or ECON 462 or consent of instructor.

ECON 570. Readings in Economics (1-4). Offered to individual student or to group of students as needed. Selected areas and problems treated in depth. May be repeated to four hours. Graded S/U only.

ECON 580. Seminar in Economics (3). On demand. Seminar on economic topics deemed appropriate to participants. Prerequisite: consent of adviser. May be repeated.

ECON 589. Internship (1-6). Supervised professional experience within occupational setting related to student's area of academic specialization. Graded S/U.

ECON 597. Economics Research Seminar (3) Summer. Topics include the process of defining a problem, selection of a model, sources of data, testing procedures and reporting results. The student is required to participate in a research project. Prerequisite: ECON 402.

ECON 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

Courses for Graduates and Undergraduates

ECON 400. Mathematics for Economics (3) I. Elementary mathematical methods and basic applications to economic theory. Not open to students who have had MATH 231 or above.

ECON 401. Mathematical Economics (3) II. Economic theory in mathematical context; microeconomic and macroeconomic models, their structure and analysis. Constrained optimization. Prerequisites: ECON 400 or equivalent.

ECON 402. Econometrics (3) II. Statistical techniques used to measure economic data and to test validity of theoretical models. Prerequisites: STAT 212 and ECON 400 or consent of instructor.

ECON 414. Monetary and Fiscal Policy (3). Objectives, means, and history of monetary and fiscal control; effect on total economic activity.


ECON 451. International Economics (3) I. Theory of international economics: international trade as factor in national income; significance of International Investment; public policies to promote trade; international economic cooperation.

ECON 452. International Monetary Economics (3) II. Alternative international monetary systems; emphasis on present system.

ECON 460. Regional Economics (3) I. Location and land use theories, central place theory, tools of regional analysis, regional growth theory, and regional public policy issues. Prerequisite: ECON 202 and ECON 203.

ECON 462. Urban Economics (3) II. Urban spatial theory and analysis, the economic analysis of urban problems including poverty, housing, transportation, the environment, and public finance. Prerequisite: ECON 202 and ECON 203.

ECON 471. Industrial Organization: Study of Business Size and Competition (3) II. Forces that lead to bigness and resulting impact of bigness on competition; public policy, including regulation, designed to cope with business size. Prerequisite: ECON 202 or consent of instructor.

ECON 472. Comparative Economic Systems (3) II. Analysis of contemporary economic systems including capitalism, centrally planned socialist economics, market socialism, and mixed economies.

Ph.D.; Bill Reynolds, Ed.D.; Martha W. Tack, Ph.D.

Associate Professors - Gary Johnson, D.Ed.; Eugene Thompson, Ed.D.

Assistant Professors - Phillip B. Alkire, Ed.D.; Albert Jurenas, Ed.D.

Graduate Degrees Offered

Master of Education, Specialist in Education, and Doctor of Philosophy. Three graduate-level programs are offered for people who are interested in careers of service in the field of educational leadership. The Specialist in Education degree is a 30 semester-hour post-master's degree program. The Doctor of Philosophy degree is a 60 semester hour post-master's program designed to prepare a person for administration at all educational levels, college teaching of educational administration and related subjects, or research.

Prerequisites to Graduate Work

Teaching and/or administrative experience is not required, but is strongly recommended. Prospective students should understand that their application for an administrative certificate, for which these programs might qualify them, will not be issued until regulations of the State of Ohio relative to teaching and/or adminis-
trative experiences have been met. These requirements include successful completion of the state prescribed examination. Deficiencies in general and/or professional preparation must be removed.

Prerequisites for the master's degree program include:

1. admission to the Graduate College;
2. possession of a bachelor's degree from an accredited college or university;
3. completion of teacher certification requirements or a declaration by the student that there is no aspiration for administrative certification;
4. completion of the Aptitude Test of the Graduate Record Examination;
5. three written recommendations from competent, professional persons including an employer.

Admission applications to all graduate programs in the Department of Educational Administration and Supervision are processed through the Graduate College and the College of Education and Allied Professions Office of Graduate Student Services, 455 Education Building. Phone: 419-372-7407.

Requirements for the Master's Degree

Course work completed in the master's degree program can be applied to a variety of certificates. The Master of Education degree is intended for those who wish to qualify as administrators or supervisors in educational or educationally related agencies. After completing this graduate program, most students are eligible to apply course work toward certification by the Ohio State Department of Education in the following areas:

Assistant Superintendent (48 semester hours)
Elementary Principalship (45 semester hours)
High School Principalship (45 semester hours)
Superintendent (63 semester hours)
Supervisor (33 semester hours)
Educational Administration Specialist Certificates (45 semester hours):
Business Management
Educational Research
Educational Staff Personnel Administration
Instructional Services
Pupil Personnel Administration
School and Community Relations
Special Education (Exceptional Children)

Master's-level students may select either a program that includes a thesis or a program that incorporates course work in statistics and research methodology as well as a comprehensive examination. The thesis experience provides students with an opportunity to conduct research and to test theory against present practice in administration. Each student's program is planned individually in consultation with an adviser to meet degree and certification requirements.

For specific degree requirements (such as required courses), contact the EDAS departmental office.

The Specialist in Education Program

Requirements for the Degree of Specialist in Education

The program leading to the degree of Specialist in Education, if carefully planned, will enable the student to meet requirements for the positions of superintendent of schools or other administrative positions for which an Ohio certificate is needed. The Specialist in Education degree program is described under "Degree Programs" in this Catalog.

Prerequisites for the Degree of Specialist in Education

Prerequisites which must be met before admission is considered include:
(a) admission to the Graduate College;
(b) possession of a master's degree from an accredited college or university;
(c) completion of the Aptitude Test of the Graduate Record Examination;
(d) three written references from competent, professional persons including an employer; and
(e) submission of a comprehensive biographical sheet which includes personal information, educational data, and a description of teaching and/or employment experience; and
(f) completion of certification requirements as a teacher, principal, or supervisor at either the elementary or secondary level or as a superintendent, or a signed declaration by the student that he/she does not aspire to administrative certification in this degree program. Previous administrative or supervisory experience is required for certification as superintendent.

The application packet including transcript records, test scores, and letters of reference is considered by the departmental faculty in making its final recommendation concerning the applicant's admission to the Ed.S. degree program. After a student is admitted to the program, an academic adviser is assigned and a Tentative Degree Program is planned.

Program Requirements

A minimum of 30 semester hours of post-master's graduate work is required. The program of study is spread over courses in educational administration, courses in professional education outside the area of educational administration, courses in research methods and educational statistics, and an internship or field experience. For specific degree requirements (such as required courses), contact the EDAS departmental office.

The Ph.D. Program

The Ph.D. degree requirements in educational administration and supervision include successfully completing a 60-hour, post-master's program designed to provide exposure to important concepts of philosophy, curriculum, leadership, and administration. The Ph.D. encompasses two areas of emphasis, such as educational administration and higher education administration; the latter area of emphasis is designed to draw upon the expertise and talent of BGSU's faculty from several disciplines across the university.

Considerable flexibility exists for designing programs to meet the individual needs of students. A research component includes courses in quantitative and qualitative research. A demonstrated proficiency in a foreign language or a set of three tool courses designed to enhance the student's ability to complete the dissertation is also a requirement. In addition, written and oral examinations, must be successfully completed. Following these exams a dissertation must be written and successfully defended to the university faculty.

Application to the Department

A prospective student will be required to submit the following materials for consideration:
1. The completed Graduate College application form.
2. Transcripts for all undergraduate and graduate study.
3. Scores from the Graduate Record Examination (GRE), General Aptitude Test dated within the last five years.
4. Three current letters of reference. At least one letter should be from a person who is familiar with the applicant's academic work and one should be submitted by a person
EDAS

knowledgeable about the applicant's professional competence/potential in terms of leadership and management in administration.

3. A written statement that includes the following information about the applicant:
   a. Present goals, professional aspirations, interests, and reasons for seeking admission to the program.
   b. The area within administration in which he or she is most interested, and why.
   c. Current research interests.
   d. What he or she wishes to achieve in the profession.

The statement, which should be approximately five pages in length (typed and double spaced using standard margins), will be reviewed by the members of the interviewing committee and the faculty with attention being given to organization, content, and clarity.

4. A professional resume.

5. An application for graduate fellowship, if one is desired.

Courses for Graduates

EDAS 513. Administration of School Discipline Strategies and Techniques (3) On demand. Methods for analyzing problem behavior; comprehensive, positive process approach to dealing with behavior problems and school discipline. Prerequisite: EDAS 521 or consent of instructor.

EDAS 515. Organizing Schools and Classrooms Using the Workshop WAY® (3). The study of the philosophy and psychology of a classroom structure that provides superintendents, supervisors, teachers, and principals with positive means to humanize the classroom and/or school within the framework of the six elements of the WORKSHOP WAY®.

EDAS 521. Introduction to Educational Administration (3) I, Summer. An overview of administrative theory, tools, and technology; educational leadership; legal issues; organizational and community relationships; political structures; and program development, evaluation, and accountability. Prerequisite: Suggested as a requisite for the several educational administration certificates issued by the State of Ohio.

EDAS 522. Educational Leadership and Policy Development (3) II, Summer. This course focuses on the study of leadership principles, strategies and styles as they apply to programs, policy and personnel in educational organizations and other social institutions; analyses of concepts, processes, and functions of leadership and management. Prerequisite: EDAS 521 (Introduction to Educational Administration) or consent of instructor.

EDAS 523. School Law and Negotiations (3) I, Summer. The study of constitutions, statutes, and judicial decisions of federal and state government affecting schools; emphasis on Ohio legal authority, powers and liabilities of school personnel; legal control, contract management, collective bargaining, and employee-employer relations. Prerequisite: EDAS 521 (Introduction to Educational Administration) or consent of instructor.

EDAS 524. School Finance and Management (3) I, Summer. A study of school finance and planning models and their applications in educational administration. Prerequisite: EDAS 521 (Introduction to Educational Administration) or consent of instructor.

EDAS 525. School Supervision and Staff Development (3) I, II, Summer. The course emphasizes organization of personnel functions, personnel evaluation, supervision, and instructional leadership in education. Prerequisite: EDAS 521 (Introduction to Educational Administration) or consent of instructor.

EDAS 530. Internship/Field Experience (3) I, II. An initial, supervised, and planned field experience seminar with opportunities for participation and observation in educational administrator/supervisor activities. Prerequisite: The completion of 12 semester hours including EDAS 522 or EDAS 525 or equivalent courses.

EDAS 570. Readings in Educational Administration and Supervision (1-4) On demand. Independent study, supervised study, selected problems and tailored readings. Proposed program of study must be developed by student and approved by instructor. May be repeated with approval of student's adviser. Course may be considered for professional growth or certification. Graded S/U.

EDAS 580. Graduate Seminar (1-3) I, II. Summer on demand. Selected topics within the discipline. Content varies from one year (or semester) to next. May be considered for professional growth or certification.

EDAS 595. Workshop on Current Topics in Educational Administration and Supervision (1-3) I, II, Summer on demand. Study, readings, activities and development of materials related to needs of EDAS practitioner. Topics vary from semester to semester. May be considered for professional growth or certification.

EDAS 599. Thesis Research (1-12) I, II. Summer. Credit for thesis study. Enrollment in excess of six hours is acceptable for plan I master's degree, but no more than six hours creditable toward degree.

EDAS 610. Issues in Higher Education (3) I. Analysis of the broad range of current problems, concerns, and professional issues confronting administrators, faculty, students, and others concerned about higher education.

EDAS 611. College and University Administrative Structure and Organization (3) I. Overview of the mission, organizational structure, and governance of higher education.

EDAS 612. Administration and Supervision of Non-Academic and Support Services in Higher Education (3) II. Exploration of issues and problems in the administration of non-academic and support service functions in higher education including emphasis on organizational structure, finance, and relationships with external and internal constituents.

EDAS 613. The Organization and Administration of the Two-Year College (3) Summer. An overview of the two-year (community and technical) college emphasizing organizational structure, administrative patterns, role and scope, institutional/system characteristics, and trends.

EDAS 621. Administration of Pupil Services, Activities and Evaluation (3) I, Summer. A focus on the administration and management of diverse school services, with special attention to practical approaches and techniques for organizing, coordinating, directing, and evaluating effective student-service programs. Prerequisite: EDAS 521 or consent of instructor.

EDAS 622. Community Relations and Politics in Education (3) II, Summer. An examination of the relationship and interaction of educational organizations to internal and external constituents with emphasis on the theory and processes associated with the school-community relations process, political structures, and conflict resolution. Prerequisite: EDAS 521 or consent of instructor.

EDAS 623. Personnel Administration in Education (3) II. An investigation of the underlying person-
Educational Curriculum and Instruction (EDCI)

Robert G. Oana, Chair, 529 Education Building
Phone: 419-372-7320
Leigh Chiarelott, Graduate Coordinator, Elementary and Secondary Education; 442 Education Building
Phone: 419-372-7352
Jacquelin Osborne, Graduate Coordinator, Reading; 567 Education Building
Phone: 419-372-7344

Graduate Faculty
Associate Professors - Harold Brubaker, Ph.D.; Darrell Pyfe, Ph.D.; Thomas Hayes, Ph.D.; Charlotte Scherer, Ph.D.; Larry Wills, Ph.D.

Graduate Degrees Offered
Master of Education, Specialist in Education in Reading. Majors offered in the master's program include elementary, secondary education, and reading. See the general requirements for the Master of Education degree in the front of this catalog.

Elementary Education
Graduate Coordinator: Leigh Chiarelott, 442 Education Building, phone: 419-372-7352

Graduate Degree Offered
Master of Education

Prerequisites for Graduate Work
A bachelor's degree from an accredited institution and completed admission to the Graduate College.

General Requirements
Completion of at least 33 semester hours of graduate work approved by...
the graduate coordinator and by the dean of the Graduate College.

Specific Requirements

Program A
The master's degree in elementary education is designed for the student who has a valid teacher's certificate and wishes to improve his/her competency as a classroom teacher. A person without a valid teaching certificate may also pursue a master's degree in elementary education but will be unable to teach in a public elementary school without undergraduate teacher certification.

Required courses for certified and non-certified individuals: EDCI 511, EDCI 581, EDFI 527 or EDFI 571, EDFI 566, EDFI 597; one of the following: EDFI 500, EDFI 501, or EDFI 502; and two of the following advanced methods courses: EDCI 510, EDCI 521, EDCI 541, EDCI 542, EDCI 543, or EDCI 610.

Recommended courses: For the selection of additional courses, the student with the help of his/her adviser is encouraged to select one of the following cognate areas:

- Reading
- Language Arts
- Mathematics
- Science
- Social Studies
- Curriculum
- Computer Education
- Gifted Education
- Physical Education
- Health Education
- Special Education

Program B
For the student who holds a valid teacher's certificate and wishes to receive a master's degree in elementary education and to satisfy some of the requirements for Ohio certification in guidance and counseling. This program allows no electives and the student has an adviser in elementary education and an adviser in guidance and counseling.

Required courses for Program B: EDCI 511, EDCI 581, EDFI 569, EDFI 571, EDFI 574, EDFI 575, EDFI 585, EDFI 596, EDFI 597, EDFI 676 is a post-master's course required for certification.

Plan I. Preparation of a thesis and an oral examination conducted by members of the thesis committee.

Plan II. A comprehensive written examination to be taken by the student before the completion of the course work for the degree.

Secondary Education
This program is designed for the certificated college graduate who wishes to enhance his/her professional preparation as a teacher and at the same time to qualify for the degree of Master of Education. To qualify for an Ohio Provisional Secondary School Certificate, a student must complete the approved sequence of courses at the undergraduate level. However, a person may complete the master's degree in secondary education without teacher certification if there is no desire to teach in a public secondary school in Ohio.

Eligibility
A bachelor's degree from an accredited institution and completed admission to the Graduate College are required. Each student's transcript is studied to identify deficiencies in preparation in professional education and to those areas in which certification is desired. If there are deficiencies in the undergraduate preparation, the graduate coordinator prescribes additional course work to cover the area or areas.

Requirements for the M.Ed. Degree
The completion of this program requires a minimum of 33 graduate hours. The following graduate courses are required: one graduate methods course in an appropriate field; EDCI 511; EDCI 583; EDFI 500, or EDFI 501, or EDFI 502; EDFI 573; EDFI 596; EDFI 597; one elective course in education; and 12 hours of graduate credit in a cognate area(s) designed by the graduate coordinator and student.

Cognate areas should only be selected with assistance from the graduate coordinator as hours vary with each cognate.

Cognate Areas in Academic Disciplines

Reading
Graduate Coordinator: Jacquelin A. Osborne, 567 Education Building, phone: 419-372-7344.

Three graduate degree programs are offered for the student who is interested in specializing in the area of reading. The first program, leading to the degree of Master of Education, is a one-year graduate program. The second program, fulfilling the requirements for the degree of Specialist in Education, is a two-year program which incorporates the first-year program. The third program is a Ph.D. in Educational Administration and Supervision with a reading cognate (minor area of specialization which includes 16-24 semester hours of graduate reading courses). All degree programs have been structured in accordance with the certification requirements established by the State Department of Education and the International Reading Association. Also, a reading certification program is offered for those who do not wish to pursue a degree program.

Prerequisites
To be admitted to each program the applicant should have teacher certification, teaching experience at the elementary or secondary level, and satisfactory scores on the Graduate Record Examination.

Master's Degree Program
The master's degree or one-year graduate reading program is designed to meet state reading certification requirements. Specifically, the program is designed to prepare the elementary and/or secondary teacher to teach special reading in Chapter I, elementary, middle, junior high, and senior high school reading programs. Also, the curriculum provides the regular classroom teacher an opportunity to study in depth one area (reading) of the curriculum. Financial assistance for full-time study is available in the form of graduate assistantships. General requirements for Master of Education are included under "Degree Programs" in this Catalog.

Master's Degree Program Requirements
Courses for the master's degree or one-year program are of the following three types:

1. Required Core Courses. The required core reading courses which meet state certification requirements for "Reading Teacher" are EDCI G420, 521, 523 and 525; also EDCI 520 and 529 are strongly recommended. Additionally, the required core research


Specialist Degree Program

A minimum of 30 semester hours of post-master's graduate work is required which includes a practicum of field-service experience. The pattern of course work inclusive of master's level preparation should include a minimum of 26 semester hours in reading, 13 hours in professional education courses outside the area of reading, at least 12 hours in a cognate area, and 6 hours in research including the introductory courses plus at least 3 additional hours in independent study which is to be used in the development of a scholarly research paper. Also, a practicum of field-service experience for 3-6 semester hours credit is required. Courses for the specialist degree program will be grouped into the following four categories:

1. Courses in reading. EDCI 621, 622, 624 and 625 are required. Strongly recommended courses are EDCI 520 and 529.

2. Practicum or field-service experience. This phase of the program is required. EDAS 605 is the course in which the candidate is given an assignment in an approved university or school under supervision of qualified personnel. A research project in relation to the assignment and seminars under the guidance of a University faculty member are integral parts of the practicum of field-service assignment.

3. Cognate requirements. A minimum of 12 hours in cognate fields are required. The cognate courses can be selected from English (note: ENG G442 or its equivalent is required for Reading Supervisor certification), Psychology, Communication Disorders or Education.

Computer Education Cognate

This cognate is designed for elementary and secondary teachers and administrators who wish to enhance their knowledge and skills in the area of computer education. Currently, it does not lead to certification in computer science. The cognate is composed of 12 semester hours. There are two required courses: EDCI 531-Survey of Computers in Education and either EDCI 533-Logo/LogoWriter or CS 531-Programming for Educators. An additional six semester hours are chosen, with approval of the adviser, from EDCI 532-Integrated Software in Education, EDCI 534-The Computer in the Content Area, EDCI 535-Special Topics in Computer Education, EDCI 559-Practicum in Curriculum and Instruction (with a focus on computer education), EDCI 553-Logo/LogoWriter (if not taken as required) and CS 531-Programming for Educators (if not taken as required).

Ph.D. Program

A Ph.D. in educational administration and supervision with a reading cognate (minor area of specialization which includes 16-24 semester hours in reading) is offered by the College of Education and Allied Professions. Each doctoral program is planned individually with the approval of the candidate's doctoral committee. Programs will vary according to background, experience and professional aspirations. The only specific course requirements are EDAS 605 - Internship or Field Service and EDAS 790 - Dissertation Research. Course work minimum requirements include 28 hours in core foundation areas, 24 hours in the major area of specialization in educational administration and supervision, 16-24 hours in the reading cognate area, and the required internship and dissertation research. Additionally, language and residence requirements must be met. For further information, please see the Ph.D. program requirements as listed in the Educational Administration and Supervision.

Reading Certification Program

Four graduate courses in reading (EDCI G420, 521, 523 and 525) plus a standard teaching certificate are required for the Reading Teacher endorsement. The courses must be taken in sequence, but, EDCI G420 and 521 may be taken concurrently. Usually, this program is for certification purposes only. However, the courses may be applied to a master's degree in reading if the student has obtained regular admission to the Graduate College before completion of the third reading course.

Courses for Graduates


EDCI 511. The Curriculum (3). Sources of curriculum; foundational bases for contemporary curriculum; forces that shape design and development of curriculum; and factors related to implementing, modifying, and evaluating curriculum.

EDCI 516. Curriculum and Instruction in Early Childhood Edu
EDCI 520. Reading and Study Skills for Secondary Schools and Junior Colleges (3) II, Summer. For students interested in secondary and junior college reading programs. Extension of content reading concepts, critical reading and specialized reading/sudy skills; e.g., use of textbooks, library formation and speed reading.


EDCI 523 Diagnosis and Correction of Reading Difficulties (4) I, Summer. Factors associated with reading difficulties, identification procedures, suggestions for correction in the home and school, and writing diagnostic/prescriptive reports. Prerequisites: EDCI 420, 521 or consent of instructor.

EDCI 525 Practicum in Remedial and Corrective Reading (4) II, Summer. Techniques of teaching atypical readers in the classroom and special reading classes. Tutorial experiences using appropriate methods, materials and motivational strategies for atypical readers in the BGSU Reading Center. Prerequisites: EDCI 420, 521, 523 or consent of instructor.

EDCI 529. Leadership in Reading and Communication Skills (3) II. Cognitive and performance based procedures for creating and guiding reading language arts (communication) programs. Review of component skills development followed by suggested program for change and action.

EDCI 531. Survey of Computers in Education (3). Introduction to pedagogical concerns surrounding the use of microcomputers in the classroom. Methods of incorporating the computer in various subject matter areas. Survey of computers in education with hands-on experience.

EDCI 532 Integrated Software in Education (3) I, Summer. Integrated software concepts and applications. Word processing, data base and spreadsheet functions and integration. A program such as AppleWorks will be covered as to content, teacher applications, and classroom applications.

EDCI 533. Logo/LogoWriter (3) II, Summer. An introduction to the Logo programming language. Coverage of turtle graphics and list processing in Logo. An overview of the educational theory on which Logo is based. Consideration of Logo as a tool to teach both problem solving skills and math concepts.

EDCI 534. The Computer in the Content Area (2). Topic varies by offering. For, instance, Computers in Reading, Computers in Social Studies, Computers in Math. A review of and experience with software available to aid in the teaching of the designated subject matter area. Strategies for software integration. Investigation of the pedagogical assumptions underlying different types of software available. May be repeated, with a different subject matter concentration, for credit.

EDCI 535. Special Topics in Computer Education (1-3). Consideration of current topics in computer education, for example: the computer and problem solving, the computer education curriculum, desktop publishing for educators, equity in computer education, and computer simulations in education. Content will vary by offering. May be repeated for credit.

EDCI 540. Methods of Teaching Writing, K-6 (3) II, Summer on demand. Examination of research leading to methods for teaching written expression. Includes all aspects of writing, from prewriting, through conferencing techniques, to evaluation.

EDCI 541. Advanced Methods in Elementary School Mathematics (3) I, Summer. A systematic examination of research, trends and issues affecting a contemporary program of elementary school mathematics. Topic areas include Math teaching in the K-6 classroom, methods, objectives and materials as applied to individualized diagnostic and prescriptive instruction.


EDCI 543. Advanced Methods in Elementary School Social Studies (3) I, Summer. Designed to explore current trends, developments and practices in social studies as related to the elementary curriculum. Emphasis will be placed on the integration of social studies with other content areas as well as techniques to develop a specific elementary social studies program for grades K-8.

EDCI 545. Problems in Teaching High School Science (3) On demand. For science teachers and science supervisors. Improved techniques, current literature, new approaches to teaching high school science, and problems confronting science teachers in classroom and laboratory.


EDCI 547. Inquiry in Secondary School Social Studies (3) On demand. Emphasizes analysis of current experimental programs that include inquiry as basic component. Student plans units with consistency among instructional materials, teaching strategies, objectives, and evaluation of learning. Research paper or unit plan required.

EDCI 570. Readings in Curriculum and Instruction (1-4) On demand. Independent study, supervised study or selected problems, and tailored readings. Proposed program of study must be approved by instructor prior to registration. Must have approval of student's adviser if graduate program credit desired or at discretion of student for recertification or for personal growth.

EDCI 580. Graduate Seminar in Curriculum and Instruction (1-3) On demand. Selected topics within the discipline. Content varies from one year (or semester) to next. Must have approval of graduate coordinator if graduate program credit is desired or at discretion of student for recertification or for personal growth.

EDCI 581. Theory and Practice in Elementary School (3) II, Summer. Current theories and programs in elementary education and relationship to and effect on public elementary schools. Recommended after EDCI 511.

EDCI 583. Theory and Practice in Secondary School (3) I, Summer. Curricular and organizational evolution of secondary school, including middle and junior high school. Relates contemporary practices to historical, philosophical, psychological, and sociological antecedents. Prerequisites: EDCI 511, 551 or equivalents.

EDCI 584. Analysis and Evaluation of Classroom Teaching (3) On demand. Elementary and secondary personnel observation, analysis and evaluation of classroom teaching, including self-evaluation/improvement techniques. Prerequisite: teaching experience and certification or
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consent of instructor.

EDCI 589. Practicum in Curriculum and Instruction (1-6) On demand. Supervised experiences within a setting of student's specialty. Must be approved by instructor prior to registration.

EDCI 590. Teaching Curriculum and Instruction at Postsecondary Level (1-3) On demand. Must have approval of student's adviser if graduate program credit desired or may be taken at discretion of student for recertification or personal growth.

EDCI 595. Workshop on Current Topics in Curriculum and Instruction (1-4) On demand. Study, readings, and development of materials related to needs of practitioners. Topics vary from semester to semester. Must have approval of student's adviser if graduate program credit desired or at discretion of student for recertification or for personal growth.

EDCI 598. Directed Research (1-4) On demand. Supervised independent research on delimited topic within discipline. Generation of new knowledge as contrasted with private reading course. Proposal for directed research must be approved by instructor prior to registration.

EDCI 599. Thesis Research (1-12) On demand. Enrollment in excess of four hours acceptable for Plan I master's degree but not more than six hours creditable toward degree.

EDCI 610. Curriculum and Instructional Design (3) II, Summer. An analysis of curriculum and instructional systems, structures, and designs. Historical and philosophical bases for contemporary curriculum and instructional innovations and practices will be examined. Representative models will be presented and discussed to facilitate the creation of student-generated designs.

EDCI 611. Advanced Theories in Curriculum and Evaluation (3) On demand. Paradigms, models, and modes of inquiry related to theory in curriculum and evaluation: includes term paper demonstrating substantial scholarship. Prerequisites: EDCI 581 or 583, EDCI 610, and permission of instructor.

EDCI 621. Investigations in Teaching Reading (3) On demand. Comprehensive study on individual basis of research and descriptive literature on assigned topics in reading.

EDCI 622. Seminar in Reading (3) On demand. Directed study; research on topics in developmental, corrective and remedial reading programs as they operate at elementary, secondary, college, and adult levels. May be repeated to 8 hours.

EDCI 624. Reading Clinic: Diagnostic Case Studies for Children with Learning Disabilities (3) On demand. Experience with students in use and interpretation of test results to diagnose severe reading and language dysfunctions together with related areas. Case history method used. Prerequisites: EDCI 420, 520, 521, 523 and 525; or consent of instructor.

EDCI 625. Reading Clinic: Tutorial Procedures for Children with Severe Language Disabilities (3) On demand. Small group and individual tutorial experiences with students having severe language dysfunctions. Prerequisites: EDCI 420, 520, 521, 529 and 624. PSYC 460 and PSYC 561; or consent of instructor.

EDCI 680. Advanced Seminar in Educational Curriculum and Instruction (1-3) On demand. Advanced topics within the discipline. May be repeated on approval of graduate coordinator. Prerequisite: permission of instructor.

Courses for Graduates and Undergraduates

EDCI G420. Developmental Reading in the Content Area (3). Orient the teacher to the developmental reading process as it applies to the various subject matter areas, including diagnosis and prescription, vocabulary, word analysis, comprehension, study skills and writing activities. Prerequisite: EDFI 302, content methods course or consent of instructor.

EDCI G429. Teaching Foreign Language Skills, K-12 (3) II. Advanced-level skills and abilities in teaching listening, speaking, reading and writing in foreign languages as applied to the K-12 curriculum, classroom management, testing and evaluation, individualized instruction, and culture. If taken for graduate credit, a research paper is required. Prerequisite: EDFI 373. C/F Hours: 30.

Educational Foundations and Inquiry (EDFI)

Trevor Phillips, Chair, 550 Education Building
Ronald Partin, Graduate Coordinator, 422 Education Building
Phone: 419-372-7350

Graduate Faculty
Associate Professors - Robert ed. Ed.D.; Peter Wood, Ph.D.; Robert Konker, Ph.D.
Assistant Professors - Kathleen Farber, Ph.D.; Peterann Siehl, Ph.D.; Jane Wolfe, Ph.D.

Graduate Degrees Offered
Master of Education and Master of Arts in Guidance and Counseling.

The major in guidance and counseling is designed to provide at the master's level a broad training in the theoretical background and the technical skills essential to the student who wishes to prepare for guidance and counseling work. This program leads to the degrees of Master of Education or Master of Arts.

The interdepartmental program in elementary education with specialization in guidance and counseling is designed to meet the needs of students who wish to prepare for guidance and counseling work in the elementary school setting. See program description under elementary education. Dual degree programs with other graduate areas such as college student personnel, marriage and family studies, and rehabilitation counseling allow further specializations.

Prerequisites to Graduate Work
To be admitted to the program, a student must have a bachelor's degree from an accredited institution and be admitted to the Graduate College at BGSU.

Requirements for the Master's Degree
A minimum of 40 hours of graduate work is required. Specific course work to meet this requirement should be planned with the graduate coordinator. Requirements for Ohio certification in school counseling can be met through completion of the master's program. Certification also requires successful completion of the state counselor certification examination and at least provisional teacher certification and three years of successful teaching experience. The Master of Arts program can be tailored to meet the academic requirements for State of Ohio counseling licensure. A candidate for plan I of the Master
of Education or the Master of Arts degree plans a thesis fitted to his/her background and interests. In each case the thesis is planned as an integral part of the program. The final oral examination is conducted by the student's committee.

A plan II candidate writes a comprehensive examination in guidance and counseling. This examination is designed to measure the integration achieved by the student in his/her studies.

Courses for Graduates


EDFI 501. Comparative Education (3) II, Summer. Comparative study and evaluation of basic factors of education found in representative occidental and oriental educational systems in each cultural setting.


EDFI 525. Direct Study of Child (1-4) I. Part of behavior analysis program. Child studies using predetermined framework.

EDFI 527. Development of the Elementary School Child (3) II, Summer. Study of the physical, intellectual, and social development of the elementary school-age child and school programs and environments which affect development at this age. Specific emphasis is placed on school intervention programs intended to promote prosocial behavior, cognitive functioning, and physical well-being.

EDFI 569. Introduction and Management of Guidance and Counseling (3) I, Summer. Introduction to the profession. Students will formulate a personal philosophy of guidance and counseling through study of self-awareness activities, management and development of guidance programs and through the effective use of public relations, school and community resources, evaluation and accountability.

EDFI 570. Readings in Educational Foundations and Inquiry (1-4). Supervised independent work by individual on selected problem in fields such as educational psychology, measurement, research, history, philosophy, or counseling. May be repeated on approval of graduate coordinator. Prerequisite: consent of instructor.

EDFI 571. Human Growth and Development (3) I, Summer. Basic knowledge and concepts for understanding human behavior. Consideration of social, emotional, physical and intellectual growth patterns from infancy through maturity. Prerequisite: nine hours of psychology or consent of instructor.

EDFI 572. Seminar in Mental Health in Education (3). Trends in mental health in schools. Building primary prevention and appropriate therapeutic intervention approaches in work with teachers in schools. Prerequisite: nine hours of psychology or consent of instructor.

EDFI 573. Adolescence (3) II, Summer. Nature of adolescence and development and behavior of adolescents and pubescents in different environments; emphasis in education. Prerequisite: general psychology.

EDFI 574. Career and Life Planning Approaches (3). Investigation of decision process applied to career and life planning; focus on development and implementation of career guidance programs for diverse settings with particular attention to goals, processes, and material and human resources.

EDFI 575. Theories and Techniques of Counseling (4). An introduction to counseling theories and techniques including practice of effective counseling skills. Through critical study of diverse theories and techniques and skill application, the student will begin to formulate a personal theory of counseling.

EDFI 577. Contemporary Theory and Research in Classroom Learning (3) On demand. Theories, principles, and concepts pertaining to learning process; variables associated with basic classroom learning problems. Recent theoretical and research developments related to classroom learning problems and to current practices and innovations in educational process.


EDFI 579. Group Counseling Models and Procedures (3). Investigation of skills and processes involved in development and implementation of group counseling/guidance programs; readings, discussion, and participation in group experiences. Prerequisite: EDFI 575.

EDFI 580. Seminar in Educational Foundations and Inquiry (1-4). Topics such as educational psychology, measurement, research, history, philosophy, or counseling. May be repeated on approval of graduate coordinator. Prerequisite: permission of instructor.

EDFI 581. Seminar in Educational Testing (3). An analysis of testing programs and standardized tests presently used in elementary and secondary schools with an emphasis upon interpretation and use of test scores. Prerequisite: EDFI 596 or permission of instructor.

EDFI 582. Principles of Elementary Guidance (3) On demand. Principles, basic concepts, and issues in elementary guidance. Prerequisite: EDFI 569 or permission of instructor.

EDFI 583. Testing Practicum (3) On demand. Selection, administration, and interpretation of standardized group tests under supervision. Open to students in guidance and related fields. Prerequisite: PSYC 460 or equivalent.

EDFI 584. Crisis Counseling (3). Introduction to theory and process of crisis counseling. Students will learn a crisis model that can be applied in numerous settings for working with clients who exhibit lack of coping skills due to loss, death, divorce, physical and sexual abuse, suicide, battering, and rape.

EDFI 585. Consulting Functions and Practices (3) I, Summer. Study of consultation models and skills for implementation with teachers, parents, administrators, and other helping professionals. Prerequisites: EDFI 574 and 575.

EDFI 589. Guidance and Counseling Field Experience (3) On demand. Supervised experience in guidance and counseling programs in schools for equivalent of one day per week. One-hour seminar held weekly to discuss relevant topics and issues encountered during field experience. Prerequisite: EDFI 569 or concurrent enrollment. Graded S/U.


EDFI 595. Workshop on Current Topics in EDFI (1-4) On demand. Selected topics within disciplines
EDFI - English

such as education psychology, measurement, research, history, philosophy, or counseling. May be repeated on approval of graduate coordinator.

EDFI 596. Statistics in Education (3). Statistics as tool in education and research, descriptive statistics, transformation of scores, sampling and probability, linear correlation and regression, introduction to statistical inference, and basic tests of significance.

EDFI 597. Research in Education (3). Identification and evaluation of research problems, research design, use of library resources, data gathering, and writing research reports. Prerequisite: EDFI 596.

EDFI 598. Directed Research (1-4) On demand. Supervised independent research on delimited topic in fields such as educational psychology, measurement, research, history, philosophy, or counseling. Involves generation of new knowledge as contrasted with private reading course. Proposal for directed research must be approved by instructor prior to registration.

EDFI 599. Thesis Research (1-12). Enrollment in excess of six hours acceptable for plan I master's degree, and no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

EDFI 602. History and Philosophy of Higher Education (3) I. Development of forms of higher education in historical and philosophical perspective; relations between institutions of post-secondary education and other social institutions; evolving policies in worldwide systems of higher education.

EDFI 671. Seminar in Education Psychology (3) I. Concepts and their relation to behavior as reflected in current literature and research. Prerequisite: EDFI 571 or equivalent.

EDFI 672. Educational Social Psychology (3) II. A study of topics in social psychology related to school and the educational process. Aggression and school vandalism, prejudice and school desegregation, sex-roles and educational equity, group dynamics and classroom interaction, etc. Prerequisites: EDFI 571 or equivalent.

EDFI 673. Instructional Processes for College Teaching (3) I. A broad survey of major approaches to learning and instruction in post-secondary schools, with an emphasis on innovation and creative design. Graduate standing required.

EDFI 678. Practicum in Counseling (4). Counseling practice with clients under supervision. Open only to students with a master's degree in guidance and counseling or advanced students in a related field. Enrollment is limited and requires advance permission of faculty. Prerequisites: EDFI 574, 575. Graded S/U.

EDFI 690. Nonparametric Statistics in Education (3) On demand. Theoretical study and practical application of distribution free statistical tests. Prerequisite: EDFI 596 or equivalent.

EDFI 696. Advanced Educational Statistics (3) I. Statistical inference and application of selected techniques. Chi-square, F-statistics, basic designs, measures of relationships, covariance, and other topics. Prerequisite: EDFI 596.

EDFI 791. Seminar in Cultural Basis of Education (1-4) II. Lectures from anthropology, sociology, economics, political science, business administration, and other fields.

EDFI 797. Seminar in Educational Research (3) I. Theoretical and philosophical constructs in research, designs of research projects, and formulation and critiquing of participants' research proposals. Prerequisites: EDFI 596, 597, and 696.

Courses for Graduates and Undergraduates:

EDFI 402. Assessment and Evaluation in Education (3). Assessment and evaluation applied to instructional procedures: construction of assessment tools; interpretations of assessment results. Prerequisite: EDFI 302 and one methods course. C/F hours: 20.

EDFI 411. Teachers' Role in Guidance (3) On demand. Human relations and classroom management practices which teachers may use to meet affective and cognitive learning needs of students: practical application counseling and guidance techniques and strategies which encourage positive classroom climate. Prerequisite: senior standing.

EDFI 415. Spaceship Earth Seminar (3) On demand. Integrating, synthesizing, environmental education seminar for upperclass and graduate students. Using inquiry approach, participants consider relationships of humankind with total environment.

EDFI 416. Philosophy of Environmental Education (3) On demand. Concepts and processes of environmental education including theories such as Toledo model, Strand approach, Environmental Studies Project, Boulder, and other representative models.

EDFI 417. Urban Education (2) On demand. Research, methods, and concepts from sociology and psychology discussed as basis for critically analyzing current educational practices, programs, and policies of urban schools. Resource people used. Library and field research required. Prerequisite: commitment to, or at least serious interest in, urban education.

EDFI 460. Sex Role Stereotyping and Sex Discrimination in Education (2) On demand. Education as influential institution and process in society in terms of sexism in educational materials, curriculum, structure; federal, state, local policy responses to this concern; consideration and development of other policies for action regarding sex equity in education.

EDFI 481. Leadership Training in Behavior Analysis Program (1-5) On demand. Prepares individuals to function as group leaders in academic, year-long, inservice Behavior Analysis Program. Prerequisite: permission of instructor and enrollment in Behavior Analysis Program.

English

Richard Gebhardt, Chair, 202 University Hall
Alice Philbin, Graduate Coordinator, 202 University Hall
Phone: 419-372-6864

Graduate Faculty


Associate Professors - Bill Coggin, Ph.D.; Robert Early, M.F.A.; Bruce L. Edwards, Ph.D.; Allan Emery, Ph.D.; Barbara McMillan, Ph.D.; Richard Messer, Ph.D.; Robert Meyers, Ph.D.; Vvian Patrika, Ph.D.; Alice Philbin, Ph.D.; Kenneth Robb, Ph.D.; Philip Terrie, Ph.D.; Harender Vasudeva, Ph.D.

Assistant Professors - Ellen E. Berry, Ph.D.; Doris Davenport, Ph.D.; Shirley E. Ostler, M.A.; Sue C. Simmons, Ph.D.; Bonnie Tu-Smith, Ph.D.

Graduate Degrees Offered

Master of Arts (Plan I and II); Master of Fine Arts in Creative Writing;
Master of Arts with a specialization in Technical Writing: Master of Arts with a specialization in Teaching English as a Second Language; Doctor of Philosophy. The English Department cooperates in the interdisciplinary master's degree, dual master's degree, and the second master's degree programs.

Requirements for Admission

All applicants must submit scores from the General Test of the Graduate Record Examination. Ph.D. applicants and applicants for Master of Arts plan must also submit scores from the Subject Test in English Literature (GRE). Most programs also require students to submit a writing sample.

Requirements for the M.A. Degrees

The four M.A. degrees in English allow students to develop programs around their specific interests. Before completion of 20 hours, each student must plan a tentative degree program in consultation with the graduate coordinator. Materials describing the M.A. degrees and their specific requirements are available from the English Department.

Master of Arts Thesis Option

(Plan I)

Master of Arts (Plan I) is designed primarily for students expecting to continue for a Ph.D. at BGSU or elsewhere. It requires a minimum of 32 hours including at least 24 hours in English course work (excluding ENG 591). Requirements include:

1. ENG 525; ENG 597; one of ENG 541, C481, C482, or C522.
2. Three or more 600- or 700-level English seminars.
3. Six courses chosen from chronologically-arranged groups to ensure a broad background in English and American literature.
4. Competence in a foreign language or a research tool (follow the regulations outlined in the Language Requirements section of the Graduate Catalog).
5. An approved thesis (six hours of ENG 599) and an oral examination given by the candidate's thesis committee and based on the thesis.
6. ENG 591 (for Graduate Assistants).

Master of Arts Examination Option

(Plan II)

Master of Arts (Plan II) is a flexible degree program encouraging individuals to design their own pre-professional or personal enrichment programs. It requires a minimum of 32 hours including a minimum of 21 hours in English course work (excluding ENG 591). Requirements include:

1. ENG 525; ENG 531; ENG 541 or equivalent; and, for anyone preparing to teach, ENG 590.
2. A professional concentration of four courses, with no more than two in English.
3. An examination based on either a reading of approximately 50 major works of English and American literature, or a reading list of approximately 40 articles and books in rhetoric and composition. The examination may be re-taken once.
4. ENG 591 (for Graduate Assistants).

Specialization in Technical Writing

This non-thesis degree program is designed for students with interests in written communication, particularly for science, technology, business, and industry. Prerequisites include excellent undergraduate preparation in writing as evidenced by transcripts and writing samples and undergraduate preparation for graduate work in a cognate area. Requirements include:

1. Thirty-five hours of graduate credit including 12 hours in a cognate area.
2. ENG 531; ENG 573; ENG 574; ENG 575; ENG 589; TECH 533; and computer science.
3. An internship (ENG 589) in an appropriate business.
4. Collection of the student's written work in a portfolio.
5. An oral examination to be taken during the student's last semester of course work. The examination committee will include the director of technical writing, the graduate coordinator in English, and at least one faculty member from the student's cognate area.
6. ENG 591 (for Graduate Assistants).

The English graduate coordinator and director of technical writing may require a student to take extra courses to prepare for a career in business, science, or technology.

Specialization in Teaching English as a Second Language

This program combines the study of linguistic theory and application with training in methods of teaching English as a Second Language. Applicants must take the General Test section of the Graduate Record Examination and should have a strong interest in language and language teaching. Non-native speakers of English must also take the Test of English as a Foreign Language (TOEFL). When it is not possible to take TOEFL, applicants may take the Michigan English Language Assessment Battery (MELAB) instead. Requirements include:

1. A total of 32 to 38 hours of graduate credit (excluding 591).
2. Three to nine hours of ENG 589 (Internship in Teaching English as a Second Language).
3. ENG 541; ENG 550; ENG 551; ENG 552; ENG 553; ENG 554; ENG 597; ENG 652.
4. A written comprehensive examination, prepared by a departmental examination committee and based primarily upon a reading list of books and articles relevant to the field.
5. ENG 591 (for Graduate Assistants).

Requirements for the Ph.D. Degree

The Ph.D. in English involves advanced scholarly work, especially in the areas of American Literature, Composition and Rhetoric, Modern and Contemporary Literature, and Creative Writing. Materials describing the Ph.D. program, its various emphases, and its graduation requirements are available from the English Department. Materials about the Creative Writing Program are available from the Creative Writing office. Also, see the listing, Degree Program in Creative Writing, in the Graduate Catalog. Ordinarily, students begin the Ph.D. after completing a master's degree; occasionally, however, applicants with only baccalaureate degrees may be admitted into a continuing program which leads directly to the Ph.D. without the intermediate step of the M.A. Such candidates do not prepare theses but qualify instead by examination.

By completing 20 hours, each student must plan a tentative degree program in consultation with the graduate coordinator. Requirements of the program include:

1. A total of 90 hours of graduate credit. (The student may transfer a maximum of 30 hours, normally a master's degree in English, from elsewhere.)
2. A minimum of 24 hours of BGSU credit in 600- and 700-level courses.
3. An approved dissertation and 12 hours of ENG 799, dissertation research. (A maximum of 27 hours of ENG 799 may be counted toward graduation.)
4. ENG 525; ENG 541 or C481 C482 or C483 or C484 or C485 or C486 or C487; ENG 597.
5. A graduate-level Shakespeare course or equivalent. (The graduate coordinator may recommend suitable substitutes.)
6. ENG 696.
7. A course in the teaching of literature for Teachers Fellows assigned to literature classes.

8. Six courses chosen in consultation with the adviser from chronologically arranged groups, to ensure a broad background in English and American literary history.

9. A three-course concentration in a literary period, a genre, linguistics, or critical theory.

10. Advanced competence in a foreign language or a suitable competence in computer science, as defined in this catalog.

11. ENG 591 (for Graduate Fellows who teach composition for the first time).

The Ph.D. With Creative Dissertation

Admission is restricted to holders of the M.A. or M.F.A. who intend to pursue careers as teacher-writers. The Ph.D. dissertation with creative emphasis should consist of an extended essay, or several short essays which integrate contemporary artistic practice with the tradition from which it springs.

The extended, or collected short, essays must meet approval of the dissertation committee and be concerned with areas outside traditional scholarship.

Courses for Graduates

ENG 500. English as a Foreign Language (2, 4, or 6). Required as prerequisite to degree candidacy of all entering graduate students whose native language is not English, unless exempted on basis of proficiency examination scores. Can be repeated. (P/NP grading).

ENG 518. American Literature to 1840 (3). Readings in about five major figures. Lectures on literary history and intellectual backgrounds.

ENG 525. Theory and Methods Criticism (3). Problems encountered in study of literature. Definition of such concepts as comedy, tragedy, romanticism, realism, and symbolism. Genres and conventions and relation to specific works. Application of various critical methods such as historical, psychological, cultural, and mythic to selected works.

ENG 531. Research in Language/Literature (2). Exercises in standard reference and specialized research tools in English study (Composition, Literature, Pedagogy, Popular Culture), culminating in a major bibliographic project in student's field of interest.

ENG 541. Modern English Linguistics (3). Phonology, morphology, syntax, and dialectology of current American and British English.

ENG 550. Theories in TESL (3). Theoretical concepts related to the nature of language and language learning; emphasis upon second language acquisition and use. Theories and approaches underlying methodology for teaching all skills at varied proficiency levels.

ENG 551. Survey of TESL (Teaching English as a Second Language) (3). Resources and current research issues. Development of skills required to critique the validity of research designs.

ENG 552. Applied Grammar (3). Adaptation of grammatical models and analysis to the TESL pedagogical context: analysis of student errors in spoken and written English and formulation of strategies for correction. Some contrastive analysis of English and other languages to isolate areas of potential difficulty with English grammar.

ENG 553. Applied Phonology (3). Articulatory phonetics; phonological rules; some contrastive analysis of English and other languages to isolate areas of potential difficulty with English phonology; practice with transcription.

ENG 554. Methods in TESL (3). Applications of approaches, methods, and techniques through lesson planning, demonstrations, observations, and evaluations; principles of testing. Prerequisite: English 550, Theories in TESL.

ENG 561. Technique of Poetry (3). Imagery, rhythm, and symbolism.

ENG 562. Technique of Fiction (3). Fictional technique in novel and short story; character development, plot, setting, mood, tone, and diction.

ENG 570. Readings in English (1-3). Individual or group study of some phase of literature or writing not ordinarily offered in curriculum. Prerequisite: consent of instructor and approval of graduate committee. (Master's level credit; S/U grading only.)

ENG 571. Directed Writing (1-3). Individual projects in creative writing, under supervision of specific faculty member. Prerequisite: permission of director of M.F.A. program.

ENG 573. Technical Writing (3). Practical application of technical writing in industry, business, and the sciences. Uses workshop approach. May be repeated once for credit.

ENG 574. Technical Editing (3). Practical application of technical editing in industry, business, and the sciences. Uses workshop approach.

ENG 575. Technical Writing Practicum (3). Directed writing of a substantial technical writing project within the student's cognate area. Completed project to be evaluated by at least one technical writing instructor and one instructor from the cognate area. Prerequisite: ENG 573.

ENG 581. Seminar in American Studies (3). Interdisciplinary seminar coordinated in rotation by members of Departments of History, English, Philosophy, Political Science, Sociology, and School of Art, using lectures, discussion, and papers to study problem, theme, or era.

ENG 589. Internship (1-9). Supervised professional experience within an occupational setting related to student's area of academic specialization, such as technical writing or teaching English as a second language.

ENG 590. Teaching of Writing (3). Theories, approaches, methods, and techniques designed to guide prospective teacher of composition in selecting approach most appropriate to his/her goals; readings and projects related to goals; current publications on writing.

ENG 591. Composition Instructors' Workshop (3). I. Classroom experience, observation visitation, preparation of teaching materials, evaluation, reading in teaching of writing. In-service training required of graduate assistants and teaching fellows in English prior to and concurrent with teaching ENG 110, ENG 111, and ENG 112. Continues through two consecutive semesters. (S/U grading only.)

ENG 592. Directed Teaching of Writing (2). For graduate student teaching in the General Studies Writing program. Student assigned to experienced, qualified writing instructor on supervisory, tutorial basis; regular conferences, observation, evaluation of other experienced instructors and of student work, presentation of material in classroom, self-evaluation. (S/U). By permis-
## English

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 593</td>
<td>Teaching of Literature</td>
<td>(3) Summer only. Applying approaches, methods, and techniques for teaching literature in secondary schools and community colleges.</td>
</tr>
<tr>
<td>ENG 598</td>
<td>Workshop on Current Topics in English (1-4)</td>
<td>I, II, Summer on demand. Workshop on current topics and issues within discipline; topics vary from semester to semester.</td>
</tr>
<tr>
<td>ENG 597</td>
<td>Bibliography and Research Methods (3)</td>
<td>Scholarly and critical forms of study relevant to professional work in literature: analytical bibliography and editing, problems in critical research.</td>
</tr>
<tr>
<td>ENG 599</td>
<td>Thesis Research (1-12)</td>
<td>Credit for thesis study. Enrollment in excess of six hours acceptable for Plan I master's degree, but no more than six hours creditable toward degree.</td>
</tr>
<tr>
<td>ENG 600</td>
<td>Old English Language and Literature (3)</td>
<td>Alternate years or on demand. Old English poetry and prose read in Old English and modern forms, including Beowulf.</td>
</tr>
<tr>
<td>ENG 602</td>
<td>Middle English Literature (3)</td>
<td>Chaucer's major works read in Middle English along with current criticism. In alternate years or on demand: Langland, Pearl Poet, Gower, and other 14th-century poetry.</td>
</tr>
<tr>
<td>ENG 604</td>
<td>Renaissance Poetry and Prose (3)</td>
<td>Alternate years. Poetry of major figures (such as Sidney or Spenser), or form (such as Elizabethan lyric) or of school (such as Spenserian poetry), in relationship to development of poetry in period. Also, representative fiction and non-fictional prose of the 16th and 17th centuries.</td>
</tr>
<tr>
<td>ENG 605</td>
<td>Tudor and Stuart Drama (3)</td>
<td>Alternate years. Dramatic forms and traditions from liturgical drama, to the plays of Kyd, Greene and Marlow, to the plays of such dramatists as Chapman, Jonson and Webster who wrote before the closing of the theatres.</td>
</tr>
<tr>
<td>ENG 607</td>
<td>Studies in Shakespeare (3)</td>
<td>Poetry or plays and criticism of specific period, type, genre, or problem.</td>
</tr>
<tr>
<td>ENG 608</td>
<td>Milton/17th-Century Poetry (3)</td>
<td>Milton's poetry and prose; reference to 17th-century background. In alternate years: 17th-century poetry, including Donne and Metaphysicals (Milton excluded). May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 612</td>
<td>Augustan Age/Age of Johnson (3)</td>
<td>Augustans, especially Dryden, Pope, Swift; minor writers, periodical essays, satire, etc. In alternate years: Boswell, Johnson, and their circle. May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 614</td>
<td>Restoration and 18th-Century Drama (3)</td>
<td>Alternate years. Significant forms, including tragedy, comedy, heroic plays, sentimentalism.</td>
</tr>
<tr>
<td>ENG 616</td>
<td>18th-Century Novel (3)</td>
<td>Alternate years. Rise of novel, major authors; minor authors who made important contributions to development of genre.</td>
</tr>
<tr>
<td>ENG 618</td>
<td>Wordsworth and Coleridge/Romantic Poetry and Prose (3)</td>
<td>Poetry and prose of Wordsworth and Coleridge against background of English romanticism. In alternate years: Romantic prose and poetry (exclusive of Wordsworth and Coleridge). May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 620</td>
<td>Dickens and Hardy/19th-Century Novel (3)</td>
<td>Representative novels of Dickens and Hardy; world views, fictional technique, etc. In alternate years: Major novelists exclusive of Dickens and Hardy. May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 622</td>
<td>Tennyson and Browning/Victorian Poetry and Prose (3)</td>
<td>Works of Tennyson and Browning, seen against background of Victorian Age. In alternate years: Victorian prose and poetry (exclusive of Tennyson and Browning). Topics such as Pre-Raphaelites, aesthetics of non-fiction prose, periodical writings. May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 626</td>
<td>Eliot and Yeats/Modern British Poetry (3)</td>
<td>Two masters of modern poetry; major works and development of poets' canon. In alternate years: Representative modern British poets, exclusive of Eliot and Yeats, such as Hopkins, Hardy, Lawrence, Thomas, Auden. May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 628</td>
<td>Joyce/Modern British Novel (3)</td>
<td>Joyce and his work as major force in modern literary tradition. In alternate years: Representative modern British Novelists, exclusive of Joyce, such as Lawrence, Forster, Woolf, Conrad. May be repeated once if topic different.</td>
</tr>
<tr>
<td>ENG 630</td>
<td>Modern British Drama (3)</td>
<td>Alternate years. Shaw and important dramatists of period. Backgrounds and early development of modern British drama.</td>
</tr>
<tr>
<td>ENG 631</td>
<td>Topics in New English Literature (3)</td>
<td>Literature written in English in countries other than Britain or the United States. May be repeated once if topic is different.</td>
</tr>
<tr>
<td>ENG 633</td>
<td>American Literature to 1800 (3)</td>
<td>Two or more important figures. May be repeated once if topics differ.</td>
</tr>
<tr>
<td>ENG 634</td>
<td>19th-Century American Prose (3)</td>
<td>Two or more important figures. May be repeated once if topics differ.</td>
</tr>
<tr>
<td>ENG 636</td>
<td>19th-Century American Poetry (3)</td>
<td>Two or more important figures. May be repeated once if topics differ.</td>
</tr>
<tr>
<td>ENG 640</td>
<td>Modern American Poetry (3)</td>
<td>Two or more important figures. May be repeated once if topics differ.</td>
</tr>
<tr>
<td>ENG 643</td>
<td>Modern American Fiction (3)</td>
<td>Two or more important figures. May be repeated once if topics differ.</td>
</tr>
<tr>
<td>ENG 644</td>
<td>Modern American Drama (3)</td>
<td>Alternate years. O'Neill and important dramatists of period such as Odes, Robert Sherwood, Lillian Hellman.</td>
</tr>
<tr>
<td>ENG 645</td>
<td>Contemporary British and American Drama (3)</td>
<td>Alternate years. Major developments in dramatic form, theory, and practice in post-war period. Representative authors may include Osborne, Pinter, Tennessee Williams, Albee.</td>
</tr>
<tr>
<td>ENG 646</td>
<td>Contemporary British and American Poetry (3)</td>
<td>Major developments in poetic form, theory, and practice in British and American poetry from 1945 to present. Representative authors may include Charles Olson, Gary Snyder, John Berryman, Elizabeth Bishop, Ted Hughes.</td>
</tr>
<tr>
<td>ENG 647</td>
<td>Contemporary British and American Fiction (3)</td>
<td>Major developments in fiction (form, theory, and practice) in post-war period. Representa­tive authors may include Hawkes, Donleavy, Flannery O'Connor, Iris Murdoch, Doris Lessing.</td>
</tr>
<tr>
<td>ENG 648</td>
<td>Studies in Ethnic Literature (3)</td>
<td>Group of texts drawn from identifiable non-Anglo-Saxon culture; ethnic issues, traditions, and rhetoric.</td>
</tr>
<tr>
<td>ENG 650</td>
<td>Research in Composition (3)</td>
<td>Research methods and the nature and direction of research studies in composition. Topics include evaluation of writing, the composing process, grammar and writing, dialect and writing, computers and literacy. Prerequisite: ENG 541 or equivalent course work in linguistics.</td>
</tr>
<tr>
<td>ENG 652</td>
<td>Language Variation (3)</td>
<td>Effects of culture on language; principles and methods of dialect studies. Prerequisites: ENG 541 or equivalent course work in linguistics.</td>
</tr>
</tbody>
</table>
ENG 654. The Rhetoric of Written Discourse (3). Survey of rhetorical theory about writing from antiquity to present. Topics include theories of invention, arrangement, and style; kinds and purposes of discourse; the effects of literacy; and the epistemology of writing and reading processes.

ENG 655. Graduate Writing (3). Assessment of situation and audience, methods of organization and development of ideas, vocabulary, style. Revision and editing of theses, papers, reports. For graduate students in all disciplines; assignments adjusted accordingly. Graded S/U.

ENG 660. Graduate Writers' Workshop (4). Directed individual projects with group discussion, in fiction, poetry or nonfiction. Prerequisites (for fall and spring semesters only): advance submission of creative work and permission of director of MFA program.

ENG 661. Creative Writing and Desktop Publishing (3). Course offered in conjunction with Creative Writing. Students will learn to integrate the computing technology of desktop publishing into their creative writing. Designed for but not limited to creative writing. Offered once a year when appropriate.

ENG 663. Studies in Contemporary Poetry (3). Individual or group study of contemporary poets; works related to student's interest in subject matter, form, and technique. May be repeated once.

ENG 664. Studies in Contemporary Fiction (3). Individual or group study of contemporary writers; works related to student's interests in subject matter, form, and technique. May be repeated once.

ENG 665. Creative Writing Administration (1-3). Study and hands-on experience in the direction and operation of a creative writing program, including budget, curriculum, fundraising, visiting writers series, advising and other related matters. Open to M.F.A. students and to others by permission of instructor. May be taken once in summer and once in academic year to a maximum of 4 credit hours. Graded S/U.

ENG 670. Readings in English (1, 3). Individual or group study of some phases of literature or writing not ordinarily offered in curriculum. Prerequisite: consent of instructor and approval of graduate committee. Doctoral-level credit; S/U grading.


ENG 676. History of Literary Criticism: Modern (3). Development of modern literary criticism from Victorian period to present. Schools and approaches of modern criticism; social, psychological, analytical, and mythical.

ENG 680. Graduate Seminar (3). Systematic study of genres or topics (poetry, fiction, drama, comparative literature, etc.), or intensive study in special literary topic, such as single author, literary school, or particular theme. May be repeated if topics are different.

ENG 686. Studies in Linguistics (3). Theories and applications of linguistics to studies in languages, literature, and related fields or disciplines.

ENG 688. History of English Language (3). Different periods and on demand. Prerequisites: consent of instructor and approval of graduate committee. S/U grading only.

ENG 690. Dissertation Research (1-16). Student must register for minimum of 16 hours in 799 while working on doctoral dissertation; may be repeated to 27 hours in degree program.

Course for Graduates and Undergraduates

ENG 442. Studies in Children's Literature (3). Alternate years. Problems in children's literature; history, criticism, trends, individual authors, types. Not open to student with credit for L&EM 442. Prerequisite: ENG 342 or permission of instructor.

ENG 481. Advanced English Linguistics (3). Alternate years. Intensive study of topic in English linguistics. Topics announced in advance and vary from section to section and semester to semester. May be repeated if topics clearly different. Prerequisite: ENG 380.

ENG 482. History of English Language (3). Alternate years. Changes in sounds, grammar, usage, and meaning from Old English to present. Prerequisite or parallel: ENG 380.

Geography

Ahkar Carlson, Chair, 305 Hanna Hall
Mohan Shrestha, Graduate Coordinator, 209B Hanna Hall
Phone: 419-372-2925

Graduate Faculty

Professors - Thomas Anderson, Ph.D.; Alvar W. Carlson, Ph.D.; John Hillner, Ph.D.; Mohan Shrestha, Ph.D.; Bruce Smith, Ph.D.

Associate Professors - Stephen Chang, Ph.D.; Jeffrey J. Gordon, Ph.D.

Graduate Degree Offered

Master of Arts. The Department cooperates with the College of Education and Allied Professions in offering a Master of Arts in Teaching degree.

Prerequisites to Graduate Work

All entering graduate students are expected to have completed GEOG 321 (Introduction to Map Communication) or its equivalent.

In addition, all entering graduate students must have completed at least one course in human geography and one course in physical geography.

The graduate coordinator will review the records of all incoming graduate students in accordance with their declared interests and, if necessary, will specify appropriate course work in areas deemed weak.
Requirements for the Master's Degree

A candidate may pursue a graduate program in geography under either of two plans:

Plan I requires a minimum of 30 hours of graduate study of which 24 must be in geography including three to six thesis hours. A minor of at least six hours is recommended. A thesis is required of each student. An oral examination on the thesis must be passed.

Under Plan II the candidate for a master's degree is required to complete a course of study approved by the graduate coordinator and consisting of a minimum of 33 hours of graduate work. At least 24 of these hours must be in geography. A minor of at least nine hours is recommended. The student under Plan II is required to pass a final written comprehensive examination covering three fields of geography. At least two of these must be in the fields of systematic geography. Upon completion of the written exam, the student pursuing this option must also pass a comprehensive oral exam. A professional quality research paper must be submitted and approved prior to graduation.

All graduate students in both plans must complete GEOG 510 and 597.

Plan I should be used by students preparing for doctoral work. Plan II may be used by students with other career objectives. Plan II is considered to be a terminal plan.

All graduate students are encouraged to undertake internships or cooperative education assignments.

Courses for Graduates

GEOG 510. Quantitative Geographical Analysis (3) I or II. Concepts, methods, and utilization of quantitative systems for describing and analyzing geographically-distributed physical and cultural phenomena.

GEOG 511. Advanced Quantitative Methods and Spatial Analysis (3) On demand. Examination of specific methods in quantitative geography and spatial analysis. Prerequisite: GEOG 510 or consent of instructor.

GEOG 512. Seminar in Meteorology and Climatology (3) On demand. Guided research activities in meteorology and climatology. Prerequisite: GEOG 213. May be repeated upon consent of adviser.

GEOG 521. Seminar in Cartography (3) On demand. Research-oriented analysis of cartographic problems. Prerequisite: GEOG 321 or consent of instructor. May be repeated upon consent of adviser.

GEOG 522. Computer Cartography (3) II. Analysis and display of spatial data on two- and three-dimensional computer maps. Prerequisite: CS 500 or 550, or consent of instructor.

GEOG 523. Geography of Soils and Land Use (3) On demand. Advanced consideration of soil processes and distribution and interrelations of world soil orders and their use. Attention to particular regions of world with land-use problems. Prerequisite: consent of instructor.

GEOG 525. Seminar in Population Geography (3) I, II. Theory, description and analysis of spatial and temporal relationships between factors of population composition and change and other areally-associated social, economic, and environmental variables. May be repeated upon consent of adviser.

GEOG 542. Conservation Ecology (3) On demand. Problems of conservation and resource management. Use of interdisciplinary approach including social, physical, and biological sciences emphasized as means of analyzing problems. Prerequisite: consent of instructor.

GEOG 570. Readings in Geography (1-3) On demand. Prerequisite: consent of graduate coordinator. Graded S/U.

GEOG 580. Graduate Seminar (3) On demand. Systematic study of selected topics in geography. Prerequisite: consent of instructor. May be repeated upon consent of adviser.

GEOG 581. Seminar in Geopolitics (3) On demand. Guided research activities in geopolitics. May be repeated upon consent of adviser.

GEOG 583. Seminar in Regional Geography (3) On demand. Guided research activities in geography of selected world regions. Prerequisite: consent of adviser. May be repeated upon consent of adviser.

GEOG 584. Seminar in Physical Geography (3) I. Methods used in investigations in physical geography, pursuit of such investigations of assigned problems, and critical discussion of results. May be repeated upon consent of adviser.

GEOG 585. Seminar in Economic Geography (3) II. Directed study, investigation, and research in selected problems in economic geography. May be repeated upon consent of adviser.

GEOG 586. Seminar in Cultural Geography (3) On demand. The nature and distribution of culture traits and geographic interpretation of how they evolved. May be repeated upon consent of adviser.

GEOG 588. Seminar in Urban Geography (3) On demand. Guided research activities in urban geography. Prerequisite: GEOG 426 or consent of instructor. May be repeated upon consent of adviser.

GEOG 589. Internship (1-6) I, II. Practical experience in applied geography, such as land-use planning; urban and rural planning; recreational, regional, and environmental planning; and location of industrial, commercial, and health service facilities. Graded S/U.


GEOG 597. Philosophy and Research Design in Geography (3) I or II. Philosophy of geography, analysis of current trends, and use of geographical source material for research.

GEOG 598. Directed Research (1-3) On demand. Prerequisite: consent of graduate coordinator. Graded S/U.

GEOG 599. Thesis Research (1-12) Enrollment in excess of six hours is acceptable for a Plan I master's degree, but no more than six hours may be credited towards an M.A. degree. Minimum acceptable total for degree is three hours.

Courses for Graduates and Undergraduates

GEOG 402. Regional Economic Geography (3) On demand. Problems of subnational areal units in county and regional planning, poverty pockets, delivery of services; emphasis on individual projects.

GEOG 404. Climatology (3) I or II. Fundamentals and applications; drought, water resources, human comfort, health, architecture; short and long-term climatic changes.

GEOG 405. Meteorology and Society (3) II. Interrelationships between human beings and the atmospheric environment; sociological and economic implications of air pollution and acid rain, snow, floods, drought and temperature extremes; urban effects. Prerequisite: GEOG 125, GEOG 213 or GEOG 303.

GEOG 411. Theoretical Cartography (3) On demand. Analysis of cartographic research. Four hours per week; two hours lecture or discussion and two hours of laboratory. May be repeated once upon consent of instructor. Prerequisite: GEOG 321 or consent of instructor.

GEOG 412. Use and Interpretation...
tion of Aerial Photographs (3) I. Sources, types, characteristics, uses, limitations of aerial photographs. Training in use of standard equipment for stereoscopic viewing and height measurement.

GEOG 413. Introduction to Remote Sensing (3) II. Principles and procedures used to obtain information about natural and cultural features through imagery derived from photographic, multispectral, thematic mapper, and side-looking airborne radar sensor systems.

GEOG 425. Food Resources and Rural Development (3) On demand. Changes and trends in availability, production, and consumption of food resources; related rural problems such as pollution, zoning, recreating, and future expectations or rural areas by urban populations.

GEOG 426. The American City (3) I. Internal organization of cities. Ecological and land-use problems, ghetto development, urban-economic base, urban sprawl, and intra-urban delivery of services.

GEOG 427. Genetic and Regional Analysis of Physical Landscapes (3) On demand. Selected aspects of physical geography (excluding meteorology and climatology); in-depth analysis of man's natural environment.

GEOG 432. Soil Classification and Mapping (3) On demand. Classification of soils; use of soil survey equipment; preparation of soil type, slope and erosion maps of assigned areas.

GEOG 436. Topics in Community and Area Development (3) On demand. Field analysis of various problems and topics of urban and rural areas. Prerequisite: GEOG 402 or GEOG 426 or consent of instructor.

GEOG 442. Conservation: Resources and Regional Development (3) On demand. Problems of area development in relationship to cultural, economic, and physical resources; obstacles to present development, needed changes, and potentials for future growth.

GEOG 451. Historical Geography of Anglo-America (3) On demand. Reconstruction of natural environment of U.S. and Canada; how different groups perceived environment and used available resources; emphasis on how mankind has modified earth's surface.

GEOG 452. Geopolitics (3) II. Geographical factors influencing development of states and interrelationship of these countries.

GEOG 460. Hydrology (3) II. Analysis of the earth's water resources. Topics include surface water systems (drainage basins, rivers, lakes and reservoirs), distribution, supply, demand, quality and hydrologic extremes. Prerequisite: GEOG 125 or consent of instructor.

GEOG 471. Oceanography (3) On demand. Geographic aspects of oceanography.

Geology

Charles Kahle, Chair, 170 Overman Hall
Richard Hoare, Graduate Coordinator, 42 Overman Hall
Phone: 419-372-2886

Graduate Faculty

Professors - Jane Forsyth, Ph.D.; Richard Hoare, Ph.D.; Charles Kahle, Ph.D.; Joseph Mancuso, Ph.D.; Don Steinker, Ph.D.
Associate Professor - Charles Onasch, Ph.D.
Assistant Professors - James Evans, Ph.D.; Joseph Frizado, Ph.D.

Graduate Degree Offered

Master of Science, Master of Arts in Teaching

Prerequisites to Graduate Work

An undergraduate major in the geological sciences normally is considered to constitute adequate preparation for regular admission to the graduate degree program, providing the work submitted is of appropriate quality as determined by the department. It is recommended that, in addition to geology, the entering student have a basic background in mathematics, biology, chemistry, and physics or some combination thereof. Students with undergraduate majors in fields other than the geological sciences will be considered for admission on an individual basis. A student may be required to take undergraduate course work as a part of his/her program. All students who apply for admission must complete both the aptitude and advanced parts of the Graduate Record Examination and have the test scores forwarded to the Department of Geology. Completion of a field course is required prior to completion of the degree program. Work experience may be substituted for this requirement at the discretion of the department. A placement examination will be given to aid in advising, prior to the start of the first semester in residence.

Requirements for the Master of Science Degree

The Plan I (thesis) degree is offered (see general requirements for the Master's Degree and Master of Science). The department requires the student to complete a degree program consisting of: (1) an approved degree program of courses; (2) an acceptable presentation and defense of a thesis proposal no later than the end of the second semester of full-time residence; (3) an acceptable thesis, including its successful oral defense before the thesis committee.

Courses for Graduates

GEOL 509. Advanced Structural Geology (3) II. Study of the deformation in the earth's crust. Analysis of stress and strain. Origin and significance of geologic structures. Two lectures and one two-hour lab. Prerequisite: GEOL 300.

GEOL 511. Petrography (2) I. Second half of semester only. Identification, description, and classification of igneous, sedimentary, and metamorphic rocks through use of petrographic microscope. Two two-hour laboratories. Prerequisite: GEOL 411.

GEOL 512. Petrology of Clastics (3) I. Identification, description, classification and origin of clastic sedimentary rocks, especially sandstones, by study of thin-sections with petrographic microscope. Two lectures and one three-hour laboratory. Prerequisite: GEOL 307; prerequisite or corequisite, GEOL 411.

GEOL 513. Carbonate Geology (4) II. Detailed study of modern and ancient carbonate textures and structures, modern carbonate environments and reconstruction of carbonate diagenetic and depositional environments. Two lectures and one four-hour laboratory/demonstration/lecture. Prerequisite: GEOL 411.

GEOL 514. Igneous and Metamorphic Petrology of Plate Margins (3) II. Development of genetic interpretations of common rock associations at subduction zones and spreading centers. One lecture and two two-hour laboratories. Prerequisite: consent of instructor.

GEOL 521. Metallic Mineral Deposits (3) I (Alternate years). Methods of search for and mineralogical and structural features of selected groups of metallic mineral deposits. One lecture and two two-hour laboratories. Prerequisite: consent of instructor.

GEOL 523. Sedimentary Environments (3) I. Study of principles and concepts involved in reconstruct-
ing ancient sedimentary depositional environments by way of lithologic, structural, and biologic aspects of sedimentary rocks and use of facies models. Two lectures and one two-hour laboratory/demonstration/lecture. Prerequisite: GEOL 308.

GEOL 528. Advanced Invertebrate Paleontology (3) II (Alternate years). Studies in morphology, taxonomy, classification, evolution, and paleoecology of selected groups of fossil invertebrate organisms. Two lectures and one two-hour laboratory. Prerequisite: GEOL 315.

GEOL 533. Advanced Paleobiology (3) II (Alternate years). Paleobiological aspects of paleontology: paleoecology, paleobiogeography, evolution, phylogeny, and biochronology. Selected case histories. Prerequisite: GEOL 315 or consent of instructor.

GEOL 535. Advanced Micropaleontology (3) II (Alternate years). Classification, paleoecology, and phylogeny of selected groups; use of microfossils in stratigraphic paleontology. Emphasis on Foraminifera. Prerequisites: GEOL 315 or consent of instructor.

GEOL 536. Exploration Geophysics (3) I (Alternate years). Principles and techniques of exploration geophysics: reflection seismology, seismic stratigraphy, refraction seismology, as well as electrical, gravity, and magnetic methods. Two lectures and one two-hour laboratory. Prerequisites: GEOL 309, PHYS 212, and MATH 131, or consent of instructor.

GEOL 537. Exploration Geochemistry (3) II (Alternate years). Principles and techniques of exploration geochemistry; field tests and design of surveys. Two one-hour lectures and one two-hour laboratory. Prerequisites: CHEM 126 and GEOL 401, or consent of instructor.

GEOL 538. Geochemistry of Sediments (3) II (Alternate years). Investigation of diagenesis of sediments; chemical behavior of sediments, nature and evolution of pore fluids. Two lectures and one two-hour laboratory. Prerequisites: GEOL 431 or consent of instructor.

GEOL 539. Glacial Geology (3) I (Alternate years). Glacial processes and influence on landscape. Three one-hour lectures. Three one-day field trips required. Prerequisite: GEOL 310 or consent of instructor.

GEOL 540. Pleistocene Geology (3) II (Alternate years). A consideration of glacial, periglacial, and contemporaneous related events worldwide during the Pleistocene Epoch. Prerequisite: GEOL 310 or consent of instructor.

GEOL 543. Thermodynamics of Geological Systems (3) II (Alternate years - odd). Application of principles of crystal, physical, and analytical chemistry to geologic systems. Two lectures and one two-hour laboratory. Prerequisite: consent of instructor.

GEOL 545. Sedimentary Basin Analysis (3). Study of sedimentary basins in their tectonic and paleogeographic setting, with emphasis on collection and analysis of field data, geophysical logs, basin mapping techniques, seismic stratigraphy, and thermal maturity studies. Prerequisite: GEOL 316.

GEOL 546. Sedimentary Structures in Clastic Rocks (3) Alternate years - odd). The recognition, significance, and hydrodynamic origin of sedimentary structures in clastic sediments and sedimentary rocks, with strong emphasis on application of sediment transport mechanics and fluid dynamics to these features. Prerequisite: GEOL 316.

GEOL 547. Mechanics of Sediment Transport (3) Alternate years - even). Study of the properties of fluid flow, analysis of forces acting on a grain, initial motion, bedload and suspended load sediment transport, and deposition. Prerequisite: GEOL 316.

GEOL 570. Graduate Readings in Geology (1-3). Supervised readings to meet students' special needs. May be repeated. Prerequisite: consent of the graduate coordinator and instructor.

GEOL 580. Seminars in Geology (2-3) I, II. Advanced seminars in specialized fields of geology covering particular subjects in detail by survey of literature and discussion. May be repeated. Prerequisite: consent of instructor.

GEOL 593. Advanced Field Geology (1-6) Summer only. Utilization of field techniques to construct geologic maps, structure sections, and stratigraphic sections of specific regions. Prerequisite: consent of instructor. Lab fee.

GEOL 597. Geologic Research and Communication (2) I. Scientific methodology; geologic research methods; preparation and communication of research results. Prerequisite: consent of instructor.

GEOL 598. Research Problems (1-3). Individual work on a topic in which a student has special interest. Prerequisite: consent of instructor. Graded S/U.

GEOL 599. Thesis Research (1-12). Enrollment in excess of six hours is acceptable for Plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is four hours. Graded S/U.

Courses for Graduates and Undergraduates

GEOL 401. Economic Geology (4) I (Alternate years). Classification and genesis of metallic ore deposits illustrated by study of classic areas. Three lectures and one two-hour laboratory. Prerequisites: GEOL 309 and GEOL 310.

GEOL 402. Computer Applications in Geology (3) I. Methods for the retrieval, extraction, and manipulation of geological information and numerical data using computers. Prerequisites: minimum of 9 credit hours in GEOL and knowledge of FORTRAN (students may co-register for CS 280); or consent of instructor.

GEOL 411. Optical Mineralogy (2). First half of semester only. Optical properties and methods of studying natural substances with a polarizing-light microscope. Two two-hour discussion laboratories. Prerequisite: GEOL 300.

GEOL 412. Advanced Historic Geology (3) I. Regional and stratigraphic geology, including classical areas in North America and Europe. Prerequisites: GEOL 315 and GEOL 316.

GEOL 416. Petroleum Geology (3) I (Alternate years). Principles and methods involved in the exploration for oil and gas. Two lectures and one three-hour laboratory. Prerequisites: GEOL 308 and GEOL 309.

GEOL 418. Geology of Ohio (3) I (Alternate years). Bedrock and surficial geology of Ohio; state's economic mineral resources. Two lectures and one two-hour laboratory. Three full-day field trips required. Credit not given for the M.S. degree in geology. Prerequisites: GEOL 100 or GEOL 104 and GEOL 105.

GEOL 419. Vertebrate Paleontology (3) II (Alternate years). Fossil vertebrates and their morphology, classification, and evolution. Two lectures and one two-hour laboratory. Credit not given for both GEOL 419 and GEOL 305. Prerequisites: GEOL 100 or GEOL 101 or GEOL 105 or BIOL 202.

GEOL 420. Environmental Aspects of Geology (3) I. Contribution of geological concepts to environmental concerns. One half-day field trip required. Credit not given for both
GEOL 423. Tectonics (3) II. Tectonic elements in the continents and ocean basins interpreted within the framework of plate tectonics. Prerequisites: GEOL 309 and GEOL 316.

GEOL 440. Geologic Remote Sensing (4) I (Alternate years). Use of remotely sensed multispectral data for geological applications. Data acquisition, image processing, and interpretation. Recent advances in geologic remote sensing research. Three lectures and one two-hour laboratory. Prerequisite: GEOL 315 and GEOL 316.

GEOL 472. Marine Geology (3) II (Alternate years). Processes, sediments, and organisms of modern marine environments; interrelationships and expression in rock record. Prerequisite: consent of instructor.

GEOL 473. Field Experience in Marine Geology (I) II (Alternate years). Field experience in marine environments as related to the geologic record. Prerequisite or corequisite: GEOL 472, consent of instructor. Lab fee.

GEOL 493. Field Experience in Modern Marine Environments (1-6). Recognition and study of geologic materials, structures, and landforms in the field. Written report required. Prerequisites: GEOL 104, GEOL 105, or GEOL 304 and consent of instructor. May be repeated up to 6 credit hours. Lab fee.

GEOL 496. Field Course in Modern Marine Environments (1-6) Summer only. Field study of shallow-water marine environments. Prerequisite: consent of instructor. Lab fee.
GERM 515. German Culture and Civilization (3) (Alternate years). A survey of German cultural, social, intellectual, and political development from the late Middle Ages to the end of the Nazi era.

GERM 516. The Two Germanies (3) (Alternate years). Contemporary society in the Federal Republic of Germany and the German Democratic Republic. Division and rebuilding of Germany after World War II; systemic comparison of the two German states, including political and governmental structures, economic systems, education, mass media, social services, and general social reality; the German Question.

GERM 519. Middle High German (2). Introduction to Middle High German. Readings in selected texts.

GERM 521. German Medieval Literature (3) (Alternate years). German medieval literature from the beginning through the high Middle Ages. Readings in Minnesang, the Nibelungenlied, Wolfram von Eschenbach, Gottfried von Strassburg, and others.

GERM 522. German Literature 1300-1700 (3) (Alternate years). German literature and culture from the late Middle Ages through the Baroque period. Readings in the Volksbuch, Fastnachtspiel, Schwank, and in authors such as Tepl, Brant, Luther, Sachs, Gryphius and GrimmeIshausen.

GERM 523. 18th Century German Literature (3) (Alternate years). Literary works and trends during the Enlightenment. Sentimentalism and Storm and Stress; Lessing and other authors.

GERM 524. German Classicism (3) (Alternate years). Study of the classical writings, mainly plays and poetry, of Goethe and Schiller. Investigation of the philosophical basis of German Classicism; the philosophy of Immanuel Kant and the development of German Idealism.

GERM 525. German Romanticism (3) (Alternate years). German Romanticism as a literary and cultural phenomenon. Readings from the major authors (Neyk, Novalis, E.T.A. Hoffmann, Eckendorfl), as well as theoretical and critical writings of the period (F. Schlegel).

GERM 526. 19th Century German Literature (3) (Alternate years). German literature from 1830's to 1880's in context of major social-political and intellectual trends of the 19th century. Biedemeier, Junge Deutschland, Poetic Realism. Authors include Buechner, Hebbel, Grillparzer, Stifter, Keller and Storm.


GERM 532. Modern German Prose to 1945 (3) (Alternate years). The reaction against realism; experimentation with new forms in prose genres. Authors include Rilke, Kafka, Hesse, Thomas Mann, Musil, Doeblin and E. Juenger.

GERM 533. German Drama Since 1945 (3) (Alternate years). Post-War World War II drama within the framework of social and literary relationships. Authors include Brecht, Duerrenmatt, Frisch, Weiss, and Hasek.

GERM 534. German Prose Since 1945 (3) (Alternate years). Selected prose works by contemporary authors: Boell, Frisch, Grass, and younger writers.

GERM 535. East German Literature (3) (Alternate years). Representative writers, including Seghers, Kant, Wolf, Braun, and Mueller, and members of young generation. Investigation of socialist aesthetic theory and the cultural policy of the GDR.

GERM 541. German Lyric (2) On demand. Introduction to forms of German lyric poetry. Selected readings from major poets, with detailed analysis and interpretation.

GERM 550. Selected Topics (1-3) On demand. Topics in German language, literature or culture. May be repeated if topics are clearly different.

GERM 570. Readings in German (1-2) On demand. Supervised individual readings to meet student's special needs. Prerequisite: advanced approval by graduate coordinator and by instructor. Graded S/U.

GERM 580. Seminar (3). Seminar on topics in literature, culture, or language. Research paper. May be repeated with different topics.

GERM 589. Internship or Practicum (1-5) On demand. Supervised professional experience related to student's area of academic specialization. Must be approved by instructor/supervisor prior to registration. May be repeated. Graded S/U.

GERM 590. Teaching College German (1-2) I, II. Current theories and practices; observation; supervised classroom experience; discussion of teaching techniques. May be required of, and open only to, teaching assistants. May be repeated twice. Graded S/U.

GERM 591. Teaching German Literature and Culture (1) On demand. Approaches to presentation of German literature and culture at early college and advanced high school level. Interrelationships between language and culture in foreign language teaching. Recommended for current or prospective teachers.

GERM 592. Practicum in Teaching German Literature or Culture (1) On demand. Methods and practices of teaching literature or culture, observation and supervised classroom experience; design of teaching units in literature or culture. Open to advanced graduate students; may be repeated twice with permission of department.

GERM 595. Workshop on Current Topics in German (1-4) On demand. Current topics and issues in the discipline. Study, readings, activities and development of materials related to needs of practitioner. Topics vary; may be repeated. Repetition for credit towards a graduate degree program in German must be approved by the graduate coordinator. Graded S/U.

GERM 598. Directed Research in German (1-3). Supervised independent research on specific topic within discipline. Generation of new knowledge as contrasted with private reading course. May run for longer than a single semester. Proposal must be approved by instructor prior to registration. Graded S/U.

GERM 599. Thesis Research (1-12). Credit for thesis study. No more than six hours may be counted towards degree requirements.

GERM 570. Directed Readings (1-3). Supervised study to meet student's special needs. May be repeated. Prerequisite: consent of graduate coordinator and instructor.

Courses for Graduates and Undergraduates

GERM 415. The German Film (3) On demand. Cultural and literary aspects of German film; emphasis may be on important developments in German film making, thematic aspects of film, or on interrelationships between literary and cultural phenomena and film.

GERM 417. Advanced Composition and Conversation (3) I. Development of increased facility in speaking and writing. (May be repeated for credit in AYA Salzburg Program.) Prerequisites: GERM 318 or permission of instructor.
GERM 418. Stylistics, Syntax and Structure of German (3) II. Practice and problems of writing style and syntax. Descriptive study of grammatical structures, contrastive analysis of English and German. (May be repeated for credit in AYA Salzburg Program.) Prerequisite: GERM 318 or permission of instructor.

GERM 419. German Drama Workshop (3) II. Practical advanced linguistic training through active participation in theatrical projects; advanced phonetics; methods of utilizing dramatic productions as part of foreign language instruction. Prerequisite: GERM 417 or permission of instructor.

GERM 480. Selected Topics in German (1-3) On demand. Topic chosen from literature, culture or language to meet curriculum needs and student requests. May be repeated to six hours with different topics. Prerequisites: GERM 318 and two courses from GERM 311, 313, 331, 380.

GERM 482. Introduction to Germanic Linguistics (3) II. Derivation of modern Germanic languages from Proto-Indo-European. Classification and history of the Germanic language group. Development of the German language to New High German. Aspects of contemporary linguistics. Prerequisite: GERM 417 or permission of instructor.

GREAL - Gerontology

John Hiltner, Director, 102 Health Center
Jennifer Kinney, Graduate Coordinator, 102 Health Center
Phone: 419-372-2326

Graduate Certificate Offered

As society enters into the twenty-first century, the elderly, those aged 65 and older, comprise the most rapidly growing segment of our population. To address the special needs of this segment of the population, the College of Health and Human Services developed the Graduate Certificate in Gerontology. The Certificate curriculum acknowledges the role of biological, psychological and social influences on older adults' well-being, and provides students with knowledge of how these factors interact to influence the aging process. Employing a multidisciplinary approach, the curriculum prepares students to help promote successful aging among the elderly. The Certificate Program is appropriate for professionals who occupy positions in agencies and institutions that directly administer and deliver services to the elderly, but who have not received recent formal training in gerontology, for students pursuing academic and/or research careers that focus on the elderly; and for students who anticipate that their chosen profession (e.g., business, health care) will bring them into contact with older adults. Regardless of a student's career goals, the Certificate Program provides knowledge of gerontology that is applicable to all business, professional and personal situations involving older adults. Students may enroll only in the Certificate Program or may complete the Certificate in conjunction with a graduate degree at BG SU.

Requirements to Graduate Work

The Certificate Program is suitable for individuals who have not received formal training in gerontology, but who would benefit from graduate level instruction in the field. Both individuals currently enrolled in graduate degree programs at Bowling Green State University and individuals whose occupations bring them into contact with older adults are eligible to apply to the Certificate Program. Prospective students must meet requirements for regular admission as outlined by the Graduate College. In addition to the application required by the Graduate College, applicants to the Graduate Certificate Program in Gerontology should submit three letters of recommendation from recent instructors, employers or other people qualified to evaluate probable success in the program and a statement of intent delineating the purpose for enrolling in the program, as well as an outline of short and long term career goals. Careful attention is given to the personal statement that accompanies the application. Interested students currently enrolled at Bowling Green State University may request the Graduate College to forward their academic records to New High German. Aspects of contemporary linguistics. Prerequisite: GERM 417 or permission of instructor.

CDIS 610. Communication Disorders and Aging
GERO 503. Cross-Cultural Aging
GERO 504. Environment and Aging
F&N 436. Nutrition for the Aged
AHE 580. Relationships in Later Life
PSY 527. Planning Leisure Lifestyles
PSYC 537. Mental Health and Aging
GERO 570. Independent Study
GERO 580. Seminar in Gerontology
GERO 598. Independent Research

Additional aging-related courses from various departments will be reviewed by the Gerontology faculty for fulfillment of electives as they are offered.

Courses for Graduates


GERO 502. Health and Aging (3) II. Issues relating to health and diseases related to aging. Consideration of health promotion, prevention, treatment, and public policy. Prerequisite: GERO 501 or consent of instructor.

GERO 503. Cross-Cultural Aging (3) II. Analysis of cultural and ethnic aspects of the aging process and their unique contributions to aging around the world. Prerequisite: GERO 501 or consent of instructor.

GERO 504. Environment and Aging (3) II. Focus on the places where older adults live. Issues concerning housing and institutions are emphasized. Prerequisite: GERO 501 or consent of instructor.

GERO 570. Readings in Gerontology (1-3). Independent reading and study in specific areas of gerontology suited to needs of individual
student. May be repeated; up to 3 hours may apply toward certificate. Registration must be approved by Program Coordinator. Graded S/U.

GERO 580. Seminar in Gerontology (3). Systematic study of selected topics in gerontology. Content varies from semester to semester.

GERO 598. Directed Research in Gerontology (1-3). Supervised independent research on a particular topic. Registration must be approved by Program Coordinator. Up to 3 credits may apply toward certificate. Graded S/U.

Graduate Business Administration

Mark Wellman, Director
Graduate Studies in Business
367 College of Business Administration
Phone: 419-372-2488

Graduate Faculty

Finance
Professors - Stephen E. Skomp, D.B.A.
Associate Professor - Raj Padmanabhan, Ph.D.
Assistants - Sung C. Bae, Ph.D.; Daniel Klein, Ph.D.; Francis Laatsch, Ph.D.; John C. Thompson, M.B.A.
Legal Studies
Professors - Donald Boren, J.D.; Bartley Brennan, J.D.
Assistant Professors - Robert A. Holmes, Ph.D.; Nancy Kubasek, J.D.; Lynn Ward, J.D.
Marketing
Professors - Orlando C. Behling, Ph.D.; Donald Campbell, Ph.D.; Chan Hahn, Ph.D.; James McFlien, D.B.A.; Peter Pinto, Ph.D.; Glenn Varney, Ph.D.; Karl Vogt, Ph.D.
Associate Professors - Daniel Bragg, Ph.D.; Arthur Darrow, Ph.D.; Dianna Stone, Ph.D.
Assistant Professors - John Loucks, Ph.D.; Charles Waits, D.B.A.

Management

Professors - Sue Graziano, J.D.; Brent Nicholson, J.D.

Finance

Each candidate is required to take the Test of English as a Foreign Language (TOEFL). A candidate who has not completed the minimum foundation for phase II is required to take all or part of phase I as prescribed by the graduate coordinator. An individual program is designed for each student after evaluation of the academic background. A holder of an undergraduate degree in business usually has little or no work required in phase I and may enter directly or fairly promptly into phase II.

Requirements for Master of Business Administration Degree

Each candidate is required to complete all or any part of phase I, depending upon undergraduate preparation. The purpose of phase I is to allow entering students with no prior academic training in the field of business to develop a level of competence and understanding which enables them to proceed to the more advanced level of phase II. In addition to the phase I courses, students are required to have an undergraduate background in calculus (MATH 128) and principles of macro and microeconomics (ECON 202 and 203). This must be substantially completed (unless waived) before entering phase II. Required core courses in phase II include STAT 511 or GBA 663; GBA 628, 630, 636, 640, 650, 695, 698, and ECON 503. With the exception of GBA 695, these core courses should be completed as early as possible after entering phase II; GBA 695 should be taken during the student's last academic term.

In addition to the required core, a candidate must elect additional courses from phase II or other approved areas to make a total of 33 semester hours. Since the GBA 698 research project is required, electives should be chosen with this in mind and in close consultation with the research adviser.

The elective portion of the program includes work in such areas as accounting, economics, finance, management, marketing, international business, information systems, statistics, and operations research. Students also have the option of pursuing one of three majors to satisfy the elective component of their MBA program. Students wishing to specialize in operations research would take GBA 663 in phase II and apply GBA 664 and 666 toward the elective hours of their program plus an additional course selected from among the following courses: GBA 665, OR 547, and OR 548. Students desiring a specialization in production/materials management would take GBA 637 and 639 as elective courses in addition to the required GBA 630. A specialization in management information systems would require GBA 681, 682, and 683. For the industrial marketing specialization, students will complete GBA 641, 644, and 645 in addition to GBA 640. All specializations assume that the GBA 698 Business Research Project will be completed on a topic relevant to the specialization. Students interested in accounting, statistics, or economics courses should refer to graduate courses in these areas.

Courses for Graduates

The complete program includes the following two levels of courses:

Phase I

Maximum of 30 hours; intensive preparation for phase II; courses offered to provide the essence of an undergraduate business major.

ECON 501. Price Theory (3). Theory of firm and applications to business administration. Prerequisite: principles of economics.


STAT 510. Statistical Methods (3). Accelerated coverage of descriptive statistics, probability, normal and binomial distributions, sampling distributions, confidence interval estimation, and hypothesis testing with applications to business problems; designed for the student without undergraduate preparation in statistics. Credit not applicable toward degree in applied statistics. Prerequisite: MATH 126 or equivalent.

GBA 520. Accounting Methods (3). Accelerated course in accounting concepts and procedures; accounting function in business; managerial emphasis; designed for first-year MBA student without undergraduate prerequisite in accounting.

GBA 530. Production Function (3). Accelerated course in production and operations management; con-
cerned with design, economic analysis, and control of productive processes in organizations; designed for first-year MBA student without undergraduate preparation in production/operations management.

GBA 536. Organization Theory and Behavior (3). Theory, research, and practice regarding organizational processes. Topics include individual and small group behavior as well as organizational design and change; designed for first-year MBA students without undergraduate preparation in organizational theory.

GBA 540. Marketing Principles (3). Accelerated course in the foundations of marketing; introduction to basic marketing management concepts, functions and managerial strategies; designed for first-year MBA student without undergraduate preparation in marketing.

GBA 550. Finance Function (3). Accelerated course in finance; acquisition and allocation of funds for a firm; analytical methods and decision process; valuation; designed for first-year MBA student without undergraduate preparation in finance.

GBA 550. Introduction to the Computer (3). Accelerated course in computer programming fundamentals, including program documentation and hardware; designed for first-year MBA student without undergraduate preparation in computer methodology.

GBA 590. Legal Environment of Business (3). Accelerated course in business law; legal environment and vital role law plays in all business decisions. Basic legal concepts illustrated from viewpoint of firm; designed for first-year MBA student without undergraduate preparation in business law.

Minimum of 33 hours required.


GBA 591. Regression and Design (3). Regression analysis, analysis of variance, and topics in the design of experiments. Credit not applicable toward degree in applied statistics. Prerequisite: STAT 510 or equivalent. Not open to students with credit for STAT 511.

GBA 628. Managerial Accounting (3). Accounting concepts as tools for administrative evaluation and control of business operations. Nature, use, and reliability of accounting data in decision making process; cost analysis and profit planning. May not be taken for credit by student in Master of Accountancy program. Prerequisite: GBA 520 or equivalent.

GBA 630. Production Theory and Practice (3). Theory and application of operations and production management. Management philosophies; production cycle; simplification and diversification; materials production and quality control. Prerequisite: GBA 530 or equivalent.

GBA 632. Management of Human Resources (3). Survey of the major topics in personnel and human resource management. Topics include job analysis, human resource planning, recruitment and selection, appraisal, compensation, labor relations, productivity, and quality of work life. Prerequisite: GBA 536 or equivalent.

GBA 636. Advanced Organization Theory and Behavior (3). Understanding effective functioning of individuals and groups in organizations through study of organizational processes. Emphasis upon applying conceptual knowledge to major organizational problems and issues such as productivity, conflict, decision making, leadership, and organizational adaptation and change. Prerequisite: GBA 536 or equivalent.

GBA 637. Materials and Logistics Management (3). Planning and control of movement and storage activities of materials in business organizations. Topics on materials and logistics system components such as facilities location, transportation, inventory requirements, materials handling, and order processing. Prerequisite: GBA 530 or equivalent.

GBA 639. Topics in Production and Operations Management (3). Recent developments in production planning and control procedures. Topics could include materials requirements planning, human planning and scheduling. Prerequisite: GBA 530 or equivalent.

GBA 640. Marketing Management (3). Relevant theory and practice as related to a planning, analysis and control framework for developing and evaluating general marketing strategy as well as component strategies and tactics; managerial decision making is stressed and illustrated through case analysis or other experiential exercises. Prerequisites: ECON 501, STAT 510, GBA 520, GBA 540, and GBA 550 or their equivalents.

GBA 641. Design and Management of Marketing Channel Systems (3). II. Design, strategy, coordination, control, and performance of relationships among manufacturing, wholesaling, retailing, and consumer products and services. The course employs behavioral, managerial and strategic approaches to study structures of interorganizational channel relationships, choice of marketing intermediaries, control of inventory and marketing programs, and performance of channel systems. Prerequisite: GBA 640.

GBA 644. Industrial (Business to Business) Marketing (3). II. A strategic analysis of industrial and business to business marketing emphasizing: analysis of markets, organizational buyer behavior, marketing research, forecasting, and management of pricing and promotional elements. Coverage of all three types of business to business markets (resale, industrial, and institutional) are included along with comparisons with consumer markets. Prerequisite: GBA 640.

GBA 645. Product Management (3). II. The development and introduction of new industrial and consumer products as well as the management of existing products. Focus will be placed on the control of a product from initial idea generation through the new product development process and product life cycle, with emphasis on strategies for each stage. Includes such topics as organizing for new projects, concept generation and evaluation, test marketing, diffusion of innovations, product life cycle, product positioning and product abandonment decisions. Prerequisite: GBA 640.

GBA 646. Introduction to International Business Administration (3). Economics, financial, political, social, and cultural environment in which American businesses conduct affairs abroad. Development of empathy toward foreign attitudes and understanding of foreign environments.

GBA 649. International Business Operations (3). Major policies and practices of firms operating in foreign environments. Topical problems in major functional areas of business administration incorporated with cases and specific company examples. Prerequisite: GBA 640 or equivalent.

GBA 650. Financial Management (3). Case method approach to acquisition and allocation of funds for non-financial firms; working capital management; capital budgeting.
long-term fund sources, dividend policy, valuation, merger. Executive view stressed. Prerequisites: GBA 520 and 550 or their equivalent.

GBA 652. Management of Financial Institutions (3). Operating problems of major types of financial institutions; acquisition and allocation of funds. Relationships to Federal Reserve System, Treasury, and money and capital markets explored. Prerequisite: GBA 550 or equivalent.

GBA 653. Fundamentals of Investment Analysis (3). Investment theory, security analysis, and management of investment portfolios of individuals and institutions. Prerequisite: GBA 550 or equivalent.

GBA 654. Insurance and Risk Management (3). Nature of risks, methods of handling risk, risk analysis, and recognition of exposure examined. Decision making from corporate risk management point of view explored through case problems.


GBA 657. Money and Capital Markets (3). Structure and functioning of money and capital markets. Flow of funds accounts used to assess effects of business conditions and monetary and fiscal policy on demand for and supply of funds by supplier and user groups. Implications for financial, investment, and loan management. Prerequisite: GBA 550 or equivalent.

GBA 661. Business Information Systems (3). Introduction to computerized systems and their effects upon the firm. Prerequisite: GBA 560 or equivalent.

GBA 662. Business Systems Analysis (3). Systems analysis and design for computer based information systems. Determination of information requirements; design of systems and methods. Feasibility study contents, project management techniques. Prerequisite: GBA 681 or equivalent.

GBA 663. Cases in Business Information Systems (3). Computerized management information system or total information system concept in action. Case approach used. Prerequisite: GBA 682 or consent of instructor.

GBA 680. Special Topics in Business (1-3). Individual or group study of special topics in business administration. Must be approved by Director of Graduate Studies in Business. Letter grade only.

GBA 681. Business Information Systems (3). Introduction to computerized systems and their effects upon the firm. Prerequisite: GBA 560 or equivalent.

GBA 682. Business Systems Analysis (3). Systems analysis and design for computer based information systems. Determination of information requirements; design of systems and methods. Feasibility study contents, project management techniques. Prerequisite: GBA 681 or equivalent.

GBA 683. Cases in Business Information Systems (3). Computerized management information system or total information system concept in action. Case approach used. Prerequisite: GBA 682 or consent of instructor.

GBA 690. Special Problems in Business (1-3). Individual or group study of some phase of business administration. Must be approved by director of graduate studies in business. Graded S/U.

GBA 692. Teaching Collegiate Business Administration (3). Philosophy, psychology, and methodology of teaching business administration subjects in collegiate institutions. Knowledge and techniques applicable to use in management responsibilities.

GBA 693. Social Responsibility (3). Social responsibility of corporations; topics include white collar crime, social accounting, legal and re-structuring of the corporate form, and government regulation.

GBA 695. Policy and Strategy Determination and Implementation (3). Corporate strategy and policy from the general manager's point of view. Analysis of strategic objectives, environmental forces, institutional resources, and social values as related to the determination and implementation of business strategy and policy. Emphasis on the integration of all the functional areas of a business. Prerequisites: GBA 628, 630, 636, 640, 650 or their equivalents.

GBA 697. Research Techniques (1). Research design, data collection methods, and formulation of research projects; reading, lecturing, and group discussion.

GBA 698. Business Research Project (1-3). Research project on topic approved by adviser who is member of graduate faculty; involves research methodology, collection and analysis of data, and presentation of results. Contact director of graduate studies for details and registration. Graded S/U.


Courses for Graduates and Undergraduates

MKT 410. Principles of Advertising and Promotion (3). Theory and decision making in advertising and promotion. Topics relate to the promotional mix from a manager's point of view, including decisions about promotional campaign design, budgeting, message and media selection, and measurement of effectiveness. Prerequisite: MKT 300 or equivalent.

MKT 411. Creative Strategies and Tactics in Advertising (3) I, II. The creative process applied to advertising and promotion. Theory and practice of creative aspects of advertising strategy development and tactical implementation: copy, layout, and production. Prerequisites: MKT 300 and MKT 410 or their equivalents.

MKT 412. Managerial Problems in Advertising (3) I, II. Evaluating opportunities for effective advertising program development and implementation. Through cases, campaign development exercises, and/or other focused projects, experience will be gained in making actual decisions regarding: the setting of objectives; campaign design; budget allocation; message and media selection. Prerequisites: MKT 300 and MKT 410 or their equivalents.
Graduate College - HPER

workshop listed below as a service to graduate students and faculty at Bowling Green State University

GRS 500. Workshop on Instruction in Higher Education. Fundamental concepts in educational philosophy, classroom management, and professional ethics for college-level classes. Lectures and laboratory. A one-week (eight hours daily) interdisciplinary course, required of new graduate assistants and teaching fellows. Graded on S/U basis.

Health, Physical Education and Recreation

Ronald Russell, Interim Director, 200A Memorial Hall
Susan Gavron, Graduate Coordinator, 200B Memorial Hall

Phone: 419-372-2878

Graduate Faculty

Professors - Richard Bowers, Ph.D.; David Groves, D.Ed.; Terry Parsons, Ph.D.; Betty van der Smissen, Re.D., JD.

Associate Professors - Pamela C. Allison, Ph.D.; N. Jean Bateman, Ph.D.; Sue Gavron, P.E.D.; Molly Laffin, Ph.D.; Nora Liu, Ph.D.; Janet Parks, Ph.D.; Ina Temple, Ph.D.


Graduate Degree Offered

Master of Education in Health, Physical Education and Recreation. The fields of study available within the School of Health, Physical Education and Recreation are: Health, Physical Education Pedagogy, Recreation and Leisure, Sport Administration and Exercise and Sport Sciences. Course work is designed to expand upon the undergraduate experience with more opportunities for research, critical thinking and analysis within a specialization. The following specializations are available: Health Education, Adapted Physical Education, Elementary School Physical Education, Secondary School Physical Education, Program Management in Recreation and Leisure Services, Recreation Facility Management, Leisure Services/Programming for Special Populations, Outdoor Related Recreation/Education, Sport Management, Interscholastic Athletic Administration, Motor Performance and Fitness and Sport Physiology.

Prerequisites to Graduate Work

To be admitted to the graduate program a student must: have a bache- lor's degree from an accredited school, a GPA of at least 2.6, complete an application for Graduate College, send in transcripts from all colleges, submit three letters of recommendation and take the GRE exam prior to or during the first semester of course work. There are specific entry requirements for each specialization. Deficiencies in course work are completed before or during graduate course work and do not count toward completion of the degree. Students are required to consult with the graduate coordinator or specialization faculty prior to starting any course work. Students considering applying for graduate assistantships will need to complete additional forms and must have 3.0 GPA to be eligible for an assistantship.

Requirements for the Master's Degree

A student may choose either Plan I or Plan II. Plan I requires 30 semester hours of graduate courses with 18-21 hours in HPER excluding HPER 597, Research Methods in HPER. The Plan I student must complete a thesis for which a maximum amount of 7 credit hours is available.

Plan II requires the completion of 33 semester credit hours of graduate courses with 18-21 hours in HPER excluding Research Methods in HPER. The Plan II student completes and must pass a comprehensive examination as a culminating experience.

Frequency of Course Offerings

The graduate courses in the School of HPER will be offered on a planned basis. It is intended to offer courses at least once a year, including summers.

Courses for Graduates

HPER 509. Administrative Management in Leisure and Recreation Services (2). Theory and application of methods and technique; acquisition and allocation of funds; process approach to supervision, training, development, and evaluation of recreation personnel. Prerequisite: consent of instructor.

HPER 510. Philosophy and Principles of Health and Physical Education (3). Investigation of varying philosophies of modern education and of contemporary health educa-
cific sports and physical activity in general. Prerequisite: Undergraduate course in human physiology or exercise physiology.

**HPER 520. Foundations of Recreation and Leisure Experiences (2).** Recreation and leisure philosophies; leisure behavior patterns; outcomes from recreation participation; bases of enjoyment in relation to leisure pursuits.

**HPER 521. Comparative Recreation and Leisure Service Delivery Systems (3).** Policy formation and planning techniques for the development of Recreation and Leisure Service Delivery Systems in relation to other social processes and institutions.

**HPER 522. The Law and Health, Physical Education and Recreation (3).** Legal authorization for services and powers; liabilities for operations based on tort, contract, violation of law; constraints on program administration and management, including human rights, health and sanitation, safety, personnel, areas and facilities; risk management.

**HPER 523. Program Design and Strategies of Recreation and Leisure Services (3).** Design principles and strategies in the development of Recreation and Leisure programs: facilitating approaches; leisure education, leisure counseling; program evaluation and management concerns in program administration.

**HPER 524. Outdoor Programs for Special Populations (2).** Objectives, program strategies, outcomes of various outdoor programs for special populations; impacting forces of environment upon behavior; evaluation of experiences; utilization of structural elements of camping.

**HPER 525. Outdoor Recreation Management (3).** Behavioral patterns of the outdoor recreationist; allocation of physical and financial resources; land and water use policies as related to on-site management.

**HPER 526. Seminar in Interpretive Services (3).** Research implications for more effective interpretive services; depreciable behavior and environmental understandings as influenced by interpretive services; evaluation processes to determine effectiveness.

**HPER 527. Planning Leisure Lifestyles (3).** On demand. Investigation of decision-making processes applied to life planning for leisure settings; focus upon development and implementation of programs for wellness and life satisfaction for professionals in leisure program development. Prerequisite: permission of instructor.

**HPER 530. Administration of Interscholastic Athletics (3).** Opportunities for professionals to identify, investigate, analyze, and seek resolutions to problems in the administration of athletic programs.

**HPER 531. Athletic and Recreation Facilities Planning and Management (3).** Theory and practice concerning problems related to construction, programming, financing, and evaluation.

**HPER 532. Budgeting and Planning for Sport and/or Leisure Enterprises (3).** Budgeting and planning aspects such as spreadsheets, budgeting, documents, budget analysis techniques, and other aspects specific to the successful operation of a sport and/or leisure enterprise. Prerequisites: any accounting, budgeting, or finance course or consent of instructor.

**HPER 533. Marketing Strategies in Sport and Leisure Services (3).** An investigation of how marketing in sport and leisure services differs from traditional product-oriented marketing. Focus on developing unique marketing strategies and processes for successful management of sport and leisure service programs and facilities. Prerequisite: GBA 540 or MKT 300.

**HPER 535. Sport and Society (3).** Cultural trends motivating forces, socializing processes, and other psycho-social parameters of American sport. Seminar-type course with the opportunity for individual research and class interaction.

**HPER 536. Psychological Aspects of Physical Activity and Sport (3).** Knowledge concerning the understanding and analysis of human behavior as it relates to team performance and individual participation in sport and physical activity settings.

**HPER 539. Contemporary Elementary School Physical Education (3).** Survey of historical and philosophical development of current trends in elementary school physical education reflecting movement as the content of physical education and methods as they relate to decision-making role with the learner.

**HPER 540. Curriculum Development in Elementary School Physical Education (3).** Components of an emerging curriculum; practical application of theories when examining and developing materials.

**HPER 541. Program Planning for Secondary School Physical Education (2).** A series of course planning approaches for physical education examined. Evaluative and informative gathering techniques for the identification of student needs.

**HPER 542. Motor Development (3).** Observation and description of changes in motor behavior across the life span. Emphasis on endogenous and environmental factors that affect motor development in education, sport, and recreation activity settings.

**HPER 545. Planning and Evaluating Health Education Programs (3).** Alternate summers. Consideration of design, implementation, and assessment of health education programs.

**HPER 546. Application of Health Education Concepts (3).** Presentation of the major content and methodological components of health promotion programs. Prerequisite: HPER 545.

**HPER 550. Electrocardiography in Health and Exercise (3).** Techniques for recording/analyzing the ECG are presented. Electrophysiology of the heart, various rhythms, heart blocks and effects of pharmacologic agents will be examined. Prerequisite: 6 hours of physiology and permission of the Instructor.

**HPER 570. Readings in HPER (1-2).** Independent study, supervised study or selected problems, and readings. Proposed program of study must be approved by instructor prior to registration.

**HPER 580. Seminar in HPER (1-4).** Selected topics within the discipline. Content varies from one year (or semester) to next. May be repeated upon approval of student's adviser if graduate program department credit desired or at discretion of student for recertification or for personal growth.

**HPER 581. Seminar in Health Education (3).** Studies and discussions in health education; topics leading to research paper or thesis.

**HPER 582. Issues in Physical Education (3).** Survey, interpretation and evolution of past and present issues facing the profession. Solution-oriented investigation of contemporary issues through literature search, study of procedure for issue resolution and composition of original professional manuscripts.

**HPER 588. Seminar in Exercise Sciences (1).** Selected topics in exercise sciences including sportsphysiology, sportsmedicine, cardiac rehabilitation, biomechanics and other related areas will be analyzed and
Lawrence Daly;

\[ \text{HPER 589. Internship, Field Placement, or Practicum in HPER (1-3). Supervised experience within setting related to one's academic specialization. Proposed field placement registration must be approved by instructor/supervisor prior to registration. May be repeated.} \]

\[ \text{HPER 590. Teaching HPER at College Level (1-2). Focus on pedagogic aspects of HPER discipline within higher education. Techniques, strategies for utilization of HPER concepts and procedures in two-year, four-year, and/or graduate institution.} \]

\[ \text{HPER 595. Workshop on Current Topics in HPER (1-3). Study, readings, and development of materials related to needs of HPER practitioner. Topics vary from semester to semester. May be repeated on approval of student's adviser if graduate program department credit desired or at discretion of student for certification or for personal growth.} \]

\[ \text{HPER 597. Research Methods in Health, Physical Education and Recreation (1-4). Identification and evaluation of research problems, design, use of library resources, data gathering, application of statistical principles, and writing of theses and research reports.} \]

\[ \text{HPER 598. Directed Research in HPER (1-4). Supervised independent research on approved delimited topics. May run for longer than one semester. Proposal must be approved by instructor/supervisor prior to registration.} \]

\[ \text{HPER 599. Thesis Research (1-12). Enrollment in excess of six hours is acceptable for Plan I master's degree, but no more than six hours creditible toward degree. Minimum acceptable total for degree is three hours.} \]

\[ \text{Courses for Graduates and Undergraduates} \]

\[ \text{HED 409. School Health Services and School Environment (3). Consideration of school health services and school environment including principles, organization and administration of health appraisal, health counseling, communicable disease control, educational adjustments, emergency programs, record keeping and a safe school environment. Prerequisites: Junior standing. C/F hours: 20.} \]

\[ \text{HED 462. Driver Education - Advanced Instructors Course (3). Second of two courses needed to qualify a student to organize, administer and teach driver education in secondary schools. C/F hours: 15.} \]

\[ \text{History} \]

Gary R. Hess, Chair, 131 Williams Hall
Lawrence J. Friedman, Graduate Coordinator, 136 Williams Hall
Phone: 419-372-2030

\[ \text{Graduate Faculty} \]

\[ \text{Professors - Lawrence Daly, Ph.D.; Edmund Danziger, Ph.D.; Lawrence Friedman, Ph.D.; James Graham, Ph.D.; Gary Hess, Ph.D.; Kenneth Kiple, Ph.D.; William Rock, Ph.D.; David Rollser, Ph.D.; Don Rowney, Ph.D.; Ronald Seavoy, Ph.D.; David Skaggs, Ph.D.; Bernard Sternisher, Ph.D.; Jack Thomas, Ph.D.; David Weinberg, Ph.D.} \]

\[ \text{Associate Professors - Edward Chen, Ph.D.; Fujjya Kawashima, Ph.D.; Thomas Knox, Ph.D.} \]

\[ \text{Assistant Professor - Sarah Sharp, Ph.D.} \]

\[ \text{Graduate Degrees Offered} \]

Master of Arts and Doctor of Philosophy

Prerequisites to Graduate Work

Graduate study in history requires a minimum of 24 hours of undergraduate work in history, but a maximum of 6 hours of political science may be accepted as a part of the requirement of 24 hours.

Requirements for the Master's Degree

A candidate may pursue the regular master's degree under either of two plans, each of which requires a total of 33 semester hours of graduate credit. Plan I involves the writing of a thesis and an oral examination on the thesis and the field of history in which it lies. The language requirement for this plan may be fulfilled either through a dictionary reading knowledge of an approved foreign language or the satisfactory completion of HIST 596 (Quantitative Methods) or SOC 369 (Introductory Statistics). Plan II does not involve a thesis or a language requirement, but culminates in a comprehensive oral examination in two fields of history. The preparation for which normally entails the reading of at least six books in each field selected in consultation with two examiners. In both plans the student's program must include a sequence of two courses in historical methods, one course in historiography, and a graduate seminar. Plan I is recommended for students who plan to pursue doctoral work in history.

A master's degree candidate may also pursue a program in Public History, which provides professional education in archives and museum management, oral history, local history, and other endeavors through which historians cooperate with larger publics. This program is integrated into the graduate offerings in history. Among the 33 semester hours required for completion of the degree are 10 hours in public history courses, a thesis, and an internship involving on-site work experience.

M.A.T. in History

The student is required to take 35 semester hours of course work of which 21 to 27 must be in history and 8 to 14 must be in education. There is a final written comprehensive examination in history.

Requirements for the Ph.D. Degree

Application to the Department Program

The applicant should submit the following items along with the Graduate College's application for admission form: GRE scores, at least three letters of recommendation from professors of history or a closely related field; evidence of ability to do research and writing, such as a copy of a seminar paper or thesis.

General Requirements

The doctoral program in history requires the completion of 90 hours of approved graduate credit beyond the bachelor's degree (including a maximum of 30 hours of credit for research on the dissertation). All candidates for the Ph.D. degree will be required to spend at least two consecutive semesters beyond the master's degree (or equivalent) in residence at the University, during which a minimum of six hours of work must be completed satisfactorily each semester. The language requirement may be satisfied, in consultation with the student's doctoral committee, in one of the following ways:

A. A thorough knowledge of one approved foreign language or a dictionary reading knowledge of two approved foreign languages;
B. Satisfactory completion of CS 500 and, as a departmental requirement for students utilizing this option, the completion of SOC 369 (Introductory Statistics);
C. Satisfactory completion of an integrated program of three two-credit courses (not less than a total of 6 hours) in
statistics.
(For certain doctoral research fields, a demonstration of competence in the appropriate language is mandatory.)

Requirements in History
Candidates must complete a sequence of HIST 597 (Historical Methods) and HIST 596 (Quantitative Methods), a course in historiography, and at least one graduate seminar. Candidates will be required to prepare either four subject fields in history or three and a cognate field (an area of another professional discipline or an interdisciplinary area) for their preliminary examinations.

Dissertation
An important part of the student's work in the doctoral program is the preparation of a dissertation. This is a mature piece of writing embodying the results of significant research in a specialized area. Dissertations may be written in areas of American, European, Latin American, and East Asian history that are consistent with departmental strengths. They may also be written in the area of history and contemporary policy.

Examinations
A. Admission to candidacy for the Ph.D. will be granted to the student following the successful completion of preliminary examinations. These consist of written and oral exercises covering the student's four fields.
B. Upon completion of the doctoral dissertation and its approval by the members of the dissertation committee, the candidate will defend it orally.

Courses for Graduates
HIST 511. Latin American History (3) II. Studies in geographical, chronological, or topical units of Latin American history designed to draw together significant trends in the area's development. May be repeated.

HIST 521. Problems-Early American History (3) I. Intensive study of selected problems, such as the nature of the colonial system, social aspects of the American Revolution, reasons for the break with England; emphasis on bibliography and on variant interpretations.

HIST 526. Problems-19th Century America (3) II. Selected themes and historiographical problems, such as development of political parties, reform movements, territorial expansion, Civil War and reconstruction, response to industrialism.

HIST 529. Problems-20th Century America (3) I. Principal works and interpretations of American political and diplomatic history in the 20th century.

HIST 536. Problems-American Social and Intellectual History (3) II. Basic topics in American social, cultural, and intellectual history such as development of social sciences, religious institutions and thought, medical institutions and thought, and rise of public education.

HIST 547. Problems in Modern European History (3) I. Major interpretive problems in European history since 1750.

HIST 551. American Historiography (3) I. American historical writing in 19th and 20th centuries; emphasis on principal philosophical tendencies.

HIST 552. European Historiography (3) I. Major historical writers and schools of Europe; emphasis on intellectual problems involved in writing history.

HIST 554. Museology (3). The focus shall be upon the philosophy of museums, the functions of museums from collection and classification to preservation and exhibition, and public relations aspects of a museum’s existence. Considerable emphasis shall be placed upon the nature and significance of the history of material culture.

HIST 555. Archives and Computer Readable Information (3) I, II. Developing, servicing, and using an archive of machine-readable historical data. Archival administration, collection standards and priorities, documentation standards, cataloging procedures, archival security, and recordkeeping. Laboratory segment in acquiring, cleaning, inventorying, and diffusing data.

HIST 556. Archives Administration (4) I. Professional ethics and standards, principles of planning, public relations, programs, financial matters, and director-trustee relations. Three hours of lecture and two hours of laboratory.

HIST 557. Historical Society Administration (4) II. Implementation history; curatorial concepts and responsibilities, educational and cultural activities, research, and publications. Three hours of lecture and two hours of laboratory.

HIST 558. Oral History: Theory, Methods and Use (3) I. The course shall provide an overview of the historiography of oral history; of the uses of oral history in the documentation of various aspects of local history; and of the numerous steps and skills involved in the research, conduct and completion of oral history interviews and projects.

HIST 562. Great European Revolutions (3) II. Comparative analysis of major European revolutions from 18th to 20th century, considering preconditions of revolutionary situations, elite and insurgent roles, influence of ideology. Reading knowledge of foreign language helpful, but not prerequisite.

HIST 570. Graduate Readings in History (1-3). Supervised individual readings to meet student's special needs. Prerequisite: consent of instructor and department. May be repeated.

HIST 580. Graduate Seminar (1-3). Systematic study of selected topics in history. Content of seminar varies from semester to semester. May be repeated on approval of graduate coordinator.

HIST 581. Seminar in American Studies (4) II. Interdisciplinary seminar coordinated in rotation by members of Departments of History, English, Philosophy, Political Science, Sociology, and the School of Art using lectures and subsequent discussion and papers to study problem, theme, or era.

HIST 583. Topics in Psychohistory (3) I. Basic assumptions of Freudian theory and applicability of those assumptions to American and European historical experience.

HIST 584. Problems in Modern East Asian History (3) II. Selected topics, primarily political and diplomatic, in East Asian history in 19th and 20th centuries. May be repeated.

HIST 589. Internship in Public History (1-4). Provides practical experience working as an historian to student concentrating in Public History. Possible work sites include museums, archives, government agencies, businesses, historical societies, and parks.

HIST 590. Teaching History at College Level (3) I. Problems including examination of literature, and systematic observations and evaluations of teaching performance in various situations. Graded S/U.

HIST 595. Workshop on Current Topics in History (1-3) I, II, summer. On demand. Study, readings, and development of materials related to needs of history teachers. Topics vary from semester to semester.

HIST 596. Quantitative Methodology (3) II. Quantitative methodology in historical research, examination of quantitative sources, and training in their use.

HIST 597. Historical Methods (3) I. Introduction to research and writing stressing the importance of
an interdisciplinary approach, introducing a variety of methodological techniques, and incalculating an understanding of basic research procedures.

HIST 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for a Plan I master's degree, but no more than six hours creditable toward degree.

HIST 621. Seminar: Latin American History (3) II. Examination of literature and source material dealing with a specific area of Latin American history.

HIST 622. Seminar: American Revolution and Early United States (3) II. Directed research on economic, political, social, intellectual, and military aspects of revolutionary and early national period (1763-1815).

HIST 624. Seminar: Society and Economy of Old South (3) I. Economy of ante-bellum South including agricultural, commercial, and transportation systems, and of distinguishing characteristics of ante-bellum Southern society with view to understanding historical relationship to secession, Civil War and recent south.

HIST 625. Seminar: American Indian (3) II. Study and directed research of pre-Columbian Indian cultures, European and U.S. governmental policies toward Indians, persistence of racism, and Indians' contribution to American culture.

HIST 634. Seminar: American Social and Intellectual History (3) II. Selected problems and topics in 19th and 20th century American social, cultural, and intellectual history. Culminated by preparation of article for professional journal.

HIST 636. Seminar: America in the 1930s (3) II. Topics in political, economic, social, cultural, and intellectual history of 1930s.

HIST 638. Seminar: 20th Century American Diplomacy (3) II. Topics and problems of American foreign policy since 1900.

HIST 640. Local History (3). Selected topics in early modern and modern European, American, and East Asian local history. Emphasizes the comparative, cross-cultural, and interdisciplinary nature of the study of local history.

HIST 651. Seminar: Modern European History (3) I. Selected problems in modern European history.

HIST 671. Seminar: Modern Russian and Soviet History (3) I. Topics in Russian and Soviet history; introduction to relevant historiographical tools and to problems of conducting research in Russian and Soviet history.

HIST 691. Topics in History (1-3) I. Credit for dissertation research. Enrollment in excess of 30 hours acceptable for a Ph.D. degree but no more than 30 hours creditable toward degree.

Courses for Graduates and Undergraduates

HIST 401. Caesar and Christ: Social Worlds of Late Antiquity and Early Christianity (3) I. Basic issues and problems involved in tensions and conflicts between pagan and Christian that were eventually accommodated in 4th century A.D.; social disaffection, political resistance, and cultural alienation.

HIST 411. Modern Mexico (3) II. Analysis of first Latin-American state to experience political, social, and economic revolution in 20th century; causes of the revolution, leaders and institutions produced, emergence of Mexico as relatively stable and progressive state.

HIST 413. Caribbean and Spanish Main (3) II. Political, economic, and social development of Greater Antilles and Spanish Main from 17th to 20th centuries; war and trade, slavery, revolution, caudillos, and communism in Caribbean.

HIST 414. Canada (3) I. European colonial rivalry, problems of European-settled colonies, emergence of colonial self-government, confederation movement, search for national identity, nature of commonwealth nation, role as mediator in Anglo-American relations, importance as independent neighbor.

HIST 415. Spain and Portugal (3) II. Political, economic, and social development of Iberian peninsula from invasion of Moors to 20th century dictators; re-conquest, reign of Hapsburgs, Spanish civil wars, regimes of Franco and Salazar.

HIST 419. Westward Movement in America (3) I. Development of Trans-Mississippi West during 19th century; American Indian, territorial expansion, sectional conflict, economic development.

HIST 421. American Colonial History, 1492-1763 (3) I. European backgrounds of American history, establishment of European settlements and institutions, emergence of colonial culture, conflict between France and England for New World.

HIST 422. American Revolutionary Era, 1763-1815 (3) II. Causes, course, and consequences of War for Independence; organization of government and emergence of national party system; economic, social, diplomatic problems of young republic.

HIST 425. Conflict and Division in U.S. (3) I. Economic, social, political institutions of 1815-1860; Old South and forces that produced Civil War.

HIST 426. Civil War and Reconstruction, 1861-1877 (3) II. Political, economic, and cultural conditions during War; resulting problems to peoples and governments of both sections continuing through postwar period.

HIST 427. American South, 1865-Present (3) II. Reconstruction South, new industrial growth, evolution of Southern agriculture, racial and labor problems. South in American political life, southern education and culture, South today.

HIST 428. U.S., 1877-1917 Industrialization and Reform (3) I. Transformation of U.S. from agrarian nation to industrialized society and attendant political and economic problems: urbanization, immigration, farmers' protest, rise of political reform movements, the Progressive Movement.

HIST 429. U.S., 1917-1945 Normalcy and Depression Between the Wars (3) II. Political, economic and social impact on America of increasing role of the federal government; World War I; the Twenties; the Great Depression; World War II.


HIST 433. American Constitutional History (3) I. Constitutional developments from the framing of the Constitution in 1787, which established a federal republic that protected states rights, to the creation of a national republic following the Civil War that actively aided the rapid industrialization of the United States and created the need for business regulation, a social welfare state, national protection of civil rights, and an expanded role of presidential lead-
ership.

HIST 436. American Social History (3) I. An examination of select topics in the American social and emotional experience during the 19th and 20th centuries: nationalism, regionalism, urbanization, immigration, ethnicity, professionalism, and mental health.

HIST 437. U.S. as World Power in 20th Century (3) I. American involvement in world affairs: imperialism in Asia and Latin America; World War I - response to German militarism and Russian communism; post-war "isolationism"; World War II - background to Pearl Harbor, wartime alliances, peace settlements.

HIST 441. Classical Hellenism (1000-300 B.C.) (3) I. Ancient Greek society and culture from "dark ages" through "golden age" of 5th century. Resourcefulness of Hellenism in democratic politics, imperialistic policies, and classic products of Periclean Athens. Weakness of Greek civilization in coping with crises engendered by Atheno-Peloponnesian war.

HIST 442. Roman Revolution: From Gracchus Through Caesar Augustus (3) II. Crisis of social turbulence, political violence, and cultural ambivalence that marked Rome's transition from city-state to world state; inquiry into how and why Roman archaism, republicanism, and imperialism contributed to collapse of Late Republic and creation of Early Empire.

HIST 444. The Making of Europe (3) II. Selected cultural, religious, and economic aspects of the Middle Ages which laid the framework for modern European Civilization; cross-cultural contacts with the Christian and Islamic East.

HIST 446. Early Modern Europe, 1450-1750 (3) I. Comparative study of European societies in an age of transition. Examines the Renaissance, the Reformation, the growth of absolutism and constitutionalism, economic expansion, social change, intellectual development, and the emergence of baroque art forms.

HIST 448. Modern European Society and Thought (3) II. Major social and intellectual trends in modern European society, including liberalism, socialism, Marxism, fascism, existentialism and post-war disillusionment.

HIST 454. European Foreign Relations, 1914-Present (3) I. Foreign policies and diplomatic practices of the great powers and their statesmen: World War I, postwar quest for stability; World War II, Europe in the Cold War; contemporary problems.


HIST 459. Great Britain, 1689-Present (3) II. Growth of parliaments and government; the impact of the Enlightenment, the French Revolution, and industrialization; Victorian England; political and economic reform; two world wars and their consequences.


HIST 464. History of France Since 1815 (3) I. Social and economic development of France, 1815-Third Republic; Jacobin radicalism, emergence of French labor movement; France between two world wars; Vichy and the Resistance; problems of Fourth and Fifth Republics.

HIST 466. Medieval and Imperial Russia, 900-1825 (3) I. Radical, political, and religious origins; development of autocracy; national and imperial problems to death of Alexander I.

HIST 470. Modern Russia, 1825-Present (3) II. Major topics in 19th and 20th century Russian history: political systems and personalities, territorial control and foreign relations, economic development, disintegration of the empire, and post-World War II developments.

HIST 471. Education and Revolution in Russia (3) II. Russian-Soviet struggle to create perfect society in world through interplay of education and revolutionary ideology as reciprocal political tools.

HIST 483. Revolution and Tradition in Modern China (3) II. China from decline of Ch'ing dynasty to rise of People's Republic, problems of culturalism, nationalism and Maoist strategy for successful peasant revolution. China's cultural legacy, struggles for unity and independence, China's relations with U.S.

HIST 486. Japan: New Superpower (3) I. Japan's successful modernization since "opening" to West in 1853; political development, industrialization, expansion; Japan's rise from defeat in World War II to world economic power.

Interpersonal and Public Communication

South Hall, Room 303
Phone: 419-372-2823
James R. Wilcox, Graduate Coordinator, 412 South Hall
Phone: 419-372-7172

Graduate Faculty
Professors - Ray Tucker, Ph.D.;
Richard Weaver, Ph.D.
Associate Professors - Donald Enholm, Ph.D.; Carl Holmberg, Ph.D.;
James Wilcox, Ph.D.
Assistant Professor - Patricia Arneson, Ph.D.

Graduate Degrees Offered
Master of Arts and Doctor of Philosophy

Prerequisites to Graduate Work
For admission to master's level of study in interpersonal and public communication, an applicant must hold a bachelor's degree from an accredited institution with a satisfactory academic record. Normally, the applicant will have an undergraduate major or minor in one of the related communication fields; others will be considered for admission on an individual basis. Applicants without sufficient coursework background may expect to complete remedial or additional coursework during the M.A. course of study.

Admission to the doctoral program requires an appropriate master's degree from an accredited institution with an excellent academic record, evidence of research proficiency, and a record which otherwise indicates potential for successful advanced work.

Admission to graduate work is, in the final analysis, a composite decision made by the departmental admissions committee. It is based upon prior academic experience and achievement, scores on the Graduate Record Examination, recommendations and the applicant's stated goals.

Requirements for the Master's Degree
All master's degree students must complete the following course: IPCO 597: Research Methods in Interpersonal and Public Communication. Additionally, the MA student must complete at least one course in the following areas: Rhetorical Criticism,
The following areas are presented as areas of strength within the doctoral program and thus represent broad areas within which doctoral dissertations are being written: interpersonal and organizational communication, rhetorical theory and criticism.

Courses for Graduates

IPCO 521. Rhetorical Theory: Classical (3) I. Study of important treatises, figures, and issues in the history of rhetoric from Homer through St. Augustine, emphasizing the Sophists, Plato, Isocrates, Aristotle, Cicero, and Quintilian.

IPCO 580. Graduate Seminar in Interpersonal and Public Communication (1-3). Systematic study of selected topics in Interpersonal and Public Communication. May be repeated with consent of graduate coordinator.

IPCO 589. Internship (1-10). Supervised experience in setting relating to specializations in rhetoric and communication. Prerequisite: consent of Director of Graduate Studies.

IPCO 590. Nonverbal Communication (3) I. A study of the nonverbal components of human interaction including facial expression, body movement and gesture, spatial behavior, self-presentation, paralinguistics, chronemics, and object language.

IPCO 595. Workshop on Current Topics in Interpersonal and Public Communication (1-3) On demand. Topics vary from semester to semester. May be repeated with approval of Director of Graduate Studies.

IPCO 597. Research Methods in Interpersonal and Public Communication (3) I. Introduction to research strategies and techniques and implications for interpersonal and public communication.

IPCO 598. Research Problems in Interpersonal and Public Communication (1-3). Independent studies and research problems in interpersonal and public communication for master’s degree students. Registration must be approved by director of graduate studies. May be repeated with approval.

IPCO 599. Thesis Research (1-12). Three to six hours of thesis research may be credited toward a master’s, but student is required to register for as many additional hours as necessary to complete thesis.

IPCO 619. Rhetorical Criticism (3) II. Perspectives and methods of rhetorical criticism with applications to rhetorical practices.

IPCO 620. Rhetorical Theory: Contemporary (3) Alternate years. Examination of major rhetorical theorists of the 20th century: Richards, Weaver, Langer, Cassirer, Burke. Emphasis on central themes, problems, similarities, and differences.

IPCO 622. Communicative Competency (3) II. A social skills approach to the study of human communication.


IPCO 624. Interpersonal Communication (3) II. Emphasis on theory and research relating to dyadic communication.

IPCO 625. Small Group Communication (3) Every other year. The study of human interaction in the small group setting. Practical experiences with simulations, game cases, studies, and structured human relations experiments. Applications to organizational consulting and communication seminars.

IPCO 628. Organizational Communication (3) II. Structural-functional approach to communication in organizations; problems of information load, content and procedural rules, and networks; techniques of auditing organizational communication behaviors.

IPCO 629. Topics in Communication and Conflict (3) On demand. Studies of the consequences of conflict on communication processes in dyadic, group, and organizational settings: negotiations and bargaining, mediation and arbitration as third party intervention processes.

IPCO 640. Health Communication (3) II. Introduction to health communication from the communication perspective. Course will expose the student to past and current research in the field of health communication and will require the student to apply various methodologies in a related research project.

IPCO 642. Instructional Communication (3) II. Designed for potential college teachers of interpersonal and public communication courses, it offers research, theory, methods, issues, and practical tips.

IPCO 644. Ethics and Persuasion (3) Alternate years. Exploration of ethical problems related to persuasion; emphasis on various approaches: means, ends, rationality, marketplace of ideas, dialogue, amorality, and symbol usage.

IPCO 680. Graduate Seminar in Interpersonal and Public Communication (1-3). Systematic study of
selected topics in Interpersonal and Public Communication. May be repeated with consent of graduate coordinator.

IPCO 689. Internship (1-10). Supervised experience in setting relating to specializations in rhetoric and communication. Prerequisite: consent of the director of graduate studies.

IPCO 691. Practicum in Interpersonal and Public Communication Assistantship/Fellowship Activities (1). Problems which arise in day-to-day assistant/fellow activities. Includes observation by regular faculty. Graded S/U. Must be taken by graduate assistants/fellows each term they have an assignment.

IPCO 697. Scientific Method in Communication Research (3). II. The application of scientific method to human communication research problems. Prerequisite: one course in statistical inference at the graduate level.

IPCO 698. Research Problems in Interpersonal and Public Communication (1-3). Independent studies and research problems in interpersonal and public communication for doctoral students. Registration must be approved by director of graduate studies. May be repeated with approval.

IPCO 724. Interpretive Research Methods in Communication Research (3). II. Introduction to methodological techniques employing the qualitative collection and analysis of data in communication studies. Includes participant observation, interviewing, focus groups, and historical documentation. Research submitted for professional review.

IPCO 725. Research in Group Communication (3). On demand. Research methods in small group communication with emphasis on observational techniques. Presentation of research report.

IPCO 726. Topics in Argumentation and Debate (3). On demand. Theory and practice of analyzing argumentations and debates, including legal argument, political argument, and legislative debates. May be repeated.

IPCO 727. Topics in Rhetoric (3). On demand. In-depth studies of theories, theorists, or specialized topics in rhetoric. May be repeated.

IPCO 728. Research in Organizational Communication (3). On demand. Contemporary research findings in organizational communication with special emphasis on methodologies for studying and auditing networks, climate, information load, and rules.

IPCO 729. Topics in Communication

Mass Communication

Dennis Hale, Director, 302 West Hall
Phone: 419-372-8349
Srivas Melkote, Graduate Coordinator, 324 West Hall
Phone: 419-372-8641

Graduate Faculty
Profsseors - Harold Fisher, Ph.D.; F. Dennis Hale, Ph.D.; John Huffman, Ph.D.; Denise Trauth, Ph.D.
Associate Professors - James Bissland, Ph.D.; Laurence Jankowski, Ed.D.; Ray Laakanlemi, Ph.D.
Assistant Professors - Denise Hartsough, Ph.D.; Bruce Klopstein, Ph.D.; Srivas Melkote, Ph.D.

Graduate Degrees Offered
Master of Arts, Master of Arts in Teaching, and Doctor of Philosophy

Requirements to Graduate Work
Admission to graduate study at the master's level normally requires 36 quarter hours or 24 semester hours of undergraduate work in mass communication fields. Students with undergraduate majors in fields other than mass communication will be considered for admission on an individual basis; s/he may be required to take undergraduate coursework in appropriate mass communications courses as part of her/his program. In special circumstances, a student with appropriate professional background may be admitted to advanced study. A student who has obtained a master's degree in mass communication from an accredited institution may be admitted to advanced graduate study beyond the master's level if the School judges that his/her record indicates potential for successful advanced work.

Requirements for the Master's Degree
Two plans (I and II) are available to students pursuing the master's degree. The student pursuing Plan I will choose courses which will prepare him or her to carry out the independent research necessary to complete an acceptable scholarly thesis. Plan II requires the student to take additional course hours and pass a comprehensive exam.

ALL master's students must successfully complete the following courses:
1. MCOM 530 (3 hrs.) - Quantitative Methods in Mass Communication Research
2. MCOM 510 (3 hrs.) - Proseminar in Mass Communication
3. MCOM 511 (3 hrs.) - M.A. Seminar in Mass Communication Theory
4. Choice of courses - At least six hours of MCOM 600-level courses; this does not include 600-level readings, internships or research problems courses (MCOM 670, MCOM 689, MCOM 698).

Plan I: Thesis Option (30 Hours)

Plan I: Thesis Option (30 Hours)

Planned program: 15 hours of coursework in addition to courses listed above, including three hours of MCOM graduate coursework and 12 hours of coursework either in MCOM or in cognate area.

Up to four hours of thesis credit (MCOM 599) and/or up to three hours of internship credit (MCOM 589) may count toward the degree. No more than three hours of independent study may be credited toward the degree.

Final examination: Oral defense of thesis and examination over related topics.

Thesis-track students must present their proposal or thesis research to the proseminar class or at a paper conference.
Plan II: Non-thesis Option (36 hours)

Planned program: 21 hours of coursework in addition to courses listed above, including nine hours of MCOM graduate coursework and 12 hours of coursework either in MCOM or in cognate area. Up to three hours of internship credit (MCOM 589) may count toward the degree. No more than three hours of independent study may be credited toward the degree.

Final examination: Comprehensive examination based on coursework and program reading list.

Requirements for the Ph.D.

Degree

The basic requirements for the Ph.D. degree are established by the Graduate Council of the Graduate College and are published elsewhere in this catalog. Each candidate should read them carefully as well as the information below.

The Ph.D. degree in Mass Communication requires a minimum of 60 semester hours beyond the master's degree. Students must successfully complete core courses: MCOM 505, MCOM 506, MCOM 510 and MCOM 611. Additional minimum requirements include three to six hours of Research Practicum (MCOM 598), 16 hours of 600- and 700-level courses in MCOM, successful presentation of two major papers and the dissertation proposal. An approved research tool sequence beyond the 60-hour requirement is also obligatory.

Ph.D. candidates must pass a qualifying examination, a written preliminary examination and an oral defense of a completed dissertation. The dissertation must be an appropriate culmination of the candidate's program of study and should represent scholarly research appropriate in method and subject to the degree program.

All requirements are detailed in doctoral guidelines available to applicants and to enrolled candidates for the degree.

Areas of Study in Mass Communication

The student seeking an M.A. degree may specialize in a number of sub-areas including, but not limited to, audio, video and film writing and production, programming, audience research, newspaper journalism, magazine journalism, photojournalism, broadcast journalism, public relations, media management, new communications technology, mass communication theory, media history and criticism, mass communication law, international/development communication and mass media research. The doctoral student may specialize in media law and policy, international/development communication, new communications technology, or mass communication and related social research. Interdisciplinary study by taking cognate courses in related areas is encouraged on both the M.A. and Ph.D. levels.

Courses for Graduates

MCOM 503. Assistantship Activities (1). Practicum in assistantship requirements, activities and problems. Must be taken by all graduate assistants. Graded S/U.

MCOM 505. Quantitative Methods in Mass Communication Research (3) II. Development of research literature in mass communication including major psychological and sociological streams. Role of theory construction in social science. Includes introduction to mass communication research and techniques.

MCOM 506. Introduction to Qualitative Methods (3) I. Methods of researching and presenting historical, legal and critical problems relating to mass communication.

MCOM 510. Proseminar in Mass Communication (3) I. Study of general or cross-disciplinary topics. May be repeated with permission of graduate coordinator. Graded S/U.

MCOM 511. Master's Seminar in Mass Communication Theory (3) I. Examines development of research literature in mass communication. Considers the role of theory construction in social science. May be repeated with permission of graduate coordinator.

MCOM 520. History of American Broadcasting (3) I. Technical and economic development of radio and television in the United States; programs and personalities of broadcast industry since its inception.

MCOM 521. Regulation of American Broadcasting (3) II. Roles of federal, state, and local government, broadcasting industry, and public in regulation of American radio and television.

MCOM 522. Educational Broadcasting (3) I. Role of educational radio and television station in formal and informal education. Program planning from inception through production, scheduling, evaluation.

MCOM 523. History and Criticism of Film (3) II. Early development of technology and production of motion picture; film as art as viewed by filmmakers and critics.

MCOM 524. Producing and Directing for Television (3) I. Advanced theory and practice of television program production and directing; creative, experimental program forms. Laboratory fee.

MCOM 525. Producing and Directing for Film (3) II. Producing, writing, directing, editing 16mm films; experimentation with new and creative techniques. Laboratory fee.

MCOM 526. Writing for Radio, Television and Film (3) II. Practical and theoretical applications of writing technique in radio, television and film. Style and development in content realization.

MCOM 527. Programming in Radio and Television (3) I. Programming techniques in broadcast scheduling and program planning. Commercial and educational network and local station format; image development in radio and television.

MCOM 528. Broadcast Station Management and Operations (3) I. Broadcast management functions, advertising, network and labor relations, internal organizational structure, operational procedures.

MCOM 570. Readings in Mass Communication (1-3). Supervised independent program of tailored readings in selected topics, issues or problems pertinent to student's interests or needs. Proposed program must be approved by instructor prior to registration. May be repeated. Graded S/U.

MCOM 580. Graduate Seminar in Mass Communication (1-3). Selected theoretical or practical problems in mass communication, including specialized areas such as broadcast journalism, newspaper or magazine journalism, public relations, photojournalism, international development/communication, and radio-television-film.

MCOM 589. Internship in Mass Communication (1-3). Supervised practical field application of a mass communication specialization in a professional setting. Prerequisites: Core and basic M.A. courses in student's specialization, plus consent of supervising professor. Graded S/U.

MCOM 595. Workshop on Current Topics in Mass Communication (1-3) On demand. Readings, experiences; topics vary from semester to semester. May be repeated on approval of director of graduate studies.

MCOM 598. Research Problems in Mass Communication (1-3) On demand. The student may specialize in mass communication, including specialized areas such as broadcast journal-
Mass Communication - Math. & Statistics

film and broadcast criticism are compared and contrasted, and further developed for future use in original research projects.

MCOM 670. Readings in Mass Communication (3). Supervised independent program of tailored readings in selected topics, issues or problems pertinent to student's interests or needs. Proposed program must be approved by instructor prior to registration. May be repeated. Graded S/U.

MCOM 680. Graduate Seminar in Mass Communication (1-3) Selected cross-disciplinary theoretical or practical problems in mass communication.

MCOM 689. Internship in Mass Communication (1-3) On demand. Supervised practical field application of a mass communication specialization in a professional setting. Prerequisites: Core and basic courses in student's specialization, plus consent of the supervising professor. Graded S/U.

MCOM 698. Research Problems in Mass Communication (1-3) On demand. Directed research on general or cross-disciplinary mass communication topics. Prerequisite: consent of instructor and MCOM 505 or 506.

MCOM 799. Dissertation Research (1-16) Student must register for minimum of 16 hours in 799 while working on doctoral dissertation; may be repeated to 36 hours in degree program.

Courses for Graduates and Undergraduates

MCOM 402. Journalism Law and Ethics (3). Legal concept of freedom of the press, constitutional guarantees, libel, privacy, copyright, broadcast regulation, contempt, obscenity, ethical problems, right to know.

MCOM 403. The Editorial (3) I. Techniques of persuasive and critical writing and the role of editorial opinion in modern mass media.

MCOM 414. Supervision of High School Publications (3) II.

For teachers or prospective teachers of high school journalism or adviser of school newspapers or yearbooks.

MCOM 431. Interpretive Reporting (3) I. Research and writing of in-depth reports, interpretive news, profiles, background stories, news analyses. Investigative reporting of current events and issues.

MCOM 432. Newsroom Decision Making (3) II. Newspaper editors, goal setting, problem analysis, readership analysis, publication conception and creation, staff management.

MCOM 433. Government and the News Media (3) I. Origins and concept of freedom of information and evolution in constitutional law and judicial decisions; contemporary problems of censorship in publishing, broadcasting and film.

MCOM 435. Press and Society (3). Press as institution; its role, content, effects and responsibilities as a cultural force in society.

MCOM 440. Public Relations Techniques (3) I, II. Application of public relations theories, tools and techniques to the public relations campaign. Research, planning and execution are practiced.

MCOM 4470. Foreign Press Systems (3) I. Social, economic and political factors, organization and controls in the national and foreign press systems, practical projects or intensive reading to meet needs of student's special interests. Prerequisite: consent of instructor.

MCOM 471. International Media Networks (3) II. Factors affecting flow of world news and information in international networks.

MCOM 490. Special Problems in Journalism (1-3) I, II. Summer. Research problems, practical projects or intensive reading to meet needs of student's special interests. Prerequisite: consent of the instructor.

Mathematics and Statistics

Hassoon Al-Amiri, Chair, 458 Mathematical Sciences Building
James Albert, Graduate Coordinator, 407 Mathematical Sciences Building

Phone: 419-372-2636

Graduate Faculty


Associate Professor - James Al-bert, Ph.D.; Charles Applebaum, Ph.D.; Thomas Hern, Ph.D.; David Merson, Ph.D.; Truc Truong Nguyen, Ph.D.; Victor Norton, Ph.D.

Assistant Professor - Neal Carothers, Ph.D.; So-Hsiang Chou, Ph.D.; Barbara Moses, Ph.D.; Edsel A. Pena, Ph.D.; Steven Seubert, Ph.D.

Graduate Degrees Offered

The Department of Mathematics
Math. & Statistics

and Statistics offers the Master of Arts, the Master of Arts in Teaching, and the Doctor of Philosophy degree program. The Master of Science in Applied Statistics is offered jointly with the Department of Applied Statistics and Operations Research. In addition, a mathematics supervision program is available which leads to a Specialist in Education degree.

Prerequisites to Graduate Work
The preferred foundation for graduate work in the department is a college major in mathematics or a closely related area. A student with less than this level of preparation may be accepted if it appears that he/she is prepared to pursue graduate work with profit. Minimum preparation consists of a full year in differential and integral calculus and two courses in which calculus is a prerequisite. An applicant should submit Graduate Record Examination scores.

Requirements for the Master's Degree
To earn the Master of Arts degree in mathematics, the student must satisfy all of the University requirements for the degree. He or she must complete at least 30 hours of credit in graduate course work, with at least 18 of these credits earned in mathematics courses numbered 500 or above, excluding MATH 590, MATH 591, and MATH 595. In addition, the student must satisfy all the requirements in one of the three groups described below.

Pure Mathematics - The required courses are MATH 533, 534, 565, 566. This group is designed for students who are interested in obtaining a broad background in pure mathematics, or who are interested in pursuing a Ph.D. degree in mathematics.

Mathematical Statistics - The required courses are MATH 565, 541, 542, and two additional courses in specialized areas of statistics selected from among MATH 544, 545, 547, 549, 571, 640. This group is intended for students interested in statistics. This track can also lead to further study toward the Ph.D. in mathematical statistics with the addition of MATH 566.

Scientific Computation - The required courses are MATH 439, 561, 518, 568, and 569. This group is intended for students interested in applied mathematics. Students entering this group are expected to have completed courses in linear algebra, advanced calculus, ordinary differential equations, and programming in FORTRAN 77 or PASCAL before (or soon after) entry.

Each of the three programs may be accomplished under Plan I (thesis) or Plan II (nontesis) as described elsewhere in this catalog. Cognate courses from other fields may be included in the student's plan, subject to the approval of the departmental graduate coordinator. The actual course of studies is designed by the student in consultation with, and with the consent of, the departmental graduate coordinator on an individual basis.

Requirements for the Master of Arts in Teaching Degree
The Master of Arts in Teaching degree is offered under Plan II for experienced teachers.

Requirements for the Ph.D. Degree
In addition to Graduate College requirements, the student seeking the Ph.D. degree must follow a program which includes several standard required courses. He or she must also earn at least 6 credits in an active program of study in a single cognate area. At about 30 hours of work beyond the M.A. degree, the student must take a written and/or oral preliminary exam in three areas of study. After passing this exam, the student is admitted as a candidate for the Ph.D. degree. The student must then write an original dissertation which is publishable. If the dissertation committee is of publishable quality, he or she is granted the degree after the dissertation is approved by the dissertation committee, and the student has passed the final oral exam in defense of the dissertation.

The following represent broad areas within which doctoral dissertations are being written: analysis, algebra, probability, and statistics.

Courses for Graduates

MATH 505. Topics in Geometry (3). Basic higher geometry including sets, logic, postulational systems, transformations and invariants.

MATH 513. Applied Differential Calculus (3). Analytic geometry in two and three dimensions, limits, the derivative, differentiation techniques, partial derivatives, and applications of differential calculus. Credit not applicable toward degree in mathematics.

MATH 514. Applied Integral Calculus (3). Definite and indefinite integral, integration techniques, multiple and iterated integrals, sequences, series, and applications of the integral. Credit not applicable toward degree in mathematics. Prerequisite: MATH 513 or equivalent.

MATH 515. Matrix Theory and Linear Algebra (3). Elementary operations on matrices, topics from linear algebra on applications. Credit not applicable toward degree in mathematics.


MATH 519. Topics in Mathematical Biology (3). Mathematical modelling techniques in the biological sciences. Prerequisite: consent of instructor.


MATH 521. Logic (3). Propositional calculus, predicate logic, first order theories. High level introduction to logical theories with no prerequisite except considerable mathematical maturity.

MATH 525. Set Theory (3). Axioms of set theory, definitions and basic properties of relations and functions, axiom of choice and its
equivalents, cardinal numbers, ordered sets, ordinal numbers.

MATH 533. Algebra I (3). Groups, rings, fields, and other algebraic structures. Prerequisite: MATH 403.

MATH 534. Algebra II (3). Continuation of MATH 533.

MATH 538. Linear Algebra (3). Vectors and matrices, quadratic forms, positive definite matrices, convexity, classical inequalities, generalized inverses. Prerequisite: consent of instructor.

MATH 541. Probability Theory I (4). Axiomatic foundations of probability theory; discrete and continuous type random variables and their distributions; random vectors and their functions; special probability distributions including multivariate normal; generating functions; limiting moment generating functions; weak law of large numbers and central limit theorem. Simple random sampling; sampling from univariate and bivariate normal; exact sampling distributions; theory of point estimation; sufficiency, completeness, unbiased estimation, Cramer-Rao inequality. Prerequisite: MATH 430 or consent of instructor.

MATH 542. Mathematical Statistics II (4). Maximum likelihood estimation, Bayes and minimax procedures; Neyman-Pearson theory of testing hypotheses; power function, most powerful and uniformly most powerful tests. Theory of confidence estimation and interrelationship with tests of hypotheses; shortest length confidence intervals; likelihood ratio tests; decision theory; analysis of variance; nonparametric procedures; sequential probability ratio test. Prerequisite: MATH 541.

MATH 544. Stochastic Processes (3). Stochastic models including discrete and continuous time; Markov chains and Brownian motion; introduction to topics: Gaussian processes, queues, theory of dams and storage, epidemic models, branching processes, renewal processes. Prerequisite: MATH 541.

MATH 545. Statistical Distribution Theory (3). Distributions, their transformations and characterizations, exact sampling distributions: approximate distributions; Gram-Charlier and Edgeworth series; Monte Carlo method; asymptotics including delta method. Prerequisite: MATH 541 or consent of instructor.

MATH 546. Nonparametric Statistical Inference (3). Nonparametric estimation; sufficiency, completeness, and unbiased estimation; tests of hypotheses without specification of underlying distribution; rank tests; tolerance and confidence sets; consistency and power of various tests; robust methods. Prerequisite: MATH 542 or MATH 541 and MATH 442.

MATH 547. Sequential Statistical Inference (3). Sequential parametric estimation; stopping rules and stopping variables, lower-bound for variance of an estimate, Wald's equation, Wald's sequential probability ratio test and its properties; Fundamental Identity of Sequential Analysis; fixed-width confidence estimation; special sequential tests of composite hypotheses. Prerequisite: MATH 542 or MATH 541 and MATH 442.

MATH 549. Introduction to Information Theory (3). Entropy of finite schemes; entropy of stationary source; Shannon-McMillan-Breiman Theorem; ergodicity; noiseless coding; compression coefficient; memoryless channels, etc. Prerequisite: MATH 541.

MATH 550. Statistical Consulting (1-3). Individualized instruction and in-depth experience in all phases of statistical consulting. Prerequisite: background in mathematical statistics, regression, and design of experiments. Same as STAT 550. Graded S/U.

MATH 551. Topology I (3). Topological spaces, separation properties, product and quotient topologies, compactness, connectedness, homotopy, fundamental group and covering spaces, geometry of simplicial complexes.

MATH 552. Topology II (3). Differenntiable manifolds, DeRham cohomology, simplicial homology, and DeRham's theorem. Additional topics as time permits.

MATH 555. Graph Theory (3). Trees, connectivity, matchings, colorings, planar graphs, etc.; applications of graph theory to other branches of mathematics and to real-world problems such as the travelling salesman problem, the personnel assignment problem, etc. Often algorithms will be included and their efficiencies analyzed. Prerequisite: consent of instructor.

MATH 561. Complex Analysis I (3). Complex numbers, analytic functions and differentiation, elementary functions, power series, complex integration with applications to function theory.

MATH 562. Complex Analysis II (3). Representation theorems, analytic continuation, normal families, Riemann mapping theorem, with additional topics such as entire functions, univalent functions, special functions, and approximation functions.

MATH 565. Real Analysis I (3). Infinite sequences and series of real numbers, theory of metric spaces, Riemann and Riemann-Stieltjes integral.

MATH 566. Real Analysis II (3). Further topics on Riemann-Stieltjes integral, sequences and series of functions, further topics in metric spaces, Lebesgue measure and integral, functions of several variables. Prerequisite: MATH 565.


MATH 570. Advanced Readings in Mathematics (1-4). Independent reading and study in the mathematical literature. Prerequisite: consent of instructor.


MATH 580. Seminar in Mathematics (1-4). Discussion, papers, and projects appropriate to special interests of participants; training in research methods.

MATH 590. Professional Aspects of Teaching Mathematics (3). Professional training for teaching mathematics at the college level with emphasis upon practical problems, and introduction to the mathematical community, its culture and career patterns. May be repeated for credit.
**Math. & Statistics**

**MATH 591. Professional Aspects of Applying Mathematics (3).** Professional training for applying mathematics in a nonacademic setting; an introduction to the mathematical community. Its culture and career patterns, continued. May be repeated for credit. Prerequisite: MATH 590. Graded S/U.

**MATH 595. Workshop in Mathematics or Statistics (1-4).** Development of selected topics and issues of current interest in mathematics or statistics. May be repeated for credit. Graded S/U.

**MATH 597. Research Techniques (1).** Study of form and bibliographic practices appropriate for preparation of master's thesis. Special attention to peculiar conditions arising in preparation of mathematical materials.

**MATH 599. Thesis Research (1-12).** Credit for thesis study. Enrollment in excess of six hours is acceptable for Plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

**MATH 605. Topics in Geometry (3).** Selected topics from linear geometry, differential geometry, Riemannian geometry, etc. Prerequisite: consent of instructor.

**MATH 629. Topics in Logic (3).** Selected topics from model theory, recursion theory, etc. Prerequisite: consent of instructor.

**MATH 639. Group Theory (3).** Solvable and nilpotent groups; extensions; free groups and free products. Prerequisite: consent of instructor.

**MATH 634. Rings and Modules (3).** Modules over principal ideal domains; subdirect sums and direct sums; prime radical and Jacobson radical; prime primitive and semiprimitive rings; Wedderburn's structure theorem; projective, injective, completely reducible modules. Prerequisite: consent of instructor.

**MATH 640. Multidimensional Statistics (3).** Multivariate distributions having specified marginals. Random orthogonal transformations, squared, S-squared and Wishart distributions; profile analysis; distribution of characteristic roots, covariance structures, classification and cluster analysis; robust multivariate statistics. Prerequisites: MATH 432 and MATH 542 or consent of instructor.

**MATH 641. Advanced Probability Theory I (3).** Probability spaces, random variables, and random vectors, distribution function and properties, stochastic independence, expectation, strong limit theorems; characteristic functions and properties, infinite divisibility. Prerequisite: MATH 665.

**MATH 642. Advanced Probability Theory II (3).** Continuation of MATH 641. Decomposition theorems, central limit problem, conditional expectation, and martingale theory. Probability on metric spaces. Prerequisite: MATH 641.

**MATH 644. Topics in Probability (3).** Selected topics from stochastic processes, harmonic analysis, probability on topological groups, characteristic functions, etc. Prerequisite: consent of instructor.

**MATH 645. Advanced Mathematical Statistics (3).** Advanced theory of estimation and hypothesis testing. Prerequisites: MATH 541 and MATH 542.

**MATH 646. Advanced Mathematical Statistics (3).** MATH 645 continued. Prerequisite: MATH 645.

**MATH 649. Topics in Statistics (3).** Selected topics from multivariate analysis, decision theory, nonparametrics, Bayesian inference, etc. Prerequisite: consent of instructor.

**MATH 659. Topics in Topology (3).** Selected topics from proximity and uniform spaces, 3-manifolds, algebraic topology, differential topology, etc. Prerequisite: consent of instructor.

**MATH 664. Topics in Complex Variables (3).** Selected topics from cluster sets, entire functions, geometry of zeros of polynomials, potential theory, univalent functions, etc. Prerequisite: consent of instructor.

**MATH 665. Real Analysis III (3).** Continuation of MATH 565-566. Abstract measure and integration theory, additional topics from metric spaces and topological spaces, differentiation, Lp spaces. Prerequisite: MATH 566.

**MATH 666. Real Analysis IV (3).** Continuation of MATH 665 with additional topics in functional analysis. Prerequisite: MATH 665.

**MATH 667. Functional Analysis (3).** Continuation of MATH 666. Prerequisite: MATH 666.

**MATH 668. Optimization by Vector Space Methods (3).** Approximation problems in Hilbert spaces and in Banach spaces. Optimization of functionals. Minimum norm problems, introduction to calculus of variations, constrained optimization, etc. Applications. Prerequisite: MATH 666.

**MATH 669. Topics in Real Analysis (3).** Prerequisite: consent of instructor.

**MATH 695. Workshop in Mathematics or Statistics (1-4).** Continuation of MATH 595 for Ph.D. students. Graded S/U.

**MATH 729. Seminar in Logic (3).** Prerequisite: consent of instructor.

**MATH 739. Seminar in Algebra (3).** Selected topics from lattice theory, local rings, ordered groups, ring theory, semigroups, etc. Prerequisite: consent of instructor.

**MATH 744. Seminar in Probability (3).** Selected topics from probability on algebraic structures, stochastic calculus, inference for stochastic processes, etc. Prerequisite: consent of instructor.

**MATH 749. Seminar in Statistics (3).** Selected topics from nonparametric statistics, sequential analysis, etc. Prerequisite: consent of instructor.

**MATH 759. Seminar in Topology (3).** Prerequisite: consent of instructor.

**MATH 764. Seminar in Complex Variables (3).** Prerequisite: consent of instructor.

**MATH 799. Dissertation Research (1-16)**

Courses for Graduates and Undergraduates:

**MATH 401. Number Theory (3).** Divisibility, prime numbers, linear congruences, Chinese Remainder Theorem, quadratic residues, quadratic reciprocity law, numerical functions, factorization of integers, Fibonacci numbers, elementary diophantine equations, and applications. Prerequisite: MATH 332 or consent of instructor.

**MATH 402. Modern Geometry (3).** Axiomatic development of neutral and Euclidean geometry. Introduction to non-Euclidean geometry. Prerequisite: MATH 332 and either MATH 322 or MATH 339.

**MATH 403. Modern Algebra I (3).** Topics from groups, and rings; normal subgroups, homomorphisms, cyclic groups, permutation groups, Lagrange and Cayley's theorem, factor groups, abelian groups, direct products, integral domains, ideals and factor rings, ring isomorphisms, polyno-
Mathematics

Supervision Program

Committee: Barbara Moses, Chair; William Speer.
Barbara Moses, 411 Mathematical Sciences Building.
Phone: 419-372-7464

The two-year program in mathematics supervision leading to the degree of Specialist in Education is designed primarily to provide advanced preparation in mathematics and education for an individual preparing for a career as a public school supervisor of mathematics or as a chair in a major secondary school.

Each applicant must: (a) present evidence of at least three years of successful experience as a teacher in grades K through 12, preferably at grades K through 6; (b) pass a series of written tests; and (c) be interviewed by the Mathematics Supervision Committee.

Major Field
Education Courses
EDAS 501, 505; EDCI 511; EDFI 571 or 572, 596, and 597.

Area of Specialization
A minimum of 5 hours in mathe-
Mathematics Supervision Program - Music

Roberta Stadler, Dean, Moore Musical Arts Center
Richard James, Graduate Coordinator, 1031 Moore Musical Arts Center
Phone: 419-372-2181

Graduate Faculty
Assistant Professors - Christopher J. Buzzelli, M.M.E.; Gregory DeNardo, Ph.D.; William Lake, Ph.D.

Graduate Degree Offered
Master of Music
The Master of Music degree program encompasses five emphases: music composition, music education, music history, music performance, and music theory. The music education emphasis features four options:
- Basic Plan I: basic, Plan II (comprehensive exam); elementary; and conducting. Music performance majors may select from choral conducting, orchestral conducting, voice, piano, instrumental, and instrumental specialization -- the latter a concentration in a major and at least a second minor instruments within the brass, strings, or woodwind areas. General hour and course requirements may be found under "Degree Requirements" in this Catalog. Outlines of specific required courses for each program are available from the coordinator of graduate studies in music.

Courses for Graduates
MUGS 500. Small Ensembles (1). Designed to provide the student with a variety of chamber music experiences, such as strings, brass, woodwind. Formed under the supervision of the College of Musical Arts and offered on demand. May be repeated.

MUGS 501. Choral Literature (3) I (Alternate years), Summer (Alternate years). Chronological study and analysis by performance recordings and scores of small and large choral works from Renaissance to present. Emphasis on gaining repertoire of fine choral music particularly suitable to various performance levels.

MUGS 502. Instrumental Literature (3) Summer (Alternate years). Chronological study and analysis by recordings and scores of instrumental works for large ensembles from Renaissance to present. Emphasis on gaining repertoire of band and orchestral music suitable to various performance levels.

MUGS 503. Critique and Analysis of Music Theory (2) I (Alternate years), Summer (Alternate years). Review and critique of music theory involving techniques of analysis and part-writing in choral style.

MUGS 504. Psychology of Music (3) I, Summer (Alternate years). Psychological responses to music including the role of memory, rhythmic and melodic organization, affective responses, musical talent, learning and reading music.

MUGS 505. Opera Theater (3) I, II. Designed to develop stage techniques for advanced students in production of scenes and complete operas.

MUGS 507. Advanced Structural Analysis (3) II (Alternate years), Summer (Alternate years). Techniques of understanding music from standpoint of form, harmony, orchestration, and history. Prerequisite: MUGS 503 or equivalent.

MUGS 508. 20th-Century Analysis Seminar (3) I, II. 20th-century practices concerning form, rhythm, melody, harmony and counterpoint -- avant-garde and electronic music included. May be repeated. Open auto-

Mathematics education, EDCl 423 and 546 recommended.

Fieldwork must be for a minimum of 5 semester hours spread over at least two semesters of the academic year. An intern registers for EDAS 605 under the supervision of an instructor or instructors designated by the Department of Education and Mathematics.

Area of Mathematics
A minimum of 33 hours with at least 17 hours at the 500 level, to be approved by the graduate coordinator.

Cognate Field
A candidate with particularly strong preparation may be permitted to enroll for 6 or more hours of appropriate cognate work.
Music

MUGS 509. Composition Seminar (3). Philosophical, organizational, and musical problems associated with marching and concert bands in the public school instrumental music programs. Consideration of standard repertory and problems of conducting these works. May be repeated. Prerequisite: consent of instructor.


MUGS 511. Repertoire and Pedagogy (3). Frequency of offering varies with need. Required of students majoring in applied music. Research in music literature and pedagogy for each major applied area. May be repeated to six hours.

MUGS 512. Source Readings in Music I (2) (Alternate years), II (Alternate years), Summer (Alternate years). Seminar on literature of history of music covering Medieval, Renaissance, and Baroque periods.

MUGS 513. Source Readings in Music II (2) (Alternate years), Summer (Alternate years). Seminar on literature of history of music covering Classical, Romantic, and Modern periods.

MUGS 514. Advanced Choral Conducting (3) II (Alternate years), Summer (Alternate years). Seminar on individual preparation in choral conducting. Prerequisite: consent of instructor.

MUGS 515. Advanced Instrumental Conducting (3) Frequency of offering varies with need. Required of students majoring in applied music. Research in music literature and pedagogy for each major applied area. May be repeated to six hours.

MUGS 516. Kodaly Approach in Elementary Music Instruction (Level I, 2, and 3) (3) II (Alternate years), Summer (Alternate years). Kodaly method; knowledge, skills, and techniques of working effectively with elementary children. Actively involves participants in Kodaly sequence as it applies to elementary music education in American schools.

MUGS 517. Seminar in Orchestral Performance (3) I, II. Structure and form of standard orchestral repertoire; consideration of problems of conducting these works. May be repeated to six hours. Prerequisite: MUGS 515 and consent of instructor.

MUGS 518. Seminar in Band Performance (3) Summer (Alternate years). Philosophical, organizational, and musical problems associated with marching and concert bands in the public school instrumental music programs. Consideration of standard repertory and problems of conducting these works. May be repeated to six hours.

MUGS 519. Seminar in Choral Performance (3) I (Alternate years), Summer (Alternate years). Structure and form of standard repertoire of choral literature; consideration of problems of conducting these works. May be repeated to six hours.

MUGS 520. Score Reading and Analysis (3) I. Designed to equip prospective conductors with skills in analyzing scores, working with clefs, transpositions, performance directions, style characteristics, and related problems of full score. Prerequisite: consent of instructor.

MUGS 523. Seminar in Current Issues and Topics in Music Education (3) I, II. Seminar on contemporary issues in music education through the presentation and critical review of individual research projects in a seminar setting. Prerequisite: MUGS 534 and 598. May be repeated to six hours.

MUGS 524. Music in Special Education (3) Alternate summers. This course is designed for educators who are interested in teaching music to special learners in various school settings. Participants will become acquainted with the learning characteristics of exceptional children and teaching methods and materials.

MUGS 525. Seminar in Performance Practice (3) I. Advanced topical seminar on source readings in history of performance practice. Prerequisite: MUGS 512 and 513 or equivalent.

MUGS 526. Seminar in Music History (3) I (Alternate years), II (Alternate years), Summer (Alternate years). Alternates with MUGS 528. Advanced topical seminar on source readings in selected period of music history. Prerequisites: MUGS 512 and MUGS 513 or equivalent.

MUGS 527. Seminar in Musical Notation (3) On demand. Advanced topical seminar on the history of notation. Prerequisite: MUGS 512 or equivalent.

MUGS 528. Seminar in Style Analysis (3) II (Alternate years). Alternates with MUGS 526. Advanced topical seminar on source readings in musical style analysis. Prerequisite: consent of instructor.

MUGS 529. Seminar in Music Literature (3) II (Alternate years). Advanced topical seminar on source readings in genres of music literature. Prerequisite: MUGS 512 and MUGS 513 or equivalent.

MUGS 534. Building Instructional Programs in Music (3) I, Summer (Alternate years). Application of humanist and behaviorist views, concept learning, sequencing and assessment of musical instruction and motivation to the development of instructional programs in music education. Prerequisites: MUGS 504 and MUGS 510 or permission of instructor.

MUGS 538. Concert or Symphonic Band (1-2). Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 539. Marching Band (2) I. Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 570. Special Problems in Music (1-4). Selected areas and problems treated in depth. Offered to individual students or to groups of students as needed. Prerequisite: consent of instructor and graduate coordinator.

MUGS 577. A Capella Choir (1) I, II. Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 578. Collegiate Chorale (2) I, II. Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 579. University Chorus (1) Summer. Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 580. Graduate Seminar in Music (1-4) on demand. Study of selected topics within the discipline. Content of seminar varies from one year or semester to the next. May be repeated on approval of graduate coordinator.

MUGS 589. Philharmonia (2) I, II. Admission by audition only. May be used to fulfill required and elective ensemble hours.

MUGS 590. Seminar in College Music Teaching (2) I. Priority given to first semester graduate assistants; open to all music graduates. One-hour seminar class; one-hour meeting with assigned music faculty supervisor. Permission of instructor required for students without assistantships.

MUGS 595. Workshop on Current Topics in Music (1-4) on de-
Music - Organization Development

Organization Development

Glenn Varney, MOD Program Graduate Coordinator. 3000A College of Business Administration
Phone: 419-372-2210

Graduate Degree Offered
Master of Organization Development (Full-time or Part-time)

Prerequisites to Graduate Work
Candidates may enter the program in the Fall Semester of each academic year. Entrance requirements include an acceptable undergraduate GPA average from an accredited school and a satisfactory score on the Graduate Management Admission Test (GMAT). Each part-time student's employer must endorse him/her in order to permit student research in their organization and to provide an opportunity for application of program concepts and technology. Foreign students must establish English proficiency and take the Test of English as a Foreign Language (TOEFL). A candidate who has not completed the minimal business foundation courses is required to take or establish proficiency in all or part of them as prescribed by the graduate coordinator. A candidate must submit evidence of completion of the following foundation courses in business: accounting, statistics, economics (Intermediate mi-

Prerequisites:

MUCH 502. Counterpoint II (2) (Alternate years). 18th-century counterpoint; traditional counterpoint in three and four voices; canon, invention, fugue, chorale prelude.
MUCH 503. Chamber Music Literature (2) II. Selected major chamber works of various periods. Reading only for forms and media.
MUCH 412. Opera Literature (2) I (Alternate years). Styles, interpretation, traditional performances of various schools.
MUCH 420. Problems and Techniques of Ethnomusicology (2) On demand. Topics and techniques in ethnomusicology. Open to students interested in all music as aspects of culture.
MUCH 425. Electronic Music II (3) II. Students realize tapes in electronic music studio under faculty supervision. Prerequisite: MUCH 424.
MUED 402. Beginning Wind and Percussion Instrument Repair (1) II. Basic practices and techniques.
MUSP 415. Organ Construction (2) II (Alternate years). History of design and construction of the organ. Prerequisite: consent of instructor.
MUSP 416. Church Music (2) II. On demand. Music of the major Western religions; plainsong, hymnology, liturgies. Prerequisites: MUCH 131 and 132 or equivalent.
MUED 450. Introduction to Adult Group Piano Teaching (2) II (Alternate years). Materials, supervised teaching, and program development appropriate for adult level class. Open to students with strong piano background. Consent of instructor required.
MUSP 467. Piano Technology (1) I. Understanding of piano design, construction and tuning. Prerequisite: consent of instructor.
Organization Development - Philosophy (Applied)

Each candidate is required to take or establish proficiency in business foundation courses, depending on undergraduate preparation. A total of 30 additional graduate hours are required, 24 of which are taken on campus. The first course in the program is a four and one-half day course, thereafter, courses are conducted on weekends. The other 6 hours are thesis credit and may be taken on a non-resident basis, under the direction of MOD full-time faculty.

Typical Part-Time Calendar

First Year - total class days: 19 1/2

Fall Semester (late Aug-early Dec)
670 (3 credits) - 4 1/2 days in Sept.
672 (3 credits) - two 2 1/2-day weekends in Oct./Nov.

Spring Semester (early January to mid-April)
671 (3 credits) - two 2 1/2-day weekends in Jan./Feb.
673 (3 credits) - two 2 1/2-day weekends in Mar./Apr.

Second Year - total class days: 13 1/4

Fall Semester (late Aug-early Dec)
677 (3 credits) - one 2 1/2-day weekend in Sept./Oct.
one 1 1/2-day weekend in Nov.
675 (3 credits) - one 2 1/2-day weekend in Oct.
one 1 1/2-day weekend in Nov.

Spring Semester (early Jan to mid-April)
674 (3 credits) - two 2-day weekends in Jan./Feb.
678 (3 credits) - one 2 1/2-day weekend in Feb./Mar.
one 1 1/2-day weekend in April.

Third Year - No classes

Individual Thesis Work. Students must be enrolled continuously each semester for at least one credit hour of thesis research, not including summer, until the thesis is completed.

Typical Full-Time Calendar

First Year

Fall Semester (Late Aug-early Dec)
ORGD 670 - 4 1/2 days in Sept.
ORGD 672 - two 2 1/2-day weekends in Oct./Nov.
ORGD 675 - two 2-day weekends in Oct./Nov.
ORGD 677 - one 2 1/2-day weekend in Nov.

Spring Semester (Early January to mid-April)
ORGD 671 - two 2 1/2-day weekends in Jan./Feb.
ORGD 673 - two 2 1/2-day weekends in Feb./Mar.
ORGD 674 - two 2 1/2-day weekends in Mar./Apr.
ORGD 678 - one 2 1/2-day weekend in Apr.

Summer Semester
ORGD 689 - Internship

Second Year

Fall Semester
ORGD 699 - Thesis Work

Courses for Graduates

ORGD 670. Introduction to Organization Development (3) I. Build learning community, establish learning goals, develop conceptual/theoretical foundations for organization development and review organization development research strategy and design.

ORGD 671. Self-Awareness and Personal Impact (3). Provides prospective organization development practitioners with awareness of their impact upon others within organizations, individual perceptions, recognition of human responses, and development of understandings in group processes.

ORGD 672. Organizational Behavior and Application (3). Provides organization development student with foundation, theories, concepts and practice in building theoretical models used in organizational development to diagnose, understand, and develop organization change strategies.

ORGD 673. Organization Development Technology and Theory of Interventions (3). Provides students with organization development theories and concepts; intervention theory and organization development technologies including organization assessment, strategies for teambuilding, conflict resolution and problem solving at dyadic, intra-group, inter-group, and total organizational level. Involves the study of the processes involved in OD interventions.

ORGD 674. Change Strategies in Organizations (3). Development of students' skills in designing and testing organizational strategies including role of learning in change, impact analysis, evaluation methodology, and extensive practice in design of change strategies.


ORGD 677. Organizational Systems and Analysis of Behavior (3). Relationships of structural, technical, and environmental factors as they impact human processes in organizations.

ORGD 678. Organizational Diagnosis and Intervention Design (3). Organizational analysis methodology and theoretical framework used to collect, analyze, and feedback data to organizations which document intervention designs. Practice in intervention design.

ORGD 689. Organization Development Internship (1-3). Application of concepts, theory and skills in an organizational setting. Internship assignment arranged with sponsoring organizations. Graded S/U.

ORGD 699. Thesis Research (1-4). Credit for thesis study. Minimum acceptable for MOD degree is 6 hours. Students must be enrolled continuously each semester, not including summer, until thesis is completed.

Philosophy (Applied)

Tom Attig, Chair, 131 College Park
Michael Bradle, Graduate Coordinator, 113 College Park
Jim Taylor, Graduate Recruiter, 129 College Park
Phone: 419-372-2117

Graduate Faculty

Professors - Thomas Attig, Ph.D.; Michael Bradle, Ph.D.; Ramona Cormier, Ph.D.; Douglas Daye, Ph.D.; Raymond G. Frey, Ph.D.; Louis Katzner, Ph.D.; Richard Lineback, Ph.D.; Fred Miller, Ph.D.; Jeffrey Paul, Ph.D.; Michael Robins, Ph.D.; Donald Scherer, Ph.D.; James Stuart, Ph.D.

Associate Professors - James Child, Ph.D.; Christopher Morris, Ph.D.

Assistant Professors - Donald Cal-
work experiences. The non-academic

work is designed to provide stu-

ents with the opportunity to apply

philosophical skills and concepts in

non-academic contexts. Academic

internships involving interdisciplinary

concentrations are also possible.

The goal of the internship is to

sharpen the students' understanding

and ability to articulate the ways in

which philosophical skills and con-

cepts can be used in career areas of

the students' choosing. The program

is flexible and provides training suit-

able both for those interested in pur-

suing academic as well as non-

academic careers.

Prerequisites to Graduate Work

The preferred foundation for gradu-

ate work is a major or minor in phi-

losophy. However, students with less

than this level of preparation who

have a strong interest in philosophy

are encouraged to apply. The depart-

ment may require remedial work for

those students judged to have defi-

ciencies in their preparation. Stu-

dents should write for application

materials to the Graduate Recruiter,

Department of Philosophy.

Requirements for the Masters

Degree

All students must complete a 24-

hour core consisting of one course

each in logic and language (PHIL

501), history of ancient philosophy

(PHIL 511), history of modern philos-

ophy (PHIL 512), history of moral

and political philosophy (PHIL 521),

and a two-course sequence in applied

philosophy (PHIL 536/537 or an ap-

propriate substitute). This core may

be supplemented in one of three ways:

the internship, further course work in

philosophy, or an interdisciplinary

course of study.

Students selecting to do an intern-

ship prepare for it by studying about

the area in which they will be work-

ing. The internship itself involves

working in a non-academic setting

(non-academic internship) or a

course of inter-disciplinary studies

(academic internship) for up to the

equivalent of fifteen weeks. This

course of study culminates in writing

and orally defending a research re-

port. The report should address phi-

losophical issues which arise in the

course of the internship. It should

also exhibit an awareness of the

broader philosophical implications

of the issues addressed. Students are

expected to do much of the organiza-

tion and writing of their report while

they are on their internship. During

the semester after their internship it

is normally expected that these stu-

dents will enroll for 8 to 12 hours of

philosophy credits. In this way stu-

dents will complete requirements for

a non-thesis M.A. program. Students

may also elect to write an M.A. thesis

upon completion of their internship.

Only those students who elect the in-

ternship option will be eligible for

continuation into the doctoral phase

of the program.

Students who choose to write and

orally defend a thesis, and decide not
to pursue the internship must sup-

plement their core courses with 12

hours of additional coursework. Stu-

dents who choose a non-thesis non-

internship option must take 15 hours

of additional coursework and take a

three-hour comprehensive exam in

their area of specialization. This sup-

plemental course work will be tail-

ored to each student's particular

needs and interests.

Requirements for the Doctoral

Degree

A doctoral student ordinarily com-

pletes a minimum of 96 semester-

hours beyond the bachelor's degree.

This work is in four main areas:

course work in philosophy (58 cred-

its), course work in a cognate area (9

credits), internship-related directed

research (12 credits), and the writing

of a dissertation (16 credits mini-

mum). Specifically, course work in

philosophy must include courses in

traditional areas of philosophy: 501,

511, 512, 521, 621 or 622, 631 and 632

courses connecting the tradition-

al areas of philosophy with the sub-

discipline of applied philosophy:

536/537, 550/551, 623, 721, and 722

two advanced elective seminars.

In addition to meeting the core

course requirements, all students

who are to continue in doctoral study

must 1) complete and defend the in-

ternship related research project de-

fined under the master's degree pro-

gram outlined above; 2) In addition,

after the student has completed ap-

proximately 60 semester hours of ap-

proved graduate work, he/she must

take the preliminary examination.

The preliminary exam is to consist of

an essay which the student will write

and defend orally with a view to exhi-

bitiong the ability and knowledge re-

quired to do doctoral research in phi-

losophy. Normally the essay will

involve a body of investigation that

will be continued in the second inter-

nship and the dissertation. The student's

research committee determines the

exact nature of this examination.

Prior to writing the dissertation, and

typically after the second internship

experience, students are admitted to

degree candidacy upon successfully

defending a dissertation prospectus.

Further information about require-

ments for the Ph.D. degree is present-

ed in the Graduate Student Handbook

which may be obtained from the De-

partment of Philosophy.

Admission to Doctoral Study

Full admission to doctoral study is

secured upon a) satisfactory comple-

tion of two years of graduate study

with at least a 3.25 GPA for work be-

yond the bachelor's degree, b) suc-

cessful defense of the first internsh-

ip related research project, c) articula-

tion of a plan of study for the remain-

der of tenure within the program, d)

arrangement for an advisor to guide

research throughout the program,

e) approval by the graduate facul-

ity in philosophy.

Since the relationship with the ad-

visor is closer than ordinarily exists

between graduate student and gradu-

ate coordinator, the matching of the

student's interests with the advisor's

areas of competence becomes particu-

larly important. A student who en-

ters the Graduate College with an M.A.

from another institution should com-

plete arrangements to have his/her

work advised by a member of the

graduate faculty by the end of the first

semester on campus. A student in the

first year of graduate work may delay

arrangements for an advisor until af-

ter the second semester.

It is emphasized that hour require-

ments are secondary in importance to

breadth of understanding evi-


denced by satisfactory performance

on examinations and demonstrated

competence in research. The intern-

ships and related research, the dis-

sertation, and preparation for it, are

central to the student's plan of study.

Plans of Study

A student's plan of study must be

designed in such a way to insure that

he/she is a broadly trained philoso-

pher, competent to initiate, conduct,

and interpret traditional and applied

research. Within this framework,

however, the provisions for a doctoral

plan of study are quite flexible and

the individual plan of study is worked

out in collaboration with the advisor,

subject to approval of the coordinator

of graduate studies. A student may

specialize in any area in which he or

she may find a competent advisor.

For convenience, six categories of

specialization within the field of ap-

plied philosophy may be identified:

philosophy and business; philosophy

of law and government; philosophy

of medicine and health service; philos-

ophy and human services; environ-

Page 119

Page 119
mental philosophy; and philosophy of mind and artificial intelligence/ cognitive science. Department faculty are qualified and prepared to support plans of study in all of these areas and others.

Courses for Graduates

PHIL 501. Logic and Language (4) I or II. In-depth examination of topics in logic and formal issues in the philosophy of language. Prerequisite: First order logic with identity (PHIL 303 or its equivalent).

PHIL 504. Aesthetics (3) I or II. Advanced consideration of the nature of aesthetic attitude. Aesthetic experience studied in relation to formal, material, and associational values of the experienced object. Aesthetic types such as beautiful, sublime, tragic, and comic are considered.

PHIL 511. History of Ancient Philosophy (4) I or II. Survey of major ancient philosophers, including Plato and Aristotle.

PHIL 512. History of Modern Philosophy (4) I or II. Survey of major modern philosophers with emphasis, for example, on Descartes, Hume and Kant.

PHIL 521. History of Moral and Political Philosophy (4) I or II. A critical study of some of the major moral and political philosophers from Plato to Marx.

PHIL 536/537. Applied Philosophy Seminar (4) and (4) I and II. A two-course sequence exploring the application of philosophy to teaching and non-academic careers and examining the philosophical aspects of several specific social issues.

PHIL 550/551. Professional Development Seminar (1) and (1) I and II. A two-course sequence developing skills applied philosophers need for success outside of a context of doing philosophical research. Graded S/U.

PHIL 561. Supervised Practice (1-8) I, II, or Summer. Supervised experience designed to enhance student's ability to use philosophical thinking and concepts in dealing with problems which arise in specific job or vocation. May be repeated. Graded S/U.

PHIL 562. Directed Research in Applied Philosophy (1-4). Examination of issues in practice in terms of philosophical skills and concepts that have been developed in program. Aimed at development of and public defense of internship-related research project. Must be taken in conjunction with PHIL 561, Supervised Practice. Students sign up initially for 4 hours and then 1 hour per semester until the report is defended. Graded S/U.

PHIL 570. Directed Readings (1-4). Tutorial study of selected philosophical issues or topics not offered in regularly scheduled courses. Must be approved by tutorial instructor prior to registration. May be repeated.

PHIL 581. Seminar in American Studies (3) II. Interdisciplinary seminar coordinated in rotation by members of Departments of History, English, Philosophy, Political Science, Sociology, and School of Art, using lectures and subsequent discussion and papers to study or problem, theme, or era.

PHIL 598. Independent Research (1-3). Independent study of selected philosophical issues or topics of special interest to student. Must be approved by graduate coordinator prior to registration. May be repeated. Graded S/U.

PHIL 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

PHIL 621. Seminar in Social Philosophy (4) Alternate years. An in-depth examination of a topic or topics in social philosophy.

PHIL 622. Seminar in Ethics (4) Alternate years. An in-depth examination of some topics in moral philosophy. May be repeated.

PHIL 623. Philosophy of Law (4) Alternate years. An in-depth examination of topics in the philosophy of law.

PHIL 631. Seminar in Metaphysics (4) Alternate years. An in-depth examination of a topic or topics prominent in contemporary metaphysics, for example, action theory, philosophy of mind or philosophy of science. May be repeated.

PHIL 632. Seminar in Epistemology (4) Alternate years. An in-depth examination of a topic or topics in contemporary epistemology. May be repeated.

PHIL 680. Seminar in Philosophy (4). Systematic study of selected topics within the discipline. Content varies from one year (or semester) to the next. May be repeated.

PHIL 721. Professional Ethics (4) I or II. Philosophical analysis of the structure of professions focusing on the moral and social implications of their organization and interrelationships with emphasis on students' research and internship interests.

PHIL 722. Applied Decision Theory (4) Alternate years. An introduction to the formal theory of individual and collective choice and its application to issues having to do with, for example, individual decision, competitive markets, democratic choice, technology assessment or public policy.

PHIL 761. Supervised Practice (I-8). An advanced, typically second, supervised experience designed to further enhance a student's ability to use philosophical thinking and concepts in dealing with problems which arise in a specific job or vocation. Graded S/U.

PHIL 762. Directed Research in Applied Philosophy (1-6). Examination of issues in advanced practice in terms of philosophical skills and concepts that have been developed in program. Aimed at development of a dissertation prospectus. Must be taken in conjunction with PHIL 761, Supervised Practice. Graded S/U.

PHIL 770. Directed Readings (1-4). Advanced tutorial study of selected philosophical issues or topics not offered in regularly scheduled courses. Must be approved by tutorial instructor prior to registration. May be repeated.

PHIL 799. Dissertation Research (1-16). Students must register for a minimum of 16 hours while working on their doctoral dissertation. A maximum of 24 hours may be counted toward the degree program.

Courses for Graduates and Undergraduates

PHIL 412. Theory of Knowledge (4) I or II. Alternate years. Survey of traditional epistemological issues and concepts combined with an in-depth treatment of some epistemological problem(s). Prerequisite: Twelve hours of philosophy.

PHIL 414. Metaphysics (4) I or II. Alternate years. Survey of traditional metaphysical issues and concepts combined with an in-depth treatment of some metaphysical problem(s). Prerequisite: Twelve hours of philosophy.

PHIL 415. Topics in American Philosophy (3) I or II. Theme or themes central to American philoso-
Philosophy - Photochemical Sciences

Deane Snively, Graduate Coordinator, Room 309, Physical Sciences
Phone: 419-372-2664

Graduate Degree Offered
Ph.D. in Photochemical Sciences

Applicants to the Ph.D. program should submit an application, official transcripts, GRE test scores and three letters of recommendation. Students who show evidence of an outstanding undergraduate performance and research ability may enter directly into the Ph.D. program after completing the baccalaureate degree in chemistry, biological sciences or physics. All other applicants must have completed a Master's degree in one of the above areas. Master's students must submit application materials and show evidence of outstanding research performance.

Requirements for the Doctor of Philosophy

At least 90 credit hours of graduate credit (60 beyond the Master's degree) are required. These hours must include at least 16 hours in PCS 799. There is also a language requirement which can be satisfied by one of the following: (1) demonstration of a reading knowledge of German, French or Russian; (2) demonstration of proficiency in a computer program language; or (3) the satisfactory completion of not less than six credit hours in statistics or technical writing. The rest of the student's course of study will be designed with the advice of the student's doctoral committee to meet the student's needs and interests.

The student is expected to take a qualification examination which covers the fundamentals of (1) physical sciences and (2) an additional area appropriate to the student's background. This examination will take place as early as the end of the second semester, but no later than the third semester in residence.

The student is required to complete a preliminary examination in order to qualify for doctoral candidacy after having completed or approached completion of at least 60 hours in the approved course of study beyond the baccalaureate degree. The preliminary examination consists of the written preparation and oral defense of two original research proposals.

Each doctoral candidate must complete an independent research project acceptable to the student's dissertation committee. This research is to be described and evaluated in the dissertation. The final exam for the degree is an oral defense in which the student presents a seminar on the research and defends the results before the dissertation committee.

The following areas are representative of strength within the doctoral program and are broad areas within which a doctoral dissertation could be written: photosynthesis, polymer photochemistry, photophysics, photochemistry of biomolecules, photoinitiated electron transfer, photodynamic therapy, vibrational spectroscopy, vibrational overtone activation and photoelectron transfer.

Courses for Graduates

PCS 650-685. Research Topics in Photochemical Sciences (1-4). Advanced research seminars covering topics of current research and historical background in specialized fields of photochemical sciences. Prerequisite: consent of instructor.

PCS 650. Research Topics in Photosynthesis.

PCS 651. Research Topics in Polymer Photochemistry and Photophysics.

PCS 652. Research Topics in Photophysics.

PCS 653. Research Topics in Photoinitiated Electron Transfer Reactions and Photodynamic Therapy.


PCS 655. Research Topics in Photophysics.

PCS 666. Spectral Methods (3) I. Chemical structure determination using spectroscopic methods. Ultraviolet-visible absorption and emission, infrared and Raman spectroscopy and mass spectrometry techniques. Magnetic resonance methods such as nuclear magnetic resonance and electron spin resonance. Two-dimensional NMR. Prerequisite: CHEM 406, CHEM 342, or consent of instructor.

PCS 680. Seminar in Photochemical Sciences (1). Selected topics in photochemical sciences. Each graduate student is required to register for this course each semester in residence. No more than two hours of credit in this course may be counted toward degree. Graded S/U.

PCS 683. Special Topics in Photochemical Sciences (2-6) Summer. Study of special topics of current interest in the photochemical sciences. Prerequisite: consent of instructor.

PCS 701. Photochemistry and Photophysics 1 (2) II. Generation and nature of excited states. Evolution of excited states including radiative and nonradiative processes, energy transfer, multiphoton processes and photolysis. Prerequisite: CHEM 514.

PCS 702. Photochemistry and Photophysics 2 (3) I. Photochemical reactions with discussions of various reaction types from the areas of chemical physics, inorganic photochemistry, organic and organometallic photochemistry, photobiology, polymer photochemistry and photoelectrochemistry applications and experimental techniques in photochemistry. Prerequisite: PCS 701, CHEM 521.

PCS 705. Laboratory Methods in Photochemical Sciences (3) Summer. Introduction and experience in the laboratory techniques and con-
Photochemical Sciences - Physics and Astronomy

Prerequisites important to the photochemical sciences including actinometry, transient spectroscopy, photochemical organic synthesis, photo sensitization and photoelectrochemistry. Prerequisite: consent of instructor.

PCS 770. Readings in Photochemical Sciences (1-4). Selected areas of research in photochemical sciences; proposed program of study must be approved by instructor. No more than 6 hours may apply to a degree program. Prerequisite: consent of staff member involved. Graded S/U.

PCS 780. Advanced Seminar in Photochemical Sciences (2). Formulation of a research proposal, development of the relevant bibliography, and oral presentation and discussion. Required for all Ph.D. degree candidates.

PCS 783. Advanced Topics in Photochemical Sciences (2-6) Summer. Rigorous study at advanced level of specific topics in photochemical sciences. Prerequisite: consent of instructor.

PCS 787. Research Methods in the Photochemical Sciences (1-9).

Physics and Astronomy

Robert Boughton, Chair, 104 Overman Hall
Lewis Fulcher, Graduate Coordinator, 115 Hayes Hall
Phone: 419-372-2421

Graduate Faculty

Professors - Robert Boughton, Ph.D.; Thomas B. Cobb, Ph.D.; G. Comer Duncan, Ph.D.; Lewis Fulcher, Ph.D.; Roger Plak, Ph.D.; Edgar Singleton, Ph.D.; Ronald Stoner, Ph.D.
Associate Professor - Charles Shirkey, Ph.D.
Assistant Professor - John B. Laird, Ph.D.

Graduate Degrees Offered

Master of Science, Master of Science with concentration in geophysics, radiological physics or data telecommunications, and Master of Arts in Teaching.

Prerequisites to Graduate Work

The prospective graduate student in physics should have the equivalent of a bachelor's degree with a major in physics, or a minor in physics and a major in a cognate field from an accredited institution. The student should also have taken at least one year of college chemistry. If necessary, in order to attain this standing, the applicant may take the required courses at this university without graduate credit or satisfactorily complete an examination to provide the required prerequisites for graduate work.

The candidate working toward a Master of Arts in Teaching degree must have had at least one year's teaching experience and hold a valid teaching certificate from the state in which he or she is teaching.

Requirements for the Master's Degree

Plan I consists of not less than 30 hours in 400- and 500-level courses approved for graduate credit including a minimum of 16 hours at the 500-level. The major consists of not less than 16 hours chosen from courses in PHYS. PHYS 501, 503, and 505 are required of all physics students. A student wishing a formal concentration in geophysics will be required also to complete PHYS 507, GEOL 432, and GEOL 536. The formal concentration in data telecommunications includes the following requirements: PHYS 507, 517, 428, CS 428, 407, 507, 429, and 529. The formal concentration in radiological physics includes the following requirements: PHYS 428, 507, 530 (Nuclear), 517 and four specified courses offered at Medical College of Ohio. The student must also register for one hour of PHYS 580 per semester. In addition to the above 16 hours in the major field, a formal thesis must be presented, and the candidate must pass an oral examination on the thesis.

Plan II consists of not less than 32 hours in the 400- and 500-level courses approved for graduate credit including two hours in a research seminar. As an important part of the research seminar work, the student must submit a scholarly paper. The major consists of at least 20 hours (other than the research seminar) in PHYS. PHYS 501, 503, and 505 are required of all physics students. A student choosing a formal concentration in geophysics will be required also to complete PHYS 507, GEOL 432 and GEOL 536. The formal concentration in data telecommunications includes the following requirements: PHYS 507, 517, 428, CS 428, 407, 507, 429, and 529. The formal concentration in radiological physics includes the following requirements: PHYS 428, 507, 530 (Nuclear), 517 and four specified courses offered at Medical College of Ohio. The student must also register for one hour of PHYS 580 each semester. In addition, the candidate must pass a final written comprehensive examination covering selected fields included in the major not later than three weeks before the end of the final registrable period before the awarding of the degree.

The requirements for the M.A.T. degree are outlined under "Degree Requirements" in this Catalog. No further requirements are added by the Physics Department.

Courses for Graduates

PHYS 501. Techniques in Experimental Physics (3) I. Laboratory oriented course in which various experimental techniques and topics of current use in physics and engineering are treated.

PHYS 503. Advanced Electrodynamics (3) I. Elements of electrodynamics including: electrostatics, magnetostatics, electromagnetism, radiating systems, and relativity. Prerequisite: PHYS 401, 402, 418 or equivalent work.

PHYS 504. Statistical Mechanics (2) II. On demand. Phase space; thermodynamic laws; ergodic theorem; Liouville's theorem; microcanonical and canonical ensembles; quantum statistics with applications to theory of gases, solids and simple quantum systems. Prerequisite: PHYS 401 or equivalent.

PHYS 505. Advanced Classical and Quantum Mechanics (4) II. Elements of classical mechanics and quantum mechanics. Applications to current problems in physics. Prerequisites: PHYS 401, 402, 417 or equivalent work.


PHYS 517. Telecommunication-
Physics and Astronomy - Political Science

Phys 523. Applied Quantum Mechanics (2) I. On demand. Applications of quantum theory. Second quantization techniques, harmonic oscillator, angular momentum, interaction of radiation field with matter, self-consistent field theory, and density matrix methods. Prerequisite: Phys 505 or equivalent.

Phys 530. Special Topics in Physics (3) On demand. Seminar on subject in modern physics representing an important advance in field or special competence of individual staff members. Prerequisite: consent of instructor.

Phys 570. Readings in Physics (1-3). Individual registration. Special topics in specific areas of physics suited to needs of individual student. May be repeated to eight hours. Prerequisite: consent of instructor.

Phys 580. Seminar in Physics (1) I, II. Systematic study of selected topics in physics. May be repeated to four hours. Graded S/U.

Phys 589. Cooperative Education in Physics (1-3) On demand. Work and study in physics in an industrial, commercial or government laboratory setting in an approved cooperative position. May be repeated to 6 hours.

Phys 595. Workshop on Current Topics in Physics (1-4) I, II. Summer on demand. Topics and issues within the discipline; topics vary from term to term.

Phys 597. Research Techniques Seminar (1-2) I. Study of computational techniques and practice in utilizing the scientific literature to write research papers. A plan I student registers for one hour, and a plan II student registers for two hours. Graded S/U.

Phys 598. Directed Research in Physics (1-2) I, II. Supervised independent research on a particular topic. Suitable for work toward paper for M.S. plan II or M.A.T. degrees, but open to others interested in physics research. Prerequisite: one hour of Phys 597.

Phys 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of nine hours is acceptable for plan I master's degree, but no more than six hours may be credited toward degree. Minimum acceptable toward degree is two hours.

Courses for Graduates and Undergraduates

Phys 401. Methods of Theoretical Physics I (3) I. Systems with more than one variable quantity, basic field theory, systems governed by rate equations, vibrating systems, Lagrangian and Hamiltonian dynamics, Fourier analysis, special functions arising from physical systems. Prerequisites: Phys 212 and one year of calculus.


Phys 403. Stellar Structure and Evolution (3) I (Alternate years). Basic data, stellar interiors, theoretical models. Advanced evolutionary states: red giants, white dwarfs, neutron stars, supernovas, black holes. Prerequisites: Phys 301 and consent of the instructor. Not open to students with credit for ASTR 403.


Phys 412. Infrared Molecular Spectra (2) II (Alternate years). Origin of spectra of simple molecules. Prerequisite: Phys 301 or course in physical chemistry.

Phys 417. Quantum Mechanics (3) II (Alternate years). Duality of matter and radiation, state functions and interpretation, Heisenberg uncertainty principle, wave equations and principles of wave mechanics, elementary applications of Schrödinger's equation, operator methods, and approximation techniques. Prerequisite: Phys 401.

Phys 418. Electricity and Magnetism I (3) I (Alternate years). Electric and magnetic fields; Maxwell's theory of electromagnetic field with applications in propagation, absorption, reflection, transmission of radiation. Prerequisites: Phys 401 and one year of calculus.

Phys 419. Electricity and Magnetism II (3) II (Alternate years). Phys 418 continued with applications to guided waves and physical optics. Relativity. Prerequisite: Phys 418.

Phys 428. Microcomputer Interfacing (3) I. Medium and large scale integrated circuits such as peripheral interface adapters. UARTS, A/D converters are used to interface a microcomputer to the external world of the laboratory. One class period and two three-hour laboratories. Prerequisites: CS 307; and Phys 212 or 201.


Phys 433. Philosophy and Physics of Space and Time (3) II. Physical theories of space and time from philosophical, scientific, and historical points of view. Topics include Zeno's paradoxes, Green's concepts of space and time, classical Newtonian world view, general ideas of modern theory of relativity and cosmology. Cross-listed in Phil.

Political Science

Michael Maggiotto, Chair, 123 Williams Hall
Roger Anderson, Graduate Coordinator, 120 Williams Hall
Kenneth Hibbelen, Graduate Coordinator, Public Administration, 118 Williams Hall
Phone: 419-372-2921

Graduate Faculty

Professors - D. S. Chauhan, Ph.D.; Michael Maggiotto, Ph.D.

Associate Professors - Dennis Anderson, Ph.D.; H. Kenneth Hibbelen, Ph.D.; Kathleen Howard-Merriman, Ph.D.; Steven Owen Ludd, Ph.D.; Francis E. McKenna, Ph.D.; John Merriam, Ph.D.; V. Jerome Stephens, Ph.D.

Graduate Degrees Offered

Master of Arts, Master of Arts in Teaching

Prerequisites to Graduate Work

To be admitted to the program the applicant must possess a bachelor's degree from an accredited institution of higher education, having main-
Political Science

tained at least a 2.6 grade point overall and a 3.0 in the major, and have a major or minor or a satisfactory equivalent in political science. In cases where the applicant is deficient in background, the departmental graduate committee will recommend additional course work.

In applying for admission to the Master of Arts program, the applicant should include the following items along with the Graduate College application for admission form: (1) official transcripts of all previous college work; (2) verbal, quantitative, and analytical Graduate Record Examination scores; and (3) three letters of recommendation from professors familiar with the applicant's academic work. Applicants for the Master of Arts in Teaching program must meet all the above requirements with the exception of the submission of the Graduate Record Exam scores.

Requirements for the Master of Arts Degree

Plan I requires a minimum of 30 hours of graduate study of which at least 18 hours must be in political science courses distributed among three areas and must include three hours of research methods. The approved areas of political science are: political theory, public law, public administration, American government, comparative government, and international relations. It also requires the candidate to write a formal thesis (for which up to six hours credit may be granted) and to (1) demonstrate proficiency in a foreign language appropriate to the candidate's specialized interests in political science, or (2) demonstrate proficiency in computer languages and programs, or (3) satisfactorily complete an integrated program of three research tool or methods courses selected from outside the student's major area. Under this plan the student must pass an oral examination on the thesis, and on the field of concentration.

Plan II requires the candidate to complete a course of study approved by the graduate coordinator consisting of a minimum of 33 hours of graduate level work, of which at least 21 must be in political science distributed among three areas, and must include three hours of research methods. POLS 507 or an equivalent with the approval of the graduate coordinator. A final written comprehensive exam covering two areas of political science and a follow-up oral exam are required. The candidate is allowed a second examination if the first is failed; however, failure on the second drops the candidate from the Graduate College.

Requirements for Graduate Program in Public Administration

The graduate program in public administration is designed to meet the growing demand for skilled public administrators by providing professional education to individuals who wish to prepare themselves for administration careers and leadership positions in government. The program also addresses itself to the educational needs of in-career governmental personnel who wish to improve their education and career development opportunities.

The program requires 42 semester hours, consisting of 36 hours of course work and 6 hours of credit for a thesis; or an internship (3 hours) with an experiential paper (3 hours) and a final written and oral comprehensive exam. Mid-and-in-career and international students have the opportunity to substitute course work for the internship component. Mid-and-in-career and international students with prior administrative experience, however, must complete an experiential paper if they select the comprehensive exam option.

The program of study consists of four educational components: core curriculum, area of specialization, program electives, a thesis or an internship and experiential paper with a written and oral comprehensive exam. The requirement for eighteen hours of core curriculum work is met by taking at least six of the following seven classes: administrative theory and behavior, government budgeting and fiscal policy, public law, public personnel administration, public policy analysis and program evaluation, research methods in public administration, and rural and small local government.

The multidisciplinary character of the program provides the student with an opportunity to select 12 hours of course work from different departments and colleges of the university to develop at least one area of specialization in one of the following eight areas: economic development, financial administration, international and comparative administration, organizational development, personnel management and labor relations, public law and criminal justice administration, public policy analysis, and small local government management.

In addition to these program requirements, all graduates must meet the general degree requirements set by the Graduate College.

Requirements for the Master of Arts in Teaching Degree

The candidate must complete 27 semester hours in political science courses. Up to 21 hours are to be selected from a list of courses provided by the department. POLS 551 and one additional seminar at the 500-level are required. The other requirements are listed under the general heading, Master of Arts in Teaching under "Degree Requirements" in this Catalog.

Courses for Graduates

POLS 501. Modern Political Theory (3) I or II. Papers, readings, and discussion of selected topics in modern political theory. Prerequisite: consent of Instructor. May be repeated under different instructors with approval of graduate coordinator.

POLS 511. Public Law (3) II. Selected problems in constitutional law, legal theory, and judicial process and behavior, and criminal justice. Prerequisite: consent of public administration director.

POLS 512. Public Administration Ethics (3) Summer. Seminar involving research and analysis of ethical questions confronted by professionals in public service including selected issues in democratic governance, professional responsibility, and legal liability.

POLS 520. Public Administration and Public Policy (3) Summer. Social and political contexts of public administration; relationship of administration to broader political process that shapes public policy; review of current and traditional issues of concern to public administrators.

POLS 521. Administrative Theory and Behavior (3) I. Systematic analysis of various theories and research focusing on organization and behavior in public administration, including the discussion of organization, human motivation, leadership, rationality, efficiency, and conflict management in public organizations. Prerequisite: consent of public administration director.

POLS 523. Public Policy Analysis/Program Evaluation (3) II. The focus is on approaches and methods for producing information about public issues and problems, alternative policies, criteria for selecting policies, and the effects of past policy and programs. Factors related to the use, non-use and abuse of analysis and evaluations by policy makers are discussed. Prerequisite: consent of
POLS 528. Public Personnel Administration (3) II. Public personnel policies and practices, including legal foundations, classification and compensation plans, recruitment and selection processes, training employment policies and morale, and public labor relations. Prerequisite: consent of instructor.

POLS 531. American Government (3) II. Readings and reports on political behavior, public opinion and mass media, state and local government, legislative process, executive and judicial process.

POLS 532. Seminar in State and Local Government (3) Summer. Research and analysis of selected topics in state and local politics, including the constitutional framework, state and local relations, political processes, and policy making.


POLS 537. Public Sector Labor Relations (3) II. Summer. Analysis of the development and effectuation of public labor policy with an emphasis on the study of the growth of public sector labor unions, process and problems of collective bargaining, public employer-employee rights and obligations, strike policies, grievance procedures, and impasse resolution. Prerequisite: consent of instructor.

POLS 540. Rural and Small Local Government (3) I. Seminar involving research and analysis of selected topics in rural and small local governments and politics including developmental policies, intergovernmental relations, service delivery issues, and political processes. Prerequisite: consent of public administration director.

POLS 541. Management in Small Local Government (3) II. Analysis of management functions and practices required to operate a small government in a rural area or a small jurisdiction, including financial management, personnel management, public relations, and intergovernmental management.

POLS 551. Seminar in Comparative Government (3) II. Directed research in selected areas of comparative government. Commentary and discussion over general area or areas selected for research.

POLS 560. Seminar in Local Economic Development (3) I, Summer. Seminar involving research and analysis of forces influencing local economic development including public policies, local development efforts, and state, national, and international political economy factors.

POLS 561. Intergovernmental Approaches to Economic Development (3) II. Summer. Survey and analysis of economic development programs including financial, employment, and training available to local governments and designed to enhance local development efforts.

POLS 570. Readings in Political Science (1-3) I, II. Individual study of selected topics in political science appropriate to student's course of study. Prerequisite: consent of instructor.

POLS 571. Seminar in International Relations (3) I. Papers, readings, and discussion of selected topics in international relations and foreign policy formation. The major emphasis will be on the state of the discipline and methodological, epistemological, and theoretical controversies in the field.

POLS 580. Graduate Seminar (1-3) I, II. Systematic study of selected topics within political science. Content of seminar varies from semester to semester. May be repeated on approval of graduate coordinator.

POLS 581. Seminar in American Studies (3) I, II. Interdisciplinary seminar coordinated by members of the Departments of History, English, Philosophy, Political Science, Sociology, and School of Art, using lectures and subsequent discussion and papers to study problem, theme, or era.

POLS 585. Internship (1-6). Supervised experience in public service jobs, political internship programs, and political campaigns. Proposed field placement registration must be approved by Instructor/supervisor prior to registration. Graded S/U.

POLS 590. Experiential Paper

POLS 595. Workshop in Public Administration (3). With varying content/themes, the workshop will involve the study and readings of materials related to the needs of public administration students and practitioners. Prerequisite: consent of workshop director.

POLS 596. Research Methods in Public Administration (3) I. Research design and sampling, data arrangement and processing, data analysis and hypothesis testing. Processing and analysis will utilize personal computers and an IBM mainframe. Prerequisite: consent of public administration director.

POLS 597. Seminar in Political Research (3) I. Study, research, and discussion of scholarship by political scientists. Prerequisite: consent of instructor.

POLS 599. Thesis Research (1-12) I, II. Credit for thesis study. Enrollment in excess of six hours acceptable for Plan I master's degree, but no more than six hours credited toward degree. Minimum acceptable total for degree is three hours.

Courses for Graduates and Undergraduates

POLS 402. Western Political Thought I (3) I. Classics of political philosophy of ancient and medieval period. Major ideas and concepts of Western political tradition from Plato through Middle Ages to Machiavelli.

POLS 403. Western Political Thought II (3) I or II. Classics of political philosophy of modern period. Major ideas and concepts of Western political tradition from Hobbes to Marx.

POLS 404. 20th Century Political Thought (3) I or II. Contemporary classics of political philosophy. Theories of justice and right of Rawls, Nozick, Hayek, and Strauss; Berlin's pluralism; existentialism; and/or democratic theory.

POLS 405. Recent American Political Thought (3) II. American political ideas, ideologies, movements with fundamental social and political philosophies from Civil War to contemporary period. Prerequisite: POLS 304 or consent of instructor.


POLS 418. Constitutional Law: Substantive Rights (3) II. Freedom of speech, press, and religion; equal protection of law, travel and privacy; right to vote.

POLS 419. Jurisprudence (3) II. Leading theories and theorists of law; Anglo-American thought and prac-
POLS 420. Administrative Law (3) I. Legal aspects of the administrative process and the effect of legal principles and processes upon administrative decision making. Emphasis on the limitation of administrative discretion and the judicial review of administrative decisions. Prerequisite: consent of instructor.

POLS 421. Bureaucratic Politics (3) I. The role federal bureaucracy plays in public policy process. Policy development; social and political factors that influence the administrative branch of government.

POLS 422. Survey of Public Administration (3) I. Fundamental literature, concepts and practices in public administration, including the discussion of administrative leadership, decision making, communication, fiscal and personnel management aspects of public administration. Prerequisite: consent of instructor.

POLS 423. Comparative Public Administration (3) II. Alternate years. Comparative study of administrative structures and processes in selected modern and modernizing political systems. Analysis includes the consideration of cultural, legal and political factors influencing the operation of bureaucratic institutions, developmental goals, and the methods of establishing and administering programs of social, economic and political development.

POLS 425. Constitutional Law Advocacy (3). Substantive knowledge of one area in constitutional law; practical skills necessary for constitutional adjudication; techniques of legal research, writing appellate court briefs, and appellate court advocacy. Prerequisite: POLS 416 and POLS 417, or POLS 419 and consent of instructor.

POLS 430. Politics of Metropolitan Areas (3) Summer. Study of socio-economic and political factors affecting the governance of metropolitan areas with an emphasis on political/administrative institutions, processes, and the major policy issues and their consequences for the management of metropolitan affairs.

POLS 431. Regulatory Policy (3) II. Development of regulation as an instrument for correcting deficiencies of economic market, role in achieving societal purposes, problems of regulatory practice.

POLS 440. Political Parties and Voter Behavior (3) II. Democracy and political parties, party organization, primaries and conventions for nomination, campaigns and elections, patterns of election participation and factors affecting the voter's decision making.

POLS 443. Mass Media in Politics (3) I. Techniques of modern election campaigns, management: use of research and voter profiles in developing strategy, tactics of mass persuasion: professional public relations in television and the electronic media.

POLS 454. Soviet Political System (3) II. Political and managerial structures and policies of Soviet Union that explain regime and institutional character and tendencies; government and party power structures; ideological influences in social and economic policies; manipulation of decision-making structure; significance of Soviet external policies for major powers and emerging nations. Prerequisite: POLS 454, or instructor's approval.

POLS 459. Intergovernmental Relations (3) II. Public policy issues and interaction with levels of government in American federal system. Dynamics of intergovernmental relations, grants-in-aid, revenue sharing, and federal relationships.

POLS 460. Politics and Issues of World Development (3) Alternate years. Political and economic modernization problems: equity versus development; hunger and population, foreign aid, technology transfer and other selected topics.

POLS 462. Japanese Politics and Foreign Policy (3) I. Political culture, institutions, processes, and major issues in contemporary domestic politics; Japan's foreign relations with an emphasis on relations with Pacific/Asian nations including the United States, the Soviet Union, and China. Prerequisite: POLS 271 or instructor's approval.

POLS 475. International Law (3) I. On demand. History, nature, sources, and applications; relationship between law and society at international level.

POLS 476. International Organization (3) On demand. History, organization, and function of international organizations within the context of world politics. Major emphasis on United Nations and issues facing it. Prerequisite: POLS 272, 372 or permission of instructor.

POLS 478. Politics of International Economic Relations (3). This seminar examines the historical development of the international political/economic system, the relationship between the state and society in economic and social development, and theoretical questions surrounding power and wealth at the international level.

**Popular Culture**

Ray B. Browne, Chair, Popular Culture Building
Jack Nachbar, Graduate Coordinator, Popular Culture Building
Phone: 419-372-2981

**Graduate Faculty**

**Professors** - Ray Browne, Ph.D.; Michael Marsden, Ph.D.; Jack Nachbar, Ph.D.

**Associate Professors** - Christopher Dost, Ph.D.; Marilyn F. Motz, Ph.D.; Jack F. Santino, Ph.D.; Jon Spencer, Ph.D.

**Graduate Degree Offered**

Master of Arts

The Master of Arts degree in popular culture is interdisciplinary in nature and is promoted through the operational and research programs of the Center for the Study of Popular Culture and the Department of Popular Culture at Bowling Green State University.

The term "popular culture" is a new term to some people. For working purposes at the Center and in the department, it is defined as the part of culture which is not narrowly elitist or aimed at special audiences, and which is generally (but not necessarily) disseminated via the mass media.

The interdisciplinary program in popular culture is designed to train scholars in the objective analysis of that part of our culture, both past and present, which has a distinctly popular base of appeal. The popular culture program draws upon the curricula of programs in American culture studies, applied human ecology, art, economics, education, English, geography, foreign languages, health and physical education, history, mass communication, music, philosophy, political science, and sociology, as well as graduate courses in the Department of Popular Culture.

The Center for the Study of Popular Culture and the Department of Popular Culture have outstanding library and resource support for the graduate
Popular Culture

program. In 1969, Bowling Green State University established the Popular Culture Library which is located on the fourth floor of the University's Library. The Popular Culture Library is a non-circulating research library that contains more than 500,000 items from popular novels to television scripts. In addition, the Sound Recordings Archives on the third floor of the University Library contains the finest and largest collections of recorded popular music in the United States. Bowling Green is the national headquarters for the study of popular culture and the publication of articles and books on popular culture topics.

Prerequisite To Graduate Work

To enter the master's degree program in popular culture, a student must receive regular admission to the Graduate College and must be approved by the graduate committee of the program. Admission to the program requires a minimum of 2.6 cumulative grade point average and a 3.0 grade point average in a specified discipline in which at least 20 semester hours of work have been completed. A student who receives an undergraduate degree in an interdisciplinary program that precludes 20 semester hours of work in a single discipline may be admitted upon the recommendation of the graduate committee.

Requirements for the Master of Arts

Core Requirements

All candidates in the program are required to complete:

1. POPC 597 (Popular Culture Theory and Methodology);
2. POPC 581 (Folklore and Folk-life);
3. Two graduate seminars in Popular Culture.

All candidates, except those opting for the research track outlined below, are allowed to choose the thesis or non-thesis plans. Up to six credit hours of thesis research can be applied toward the degree.

Candidates are required to complete at least 32 credit hours beyond the baccalaureate degree (Candidates may, of course, register for more credit hours than those which count toward the degree.)

Candidates are responsible for entering the content of a core reading list provided to them at the beginning of their academic program. Candidates are required to complete a general three-hour written departmental examination over the core reading list and the required core courses listed above.

Non-thesis candidates are also expected to complete a two-hour oral examination over their areas of specialization; thesis candidates are expected to complete a two-hour oral examination over their thesis and related course work.

Candidates are to create their own advisory committees, in close consultation with the graduate coordinator, composed of at least one member from outside the Department of Popular Culture and no more than two members from within the Department. In the case of the non-thesis candidate, the committee exists to advise, prepare, and evaluate the oral examination over the candidate's area of specialization. In the case of the thesis candidate, the committee advises the thesis and prepares and evaluates the oral examination over the thesis and related course material. A candidate is expected to have created his/her committee by no later than the beginning of the second semester in residence in the program.

The aim of the professional track is to prepare students for work in a particular, vocational aspect of popular cultural studies. May be repeated if topic is different. Some past topics were "Myth of the West," "Religion in America," and "Women's Popular Culture.

Courses for Graduates

POPC 570. Special Studies in Popular Culture (1-3) On demand. Individual reading on topic in popular culture studies not ordinarily offered in curriculum. Prerequisite: consent of graduate coordinator of program or representative. Graded S/U.

POPC 580. Seminar in Popular Culture (3). Interdisciplinary seminar utilizing lectures, discussions, readings and research assignments to study a theme, era, or problem in popular culture studies. May be repeated if topic is different. Some past topics were "Myth of the West," "Religion in America," and "Women's Popular Culture.

POPC 581. Folklore and Folk-life (3) II. Examines expressive culture shared within groups and transmitted person-to-person. Includes traditional and contemporary folklore such as legends, folktales, foodways, folk medicine and folk art. Emphasis on theory, methodology and history of discipline. Popular Culture M.A. students or permission of instructor.

POPC 562. Topics in Popular Film (3) II. Intensive study of a specific genre, period or theme in Hollywood film. Emphasis on movies as cultural artifacts. May be repeated if the topic is different.
POPC 593. Topics in Popular Literature (3) II. Intensive study of a popular genre, author or theme in popular literature. Emphasis on popular literature as cultural product. Both historical background and close reading of specific texts will be employed. May be repeated if the topic is different.

POPC 594. Television as Popular Culture (3) I. Intense examination of television's role in American popular culture. Industry structure, ratings and their meanings, creation of programming, and advertising strategies; current theoretical approaches to the study of television, etc. Also includes detailed analysis of selected programs and series.

POPC 595. Popular Entertainments (3) I. A study of a variety of popular entertainment forms from the 19th century to the present, with a focus on the United States and Canada. Topics include: the circus and carnival, vaudeville, community celebrations, fairs, festivals, pageants, participatory as well as spectator sports, outdoor recreation and other live entertainment forms.

POPC 596. Music as Popular Culture (3) II. Selected genres, periods or themes in popular music. Emphasis is on the social and cultural contexts in which popular music is created, performed and experienced. May be repeated if the topic is different. Popular Culture M.A. students or permission of the instructor.

POPC 596. Internship (1-8) On demand. Supervised experience in setting related to one's area of specialization. Proposed field placement registration must be approved by the graduate coordinator and site supervisor prior to registration. May be repeated to 8 hours. Graded on S/U basis.

POPC 599. Teaching Popular Culture (3) I. It is assumed that students enrolled in master's degree program in popular culture who intend to teach when they complete the program will take this course. Practicum of teaching methods in popular culture curriculum. Graded S/U.

POPC 591. Directed Teaching of Popular Culture (1-3) On demand. Students teaching 100- and 200-level popular culture courses are assigned to experienced popular culture instructors on a tutorial basis. Includes close supervision of assignments, testing, grading and classroom methods. Prerequisite: permission of graduate advisor or program representative. May be repeated. Not counted in required number of graduate courses. Graded S/U.

POPC 595. Workshop on Current Topics in Popular Culture (1-4) On demand. Workshops designed for current topics, issues and problems in popular culture studies; focus will vary from semester to semester. May be repeated upon approval of the graduate coordinator.

POPC 597. Popular Culture Theory and Methodology (5) I. Required of all students in program. Content, theoretical developments, and perspectives of popular culture studies. Includes study and application of theories relating to analysis of popular culture; methodologies and research techniques.

POPC 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours is acceptable for plan I master's degree, but not more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

Psychology

Charles J. Cranny, Chair, 207 Psychology Building

Eric F. Dubow, Graduate Coordinator, 230 Psychology Building

Phone: 419-372-2301

Graduate Faculty


Associate Professors - William Balzer, Ph.D.; Clifford Mynatt, Ph.D.; John Tisak, Ph.D.; Russell Veltch, Ph.D.; Robert Warehime, Ph.D.

Assistant Professors - Vernon Blingman, Ph.D.; Eric Dubow, Ph.D.; Nancy Jo Dunn, Ph.D.; Jason Dura, Ph.D.; Kenneth R. Jones, Ph.D.; Dale Klopfner, Ph.D.; Betty Royster, Ph.D.; Ann Marie Ryan, Ph.D.; Carla Smith, Ph.D.; Catherine Stein, Ph.D.; Marie Tisak, Ph.D.

Graduate Degrees Offered

Master of Arts and Doctor of Philosophy

Prerequisites to Graduate Work

The graduate student in psychology should have had approximately 20 semester hours or 30 quarter hours of undergraduate psychology courses including experimental psychology and statistics. Credit in a related field or pertinent experience may count toward this minimum if approved by the department. Students should write for application materials to Chair, Admissions Committee, Department of Psychology.

Requirements for the Master's Degree

A minimum of 30 hours of graduate work is required for a Master of Arts degree. Although it is required that a student admitted to graduate study in psychology work toward the doctorate, the M.A. degree is ordinarily included in the total program. A candidate for the degree of Master of Arts, plan I, with a major in psychology, is expected to have an appropriate level of knowledge related to his/her particular course of study. This should include some or all of the areas of experimental and physiological psychology, psychological statistics and measurement, psychological tests, developmental psychology, individual differences, interpersonal relationships, personality theory, history and systems of psychology, learning and learning theory, motivation, and behavior abnormalities. Two one-year courses are required of each student; the methodological proseminar (PSYC 524 and PSYC 525); and basic statistical theory (PSYC 567, PSYC 568, PSYC 569).

Thesis

A candidate for the master's degree in psychology must complete a thesis satisfactory to the Department of Psychology and to the Graduate College.

Final Examination

In addition to regular course examinations, a candidate for the master's degree in the Department of Psychology must perform satisfactorily in an oral and written examination covering the thesis and related topics included in the student's course of study.

Requirements for the Doctoral Degree

A doctoral student ordinarily completes a minimum of 90 semester hours beyond the baccalaureate; who is taking a degree within a clinical specialty also must have a full year of internship. It is emphasized that hour requirements are secondary
Psychology

Each student, regardless of area of specialization, must fulfill several requirements to obtain the doctorate. He/she must satisfactorily complete the sequence of core courses (methodology and statistics) during the first two years. In addition, all students are required to take and successfully master content core courses as well as general courses covering the major fields of psychological study. A completed master's level research project should be presented to the student's committee by the end of the second year of study.

After the student has completed approximately 60 semester hours of approved graduate work, he/she must take the preliminary examination. The examination may be either in the form of a research project presented to the committee or may be a written and oral examination dealing with the area of specialization. The student's doctoral committee determines the exact nature of this examination.

**Dissertation**

A candidate for the Ph.D. degree in psychology must complete a dissertation satisfactory to the Department of Psychology and to the Graduate College.

The following areas are presented as areas of strength within the doctoral program and thus represent broad areas within which doctoral dissertations are being written: clinical psychology, developmental psychology, experimental psychology, industrial psychology, psychobiology, cognitive psychology, and social psychology.

**Courses for Graduates**

**PSYC 501. History of Psychology I** (3) I. Philosophical and physiological antecedents of scientific psychology. Role of experiment, theory, data in 19th and early 20th century psychology. Emphasis on reading and interpreting primary sources.

**PSYC 502. History of Psychology II** (3) II. Emergence of modern applications of scientific psychology in industrial, clinical, developmental, and educational contexts. Emphasis on reading and interpreting primary sources.

**PSYC 504. Child Development** (3) II. Major concepts and principles of child development. Discussion focuses on how cognitive, personality, and social-psychological issues interact to produce development.

**PSYC 505. Personality Theory** (3) I, II. Nature of personality; biological and psychological determinants. Major constructs; primary determinants of personality development.

**PSYC 508. Behavior Pathology and Interviewing** (3) II. Evaluation of various theories of psychopathology, as well as a discussion of several pathological syndromes and illustrative interviews.

**PSYC 510. Fundamentals and Applications of Learning** (3) I, II. A broad survey of learning which combines the historical perspective on the development of major learning theories, exposure to major principles of learning, and information about how learning principles and theories are applied in the real world.

**PSYC 512. Cognitive Psychology** (3) I, II. Current theoretical and empirical approaches to the study of knowledge and thought including topics such as attention, memory, categorization, reasoning, problem solving, imagery, and language.

**PSYC 514. Psychobiology** (3) I, II. Contemporary research dealing with neural control of behavior.

**PSYC 516. Human Judgment** (3) I, II. Overview of approaches to individual decision processes, including decision theory, social judgment theory, heuristics and biases. Applications to clinical and organizational decision making, medical diagnosis, and other decision problems. Prerequisite: a course in statistics or consent of Instructor.

**PSYC 517. Sensation and Perception** (3) II. Sensory processes and perception. Vision and audition emphasized. Special topics include contemporary psychophysics; neurophysiological bases of form, depth, and movement perception; modulation transfer function; auditory coding; attention; perceptual development.

**PSYC 524. Methodology in Psychology I** (3) I. Focuses on the nature of scientific activity. Includes theory construction, hypothesis construction, hypothesis testing, prediction, explanation, and methodological and statistical issues that affect the evaluation of data.

**PSYC 525. Methodology in Psychology II** (2) II. Research leading to measurement and prediction of behavioral attitudes. Different models for prediction.

**PSYC 534. Cognitive Development** (3) I. Major theories of cognitive development across the lifespan; integration of theory with relevant research is emphasized.

**PSYC 535. Social and Personality Development** (3) II. Major theories of social and personality development across the lifespan; integrat-
Psychology

Aging

PSYC 536. Psychosocial Aspects of Aging (3) I. Focus on major theories and research on aging. Provides a thorough background in cognitive, social, and personality development in older adults. Prerequisite: GERO 501 or consent of instructor.

PSYC 537. Mental Health and Aging (3) I. Focuses on mental disorders, assessment, and therapeutic approaches that pertain to older adults. Emphasizes special issues in dealing with older adult clients. Prerequisite: GERO 501 and PSYC 536 or consent of instructor.

PSYC 538. Contemporary Research Issues in the World of Work (4). Introduction to the research literature associated with the world of work. Methodological as well as conceptual issues associated with organizational as well as work effectiveness will be reviewed and critiqued.

PSYC 544. Interviewing (3) I, II. Theory, methods, and application of the personnel interview in employee selection, development, and evaluation.

PSYC 550. Organizational Staffing (3) II. Principles of personnel selection and associated topics, such as recruitment, prediction, training, job analysis, promotion and performance appraisal. Effects of EEO requirements on validation of personnel actions. Prerequisite: 567 and 525.

PSYC 555. Motivation and Morale (3) II. Research and theory on attitudes, motivation, and intentional behavior related to satisfaction, motivation, effort, and goal setting at work.

PSYC 556. The Social Environment of Work (3) I. Theory and research on the impact of multiple social environments (groups, organization design, external environments) on organizational behavior and job performance.

PSYC 558. Psychometrics I (3) I. Summer Introduction to assessment of intellectual processes: administration, scoring and educational interpretation of children's intelligence tests; concepts of reliability, validity, and utility; adult testing; use and abuse of intellectual assessment. For school psychology: Concurrent registration in EDSE 589 is required. Prerequisite: PSYC 460 or equivalent and/or consent of instructor.

PSYC 622. Psychometrics II (2) I. Ecological and client needs assessment including experience with interviewing and observation procedures, needs assessment, task analysis, criterion and domain-referenced assessment, informal and standardized assessment; language-reading development assessment, learning styles, Learning disorders of children: evaluation and intervention. Prerequisite: PSYC 561 or consent of instructor. PSYC 567 for school psychology and consent of instructor.

PSYC 563. Psychometrics III (3) II. Child study process. For school psychology, concurrent registration in EDSE 589 is required. Prerequisite: PSYC 561 and PSYC 562 or consent of instructor.

PSYC 564. Basic Statistical Theory I (3) I. General overview of basic statistical concepts followed by a special emphasis upon the multiple regression model. Topics will include dummy, effect, and orthogonal coding of categorical variables, experimental and nonexperimental designs, linear and curvilinear trends, continuous and categorical independent variables, repeated measures designs, path analysis.

PSYC 566. Basic Statistical Theory II (3) II. Experimental design, data analysis, hypothesis testing and parameter estimation for simple through complex research plans.

PSYC 568. Behavior Pathology in Children (3) I, II. Etiological and dynamic factors in creation and maintenance of maladaptive behavior in child. Prerequisite: PSYC 505 and PSYC 508.

PSYC 569. Clinical Practice (1-6). Practical application of psychodiagnostic and psychotherapeutic techniques with children and adults. Assignment to a variety of facilities including the department's Psychological Services Center. May be repeated. Prerequisite: consent of instructor. Graded S/U.

PSYC 631. Theories and Techniques of Therapy I (4). The first part of the therapy sequence includes: psychodynamic psychotherapy, cognitive/behavioral approaches, and systems models and family therapy. Prerequisite: PSYC 508 or consent of instructor.

PSYC 632. Theories and Techniques of Therapy II (3). This course is a continuation of PSYC 631. The topics will include: behavioral and operant techniques and applications; psychotherapy process and outcome research; and ethical, public policy and practical issues in psychotherapy. Prerequisite: PSYC 631 or consent of instructor.

PSYC 633. Theories and Techniques of Therapy III (2-4). Supervised practicum experience with varied therapeutic modalities. Prerequisites: PSYC 631 and 632, or consent of instructor. Graded S/U. May be repeated.

PSYC 642. Theories of Social Psychology I (3) I. Major theoretical approaches: S-R, cognitive, mathematical, biological theories. Prerequisite: PSYC 525 and PSYC 568.

PSYC 643. Theories of Social Psychology II (3) II. Contemporary minitheories; includes theories of attraction, conformity, social facilitation, and aggression. Prerequisite: PSYC 525 and PSYC 568. May be taken prior to PSYC 642.

PSYC 664. Psychological Assessment I (3) I. Historical theories of intelligence and application of intelligence tests to clinical populations. Administration, scoring, interpretation of intelligence tests for children and adults. Prerequisite: consent of instructor.

PSYC 665. Psychological Assessment II (3) I. Assessment of brain-damage; experience with standard neuropsychological devices. Use of structured personality tests. Prerequisite: PSYC 664.


PSYC 668. Scaling (3) I, II. Theory and methods of unidimensional and multidimensional scaling. Topics include measurement problems, procedures for developing scales, and interpretation of scales.

PSYC 669. Advanced Quantitative Methods (3) I, II. Possible topics include: stochastic models of learning and perception, decision processes, linear and non-linear factor analysis, latent trait theories, modern mental tests, multivariate analysis of variance, fundamentals of measurement. May be repeated. Prerequisite: PSYC 567, 568, or consent of instructor.

PSYC 670. Independent Study (1-12). Reading or empirical research on topic or problem approved by supervising instructor. May be repeated-
Rehabilitation Counseling

Harold L. Henderson, Graduate Coordinator, 405 Education Building
Phone: 419-372-7296

The two-year interdisciplinary graduate program is designed to train professional rehabilitation counselors to work in a variety of settings such as state rehabilitation agencies, sheltered workshops, mental health and substance abuse. Classroom and field experiences are utilized to help counselors develop a flexibility which permits them to adapt to diverse career situations. The two year program meets the educational requirements for licensure and certification.

Practicum and Internship

A practicum and intern experience is an integral part of this program providing practical counseling experience with the handicapped in a setting selected jointly by the candidate and adviser in terms of training and career goals.

Professional Area

The academic program including practicum requires a minimum of 48 hours of credit. With concurrence of a major adviser, a student may selectively pursue a course of study derived from the following courses which have been approved for the preparation of rehabilitation counselors:


Courses for Graduates

REHB 556. Principles of Rehabilitation Counseling (3). History, philosophy, principles, objectives, development of vocational rehabilitation counseling as social structure and profession. The student becomes aware of the various career ladders in the Rehabilitation Counseling profession.

REHB 557. Counseling in Rehabilitation Process (3). Methods and techniques in assessment and evaluation of vocational handicap; laboratory counseling experience; effective interviewing and recording procedures. The course introduces the student to a variety of treatment modalities.


REHB 559. Job Analysis and Work Evaluation in Rehabilitation (3). Occupation evaluation for rehabilitation counselors; job analysis in terms of work demands on client; client-capacity assessment. Students are introduced to the variety of vocational choice and development theories and how these can be related to the needs of the disabled.

REHB 560. Work Adjustment and Job Placement (3). Work adjustment counseling and job placement techniques. Special needs of a variety of rehabilitation populations. Prerequisite: REHB 559 or consent of instructor.

REHB 561. Family Intervention in Rehabilitation (3). Family counseling as a mode of intervention in rehabilitation process. Students learn the various treatment models related to family intervention.


REHB 567. Community Approaches to Counseling (3). Research and practice of community counseling: consultation, prevention, training of paraprofessional, action research. Prerequisite: consent of instructor.

REHB 570. Readings in Rehabilitation (1-4). Independent study, supervised study or selected problems, and tailored readings on one-to-one basis; proposed program of study must be approved by instructor prior to registration. Graded S/U.

REHB 587. Internship, Field Placement, or Practicum (1-4). Supervised experience within setting related to one's academic specialization. Proposed field placement registration must be approved by instructor/supervisor prior to registration. Graded S/U.

REHB 589. Clinical Internship (12). Five-day per week practice and probationary period of continuous

ed. Graded S/U.

PSYC 460. Introduction to Psychological Testing (3) I, II. Theory and methods of measuring human behavior. Basic measurement principles and applications; representative standardized tests of intelligence, interest, aptitude and personality. Prerequisite: PSYC 201 and PSYC 270 or equivalent.

Courses for Graduates and Undergraduates


PSYC 488. Field Study: Deafness and ASL (1) I. Orientation to deafness and on-site observation of educational approaches and communication methods used at elementary, secondary, and post-secondary levels by programs for deaf children. Conducted at Gallaudet College, Washington, D.C., between semesters. Pre-requisites: manual communication skills and consent of instructor. Graded S/U.

PSYC 489. Dissertation Research (1-16). Student must register for minimum of 16 hours in 799 while working on doctoral dissertation; may be repeated to 30 hours in degree program.
participation in active rehabilitation program under direction of qualified supervisors. Graded S/U. Prerequisite: REHB 596.

**REHB 596. Teaching Rehabilitation Counseling at Postsecondary Levels (1-3).** Pedagogic aspects of rehabilitation counseling discipline within higher education. Techniques, strategies for use of rehabilitation counseling concepts and procedures in two-year, four-year, and/or graduate institution.

**REHB 597. Research in Rehabilitation (3).** On demand. Analysis of the research methodology related to rehabilitation. Emphasis is on applied rather than basic research. Prerequisite: EDFT 596 or equivalent.

**REHB 598. Directed Research (1-4).** Supervised independent research on delimited topic. Involves generation of new knowledge as contrasted with private reading course.

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**Romance Languages**

Diane G. Pretzer, Chair, 67 College Park

Phone: 419-372-2667

Michael Locey, Graduate Coordinator (French), 10 College Park

Phone: 419-372-8278

Carole Bradford, Graduate Coordinator (Spanish), 13 College Park

Phone: 419-372-8058

**Graduate Faculty**

*Professors* - John Burt, Ph.D.; Mercedes Junquera, Ph.D.; Boleslav Povsic, Ph.D.; Antony van Beysterwelt, D.L.

*Associate Professors* - Carole Bradford, Ph.D.; Antonio Buron, Ph.D.; Karen Gould, Ph.D.; Lenita Locey, Ph.D.; Michael Locey, Ph.D.

**Prerequisites to Graduate Work**

Admission to graduate study in French or Spanish requires an undergraduate major or minor in French or Spanish (not less than 20 semester hours beyond the intermediate level). A student with less background may be accepted, provided he/she is willing to make up the deficiencies specified by the graduate coordinator.

**Requirements for the Master's Degree**

A candidate may pursue graduate studies in French or Spanish under the following two plans:

**Plan I** requires the completion of a minimum of 27 semester hours of course work and the writing of a thesis for which 6 semester hours of credit are granted. The student must also pass a written examination. This plan is recommended for the person who expects to continue graduate study to the degree of Doctor of Philosophy.

**Plan II** requires the completion of a minimum of 32 semester hours of course work. No thesis is required. Under plan II, a candidate for the degree must pass two written examinations: one general examination (all fields) and one in-depth examination concerning areas chosen by the student.

Under either plan the student is expected to show a general familiarity with the civilization, principal periods of literature, and a first-hand knowledge of the most significant works of the major writers. A list of suggested readings is available. M.A. candidates in French formulate their own reading lists in consultation with the graduate faculty. The student must also demonstrate proficiency in the language.

Under either plan, a student may include up to 8 semester hours of study in cognate areas, subject to the approval of the graduate coordinator.

**Second Language Requirement**

A plan I candidate must, before beginning recommended for the degree, demonstrate proficiency in a second foreign language equivalent to the completion of the 202 or 212 course listed in the Undergraduate Catalog or the 500 course listed in the Graduate Catalog. This may be satisfied by having completed the equivalent study in high school or in college or by passing a written examination.

The department conducts a graduate study program in Spain and France. However, the student must complete 51 percent of the courses in the degree program on the home campus.

**Graduate Courses in Romance Languages**

**ROML 495. Literary Translation (3).** Translation into English of poems and short prose works of students' choice, with advice and consultation of the instructor. From French, Spanish, Italian and Portuguese. Open to majors, minors and graduate students in French and in Creative Writing. Prerequisite: French, Spanish or Italian 202, 212, 500 or equivalent.

**ROML 590. Teaching College French/Spanish (1-3).** Current theories and practices, classroom experience, observation, required of and open only to teaching assistants. Does not count toward degree. Graded S/U.

**ROML 595. Workshop on Current Topics in Romance Languages (1-3).** On demand. Topics and issues vary.

**Graduate Courses in French**

**FREN 500. French for Graduate Students (4).** On demand. For graduate student in another field who desires to develop reading knowledge of French. Does not count toward degree. Graded S/U.

**FREN 511. History of French Language (3).** Reading and analysis of selected texts for tracing development of French language from ninth century to present. Pre-classical texts.

**FREN 512. Introduction to Old French (3).** Presentation of morphology and syntax of Old French with selected readings from different centuries. Prerequisite: FREN 511 or permission of instructor.

**FREN 555. Problems in French Linguistics (3).** Comparison of contemporary French and English phonology, morphology, and syntax through application of basic concepts of structural linguistics.

**FREN 556. French Grammar and Style (3).** Literary French: vocabulary, syntax, style.

**FREN 559. Self-Expression, Translation, and Style (3).** Develop-
Romance Languages


FREN 561. French Medieval Literature (3). Important works of medieval period, representative of various genres. Prerequisite: FREN 512.

FREN 562. French Literature of the Renaissance (3). Readings in the five or six major authors of the period. Lectures on pertinent literary history and intellectual backgrounds. Discussions. Slides.

FREN 564. Seminar in Seventeenth-Century French Literature (3). Analysis through readings, discussions and lectures of prominent Baroque and Classical authors. All genres. Slides.

FREN 566. Seminar in the Writers of Touraine (3). Reading and analysis of the works of writers typically associated with Touraine. The bearing of the Loire Valley region on their writings.

FREN 570. Graduate Readings in French (1-3). Supervised individual readings, such as verse, essay, prose, and intellectual production of one or several major authors. Please consult Department Chair before registration.


FREN 575. Contemporary French Literature (3). Development of novel in France from early 1930's to the present, current theories of novel as genre.

FREN 582. Contemporary French Theatre (3). French theatre of 1950's, predecessors and major successors, dramatic theories.

FREN 583. French Women Writers (3). Great women authors from Middle Ages to present.


FREN 586. Contemporary French Civilization (3). Modern France and its institutions: history, politics, education, the arts.

FREN 588. Topics in French Literature and Civilization (3). Particular author, authors, or genre such as poetry, drama, essay, prose fiction, literary criticism or else a cultural issue.

FREN 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree; minimum acceptable total for degree is three hours.

Courses for Graduates and Undergraduates in French

FREN 451. Advanced Composition and Conversation (3). Development of fluency and accuracy in written and oral skills at an advanced level.


FREN 458. Career French I (3). Terminology used in commercial operations, economics, international trade; emphasis on business correspondence; some translation.

FREN 459. Career French II (3). An advanced study of the economic and administrative structures in France and in Francophone areas, with intensive concentration on related technical language.


FREN 488. French Literature: Advanced Studies (3). Intensive study of an author, literary school, genre, or a selected theme. May be repeated if topics are clearly different.


Graduate Course in Italian

ITAL 570. Directed Readings in Italian (1-3). Supervised study to meet student's special needs. Prerequisite: consent of department chair and instructor.

Graduate Courses in Latin

LAT 500. Latin for Graduate Students (4) On demand. For graduate student in another field who desires to develop reading knowledge of Latin. Does not count toward degree. Graded S/U.

LAT 570. Graduate Readings in Latin (1-3). Supervised individual work to meet student's special needs. Prerequisite: approval by department chair.

Graduate Courses in Spanish

SPAN 500. Spanish for Graduate Students (4) On demand. For graduate student in another field who desires to develop reading knowledge of Spanish. Does not count toward degree. Graded S/U.

SPAN 512. Topics in Spanish Language and Linguistics (3). One or more topics in Spanish language or linguistics, including dialectology, field studies, kinesthetics, philology, semantics, semantics, transformational grammar.

SPAN 547. Seminar in Spanish American Short Story (3). In-depth study of one or several authors of contemporary period.

SPAN 556. Spanish Stylistics and Literary Theory (3). Forms of creative language and manifestations in literature.

SPAN 562. Spanish Medieval Epic and Romancer (3). Origins and development of Spanish epic and resurgence in balladry of 15th and 16th centuries, emphasis on the Cid.

SPAN 568. Cervantes (3). Principal works, such as Don Quixote.

SPAN 569. Picaresque Literature (3). Origins and development of Spanish picaresque literature, set against historical and social background of the Spanish empire.

SPAN 570. Graduate Readings in Spanish (1-3). Supervised individual readings to meet student's special needs. Prerequisite: advanced approval by departmental graduate committee.

SPAN 571. Seminar in Golden Age Drama and Poetry (3). Thematic development of Spanish national theatre and poetry from Lope de Vega to Calderón.

SPAN 573. Seminar in Nineteenth-Century Literature (3). Works of principal 19th century writers, including Espronceda, Bécquer, Pérez Galdós, Leopoldo Alas.

SPAN 575. Seminar in Generations of 1898 (3). Literary production of one or several major writers of movement, set against political and cultural background of period.

SPAN 577. Seminar in Contemporary Spanish Poetry (3). Literary production of one or several major
Romance Languages - Sociology

poets from the generation of 1927 to the present.


SPAN 582. Modernism in Spanish America (3). Sources and characteristics of "modernista" movement, principally in poetry, through consideration of works of Rubén Darío, Gutierrez Márquez, Herrera y Reissig, other leading authors.


SPAN 586. Contemporary Spanish Civilization (3). Political, educational, artistic developments that shaped present-day Spain.

SPAN 587. Contemporary Spanish American Civilization (3). Socio-political, educational, artistic developments that shaped nations of Spanish America.

SPAN 589. Topics in Hispanic Literature and Culture (3). Intensive study of particular author, authors, theme or genre, such as drama, essay, poetry, or prose fiction.

SPAN 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

Courses for Graduates and Undergraduates in Spanish

SPAN 431. Spanish American Fiction (3). Major authors and works from literary movements of the 19th and 20th centuries, with emphasis on either regionalism or the contemporary novel.

SPAN 441. Medieval and Golden Age Literature (3). Representative masterpieces of Spanish literature from the Middle Ages and the Siglo de Oro: Epic, poetry, novel, and theater.

SPAN 442. Spanish Literature of the Nineteenth-Century (3). Outstanding works of the 19th century; Romanticism, Realism, Naturalism, prose and poetry.

SPAN 444. Spanish Literature of the Twentieth-Century (3). Outstanding works from the generation of 1898 to the present: poetry and prose.

SPAN 450. Advanced Grammar and Composition (3). Grammar and composition, especially appropriate for future teachers of Spanish.

SPAN 455. Applied Linguistics (3). Phonological, morphemic, syntactical, semantic aspects of Spanish; application to language learning and teaching.

SPAN 463. Career Spanish (3). Development of translation skills (Spanish to English and English to Spanish) on materials representing a wide range of technical, professional, and business careers.

SPAN 481. Spanish-American Literature: Discovery to Modernism (3). Representative authors from the Chroniclers and through the Romantists; prose and poetry.

SPAN 482. Spanish American Literature II: Modernism to the Present (3). Representative authors from Modernism and subsequent 20th century literary developments; prose and poetry.

SPAN 488. Contemporary Mexican Literature (3). Outstanding works of the 20th century. Prerequisite: SPAN 368 or consent of instructor.

SPAN 489. Hispano Studies (3). Intensive study of a particular topic to increase the student's understanding of Hispanic literature, culture, or language. May be repeated if topics are clearly different. Prerequisite: SPAN 367 or SPAN 368.

Sociology

Meredith Pugh, Chair, 224 Williams
Phone: 419-372-2294
Stephen A. Cernkovich, Graduate Coordinator, 217 Williams
Phone: 419-372-2743

Graduate Faculty

Richard Zeller, Ph.D.

Assocs - Joseph E. Jacoby, Ph.D.; Ralph Wahrman, Ph.D.

The Graduate School offers several programmatic areas of study at both the M.A. and Ph.D. level. Most students, particularly those at the doctoral level, will specialize in one of a number of areas: Criminology/Divorce, Population Studies/Demography, Social Psychology, or the Sociology of Conflict. While the strength of the department lies within these major programmatic fields, students are encouraged to plan a course of study meeting their own particular interests and career objectives. Additional faculty expertise in the areas of Applied Demography, Criminal Justice, Family Studies, Sociology of Sport, Sociological Theory, and Quantitative Methods results in considerable flexibility in the design of individualized programs of study. Regardless of area of specialization, students in the program build a firm foundation in research methodoloty, statistics, and theory. Since graduates are employed in both academic and nonacademic settings, the program speciality areas provide the flexibility to prepare the student for a broad spectrum of professional opportunities. The M.A. programs in Applied Demography, Criminal Justice, and Family Studies, for example, are especially designed to prepare individuals for careers in the public sector, private industry, service organizations, and governmental agencies.

Prerequisites to Graduate Work

M.A. Program

For admission to the M.A. program in sociology the applicant must have a satisfactory academic record and a bachelor's degree from an accredited institution. Applicants are required to have completed undergraduate courses in sociological theory, methodology, and statistics. In cases where applicants are deficient in sociological background, they may be admitted on a conditional basis providing that the deficiencies are remedied during the course of study toward the Master's degree. A remedial plan will be developed by the Graduate Committee for the student's guidance. A placement (diagnostic) test in methods and statistics is given to all entering students for purposes of course advisement.

Ph.D. Program

Only strongly motivated individuals whose records indicate that they are capable of successfully completing a Ph.D. degree are admitted. A Master's degree is required for admission to the doctoral program. The ob-
Sociology

Objectives of the Ph.D. program are to provide a broad background in general sociology and to create the capacity for theoretically relevant, rigorous research in at least one area of specialization. Although faculty interests cover a wide range of speciality areas within sociology, doctoral students are encouraged to major in one of the following four areas: Criminology/Deviance, Population Studies/Demography, Social Psychology, or the Sociology of Conflict. This is not intended to be restricting, and recent students have not found it so. Faculty work with students to accommodate various other interests so long as they are consistent with faculty expertise.

Admission Procedures
Applicants are required to submit transcripts of all previous college work, scores on the Graduate Record Examination, and three letters of recommendation, at least two of which should be from professors familiar with the applicant's academic work; for doctoral applicants, all of the letters of reference should be from former sociology professors at the graduate level. The departmental Graduate Committee also requires that applicants submit an essay describing their area of sociological interest and professional goals. This essay is particularly important because it helps the Committee decide if the Department can meet the applicant's career goals.

Requirements of the Master's Degree
The M.A. degree in offered in eight general programmatic areas: Criminology/Deviance, Population Studies/Demography, Social Psychology, Sociology of Conflict, Applied Demography, Criminal Justice, Family Studies, and Quantitative Methods. All masters' degree students are required to complete the following courses: Classical Sociological Theory (SOC 501), Intermediate Statistics (SOC 568), and Intermediate Methodology (SOC 569). Classical Sociological Theory is not required, however, for those students in the Criminal Justice and Applied Demography programs. These students substitute courses in criminological theory and demographic theory, respectively, for the general theory requirement. Similarly, Applied Demography majors substitute specialized courses in demographic methods for the required Intermediate Methodology course. Each of the eight programmatic areas of study at the M.A. level specify course requirements in addition to those noted above. Further information about these requirements is presented in the specialty area program statements and in the department's Graduate Student Handbook, all of which may be obtained from the Department of Sociology.

Students may pursue the Master's degree under Plan I or Plan II, as they choose.

Plan I requires the writing of a formal thesis and a minimum of 30 semester hours of graduate coursework. The Master's thesis may be a replication of a previous study, a secondary analysis of data from another study, the product of original research based on primary data, or a piece of library research. Under this plan the student also must pass an oral examination on the thesis. In lieu of a thesis, students in the Criminal Justice program are required to complete an internship in Criminal Justice (SOC 589), during which they conduct a research project designed to meet the needs of the applied internship setting. This project results in a formal internship report that is designed and presented much like a thesis.

Plan II requires at least 33 semester hours of graduate coursework, including Research Design (SOC 597). Plan II students are required to pass a three-hour comprehensive examination in their area of specialization, a two-hour examination in sociological theory, and a two-hour examination in research methods/statistics.

Requirements of the Ph.D. Degree
Doctoral students are required to complete 60 semester hours of graduate course credit beyond the Master's degree; a maximum of 24 semester hours of dissertation work may be applied to this 60 hour requirement. Hour requirements, however, are secondary in importance to breadth and depth of knowledge as evidenced by performance on the departmental comprehensive examinations and demonstrated research competence. The dissertation, a mature piece of scholarship embodying the results of original research, is central to the student's plan of study. Students are expected to develop a dissertation proposal early in their program.

Ph.D. candidates are given considerable flexibility in working out their programs of study, although all students are expected to achieve a level of basic competence in theory, research methods, and statistics. Most Ph.D. students will choose a major and a minor area of concentration from among the following areas: Criminology/Deviance, Population Studies/Demography, Social Psychology, or Sociology of Conflict. Students may specialize in an area other than one of these four as long as there is sufficient faculty expertise in the area to permit specialized advanced study.

All Ph.D. students are required to take five basic courses in theory and research: Classical Sociological Theory (SOC 501), Modern Sociological Theory (SOC 502), Intermediate Statistics (SOC 568), Intermediate Methodology (SOC 569), and Research Design (SOC 597). Doctoral students also are required to complete Sociology of Conflict (SOC 632) and Seminar in Social Psychology (SOC 535). A minimum of 16 hours of Dissertation Research (SOC 799) also is required.

Doctoral students take written comprehensive examinations in the following four areas: Theory, Methods/Statistics, Major Area, and Minor Area. The examination in the Major Area is a single eight-hour written examination, while the Minor Area examination is a four-hour examination. The Theory and Methods/Statistics examinations are four hours each. Students who pass all of the required courses in the Theory sequence (SOC 501 and SOC 502) or in the Methods/Statistics sequence (SOC 568, SOC 569, SOC 597) with a grade of B or better, and who have acquired a grade point average of 3.5 or better in that sequence, will be exempt from taking the corresponding required examination.

Doctoral students may fulfill the Graduate College language requirement by demonstrating proficiency in either a foreign language or a computer language. Further information about requirements for the Ph.D. degree is presented in the specialty area program statements and in the department's Graduate Student Handbook, all of which may be obtained from the Department of Sociology.

Courses for Graduates
SOC 501. Classical Sociological Theory (3). Selected classical theorists ranging from Saint-Simon through Weber. Prerequisite: SOC 302 or consent of instructor.
SOC 502. Modern Sociological Theory (3). Major theories beginning with Parsons. Prerequisite: SOC 501 or equivalent.
SOC 516. Social Stratification (3). Classes, class conflict, social mobility. Prerequisite: consent of instructor.

SOC 517. Human Ecology (2) On demand. Theory and application, emphasis on research. Selected topics in areal structure and spatial distribution. Prerequisite: consent of instructor.

SOC 518. Human Fertility and Family Planning (3). Correlates of fertility in industrial and preindustrial societies. Prerequisite: consent of instructor.

SOC 521. Survey in Social Organization (3) On demand. Major approaches; methodological problems. Prerequisite: consent of instructor.

SOC 522. Organizations (3) On demand. Development, structure, and operation of complex organizations. Theories of complex organizations, problems of coordination and communication, formal and informal processes in complex organizations, relationships of complex organizations to their publics.

SOC 523. Population and Society (3). Human population; major variables (population size, composition and distribution); processes of change (birth, death, migration); social, economic, and political determinants and consequences.

SOC 525. Migration (3) Alternate years. International and internal migration; measurement, patterns, societal and individual consequences. Prerequisite: consent of instructor.


SOC 528. Race and Ethnic Relations (3) On demand. Social structural, social psychological, and cultural variables associated with patterns of interaction between racial and ethnic aggregates. Prerequisite: consent of instructor.

SOC 529. Market Demography (3). Development of demographic information for a broad range of market research problems. Interpretation of demographic data as well as evaluation and selection of data available from vendors and government agencies.

SOC 530. Social Change (3) Alternate years. Historical and contemporary theories and methods employed in study of social change.

Prerequisite: SOC 501 or equivalent.

SOC 532. Social Movements (3) Alternate years. Organizational, programmatic, action characteristics of contemporary social movements. Prerequisite: consent of the instructor.

SOC 535. Proseminar in Social Psychology (3) Alternate years. Contemporary systematic positions: review of research methods; theories and problems of current importance. Prerequisite: consent of instructor.

SOC 537. Political Sociology (3). Social sources and consequences of political strategies in both promoting and resolving conflicts in social organization. Prerequisite: consent of instructor.

SOC 540. Sociology of Education (3) On demand. Social structure and culture of schools; interrelationships between educational institutions and society. Prerequisite: consent of instructor.

SOC 542. Advanced Social Psychology (3) Alternate years. Societal influences on individual behavior with an attempt to bring together contributions from other related behavior sciences. Prerequisite: consent of instructor.

SOC 543. Small Groups (2) Alternate years. Experimental design, data analysis, development of theories. Prerequisite: SOC 502 and SOC 542, or graduate standing in psychology. Others by consent of instructor.

SOC 544. Deviant Behavior (3). Theories of deviant behavior and implications for treatment of deviants. Deviant behavior in relation to social control and social change. Prerequisite: consent of instructor.

SOC 550. Socialization (2) On demand. Socialization and the life cycle; emphasis on origins of self-identity, and consequences of self-conceptions for educational achievement, occupational attainment, and deviant behavior. Prerequisite: consent of instructor.

SOC 561. Corrections (3). Sociopsychological factors in rehabilitation of law violators and in field of corrections. Prerequisite: consent of instructor.

SOC 562. Sociology of Law (3). History and philosophy of criminal and civil law. Influence of social context in the creation and application of law. Prerequisite: consent of instructor.


SOC 569. Intermediate Methodology (3). An intermediate-level treatment of research methodology including methods of observation, questionnaire and interview construction for mail and telephone surveys, sampling strategies, and measurement techniques. Computer software applications.

SOC 570. Readings in Sociology (1-3). Selected problems in sociology; proposed program of study must be approved by instructor. Graded S/U.

SOC 580. Graduate Seminar (1-3) On demand. Systematic study of selected topics in several areas of sociology. Prerequisite: consent of instructor.

SOC 581. Seminar in American Studies (3). Interdisciplinary seminar coordinated in rotation by members of Departments of History, English, Philosophy, Political Science, Sociology, and School of Art, using lectures, discussion, and papers to study problem, theme, or era.

SOC 582. Family Theory and Research (3) On demand. Analysis of recent sociological literature on the family from the perspective of basic theoretical and methodological issues. Particular emphasis on basic concepts, measurement, and theory construction. Prerequisite: consent of instructor.

SOC 589. Internship (1-3). Supervised professional experience within occupational setting related to student's area of academic specialization. Graded S/U.

SOC 590. Teaching Introductory Sociology (1). Current theories and practices, emphasizing sociological perspective. Required prior to or concurrent with teaching of SOC 101 for students without previous college teaching. Graded S/U.

SOC 595. Workshop on Current Topics in Sociology (1-6) On demand. Workshops designed for current topics, issues, and social problems as reflected in society. Focus may vary from semester to semester.

SOC 597. Research Design (3). Problem formulation in behavioral research, alternative research designs, approaches to evaluation research, and research reporting. Prerequisite: SOC 568, 569 or consent of instructor.

SOC 598. Thesis Research (1-12). Credit for thesis study. Enroll-
ment in excess of six hours acceptable for plan I master's degree, but no
more than six hours creditable toward degree.

SOC 606. Advanced Studies in Methodology (3) On demand. Critical
examination and evaluation; includes such topics as qualitative
analysis, ethnomethodology, typological
analysis, use of models and quasi
models. Prerequisites: SOC 568 and
SOC 569 (Methodology).

SOC 607. Theory Construction in Sociology (3) On demand. Interre-
lations between theory building and empirical findings. Prerequisites:
SOC 502 and SOC 569 (Methodology).

SOC 612. Community (3) Alternate
years. Community theory, or-
ganization, power, and conflict. Pre-
quisite: consent of instructor.

SOC 617. Techniques of Demog-
graphic Analysis I (3). Procedures and
techniques for collection, evalu-
ation, and analysis of demographic data; census and vital registration
systems; basic measures of demo-
graphic components, construction of
simple life tables, population esti-
mates and forecasts. Prerequisite:
SOC 527 or consent of instructor.

SOC 618. Techniques of Demog-
graphic Analysis II (3). Techni-
ques not covered in SOC 617 are discussed. Multi-
ple increment-decrement life tables, model life tables, stable and
quasi-stable models, Hazards mod-
els, life table applications to the sub-
jects other than mortality, fertility and
nuptiality model schedules, and an introduction to multi-stage demog-
rapy. Prerequisite: SOC 617 or con-
sent of instructor.

SOC 619. Indirect Methods for Demographic Estimation (3) Alternate
years. Basic principles of indi-
cert estimation of demographic char-
acteristics such as fertility, infant
mortality, adult mortality, and migra-
tion from incomplete and deficient
data and examples of their applica-
tions using computer software. Pre-
quisite: SOC 617 or permission of
the instructor.

SOC 622. Population Forecast-
ing (3). History of projection and
forecasting. The cohort-component
methods: Development of population
base, mortality, fertility, and migra-
tion data; scenario development;
computer algorithms; judgment and
control issues. Forecasting in a poll-
environment. Prerequisites: SOC
527 (Introduction to Applied Demo-
ography).

SOC 623. Population and Third
World Development (3) Alternate
years. Theoretical and empirical lit-
urature which treats population
trends as determinants of economic
growth and development.

SOC 625. Seminar in Demo-
ography and Ecology (3). Selected topics in
demography and human ecology.
May be repeated. Prerequisite: con-
sent of instructor.

SOC 631. Sociology of Violence
(3) Alternate years. Generative condi-
tions, principle components, and so-
cial consequences of non-
institutionalized violence. Prerequi-
site: consent of instructor.

SOC 632. Sociology of Conflict
(3). Classical and contemporary per-
spectives on social conflict. Pre-
quisite: SOC 502.

SOC 640. Sociology of Higher
Education (3) On demand. Rela-
relationships between higher education and
society; student subcultures and dis-
sent; new alignments of power and
authority structures; bureaucratic
prestige, status relationships in
colleges and universities. Prerequisite:
SOC 540.

SOC 642. Deviant Sexual Be-

behavior (3) Alternate years. An exami-
nation of sexual behaviors that are
current social and political issues; re-
search on the behaviors' characteris-
tics and on the sociopolitical aspects
of official and public reactions. Pre-
quisite: consent of instructor.

SOC 644. Theories of Juvenile
Delinquency (3) Alternate years. Anal-
alysis of juvenile delinquency theo-
ries emphasizing social interaction
approach to understanding adoles-
cent subcultures, social controls, so-


Sociology

SOC 650. Advanced Studies in
Sociological Theory (3) On demand.
In-depth analysis of selected theoretical
issues. Prerequisite: SOC 502.

SOC 651. Social Structure and
Alienation (3) Alternate years. Con-
ceptions, measures, and correlates of
alienation in its multiple forms. Pre-
quisite: consent of instructor.

SOC 652. Collective Behavior
(3) Alternate years. Analysis of forms,
processes, and behavior in collectivi-
ties, crowds, publics, transitory
groupings. Prerequisite: consent of
instructor.

SOC 653. Social Psychology of
the Marital Dyad (3). Analysis of
processes of heterosexual dyadic for-
mation; construction of social reality
in marriage; adjustments to stressful
life events; emphasis on 'the genera-
tion gap,' the empty nest,' retirement,
and depth of spouse. Prerequisite: con-
sent of instructor.

SOC 654. Women and Institu-
tions (2) On demand. The position of
women in different institutions of
American society and other cultures examined theoretically and empi-
rically. The focus on the family, poli-
tics, economy, education, and religion
will portray the social factors which
promote harmony, conflict, strain,
power struggle, and consensus be-
tween the sexes relative to each insti-
tution. Prerequisite: consent of in-
structor.

SOC 660. Theories of Criminal-
ity (3) Alternate years. Criminal be-

behavior as analyzed by theorists of 18th, 19th, and 20th centuries.

SOC 668. Measurement and
Sampling (3) On demand. Theory and
methods; levels of measurement; uni-
dimensional and multidimension-
al scaling techniques using digital
computers. Prerequisite: SOC 572 or
equivalent.

SOC 670. Readings in Sociolo-
gy (1-3). Selected problems. Pro-
posed program must be approved by
instructor prior to registration. May
be repeated. Graded S/U.

SOC 671. Advanced Methods/
Statistics (3). Topics vary from term
to term. Illustrative topics include
causal modeling, loglinear models, and structural equation systems.

Computer software applications. Prerequisite: SOC 568 or consent of
instructor.

SOC 680. Graduate Seminar (1-
3) On demand. Systematic study of
selected topics in several areas of so-
ciology. Prerequisite: consent of in-
structor.

SOC 690. Internship in College
Teaching (2) On demand. Designed to
prepare qualified students for


SOC 417. Sociology of Sport (3).
Sociological concepts and theories to
investigate sport as social institution
and relationship to other social insti-
tutions; organizational theory and
small group research applied to
sport; social psychological aspects of
sports. Prerequisite: SOC 101.

SOC 460. Family and Sex Roles
(3) On demand. Theoretical and em-
pirical literature on family and sex
roles; socialization, changing nature of women's and men's roles, prospects for future; institutional sources of women's and men's roles in other cultures. Prerequisite: SOC 101.

Sociology - Special Education

SOC 461. Sociology of Family Violence (3) Alternate years. Current research and theoretical perspectives on family violence: spouse battering; marital rape; sibling violence; incest; and child abuse. Sex roles, family ideologies, social structures, and power relations are examined as constituting the basis of family conflict and violence between family members.

Special Education

(EDSE)

Edward Fiscus, Chair, 451 Education Building
Steven C. Russell, Graduate Coordinator, 449 Education Building
Phone: 419-372-7293

Graduate Faculty

Professors - Robert Blackwell, Ed.D.; Robert MacGuffie, Ph.D.
Assistant Professors - Audrey Ellenwood, Ph.D.; David J. Majsterek, Ed.D.; William T. Southern, Ph.D.; Ruth Wilson, Ph.D.

Graduate Degrees Offered

Master of Education with a major in special education, or school psychology, and Master of Rehabilitation Counseling.

Major Program Areas

Specific learning disabilities; developmentally handicapped; multi-handicapped; school psychology; rehabilitation counselor education.

Program emphasis may also be obtained in gifted and talented, hearing handicapped, and severe behavior handicapped.

Prerequisites to Graduate Work

Applicants to candidacy for the Master of Education degree with a major in special education, and for the Master of Rehabilitation Counseling degree must meet the following basic prerequisites: Meet minimum acceptance requirements for the Graduate College; meet minimum requirements for admission to the College of Education and Allied Professions; possess a valid baccalaureate degree in special education, elementary education, secondary education, or in a related field which will allow the applicant to make up background deficits within time limitations established prior to admission; and meet personal qualifications, as determined from an interview with the departmental graduate coordinator, and as established by the departmental graduate screening council.

Requirements for the Master of Education Degree

These are determined by the major area in which the candidate wishes to specialize. However, all majors have in common the requirement that the candidate must have completed, or will complete, the basic certification requirements for teaching in the state of Ohio in the major area for which he/she is a candidate. Degree programs are primarily designed for candidates who hold a baccalaureate degree plus teaching certification in special education, elementary education, or secondary education.

Required program courses: EDFI 506, EDSE 597, or REHS 597. EDSE 549, EDSE 580 (Professional Development Seminar).

There are six major areas a candidate may choose from in the Special Education Department which lead to a master's degree.

Specific Learning Disabilities

This interdepartmental major is designed to provide specialized training in theoretical foundations and in practical technical skills at the master's degree level for the person planning to teach children and adolescents who have specific learning disabilities as defined by a competent educational authority. Enrollment should normally be for the purpose of obtaining a master's degree in education.

A deficiency in background requirements may be repaired concurrently with the beginning of the graduate program, depending upon the nature and extent of such deficiencies. Courses taken to repair deficiencies must be in addition to the established requirements for the master's degree program.

Professional Area

The academic program, including practicum, requires a minimum of 33 semester hours of 500-level credit. With concurrence of his/her major adviser, a candidate may selectively pursue a course of study leading to certification, where necessary, and the M.Ed. degree. For specific requirements, contact departmental graduate coordinator.

Practicum Experience (EDSE 552/562)

Depending upon background experience, a practicum experience in the form of an intern-type situation is required in a setting consistent with the particular objectives of the candidate.

Developmentally Handicapped

Requiring a minimum of 33 semester hours of 500-level credit, this program is designed to prepare the candidate to work with developmentally handicapped persons at all grade levels. It has been organized for (a) the graduate student with an approved bachelor's degree who holds a teaching certificate in other than special education and desires to complete the Master of Education degree with specialization in this area; (b) the graduate student who holds an approved bachelor's degree and who has the standard provisional special teaching certificate and who desires to obtain the Master of Education degree with specialization in this area.

Professional Area

A student entering this program under conditions (a) or (b) above may, with the concurrence of the major adviser, selectively pursue an individualized course of study which will result in certification as a teacher of the developmentally handicapped, where necessary, and the M.Ed. in special education. For specific requirements, contact the departmental graduate coordinator.

Multihandicapped

This program is designed to prepare the candidate to work with the multihandicapped at all age levels. Students can pursue a M.Ed. degree and seek teacher certification, where necessary. The program is interdepartmental and includes a practicum experience. Candidates may be required to complete undergraduate courses in order to meet program or certification requirements. A minimum of 33 semester hours of 500-level course work is required in addition to completing any deficiencies. Professional Area

A student entering the program may selectively devise an individual course of study in conjunction with his/her adviser's approval. Certification requirements will be determined on an individual basis. For specific requirements, contact the departmental graduate coordinator.

Certification Program

Those students who already possess a baccalaureate degree and a
Special Education

Teaching certificate, and choose not to pursue a M.Ed. degree, but instead desire to meet certification requirements in the state of Ohio for teaching, special education supervisor, special education principal, or special education superintendent in one or more of the following areas—specific learning disabilities, developmentally handicapped, or multi-handicapped—may consult with the departmental graduate coordinator to arrange such a program of study.

School Psychology Program
Norman S. Chambers, Director, 418 Education Building.

The interdepartmental major in school psychology is designed to provide: 1) a broad background of theoretical and functional training; 2) an intensive and meaningful educational experience through a consultation and educational change process program at the master's degree level for the person planning to work primarily as a school psychologist in the school or mental health setting. Completion of the academic program leads to the degree of Master of Education. Subsequent completion of the supervised experience results in Ohio certification in school psychology.

Prerequisites to Graduate Work
A student planning to major in school psychology is expected to have had minimal background training equivalent to 8-10 hours in psychology including such courses as general psychology, child development, human learning, and psychology of adjustment. Depending on the nature and extent of the background deficiency, such background may be repaired concurrently with the beginning of the graduate program but shall be in addition to the degree requirements.

Requirements for the Master's Degree and Ohio Certification
The student must complete a program meeting Graduate College requirements as well as state certification requirements in school psychology. Such a program, including 12 hours in supervised experience plus 8 hours of seminar, approximates 70 to 75 hours of graduate credit and typically includes EDSE 548, 554, 571, 574, 576, 615, 616, 617, 682, EDSE 571, 572, 575, 576, 579, 596, 597, and PSYC 561, 562, 563, 568.

An additional program of courses is required for those students not possessing a valid teaching certificate and typically includes the following courses: EDSE 511, EDSE 560 and EDSE 585. The latter course shall be directed toward the observation of and participation in the normal school processes under supervision within a school setting. (See program coordinator for current certification information.)

After completion of a program of courses approved for the degree and the awarding of the Master of Education, the candidate is assigned to a supervised experience (internship) in a school approved by the director of the school psychology program. The supervised experience (internship) involves an academic year of service under the aegis of a certified school psychologist. Registration is required for the supervised experience. The consultant-trainee is classified as an employee of the school district and is remunerated during the supervised experience. The consultant-trainee is supervised either by a member of the faculty of Bowling Green State University or by a member of the faculty from the nearest university that has an approved program for the preparation of school psychologists (with permission of BGSU director of school psychology program).

Rehabilitation Counseling
(Master of Rehabilitation Counseling)
Director, Harold L. Henderson, 405 Education Building; see program description under Rehabilitation Counseling.

Courses for Graduates
EDSE 510. Education and Psychology of the Gifted and Talented (3) I. The history of gifted education; characteristics, psychology, and needs; identification and assessment, introduction to major theorists and current issues in the field.

EDSE 511. Curriculum for the Gifted and Talented (3) II. Describe factors that constitute differential education for gifted students; examine existing curricular models for gifted education; develop curriculum compatible with various service delivery models; develop evaluation mechanisms.

EDSE 512. Methods and Materials for the Gifted and Talented (3) Summer. The methodological strategies in classroom management and techniques for facilitation of gifted learners in various settings; competencies and attributes required for instructors; sources and evaluation of commercially available materials from a variety of sources.

EDSE 513. Practicum in Teaching the Gifted and Talented (1-6). Supervised experiences in a variety of planning and implementation set-tings. Prerequisite EDSE 510 and/or consent of the instructor.

EDSE 519. Advanced Practicum in Gifted/Talented Education (3) On demand. Supervised teaching experiences in education programs for the gifted. This course is designed for students who have completed an initial practicum experience. Prerequisite: EDSE 513 and permission of instructor.

EDSE 520. Introduction to the Integrated Early Childhood Classroom (3) I. An introduction to the knowledge and skills needed to teach handicapped young children in the regular classroom. The interface between general and special education is emphasized.

EDSE 521. Education Evaluation of the Young Handicapped Child (3) I. Exposure to informal assessment procedures, standardized tests, and observation systems necessary for planning an appropriate individualized educational program for the young handicapped child.

EDSE 522. Parents of the Young Handicapped Child; from Education to Involvement (3) I. Rationale and techniques for working with the parents of young handicapped children: supporting parent involvement in the educational process, helping families cope, and methods used.

EDSE 523. Curriculum and Instruction for the Young Handicapped Child (3) I. Identification and development of curriculum paradigms in relationship to past and present educational programs for young handicapped children. Focus will be on the development of preschool program models for young handicapped children.

EDSE 530. Sign English Intervention Systems/Total Communication (3). Examination of Sign English intervention systems, rationales, linguistic foundations, and expressive codes. Integrating Total Communication philosophy and principles of child development, procedures outlined for implementation with special children.

EDSE 531. Beginning Language Intervention with the Hearing Handicapped (3) I. Relates knowledge of communication pragmatics, syntax and semantic aspects of language to planning for instruction and evaluation of hearing-impaired students. Specific language characteristics and disorders associated with various levels of hearing impairment. Emphasizes on young children and through-the-air communication.

EDSE 532. Advanced Language
Special Education

Intervention with the Hearing Handicapped (3) II. Planning language instruction for hearing-handicapped learners at different levels. Emphasizes on older students and printed language. Assessment, identification and remediation of reading and writing problems. Issues related to instruction in other subject areas. Prerequisites: EDSE 535 and 531.

EDSE 533. Selection and Development of Instructional Strategies and Methods for the Hearing-Handicapped I (3) II. Develops knowledge and skills in planning instructional strategies especially for the younger hearing-handicapped child. Emphasis on selection and modification of existing materials and methods for content area instruction. Prerequisite: EDSE 535.

EDSE 534. Selection and Development of Instructional Strategies and Materials for the Hearing-Handicapped II (3) I. Extends knowledge and application of instructional theory to older hearing-handicapped students and to non-standard subject areas. Emphasis on development of teacher-made materials, individualizing and managing instruction, and on alternative instructional programming. Prerequisites: EDSE 535 and 533.


EDSE 548. Introduction to School Psychology (3) I. The study of origins and development of the profession of school psychology including roles and responsibilities, legal bases, ethical issues and interaction with parents, teachers, and other professional personnel.

EDSE 549. Seminar: Problems in Special Education (3) I. Summer. For leaders and resource personnel in special education; how to develop good leadership, identification of problem areas, possible solutions of these problems, evaluation of these solutions.

EDSE 550. Advanced Curriculum Development in Special Education (3) I. Summer. Application of principles of preparation, development, effective use of integrated units in teaching handicapped children; emphasis on total program: goal identification, scope, sequence. Prerequisite: consent of instructor.

EDSE 551. Seminar in Curriculum Planning for Students with Specific Learning and/or Behavior Disorders (3) I, II. Summer. Direct experiences in planned educational programs for individual children and in tutoring individuals and small groups. Consent of instructor and EDSE 553.

EDSE 552. Practicum in Teaching Students with Specific Learning and/or Behavior Disorders (1-8). Experiences in variety of planning and implementation settings. Prerequisite: EDSE 551, EDSE 553 and/or consent of instructor.

EDSE 553. Seminar in Differential Diagnosis in Specific Learning and/or Behavior Disorders (3) I, Summer. Recognition, identification, sorting and grouping of children with learning and/or behavior disorders for special education purposes: diagnostic instruments and procedures in classroom application. Prerequisite: consent of instructor.


EDSE 555. Seminar in Education Behavior Modification in Specific Learning or Behavior Disorders (3) II, Summer. Practical application of specific operant behavior modification and contingency management techniques and strategies. Prerequisite: EDSE 554, or consent of instructor.

EDSE 560. Administration and Supervision of Special Education (3) II, Summer. Organizing, financing, housing, equipping, staffing, supervising, and programming specialized educational programs for exceptional children. Prerequisite: consent of instructor.

EDSE 562. Advanced Practicum with Exceptional Individuals (1-6). Supervised teaching experience in education programs for exceptional children; planning and executing educational program under supervision of experienced teacher in area of concentration, i.e., crippled, deaf, educable mentally retarded, trainable mentally retarded, multiple-handicapped, learning disabilities, visually handicapped. Prerequisite: consent of instructor.

EDSE 563. Community Planning for Exceptional Individuals (3) II. Summer. Facilities and services available in planning comprehensive programs for exceptional children.

EDSE 564. Counseling Parents of Exceptional Individuals (3) II. Summer. Goals of individual adjustment of exceptional children, evaluation of techniques for gathering and utilizing information, principles and techniques of using such material in counseling parents.

EDSE 566. Rehabilitation Plan Formulation (2) Summer. Design, development, and implementation of individual client plans, based on individualized accumulative data, in operational structure of total rehabilitation process.

EDSE 567. Seminar: Professional Development in Rehabilitation (2) I. Current trends, problems, program developments in rehabilitation services: significances of rehabilitation programs.

EDSE 568. Seminar: Problems in Rehabilitation Specialization (4) II. Analysis of rehabilitation problems entailed by specialization in particular-disability counseling; laboratory-setting examination of and experience in unique counseling methods peculiar to specific disability.

EDSE 569. Principles and Procedures in Workstudy Coordination for Handicapped (3) On demand. Philosophy, history, principles, procedures, objectives, developments of work-study coordination for handicapped as profession.

EDSE 570. Readings in Special Education/School Psychology (1-4) I, II, on demand. Independent study, supervised study or selected problems, tailored readings. Proposed program of study must be approved by instructor prior to registration. May be repeated upon approval of student's advisor if department credit desired, or at discretion of student for recertification or personal growth.

EDSE 571. Process of Change in Public Schools (3) II. Summer. Theoretical bases, systematic and planned strategies for affecting change in education from sociopsychological consultation viewpoint; role and strategies of change agent: consultant. Prerequisite: consent of instructor.

EDSE 574. Analyzing Classroom Learning Environments and Social Relations (3) I. Practicum to analyze and assess problems related
Special Education

to classroom learning environments; plan program to enhance environment; to implement and evaluate plan. Theory integrated with field experience. Prerequisite: consent of instructor.

EDSE 575. Supervised Work Experience in Workstudy Coordination for Handicapped (8) On demand. Planned and supervised work experience with specific observation and participation in active work study type program under guidance and direction of qualified supervisors.

EDSE 576. Role and Function of the School Psychologist (4) Summer, on demand. An overview of the professional concerns school psychologists face working in the public school system. Orientation and preparation for the supervised internship experience; future responsibilities as a professional staff consultant. Basic issues; legal, ethical and moral guidelines. Prerequisites: PSYC 561-563, EDSE 571, EDSE 574, EDSE 548.

EDSE 580. Seminar in Special Education/School Psychology (1-3) I, II, on demand. Selected topics in the discipline; content varies from one year (or semester) to next. May be repeated upon approval of student’s advisor if graduate program department credit is desired or at discretion of student for recertification or for personal growth.

EDSE 585. Observation and Participation in the Schools (3) II, on demand. Directed observation and participation by school psychology students in educational settings.

EDSE 589. Internship, Field Placement, or Practicum in Special Education/School Psychology (1-4) I, II, on demand. Supervised experience in setting related to one’s academic specialization. Proposed field placement registration must be approved by instructor/supervisor prior to registration. May be repeated.

EDSE 590. Teaching Special Education/School Psychology at Postsecondary Level (1-3) I, II, on demand. Pedagogic aspects of EDSE discipline in higher education. Techniques; strategies for use of special education concepts and procedures in two-year, four-year, and/or graduate institution.

EDSE 595. Workshop on Current Topics in Special Education/School Psychology (1-3) I, II, on demand. Study, readings, and development of materials related to needs of special education practitioner. Topics vary from semester to semester. May be repeated on approval of graduate coordinator if graduate program department credit desired or at discretion of student for certification or for personal growth.

EDSE 599. Thesis Research (1-12) On demand. Credit for thesis study. An enrollment in excess of 6 hours is acceptable for a master’s degree, but no more than 6 hours are creditable toward the degree. The minimum acceptable total for the degree is 3 hours.

EDSE 615. School Psychology Supervised Experience I (1-10) I. Experiences in school psychology under supervision of school psychologist in approved supervised experience center. Registration requires approval of director of school psychology program, chair, and instructor. Graded S/U.

EDSE 616. School Psychology Supervised Experience II (1-10) II. EDSE 615 continued. Prerequisite: EDSE 615. Graded S/U.

EDSE 649. Advanced Seminar in School Psychology (4) I. A first-semester seminar involving child study and consultation staffings, lecture, readings, and discussion of selected topics related to the internship experience. Prerequisites: Master’s degree, taken concurrently with supervision of program director.

EDSE 650. Advanced Seminar in School Psychology II (4) II. A second-semester seminar involving child study and consultation staffings, lecture, readings, and discussion of selected topics related to the internship experience. Prerequisites: Master’s degree, taken concurrently with supervision of program director. Graded S/U.

EDSE 655. Orientation and Job Preparation for the Handicapped (3) I, II. Responsibilities of special class teacher for developing employable skills. Prerequisites: EDSE 431, EDSE 433 and EDSE 451.

EDSE 640. Curriculum Development and Methodology for Teaching Students with Moderate to Profound Handicaps (3) I, II. Materials and techniques emphasizing development and appropriate skills with practical applications. Prerequisites: EDSE 431 and EDSE 451; or consent of department.

EDSE 445. Sheltered Workshop-Function and Relationship to Special Education (3) I, II. Sheltered workshops in rehabilitation of mentally retarded. Techniques for job analysis and analyzing skills for specific jobs and job areas. Prerequisites: EDSE 431, EDSE 433, and EDSE 451.

EDSE 447. Education of Specific Learning Disabled Students (3) I, II. Multiple origins and educational significance of specific learning disabilities and/or behavior disorders.

EDSE 453. Educational Evaluation of Students with Specific Learning Disabilities (3) I, II. Identification and analysis of specific learning disorders or disabilities as direct or contributing factors in educational and behavioral failures or otherwise educationally competent children. Prerequisites: EDSE 431 and EDSE 451; or consent of instructor.

EDSE 459. Introduction to Manually Coded English Systems/Total Communication (3) I. Introduction to manual English and total communication instruction, sign systems and processes. Development of basic sign skills for classroom use.

EDSE 460. Advanced Seminar in Functions of public schools and governmental agencies in providing educational services for exceptional children.
Special Education - Technology

Manually Coded English/
Classroom Techniques and Applications (3) I, II. Investigation of linguistics of manual English in classroom use, implementation procedures for older students, and parents. Development of advanced skills in manually coded English.


EDSE 462. Introduction to Methods of Teaching Elementary School Subjects to Deaf and Hard-of-Hearing Children (3) II. Methods of teaching pre-school and primary elementary school subjects. Prerequisites: EDSE 431, EDSE 451, and EDSE 461.

EDSE 463. Advanced Methods of Teaching Elementary School Subjects to Deaf and Hard-of-Hearing Children (3). Methods of teaching intermediate and junior high subjects. Use of communication skills in all content subject areas. Preparing pupils to enter regular high schools or special colleges. Prerequisites: EDSE 431, EDSE 451, EDSE 461 and EDSE 462.


Technology

Jerry Streichler, Dean, College of Technology
Ernest Savage, Graduate Coordinator, College of Technology
Phone: 419-372-7613

Graduate Faculty


Associate Professors - Keith Bernhard, Ph.D.; Sudershan Jetley, Ph.D.; Anthony J. Palumbo, M.Ed.; Gene Poor, Ph.D.; John W. Sinun, Ed.D.; Charles Spooner, Ph.D.


Graduate Degree Offered

Master of Industrial Technology
The College of Technology offers the Master of Industrial Technology degree with a specialization in manufacturing. The Master of Education in Career and Technology Education is also offered by the college. The Master of Industrial Technology is designed to accommodate needs of students and to respond to requirements of industry for advanced technical and managerial personnel. The advent of microcomputers, new materials, computer graphics, manufacturing practices, and the requirements for better product design and quality as well as increased productivity and conservation of energy and resources create the critical need to effectively integrate engineering and operations. Leadership functions of technical managers are affected by these changes which dictate the design of the advanced course work in this program. The Master of Industrial Technology provides opportunities for students to engage in applied technical research. The outcomes of such activity add to the knowledge of relevant practice or solve immediate problems which surface in the workplace. Prerequisite to Graduate Work
A candidate may enter the program at the beginning of any semester. Admission requirements include a bachelor's degree with a major in industrial technology, engineering technology, engineering or a related academic field. A candidate must have the appropriate distribution of courses. Minimally, this will include 20 semester hours of study in a relevant technology or engineering field, 12 hours in business operations and 15 hours that will include applied calculus, physics or chemistry, applied statistics and computer science. Foreign students must establish English proficiency and must take the Test of English as a Foreign Language (TOEFL). To be admitted to this program candidates must meet the Admission Requirements described in this Catalog and present an undergraduate grade point average (GPA) of no less than 3.0 on a 4.0 scale (grade of "A" equal to 4.0). Competitive stipends are available for graduate research assistants. Qualification for a stipend requires a minimum GPA of 3.2. Candidates with lower GPA's may receive consideration if they have special credentials such as relevant work or military experience and/or examples of projects completed. An individual program is designed for each student after evaluation of the academic background. Requirements for Master of Industrial Technology Degree
Each applicant must present evidence of an appropriate academic foundation before entering the program - A minimum of 33 hours plus 6 hours thesis or project is required for graduation. This work consists of four components with either of two synthesis experience options: plan I, the thesis or applied research option; or plan II, the project or professional applied option. The four components are described below. Specific courses that meet the requirements are selected by the student in consultation with, and approval of, the graduate adviser.

1) The Technology Core (9 credits) consists of course work in research and development, data analysis and decision-making and organizational communication.

2) The Technology Concentration (15 credits) consists of course work in Manufacturing including advanced level automation and production systems, instrumentation and control, engineering design with emphasis on computer-aided design, computer-integrated manufacturing, quality and reliability testing, and related advanced training and development.

3) Business Operations (9 credits) consists of course work selected through advisement from accounting, management, marketing or organizational theory and behavior. Only Phase II Graduate Business Adminis-
Technology

The Synthesis Experience (6 credits) options are determined based upon the students choice of plan I or plan II. Plan I requires a thesis and Plan II requires a major project. The nature of the synthesis experience under each plan may differ significantly. The thesis develops the candidate's capability for applied technical research. The student must complete the thesis and pass a final oral examination. In the major project, the student must write a project report and pass a final oral examination. In this activity, the student synthesizes and applies knowledge derived from the program to solve complex human-machine problems or to analyze and develop prototype mechanisms or systems. Application of technology and business operations to the solution of human, machine, or technical management problems is also integrated. Problems for thesis or major projects are encouraged to be derived from the work place.

Courses for Graduates

TECH 501. Soil and Foundation Systems (3) II. Advanced study in the mechanics of the soil structure. Such topics as soils exploration, tests to evaluate bearing capacity, establishing foundation sizes, lateral soil movement, ground water problems, and the economics of different foundation systems will be evaluated. Prerequisites: CONS 335, DESN 336, CONS 435, CONS 439.

TECH 502. Instrumentation and Control (3) I (Even years). A study of instrumentation and control and final control elements with emphasis on direct digital control. Prerequisite: ET 441 and ET 442.

TECH 503. Data Analysis and Decision Making in Technology (3) II, Summer (Odd years). Concepts of data analysis, distribution and probability, variance and inference, data and their uses, and other statistical analysis techniques, with technological and industrial applications. Prerequisite: STAT 510 or equivalent.

TECH 504. Computers in Design and Manufacturing (3) II, Summer on demand. A study of computer systems in industry with an emphasis on computer-aided design/computer-aided manufacturing (CAD/CAM), including programming, documentation, hardware configurations and integrated applications. Prerequisite: CS 500, ET 442, and DESN 404 or equivalent.

TECH 526. Quality and Reliability Testing (3) II (Odd years). Implementation of quality and reliability through materials analysis, product development, design analysis and testing, and process control applications. Two hours lecture and two hours laboratory. Prerequisites: MGF 424, 426, and TECH 503 or equivalent.

TECH 527. Industrial Productivity Analysis (3) I (Odd years). Implementation and application of productivity analysis through contemporary productivity measurements, work methods design, performance sampling analysis and standardization to improve industrial productivity. Two hours lecture and two hours laboratory. Prerequisites: MGF 427, and TECH 503 or equivalent.

TECH 528. Computer Automated Manufacturing (3) II (Even years). Advanced study of computer integration and manufacturing and its subsystems in flexible manufacturing applications. Two hours lecture and two hours laboratory. Prerequisites: DESN 404, CS 500, MGF 428 and TECH 504 or equivalent.

TECH 533. Visual Communication for Business and Industry (3). An accelerated inquiry into the theories and processes of systematic communication problem solving, slide presentation, desktop publishing, presentation graphics, and non-broadcast television production.

TECH 570. Readings and Problems in Technology (1-3). Supervised study, selected problems and/or tailored readings related to construction management and technology or manufacturing or visual communication technology. Proposed program of study must be approved by instructor prior to registration. May be repeated to six credit hours.

TECH 580. Topics in Technology (1-3) On demand. Systematic study of selected topics and their application to construction management and technology or manufacturing or visual communication technology. Prerequisite: consent of instructor. May be repeated.

TECH 589. Cooperative Education Internship (3). Work and study in business, industry, service or government agency in a position related to student's intended area of specialization. Student assumes a professional role and pursues solutions to appropriate technical management problems. Placement must be approved by major advisor prior to registration. May be repeated to six credit hours.

TECH 597. Research and Development in Technology (3) I, II (Odd years), Summer (Even years). Research and development strategies in technology. Emphasis is placed on preparation of a research or development proposal.

TECH 598. Directed Research (1-3). Supervised independent development project or research on a delimited topic in construction management and technology or manufacturing or visual communication technology as contrasted with a private reading course. Proposal for directed research must be approved by instructor/supervisor prior to registration. May be repeated to six credit hours.

TECH 599. Thesis Research (1-12). Credit for thesis study. A student may register for unlimited thesis credits with a maximum of six credits allowable toward degree requirements. The minimum acceptable total is three credit hours.

TECH 662. Analysis, Design and Development in Training (3) I, II. Extensive examination and development of competencies in training needs assessment, training proposal, development, techniques and competencies in work process, troubleshooting and subject matter analysis, design techniques and training material development. Prerequisite CTE 559 or permission.

TECH 663. Implementing Training Systems (3) I, II. Examine the organization and placement of the training and development departments within business and industry and develop competencies in organizing, implementing, and evaluating training systems. Prerequisite CTE 559 or permission.

Career and Technology Education Courses for Graduates

C&TE 559. Training in Industry and Business (3). Design, production and evaluation of training programs for industry and business. Task analysis, system design, and cost analysis in development of training programs. (For advanced training courses, see TECH 662 and TECH 663).

Courses for Graduates and Undergraduates

DESN 404. Computer Aided Design (3). Study and application of computer graphics systems to the design process. Use of interactive methods using computers and commercial CAD software for design purposes. Development of two and three dimensional views and complex sur-
Technology - Theatre

face generation. Emphasis on learning to draw with the computer and applying computer graphics technology to engineering graphics and design. Prerequisites: DESN 104, CS 101.

DESN 436. Planning and Design of Industrial Facilities (3) On demand. Planning, estimating, design, and modeling of industrial facilities with consideration of management, personnel, production, aesthetics, and environment. Four hours lecture and laboratory. Prerequisite: DESN 301.

DESN 450. Architectural Graphics II (3) II. Architectural design, commercial and industrial construction; man-made environment considered through the study of advanced problems in the planning and designing of commercial structures. Development and use of schematics, sketches, elevations, plans, details, and construction documents. Four hours of lecture and laboratory. Prerequisite: DESN 301.

DESN 452. Design in Industry (3) I (On demand). Systems approach applied to solution of one and two dimensional product design problems; emphasis on feasibility in production and use. Prerequisites: DESN 304, DESN 404.

DESN 455. Engineering Design (3) II (Even years). Problems in design requiring advanced engineering graphics and computation for solution. Emphasis on kinematics of mechanism, human factors, strength of materials and the design process. Four hours lecture and laboratory. Prerequisite: DESN 304.

ENVR 421. Industrial Pollution Control (3) II. Air and water pollution control regulations as they apply to industry. Functioning and selection of parameters of industrial pollution control equipment and selected case studies.

ET 441. Instrumentation (3) II, Summer on demand. Industrial instrumentation, measuring mechanical, fluid, and electric phenomenon, transducers, recorders, indicators and controllers. Principles underlying their design and applications. Four hours of lecture and laboratory. Prerequisite: ET 241 or consent of instructor.

ET 442. Digital Computer Analysis (3) II. Summer on demand. Organization and construction of microcomputers, machine language and programming, interfacing, including developing logic design, selection of integrated circuits, assembly, testing, and system diagnostic testing procedures. Four hours of lecture and laboratory. Prerequisites: ET 358 or consent of instructor.

ET 443. Solid State Devices (3) I, Summer on demand. Semiconductor devices operational amplifiers, SCR, unijunction and FET transistors. Theory of operations, manufacturing procedures, parameter specifications, performance, testing and applications. Four hours of lecture and laboratory. Prerequisite: ET 241 or consent of instructor.

ET 453. Digital Computer for Process Control (3) II, Summer on demand. Basic concepts, terminology, evaluation and types of control systems as they apply to industrial process control and positioning systems. These systems will be subdivided into measurement, controllers and final control elements. Four hours of lecture and laboratory. Prerequisite: ET 358 or CS 307, CS 101, MATH 126 or 131.

MFG 458. Machine Tool Processes II (3) II (Even years), Summer on demand. Advanced precision metal machining tool processes, machining machines and related tooling problems. One 1-hour lecture and two 2-hour laboratories. Prerequisite: MFG 311.

TECH 454. Energy Conversion and Power Transmission (3) On demand. Existing and developing systems of energy conversion and power problems of fuel efficiency, pollution potential, maintenance and application. Four hours of lecture and laboratory. Prerequisite: ET 191.

TECH 457. Handicrafts for Recreation, Therapy, and Teaching Professionals (3) I (Odd years). Creative possibilities using various materials and tools in development of personal lifetime recreational interests and skills in directing others in such activities. Four hours of lecture and laboratory. Prerequisite: TECH 313 or permission of Instructor.

TECH 489. Cooperative Education (4). Work and study in business, industry, service, or government agency in College approved 10- or 16-week, paid, full-time position related to student's intended area of concentration. May be repeated to six hours. Prerequisite: TECH 389 and consent of department. Graded S/U.

VCT 456. Color Process Photography (3) II. Process photography for reproduction of photographs and illustrations in black and white and color. Halftones, duotones (black and color), electronic scanning, color separation, photographic four-color-separation, and color proofing systems. Four hours lecture/laboratory. Prerequisite: VCT 208. Lab fee.

VCT 460. Photography (3) I. Research and experimentation in special effects photography and creative darkroom techniques. Four hours lecture/laboratory. Prerequisite: permission of instructor. Lab fee.

VCT 483. Color Photography (3) On demand. Theories and principles in production of color negatives, positives, and transparencies for commercial and industrial photographic applications; emphasizes basic color sensitometry, quality control techniques and use of laboratory color films. Four hours lecture/laboratory. Prerequisite: VCT 362. Lab fee.

Theatre

Allen Kepke, Chair, 318 South Hall
Phone: 419-372-2222
Allen S. White, Graduate Coordinator, 301 South Hall
Phone: 419-372-7175

Graduate Faculty
Professors - Allen Kepke, Ph.D.;
Allen White, Ph.D.
Associate Professors - Britt Lee, Ph.D.;
Norman J. Myers, Ph.D.;
Scott Negan, Ph.D.
Assistant Professors - Steven Boone, M.F.A.; Robert Groff, M.F.A.;
Margaret McCubbins, M.F.A.; Ronald Shields, Ph.D.

Graduate Degrees Offered
Master of Arts and Doctor of Philosophy

Admission Procedures
In applying for admission to either the master's or doctoral program, applicants should include the following items in addition to the Graduate College Admission Application: transcripts of all previous college/university work, Graduate Record Examination scores, an essay describing the applicant's educational/professional goals, three current letters of recommendation and a sample of the applicant's research writing.

Prerequisites to Graduate Work
M.A. Program
For admission to graduate study in theatre at the master's level, the applicant must hold a bachelor's degree from an accredited institution with a satisfactory academic record. Admission normally requires 36 quarter hours or 24 semester hours of undergraduate work in theatre. Students with undergraduate majors in fields
other than theatre will be considered for admission on an individual basis and may be required to take specified remedial undergraduate course work. A student is expected to have completed undergraduate courses in acting, directing, technical theatre, and dramatic literature.

Ph.D. Program

A student who has obtained a master's degree in theatre from an accredited institution may be admitted to advanced graduate study beyond the master's level if the record indicates potential for successful, advanced scholarly and creative work. The graduate selection committee will review the records of all incoming doctoral students in accordance with their declared interests and, if necessary, the doctoral applicant may be required to take specified remedial master's level course work. A student is expected to have completed M.A. courses in research methodologies, theatre history, theory and criticism, and dramatic literature.

Requirements for the Master's Degree

A student may meet the minimum requirements for the Master of Arts degree, Plan I, by completing a minimum of 30 semester hours and writing a thesis demonstrating an ability to carry on research or independent creative activity.

In Plan II, a student must complete a minimum of 33 semester hours and write 6-8 hours of comprehensive examinations. In both plans I and II, details of expected course sequences in the major program may be obtained from the Theatre Department.

In the final examination for the master's degree, the candidate is expected to show a knowledge of the principal historical factors, philosophical concepts, and accepted methodology in the chosen field of study. The student who elects plan II must complete a written examination, which may be followed by an oral examination in cases where the academic advisory committee deems it necessary.

All students must have summer stock theatre experience as part of the master's degree program. They may gain the experience through the Department's Summer Stock Theatre or demonstrate evidence of a comparable experience elsewhere.

Requirements for the Ph.D. Degree

The doctorate is granted after the candidate passes an oral defense of the dissertation. The dissertation must be an appropriate culmination of the candidate's program of study, and represents scholarly research and writing appropriate in method and subject to the degree program.

The following areas are presented as areas of strength in which doctoral dissertations have been written: theatre history, directing and staging, theory and criticism, and dramatic literature. In addition to the dissertation, students are required to complete 10 hours of comprehensive examinations in the theatre history, theory and criticism, directing/staging, technical theatre, and 8-10 hours of specialized exams in a specified area of theatre.

Students are required to demonstrate proficiency in pedagogy, research, and theatre production through formal course work and practicums. Whenever appropriate, students are encouraged to participate in professional conventions and/or publish their research findings.

The doctoral program requires a minimum of 60 semester hours beyond the master's degree, including dissertation credit; successful completion of a written and oral comprehensive examination related to the candidate's program of study; and completion of the appropriate language option or alternate. Details of expected course sequences and dissertation directions can be obtained from the Theatre Department.

Courses for Graduates

THEA 561. History of Theatre I (3) I. Historical development of physical theatre and production styles from primitive times through 1650; stage, auditorium, scenery, machinery, lighting, costumes, acting, directing, conventional practices.

THEA 562. History of Theatre II (3) II. THEA 561 continued. Theatre in Europe and America, 1650 to the present.

THEA 565. Theories of Drama (3) II. Major critical theories from Aristotle to present.

THEA 567. Seminar in Directing (3) I. Theory and practice of play direction with attention to particular needs of individual student.

THEA 589. Practicum in Theatre (1-12). Supervised experience in theatre production, acting, management, technical theatre. Field placement must be approved by supervisor prior to registration.

THEA 597. Research Methods in Theatre (3) I. Introduction to research, research methodologies and techniques, and implications of research in theatre.

THEA 598. Research Problems in Theatre (1-3). Independent studies and research problems in theatre for master's degree students. Registration must be approved by department chair. May be repeated with approval of graduate coordinator and department chair.

THEA 599. Thesis Research (1-12). Credit for thesis study. Enrollment in excess of six hours acceptable for plan I master's degree, but no more than six hours creditable toward degree. Minimum acceptable total for degree is three hours.

THEA 660. Staging Problems in Musical Theatre (3) Alternate years. Theoretical and practical problems in staging the musical play. Prerequisite: THEA 567.

THEA 661. Readers Theatre (3) I. Theory and practice of adapting and staging literary texts through group performance.

THEA 663. Theatre for Young Audiences (3) On demand. Introduction to producing plays for child audiences; application of concepts of child development on aesthetic problems of theatre for young audiences, through reading, discussion and participation.

THEA 664. Topics in Technical Theatre (3) On demand. Topics concerning theatre architecture, scenery, properties, sound, lighting, costumes, and make-up.

THEA 665. History of American Theatre (3) Alternate years. From beginnings to 1940; relationship to English theatre, censorship, acting, directing, theatre architecture, production methods, playwrights, commercialization.

THEA 666. Scene Design (3) II. Theory and practice of scenic design for the stage. Exploration of period styles as well as conceptual approaches to the work by the stage designer.

THEA 667. Scene Painting (3) Alternate years. Practical, traditional scene painting as well as an exploration of nontraditional approaches to the work of the scenic artist. Laboratory work on University productions required.

THEA 668. Theatre Organization and Management (3) II. Summer. Principles and techniques of organizing and managing theatre production program in educational, community, and commercial settings.

THEA 669. Technical Drafting for the Theatre (3) Alternate years. Practical drafting for stage designer
and technicians, including an introduction to the use of computer-aided design tools in the theatre. Laboratory work on University productions required.

THEA 670. Styles of Rendering for the Stage (3) Alternate years. Practical approaches to traditional rendering techniques as well as exploration into nontraditional approaches to the graphic work of the theatrical designer.

THEA 671. Costume Design (3) Alternate years. Theory and practice of costume design for the stage. Studio work provided.

THEA 672. Lighting Design (3) Alternate years. Contemporary theories and practice in lighting design for the stage, television and film. Examination of the history of lighting design and major figures in its theoretical and technological development. Prerequisite: THEA 666.

THEA 677. Seminar in Scene Design (3) Alternate years. Advanced problems in scenic design for the stage, television, and film. Examination of the history of design and major figures in its theoretical and practical development. Studio work provided. Prerequisite: THEA 666.

THEA 679. Playwriting (3) II. Writer's workshop involving creation and production of original play for stage; discussion of process of playwriting and mounting a play for production. May be repeated with permission of instructor.

THEA 688. Practicum in Theatre (1-12). Supervised experience in theatre production, acting, management, technical theatre. Field placement must be approved by supervisor and department chair prior to placement.

THEA 691. History and Theory of Oral Interpretation (3) On demand. The history of pedagogical philosophies, theories, and techniques associated with the practice and teaching of oral interpretation.

THEA 694. Practicum in Theatre Pedagogy (1). Problems which arise in day-to-day assistant/fellow activities. Includes observation by regular faculty. Graded S/U. Required of graduate assistants/fellows each semester they have an assignment.

THEA 695. Workshop on current Topics in Theatre (1-3). On demand. Reading, experiences in theatre; topics vary from semester. May be repeated with approval of graduate coordinator. Graded S/U only.

THEA 698. Research Problems in Theatre (1-3). Independent studies and research problems in theatre for doctoral degree students. Registration must be approved by program chair. May be repeated with approval of graduate coordinator and department chair.

THEA 680. Topics in Directing and Staging Styles (3) On demand. Approaches to addressing problems of style in such plays and movements as: Classical, Shakespearean, Restoration. Epic, Absurdist. May be repeated with permission of faculty adviser.

THEA 682. Topics in Directing and Staging Theory (3) On demand. Theoretical approaches to directing and staging. Topics include such issues as: play script interpretation, collaboration among actors, director, designer; audience response, coaching the actor. May be repeated with permission of faculty adviser.

THEA 763. Theatre Pedagogy (3) I. Pedagogical philosophies, problems, and techniques associated with teaching theatre.

THEA 766. Topics in Theatre History: Classic-Elizabethan (3) Alternate years. Theatre of ancient Greece, Romans, Middle Ages, and Elizabethan period; physical elements and conventional practices. May be repeated with permission of faculty adviser.

THEA 767. Topics in Theatre History: 17th-19th Century (3) Alternate years. Western theatre during the 17th-19th centuries; physical elements and conventional theatre practices. May be repeated with permission of faculty adviser.

THEA 768. Topics in Modern Theatre History (3) On demand. Western theatre during late 19th and 20th centuries. Various topics from year to year such as realism, space stages, educational theatre, Broadway, off-Broadway, regional theatre. May be repeated with permission of faculty adviser.

THEA 772. History and Principles of Dramatic and Theatrical Criticism from Beginning Through Renaissance (3). Critical and theoretical writings pertaining to drama and theatre from beginning through 17th century.

THEA 773. History and Principles of Dramatic and Theatrical Criticism from 18th Century to the Present (3). Critical and theoretical writings pertaining to drama and theatre in 18th, 19th and 20th centuries.

THEA 774. Topics in Contemporary Theatre (3) On demand. Specific critics, playwrights, genres of theatrical literature, or particular critical viewpoints. May be repeated with permission of faculty adviser.


THEA 776. Readings in 16th-17th Century Theatrical Literature (3) Alternate years. Dramatic literature in England and continent during 16th-17th centuries.


THEA 778. Readings in 20th Century Theatrical Literature (3) Alternate years. Dramatic literature in America, England, and continent from age of Realism until present.

THEA 799. Dissertation Research (1-16). Student must register for a minimum of 16 hours in 799 while working on doctoral dissertation; may be repeated to 30 hours in degree program.

Graduate offerings in Women's Studies are open to all graduate students at BSU and may count toward degree programs in many areas. Women's Studies courses examine the roles and contributions of women in culture, society, and history. They also introduce students to the various methods of feminist scholarship now being used in the new research on women in the humanities, social sci-

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**Women's Studies**

Karen Gould, Director, 419 University Union
Phone: 372-2620

Graduate Faculty
- Patricia Arneson, Interpersonal and Public Communication; Ellen Berry, English; Alice Calderonello, English; Patricia Cunningham, Applied Human Ecology; Doris Davenport, English; Dawn Glanz, Art and Women's Studies; Karen Gould, Romance Languages and Women's Studies; Denise Hartsough, Mass Communication; Kathleen Howard-Merrilam, Political Science; Nancy Kubasek, Legal Studies; Marilyn Motz, Popular Culture; Vivian Patraka, English; Bonnie Tu-Smith, English.

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Women's Studies

Courses for Graduates

WS 520. Feminist Theory (3). An introduction to the principal conceptual bases underlying feminist theory across the disciplines. Will examine recent feminist theory and its applications in the fields of language, literature, film, religion, philosophy, history, psychoanalysis, developmental psychology, and politics.

WS 570. Readings in Women's Studies (1-3) I, II. Topics not ordinarily offered in curriculum. Prerequisite: consent of instructor.

Above: Two graduate students chat at a reception held during the Graduate Student Professional Development Program.

At left: Students walk to classes beside the newly remodeled Business Administration building.
Index

Abstract charge, 21
Academic regulations, 25
Grading policies, 25
Transfer of credit, 27
Academic community, 6
Academic dismissal, 27
Academic honesty, 25
Accounting & management information systems, 52
Accreditation, 4
Administrative officers, 2
Admission categories, 15
Admission fee, 17
Admission requirements, 16
Adviser, assignment of, 31
American culture studies, 53
Application fee, 17
Application procedures, 16
Application for assistantships and fellowships, 19
Application for graduation, 32
Applied human ecology, 56
Applied statistics & operations research, 58
Approval of thesis topic, 34
Arts, Master of Fine, 39
Art, 59
Arts & Sciences, 61
Arts, Master of Fine, 39
Assistantships and Fellowships, 19
Audit, 12
Automobile registration fee, 21
Automobiles, student use of, 29
Biological sciences, 62
Business administration, graduate, 98
Business education, 66
Calendar, 29
Campus, 7
Candidacy, doctoral, 47
Career & technology education, 67
Center for Archival Collections, 8
Center for Governmental Research and Public Service, 8
Center for Photochemical Sciences, 8
Center for the Study of Popular Culture, 8
Centers and institutes, 8
Certification, 31
Changes in registration, 12
Charges, basic fees and, 20
Chemistry, 69
College student personnel, 71
Communication disorders, 73
Comprehensive examination, 35
Computer resources, 7
Computer science, 74
Conditional admission, 15
Continuous registration, 34
Cooperative education, 10
Cooperative registration applications, 16
Costs and financial aid, 19
Credit by examination charge, 21
Credit-hour load, 14
Credit, transfer, 27
Deadlines, 11, 16, 48
Degree programs, 31
General requirements for degrees
Doctor of Philosophy, 44
Master's degree, 33
Directory information, 28
Dismissal from a course, 12
Dissertation Research, 47
Thesis/dissertation fund, 7
Doctoral committee, 46
Doctoral fellowships, 19
Doctor of Philosophy, 44
Admission, 44
American culture studies, 53
Biological sciences, 62
Candidacy, 47
Committee, 46
Communication disorders, 73
Completion of work, time limit for, 45
Dissertation, 47
Educational administration & supervision, 75
English, 87
Final examination, 48
History, 103
Interpersonal & public communication, 106
Language requirements, 45
Major and minor, 45
Mass communication, 108
Mathematics & statistics, 114
Philosophy (applied), 118
Photochemical sciences, 121
Preliminary examination, 46
Psychology, 128
Re-examination, 46
Residence requirements, 44
Retaking the final examination, 48
Sociology, 134
Theatre, 144
Dual master's degrees, 35
Economics, 77
Educational administration & supervision, 78
Educational curriculum & instruction, 81
Educational foundations & inquiry, 85
Electron Microscopy Center, 8
Employment, loans and, 20
English, 87
Equal access to programs, 28
Examinations
Comprehensive, 35
Final, 34
Preliminary, 46
External and nonresident courses, 13
Faculty, graduate, 10
Fees and charges, 20
Admission, 17, 21
Application, 17, 21
Applied music, 21
Automobile registration, 21
Credit by examination, 21
Course revalidation, 21
Dissertation, 21
Excess credit, 21
Extension, 21
General, 20
Instructional, 20
Late payment, 21
Late registration, 11
Nonresident, 20
Payment, 22
Refund, 22
Return check charge, 21
Summer session, 21
Thesis binding and abstract, 21
Transcript, 21
Fellowships, 19
Fields, 50
Final examination, 34, 48
Financial aid, 19
Foreign language requirement, 45
Full time, definition of, 14
General fee, 20
General requirements for master's degree, 33
Geography, 91
Geology, 93
German, Russian & East Asian languages, 95
Gerontology, 33, 97
Grade appeals, 26
Grade points and grade point averages, 25
Grading options, 26
Grading policies, 25
Grading system, 25
Graduate assistantships, 19
Graduate business administration, 98
Graduate college, 10, 101
Graduate coordinator, 31
Graduate programs and courses, 52
Graduate Management Admission Test, 12
Graduate Record Examination, 17
Graduate faculty representative on doctoral committee, 46
Graduate student senate, 10
Graduation, application for, 32
Health form, 16
Health, physical education & recreation, 101
History, 103
History of University, 6
Hours, credit load, 14
Housing, 22
Incomplete grades, 26
Index of fields & specializations, 50
Institute for Psychological Research and Application, 8
Instructional fee, 20
Interdisciplinary master's degree program, 35
Interpersonal and public communication, 106
Alphabetical Index

Graduate College 1,AA
Greenhouse 34
Guest House 101
Hanna Hall 50
Harmon Hall 5
Harshman Quadrangle B1-B4
Hayes Hall 44,C
Health and Human Services, College of 90,A
Health Center 90,A
Heating Plant 104
Home Economics Building 2
Housing 64,A
Ice Arena 95,B
Industrial Technology 35,AA
Information Center 98
Jerome Library 62,C
Johnston Hall 16
Kappa Alpha Psi Fraternity 33 East
Kappa Delta Sorority 22
Kappa Delta Sorority 72
Kappa Sigma Fraternity 74
Kohl Hall 55
Kreisler Quadrangle 86-89
Lambda Chi Alpha Fraternity 66
Library 62,C
Life Sciences Building 40,A
Lowry Hall 4
Mathematical Sciences Building 42,AA
McDonald Dining Hall 29
McDonald East Hall 26
McDonald North Hall 27
McDonald West Hall 28
McFall Center 1,AA
Memorial Hall 61
Mietti Alumni Center 85
Music Hall 95
Moore Musical Arts Center 91,AA
Mosley Hall 48,B
Off-Campus Student Center 49,B
Offenburger Tower East 31,AA
Offenburger Tower West 30,AA
Overman Hall 43
Park Avenue Warehouse 36
People and Traffic Division 56
Phi Delta Delta Fraternity 70
Phi Kappa Psi Fraternity 73
Phi Kappa Tau Fraternity 59
Phi Mu Sorority 15
Physical Sciences Laboratory Building 41,AA
Pi Kappa Phi Fraternity 67
Poplar Center 99
Prout Chapel 10
Prout Hall 33,AA
Psychology Building 39,AA
Recreation Center 92,AA
Registration and Records 8,C
Rodgers Quadrangle 57
Science Library 42,AA
Shatzel Hall 9
Sigma Alpha Epsilon Fraternity 75
Sigma Chi Fraternity 77
Sigma Nu Fraternity 58
Sigma Phi Epsilon Fraternity 58
Social Philosophy and Policy Center 102
South Hall 51,C
Stadium 96
Steller Field 93
Student Recreation Center 92,AA
Student Services Building 64,AA
Technology Annex 38
Technology Building 35,AA
Television Station 103
Treadway Pressbox 97
Treadway Hall 6
Union 12,AA
University Hall 49,B
University Union 12,AA
Visitor Information 98
Warehouse 36
WBGU-TV 103
West Hall 7,B
Williams Hall 11
Zeta Beta Tau Sorority 71

Numerical Index

1. McFall Center, AA
2. Home Economics Building
3. Moore Hall
4. Lowry Hall
5. Harmon Hall
6. Treadway Hall
7. West Hall, B
8. Administration Building, C
9. Shatzel Hall
10. Prout Chapel
11. Williams Hall
12. University Union, AA
13. Phi Kappa Psi Fraternity
14. Chi Omega Sorority
15. Phi Mu Sorority
16. Johnston Hall
17. Early Childhood Education Center
18. Gamma Phi Beta Sorority
19. Alpha Xi Delta Sorority
20. Delta Gamma Sorority
21. Alpha Phi Sorority
22. Kappa Delta Sorority
23. French House
24. Alpha Chi Omega Sorority
25. Alpha Omicron Pi Sorority
26. McDonald East Hall
27. McDonald North Hall
28. McDonald West Hall
29. McDonald Dining Hall
30. Offenburger Tower West, AA
31. Offenburger Tower East, AA
32. Art Annex
33. Kappa Alpha Psi Fraternity
34. West Alpha Phi Alpha Fraternity
35. Greenhouse
36. Technology Building, AA
37. Central Services
38. Technology Annex
39. Psychology Building, AA
40. Life Sciences Building, AA
41. Physical Sciences Laboratory Building, AA
42. Mathematical Sciences Building, AA
43. Overman Hall
44. Hayes Hall, C
45. Eppler North
46. Eppler Center
47. Overman Pressbox 97
48. Moseley Hall, B
49. University Hall, B
50. Hanna Hall
51. South Hall, C
52. Centrex Building
53. Education Building, AA
54. Educational Memorabilia Center
55. Kohl Hall
56. Compton Hall
57. Rodgers Quadrangle
58. Sigma Phi Epsilon Fraternity
59. Phi Kappa Tau Fraternity
60. Business Administration Building, AA
61. Memorial Hall
62. Jerome Library, C
63. Fine Arts Building
64. Student Services Building, A
65. Alpha Sigma Phi Fraternity
66. Lambda Chi Alpha Fraternity
67. Pi Kappa Phi Fraternity
68. Delta Upsilon Fraternity
69. Beta Theta Pi Fraternity
70. Phi Gamma Delta Fraternity
71. Zeta Beta Tau Fraternity
72. Kappa Kappa Gamma Sorority
73. Phi Kappa Psi Fraternity
74. Kappa Delta Sorority
75. Sigma Alpha Epsilon Fraternity
76. Conklin Hall
77. Sigma Chi Fraternity
78. Alpha Gamma Delta Sorority
79. Delta Tau Delta Fraternity
80. Sigma Nu Fraternity
81. Anderson Hall
82. Bromfield Hall
83. Chapman Hall
84. Dunbar Hall
85. Mileti Alumni Center
86. Ashley Hall
87. Batchelder Hall
88. Compton Hall
89. Darrow Hall
90. Health Center, A
91. Moore Musical Arts Center, AA
92. Student Recreation Center, AA
93. Steller Field
94. Golf Club
95. Ice Arena, B
96. Stadium
97. Track Pressbox
98. Information Center
99. Popular Culture Center
100. Delta Zeta Sorority
101. Guest House
102. Social Philosophy and Policy Center
103. WBGU-TV
104. Heating Plant
105. College Park Office Building, AA

Accessibility Code
AA Totally accessible
A Accessible with telephones, fountains, no accessible restrooms
B Accessible first floor only, limited facilities
C Totally accessible, limited facilities