

Marshall University

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1997

### Graduate Catalog, 1997-1998

Marshall University

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MARSHALL UNIVERSITY  
GRADUATE CATALOG

# MARSHALL UNIVERSITY

With the merger of the West Virginia Graduate College and Marshall University on July 1, 1997, it is anticipated that a number of policy and program changes will ensue. For any supplements to this one year catalog, please contact the academic area in which you wish to enroll. A more inclusive catalog will be available by the summer of 1998.

## CATALOG OF THE GRADUATE SCHOOL

1997-1998

Virginia Plumley, Ph.D.

Editor

Huntington, West Virginia 25755

# Contact Directory

For specific information about academic or student services at Marshall University, the following telephone numbers are provided.

## Academic Area Code (304)

Admissions, Undergraduate .....	696-3160
1-800-642-3499 (in-state only)	
Admissions, Graduate .....	696-6606
Adult and Extended Education .....	696-4723
College of Business .....	696-2314
College of Education & Human Services .....	696-3130
College of Fine Arts .....	696-6433
College of Liberal Arts .....	696-2350
College of Science .....	696-2372
Community & Technical College .....	696-3646
Graduate School .....	696-6606
Enrollment Management .....	696-2206
School of Medicine .....	696-7000
School of Nursing .....	696-6750

## Department/Division

Accounting .....	696-2310
Adult and Technical Education .....	696-2380
Anatomy and Cell Biology .....	696-7382
Anthropology .....	696-6700
Applied Science Technology .....	696-3064
Archaeology Lab .....	696-2802
Art .....	696-6760
Biochemistry and Molecular Biology ...	696-7322
Biological Sciences .....	696-3148, 696-5413
Business Technology .....	696-5431
Center for Academic Excellence ...	696-6763/5421
Center for Environmental, Geotechnical and Applied Sciences .....	696-5453
Chemistry .....	696-2430
Classical Studies .....	696-6749
Clinical Laboratory Sciences .....	696-3188
Communication Disorders .....	696-3640
Communication Studies .....	696-6786
Computer Science & Software Dev. ....	696-5424
Continuing Education .....	696-3113
Counseling & Rehabilitation .....	696-2383
Criminal Justice .....	696-3196
Developmental/General Studies .....	696-3027
Early Childhood Education .....	696-3101
Economics/Finance .....	696-2311
Educational Foundations .....	696-3630
Elementary Education .....	696-3101
Engineering .....	696-6606
English .....	696-6600, 696-6601
Environmental Science .....	696-5453
Finance & Economics .....	696-2311
Geography .....	696-2500
Geology .....	696-6720
German .....	696-2744
Greek .....	696-6749
Health, Phy. Ed. & Education .....	696-6490
History .....	696-6780
Family and Consumer Science .....	696-2386
Human Dev. & Allied Technology ...	696-2380
Journalism & Mass Communication ....	696-2360

Latin .....	696-6749
Management/Marketing .....	696-5423
Marketing/Management .....	696-5423
Mathematics .....	696-6482
Medicine .....	696-7000
Medical Tech./Medical Lab. Tech. ....	696-3188
Military Science .....	696-6450
Modern Languages .....	696-6730
Music .....	696-3117
Nursing .....	696-6750
Obstetrics/Gynecology .....	696-7136
Pathology .....	696-7346
Pediatrics .....	696-7081
Pharmacology .....	696-7313
Philosophy .....	696-6749
Physics & Physical Science .....	696-6738
Physiology .....	696-7362
Political Science .....	696-6636
Psychiatry .....	696-7077
Psychology .....	696-6446
Public Service/Allied Health Tech. ..	696-3022
Radiation Safety .....	696-6755
Radiology .....	696-7246
Religious Studies .....	696-6749
Safety Technology .....	696-4664
Social Work .....	696-2792
Sociology & Anthropology .....	696-6700
Spanish .....	696-2743
Special Education .....	696-2340
Surgery .....	696-7029
Teacher Education .....	696-2333
Theatre/Dance .....	696-6442
Tutoring Office .....	696-6622

## Student Services

Academic Advising Center .....	696-3169
Alumni Affairs .....	696-3134
Artists Series .....	696-6656
Athletic .....	696-5408
Ticket Office .....	696-4373
Attorney for Students .....	696-2285
Bookstore .....	696-3622
Cafeteria:	
Holderby Hall .....	696-4895
Twin Towers .....	696-4894
Campus Christian Center .....	696-2444
Career Counseling .....	696-2370
Disabled Students .....	696-2271
Greek Affairs .....	696-2284
Learning Center .....	696-6213
Learning Disorders .....	696-6252
Library .....	696-2320
Residence Services .....	696-6765
Student Activities .....	696-6770
Student Center .....	696-6472
Student Consuler Protection Agency/ Off-Campus Housing .....	696-6435
Student Financial Assistance .....	696-3162
Student Government .....	696-6435
Student Support Services .....	696-3164
Substance Abuse Education Program ..	696-3111
Theatre .....	696-6442

### **The Marshall University Catalog fulfills two primary functions:**

1. The rules and regulations, policies and procedures of the University, its divisions and its governing body, all of which apply to all students, are contained in this document. These rules apply during the publication year of the document and are subject to change during that year upon recommendation of the various divisions and approval of the president or governing body of the University.

2. The Catalog contains the specific requirements for all degrees and certificates awarded by the University. These are in effect for a period of ten consecutive years for undergraduate degrees and certificates and five consecutive years for graduate degrees and certificates. Students are cautioned that programs leading to licensure may be altered by the outside licensing agency and are not subject to this provision.

### **AFFIRMATIVE ACTION POLICY STATEMENT**

It is the policy of Marshall University to provide equal opportunities to all prospective and current members of the student body, faculty, and staff on the basis of individual qualifications and merit without regard to race, color, sex, religion, age, handicap, national origin, or sexual orientation.

This nondiscrimination policy also applies to all programs and activities covered under Title IX, which prohibits sex discrimination in higher education. Marshall University strives to provide educational opportunities for minorities and women in the graduate student body which reflect the interest, individual merit and availability of such individuals. The university ensures equality of opportunity and treatment in all areas related to student admissions, instructions, employment, placement accommodations, financial assistance programs and other services.

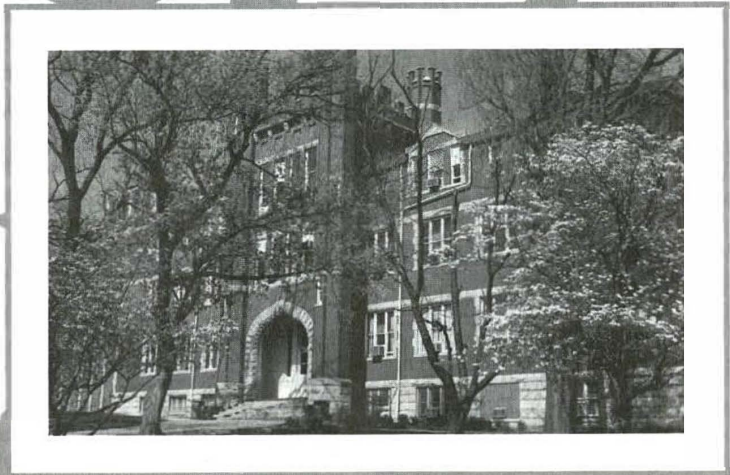
Marshall University also neither affiliates with nor grants recognition to any individual, group, or organization having policies that discriminate on the basis of race, sex, religion, age, sexual orientation, handicap, or national origin. Information on the implementation of the policy and/or the Title IX Amendment should be addressed to: Director of Equity Programs, Old Main, Marshall University, Huntington, West Virginia 25755 (304) 696-2592

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UNIVERSITY STORY

97



The Marshall  
University Story

UNIVERSITY STORY

# The Marshall University Story

Marshall University, one of West Virginia's two State universities, encourages individual growth by offering programs and instruction in attainment of scholarship, acquisition of skills, and development of personality.

The University provides students with opportunities to understand and to make contributions to the culture in which they live; to develop and maintain physical health; to participate in democratic processes; to learn worthwhile moral, social, and economic values; to develop intellectual curiosity and the desire to continue personal growth; and to share in a varied cultural program.

Professional, technical, and industrial career studies are available through the various departments of the university.

Marshall also recognizes an obligation to the state and community by offering evening courses, off-campus classes, lectures, musical programs, conferences, forums, and other campus and field activities.

## MISSION OF THE UNIVERSITY

### Statement of Philosophy

While institutions of higher education differ in size and function, they share a common core of values; these help shape and guide their academic life. Marshall University is committed to seven basic principles.

The first and most basic commitment of Marshall University is to undergraduate education.

A second and major commitment of Marshall University is the enhancement of graduate education.

Third, Marshall University is committed to expanding the body of human knowledge and achievement through research and creative arts activities.

A fourth characteristic of Marshall University is its commitment to society through public service.

A fifth commitment of this university is diversity in its student body, its faculty and staff, and its educational programs.

A sixth commitment of Marshall University is to academic freedom and shared governance.

Finally, Marshall University is committed to assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance.

### Identification of Areas of Current Emphasis

The following areas of emphasis will command the commitment of institutional resources.

A commitment to high quality **undergraduate liberal arts** education, broadly defined.

A commitment to **rural health care**, including medicine, nursing, nutrition, health education, health care management, etc.

A commitment to **schools and schooling**, including teacher education and the setting of the agenda for education in southern West Virginia.

**Economic development**, which would include programs in education, science, business, the Community and Technical College, perhaps engineering, and a broad range of fields.

A commitment to the **fine arts and humanities** because Marshall is — and should be — the cultural center of this community.

A new commitment to high quality **graduate programs** (master's, specialist, and doctoral degrees).

Finally, a university concerned with **environmental issues** which, unquestionably, will be a dominant factor of life in the 21st Century.

In accord with the first and most basic commitment of Marshall University as outlined in the Statement of Philosophy of the Mission Statement and the above seven areas of emphasis, Marshall University will strive to develop programs that will be recognized nationally for their excellence. Toward this goal strong emphasis will be placed on high quality teaching and interaction with the individual student. Uniform guidelines for monitoring instruction and corrective measures will be developed and implemented by college deans. Programs that have University commitment to independent accrediting will be brought into compliance and maintain accrediting agency guidelines.



## HISTORY

The campus of Marshall University is located in Huntington, West Virginia, just across the Ohio River from Ohio, and thirteen miles from the Kentucky border. It is served by rail, air, and highway transportation.

Marshall University traces its origin to 1837, when residents of the community of Guyandotte and the farming country nearby decided their youngsters needed a school that would be in session more than three months a year. Tradition has it that they met at the home of lawyer John Laidley, planned their school, and named it Marshall Academy in honor of Laidley's friend, the late Chief Justice John Marshall. At the spot called Maple Grove they chose one and one-quarter acres of land on which stood a small log building known as Mount Hebron Church. It had been the site of a three-month subscription school and remained that for another term. Eventually \$40 was paid for the site.

On March 30, 1838, the Virginia General Assembly formally incorporated Marshall Academy. Its first full term was conducted in 1838-39. For decades the fledgling school faced serious problems, most of them financial. The Civil War forced it to close for several years, but in 1867 the West Virginia Legislature renewed its vitality by creating the State Normal School at Marshall College to train teachers. This eased Marshall's problems somewhat, but it was not until the tenure of President Lawrence J. Corbly from 1896 to 1915 that the college began its real growth. In 1907, enrollment exceeded 1,000.

Since then Marshall's expansion has been consistent and sometimes spectacular. The College of Education, first called Teachers College, was organized in 1920 and the first college degree was awarded in 1921. The College of Arts and Sciences was formed in 1924, and the Graduate School was organized in 1948. The College of Applied Science came into being in 1960; the School of Business was formed in 1969. These were merged into the College of Business and Applied Science in 1972. In 1974 the School of Medicine and Associated Health Professions was established. The Community College was organized in 1975 and became the Community and Technical College in 1991, and the College of Science was authorized by the Board of Regents in 1976. In 1977, the Board approved a change of name for the College of Arts and Sciences to the College of Liberal Arts, and for the College of Business and Applied Science to the College of Business. In 1978, the School of Nursing was established as a separate entity, the other Associated Health Professions were transferred from the School of Medicine to the College of Science, and the School of Journalism was authorized as a part of the College of Liberal Arts. The most recent addition was the College of Fine Arts in 1984. Marshall was authorized in 1992 to award the Ph.D. degree, in Biomedical Sciences.

Marshall was granted University status in 1961. As of April 1, 1996 alumni numbered approximately 70,072.

Since the formation of the West Virginia Board of Regents in 1969 and now under the University of West Virginia Board of Trustees, Marshall's progress as an urban-oriented university has been given strong impetus. As a result of this support, and because of its own active leadership and its location in the thriving Tri-State Area, Marshall is a university with excellent prospects for future development.

## ACCREDITATION

Marshall University is accredited as an institution for higher education by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. The teacher education programs are accredited by the National Council for Accreditation of Teacher Education and the West Virginia State Department of Education. Marshall also is a member of the Council of Graduate Schools in the United States. Academic credits earned at Marshall University are fully standardized for acceptance by all other colleges and universities. The Elizabeth McDowell Lewis College of Business is accredited by the American Assembly of Collegiate Schools of Business (AACSB).

The Department of Chemistry is accredited by the Committee on Professional Training of the American Chemical Society. The Bachelor of Science in Nursing Degree Program is accredited by the National League for Nursing. The News-Editorial Sequence of the School of Journalism and Mass Communications is accredited by the American Council on Education in Journalism and Mass Communication. Engineering Technology is accredited by the Accrediting Board for Engineering Technology. The Department of Music is an accredited institutional member of the National

Association of Schools of Music. The Cytotechnology program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association in collaboration with the American Society of Cytology. The Medical Technology program and the Medical Laboratory Technician program are accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association. The Health Information Technology program is fully accredited by the AMA's Committee on Allied Health Education and Accreditation in Cooperation with the Council on Education of the American Medical Record Association. The School of Medicine is accredited by the Liaison Committee on Medical Education of the American Medical Association and the Association of American Medical Colleges, and the School's Residency Programs in Internal Medicine, Pathology, Transitional Residency, Surgery, Pediatrics, and Family Practice are accredited by the Accreditation Council for Graduate Medical Education. Continuing Medical Education is accredited by the Accreditation Council for Continuing Medical Education. The graduate program in the Department of Communication Disorders is accredited by the Ethical Standards Board of the American Speech-Language-Hearing Association. The Legal Assisting Program is American Bar Association Approved. The Athletic Trainer program is approved by the National Athletic Trainer Association. Park Resources and Leisure Service is accredited by the National Recreation and Park Association and the American Alliance of Leisure and Recreation. The University is an Agency Member Unit member of the American Home Economics Association. The Plan V Dietetic Program is an approved program of the American Dietetic Association Council on Education Accreditation/Approval, a specialized accrediting body recognized by the Council of Postsecondary Accreditation and the United States Department of Education. In the Business Technology Division, the Management Technology, Accounting, and Banking and Finance Programs are accredited by the Association of Collegiate Business Schools and Programs (ACBSP); Social Work is accredited by the Council on Social Work Education. The Safety Program is accredited by the American Society of Safety Engineers.

The University is approved for attendance of nonimmigrant international students under the Federal Immigration and Nationality Act, and is approved by the American Association of University Women. Other major organizations in which Marshall holds membership, in addition to those named above, are the American Association for Affirmative Action, American Association of State Colleges and Universities, the American Assembly of Colleges and Schools of Business, the American Association of Colleges for Teacher Education, Association for Schools, Colleges & University Staffing, The American Association of Community and Junior Colleges, the American Council on Education, the American Library Association, the Southern Council on Collegiate Education for Nursing, the Southern Conference, NACUBO-SACUBO, and the National Collegiate Athletic Association.

## DIVISIONS

The University functions through nine divisions: College of Business, College of Education and Human Services, College of Fine Arts, College of Liberal Arts, College of Science, Community and Technical College, Graduate School, School of Medicine, and School of Nursing.

## MARSHALL UNIVERSITY LIBRARIES

The Marshall University Libraries are comprised of the James E. Morrow Library and three branch libraries: The Health Science Library, the Music Library and the Hoback Chemistry Library. The James E. Morrow Library is a handsome campus landmark of imposing Georgian design and centrally located for campus access. The Health Science Library is located on the lower level of the Community and Technical College Building, the Music Library is on the first floor of Smith Music Hall, and the Hoback Chemistry Library is in Room 460 of the Science Building. Construction is underway for a new technologically sophisticated main library building which will include library and computing services and a new Health Science Library located adjacent to Cabell-Huntington Hospital.

The Libraries play an essential role in the educational and research activities of the University by making accessible informational materials necessary to carry out the academic and research programs. The collections include 1.7 million items of which 426,000 are bound books and periodicals. A wide variety of audio-visual materials is available.

As a U.S. Government Depository Library, selecting approximately 60% of all available documents, the Library has a collection of more than 952,000 items. The Special Collections Department provides materials on West Virginia, the Tri-State area and Appalachian region. Rare books, manuscripts, MU archives, the Rosanna Blake Library of Confederate History, and the Hoffman Collection of Medical History are located in Morrow Library. The Morrow Library has one of the most heavily used computer labs on campus, providing access to a variety of software products, several CD-ROM databases and the Internet.

## STUDENT AFFAIRS

The student as a planner, participant, leader, and presenter is best exemplified in the area called Student Affairs. Staff strives to create environments for students where they can practice leadership skills and responsible citizenship, clarify their values, and generally become full participants in the learning process. The division is divided into two components: Student Development and Student Activities.

Staff provides advising, leadership development, support services in a variety of settings including but not limited to student social-cultural events, student governance, fraternities and sororities, legal aid, judicial affairs, and off-campus and commuting students.

### Student Development

The Student Development Center is best described as the educational support service area of the Division of Student Affairs. Its major goal is to enhance and support a student's personal and academic development. This assistance is accomplished through developmental, remedial, and preventive programs, activities, services which include, but are not limited to personal and social counseling; educational and career counseling; reading and study skills development; tutorial services; minority, women and international student programs; health education; returning students and disabled student services.

### Education Records: Privacy Rights of Parents and Students

The Family Educational Rights and Privacy Act of 1974, 93-380, 93rd Congress, H.R. 69 authorizes granting to parents and students the right of access, review, challenge, and exception to education records of students enrolled in an educational agency or institution. In accordance with the regulations of the Family Educational Rights and Privacy Act of 1974, Marshall University has adopted a policy to be implemented by all units of the institution. Upon enrollment in the university, the student and/or eligible parent(s) may request a copy of the policy.

Under the Act the student and eligible parent(s) are granted the following rights:

- a. to be informed of the provisions of the Act through adoption of an institutional policy;
- b. to inspect and review the records of the student;
- c. to reserve consent for disclosure except as exceptions are granted in the regulations, i.e., school officials, officials of other schools to which the student seeks attendance, or others as delineated in Section 99.31;
- d. to review the record of disclosures which must be maintained by the university; and
- e. to seek correction of the record through a request to amend the record and to place a statement in the record.

After the student registers for courses, the student and/or eligible parent(s) may request a copy of the policy Education Records: Privacy Rights of Parents and Students from the Student Legal Aid Center, MSC, 2W29.

Complaints of alleged failure by the university to comply with the Act shall be directed to:

The Family Educational Rights and Privacy Act Office  
330 Independence Avenue, S.W.  
Washington, D.C. 20201

The University encourages complainants to lodge a formal complaint with either the Dean of Student Affairs, Ombudsman, or the Attorney for Students.

Requests for further clarification on this Act, the regulations, and University policy should be directed to the Dean of Student Affairs or Student Legal Aid Center.

## Liability

Marshall University, as a state agency, cannot assume responsibility for loss of or damage to the personal property of students. Furthermore, the University cannot assume responsibility for personal injury to students.

## Judicial Affairs

The faculty and administration recognize the rights and responsibilities of students. These include the privilege and obligation of maintaining high standards of social and personal conduct. While encouraging students to develop independence, the University embraces the concept that liberty and license are not synonymous, and it therefore accepts the obligation to maintain standards which will provide for the welfare of the individual and the campus community at large.

For Marshall University to function effectively as an educational institution, students must assume full responsibility for their actions and behavior. Students are expected to respect the rights of others, to respect public and private property, and to obey constituted authority. A student's registration constitutes acceptance of these responsibilities and standards; thus registration serves as an agreement between the student and the University. Failure to adhere to the policies and conduct regulations of the University places the student in violation of the Marshall University Code of Conduct and may, therefore, subject the student to disciplinary action such as disciplinary warning, a period and degree of probation, suspension, or expulsion. All registered students are subject to the Code at all times while on or about university-owned property, or at university sponsored events.

Students are expected to be thoroughly familiar with the rights, regulations, and policies outlined by the Board of Trustees and all University rules and regulations as expressed in this catalog and in The Student Handbook. Copies of The Student Handbook are available in the office of the Dean of Student Affairs.

## Student Health Service

Student Health Service (SHS) is provided by University Physicians and Surgeons Inc., an affiliate of the University's School of Medicine. The clinic is located at 1801 Sixth Avenue, one block southeast of the main campus, and is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. The clinic is closed on Saturday, Sunday, and Holidays. Students seeking after hours medical care will be financially responsible for the cost.

Student Health Service will be provided from the first day to the last day of each fall, spring, and summer class session to students who pay full student activity fees and attend classes scheduled between semesters (intersession). Marshall University students who present current validated activity and identification cards are eligible to use this service.

## Psychology Clinic

The Department of Psychology staffs a clinic which provides consultation and services on a wide range of psychological problems for Marshall students, staff, and the general public. The clinic is located in Harris Hall and inquiries and appointment requests should be directed to the clinic, Harris Hall 449, telephone 696-2772. The clinic is staffed by graduate students in clinical training; some faculty services are also available.

## Speech and Hearing Center

The Department of Communication Disorders operates the center which provides assistance to any Marshall student, or any member of their immediate family who wants help with speech and hearing problems.

The Department of Communication Disorders also provides special training for students requesting assistance with dialect change or foreign dialect. People who have foreign dialect or who have non-standard speech patterns not considered to be clinically significant but which they wish to change may be scheduled in the clinic.

The center is located in Smith Hall 143, telephone 696-3640.

## Higher Education for Learning Problems

H.E.L.P. is an individualized tutorial program for learning disabled students. Assistance with coursework, study skills, note-taking skills, and oral testing is available. Graduate Assistants conduct tutorial sessions. Remediation in reading and spelling is available from learning disabilities specialists. Application to H.E.L.P. must be made separately from application to the University and should be completed no less than one year in advance. For information from Dr. Barbara Guyer, Director, H.E.L.P., phone (304) 696-6317 or Lynne Weston, Asst. Director, (304) 696-6316.

## Graduate Student Council

The Graduate Student Council is an organization open to all graduate students. Meetings are designed to discuss problems common to graduate students and propose their administrative solutions. Probably the most attractive aspect of the GSC is its ability to initiate administrative changes favorable to graduate students. GSC appoints representatives to all Faculty Senate standing committees. A second and related goal of the GSC is to provide an environment in which contact with graduate students in other disciplines is expanded. Above all, the GSC is concerned with enriching the academic and personal lives of its members.

## UNIVERSITY RESIDENCE HALLS

The Department of Residence Services provides on-campus living space for approximately 2,100 students. Individual halls will accommodate from 180 to 500 residents in rooms for two persons. All halls are located within easy walking distance of academic buildings. Each hall is managed by Director of Residence Services' staff in order to provide the students with the best possible living and learning conditions.

Housing for families, single graduate and married students is also provided in 78 furnished apartment style dwellings owned and operated by the university. Family student housing is located approximately four miles from the main campus.

For additional information concerning on-campus housing, please contact the Department of Residence Services at (304) 696-6765.

## INTERIM EXECUTIVE POLICY BULLETIN NO. 7

Effective Date: August 8, 1994

## POLICY REGARDING WEATHER-RELATED AND/OR EMERGENCY CLOSINGS AND DELAYS

Generally, it is Marshall University's policy to maintain its normal schedule, even when conditions are inclement. However, this is not always possible.

In those instances when it is necessary to alter the schedule in response to weather conditions, every effort will be made to notify all those affected, students, faculty, staff and the general public, as expeditiously and as comprehensively as possible in the following ways:

1. Television stations in Huntington and Charleston will be notified.
2. Radio stations in Huntington and Charleston will be asked to announce the delay or closing.
3. Time permitting, newspapers in Huntington and Charleston will be notified. Often, however, decisions must be made after the deadlines of newspapers.
4. The Director of University Relations will communicate the specific details of the closing as follows:
  - a. To the Office of Public Safety at 696-HELP.
  - b. To the AUDIX of the Director of Campus Technology at 696-3335 and to the Director at his home.
5. The Director of Campus Technology will place the closing message on the entire university AUDIX system as well as the University response number 696-3170.

### Definitions:

1. University Closed: All classes suspended and offices closed.

2. **Classes Canceled:** All classes suspended; offices open.
3. **Delay:** A delay in the beginning of activities, usually in the range of one to two hours. For example, since normal operations of the university begin at 8:00 a.m., a two hour delay would mean functions would begin at 10:00 a.m. As a result, Monday, Wednesday or Friday classes beginning at 8:00 a.m. or 9:00 a.m. would be canceled; 10:00 a.m. classes would meet. Tuesday or Thursday classes beginning at 8:00 a.m. would be canceled; those scheduled for 9:30 a.m. would begin instead at 10:00 a.m. in an abbreviated session. In most instances, delays on Tuesday or Thursday will be 90 minutes, enabling 9:30 classes to begin on schedule.

**Clarification:**

Since announcements in the mass media are subject to inadvertent distortion, incompleteness or misunderstanding, clarification may be obtained by telephoning Marshall University at 696-3170.

**Staff and Administration Personnel:**

The University will be completely closed only rarely and in extreme situations since it is essential that public safety be maintained, that buildings and equipment be protected and that services be provided for those students housed in campus facilities. Therefore, although classes may be canceled, all university staff and administrative employees will be expected to report to work, unless notified otherwise.

In the event of critical need, certain employees may be required to report to work or temporarily reside on campus to ensure human safety and preservation of university property and/of facilities.

Individual employees may, in their best judgment, determine the risk of travel to be too great and elect to remain at home. Those who do so should contact their respective supervisors and indicate they are: (1) taking annual leave that day, or (2) taking compensatory time, in the event compensatory time is owed them.

In the event a building, or a section of a building is closed (because of heat loss, power outage, etc.), employees working in the affected area will be permitted to take their work to another area or building on campus. Or, in consultation with the supervisor, the employee may elect to take annual leave that day, or take compensatory time off.

In the event of an extreme situation (tornado, flood, ice storm, campus disturbance, etc.) and if the employees' presence is not desired on campus, this information will be disseminated to the news media. A decision as to whether the missed time will be chargeable to annual leave, compensatory time, or a non-pay situation will be determined by the President and communicated through supervisors.

Supervisors must take steps to ensure offices and/or work stations are open to employees at all times when those employees are expected to be at work, including inclement weather situations and other disruptive situations.

**Faculty:**

Once operations are resumed, Deans and departmental chairs must take steps to ensure that faculty meet their scheduled classes or substitutes are secured so that class schedules are met.

**Decision-making:**

Decisions on closings and/or delays will be made jointly by the Vice President for Academic Affairs and the Senior Vice President for Operations following consultation with other appropriate officials, including the President. Should only one of those two Vice Presidents be available, that person will make the decision.

Every effort will be made to reach a decision to allow time for adequate notification to the news media and, in turn, those affected.

**Disclaimer:**

The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant or student and Marshall University. The university reserves the right to change any of the provisions, schedules, programs, courses, rules, regulations, or fees whenever University authorities deem it expedient to do so.



# Adult and Extended Education

# The Center for Adult and Extended Education

The Center for Adult and Extended Education (AEE) serves adult students (23 years of age or older) and those students who are located at distances from the main campus. The center sponsors evening administrative hours, courses via telecommunications, weekend and accelerated offerings, and off-campus instructional centers throughout the region.

AEE works with university academic departments to ensure the delivery of courses in time periods and at locations that increase student access. AEE is responsible for the delivery of televised courses to points throughout the region. Telecourses via public television (HEITV), satellite (SAT-NET), and interactive television (T-I) provide a variety of offerings with some full degree programs now available through television. For more information contact AEE's telecourse office at 304-696-2970.

A series of off-campus centers has been developed to provide university services to remote locations. These include Mid-Ohio Valley Center (Point Pleasant), Southern Mountain Center (Logan, Williamson), Capitol Center (South Charleston), and Teays Valley Center (Winfield). Other centers are in development stages with a plan to cover the entire southern region of West Virginia. For information on off-campus centers or other AEE projects contact the main AEE office: Tel: 304-696-GRAD (4723); Toll-free 800-906-GRAD (4723); FAX 304-696-6419; e-mail: [aee@marshall.edu](mailto:aee@marshall.edu). The AEE World Wide Web site is located at <http://www.marshall.edu/aee>.



# The Center for Environmental, Geotechnical, and Applied Sciences

The Center for Environmental, Geotechnical, and Applied Sciences was established in May 1993 through the cooperative effort of the presidents of Marshall University and West Virginia Graduate College (effective July 1, 1997 West Virginia Graduate College became Marshall University Graduate College - MUGC). The goal of the Center is to forge close working relationships among the business community, higher education institutions, and government agencies, in technology related endeavors. The Center has been involved since its inception with educational offerings, research, service, and long-term planning for regional development.

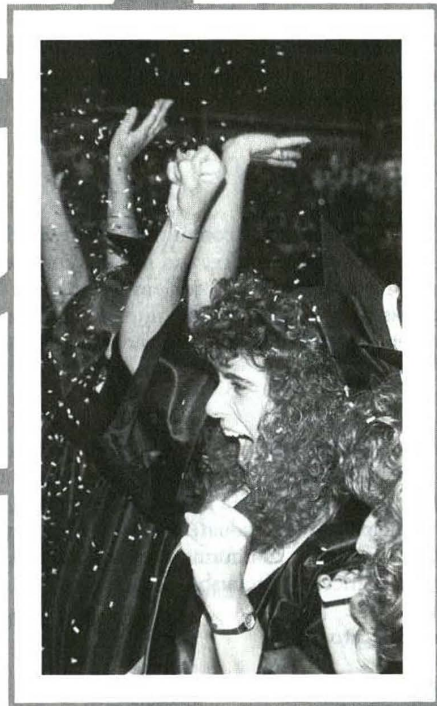
The Center, as of April 1997, has obtained over 3.1 million dollars in external contracts with participation of other MU departments and local businesses. The contracts and grants include efforts in software engineering, geographic information systems, environmental engineering, and development of the Environmental Management Incubator for area businesses.

The Environmental Center coordinates several degree programs:

- Since Fall 1994 the Center has coordinated the Huntington offering of MUGC's masters degree programs in Environmental Science and Environmental Engineering.
- As of Fall 1996, the Center coordinates admission and enrollment for a new masters degree program in Technology Management, which is a joint program with MUGC. Areas of Emphasis are available in Environmental Management, Manufacturing Systems Management, Information Technology Management (effective Fall 1997).
- A new MU undergraduate degree program in Environmental Science began in Spring 1997. Concentrations are available in Biology, Chemistry, and Geology. As of Spring 1997 concentrations in Environmental Economics and Modeling are in planning. The B.S. in Environmental Science is coordinated by a committee with representation from the Environmental Center, College of Science, College of Business, and School of Medicine. Please see the Environmental Science description in the undergraduate catalog for more details.

Feel free to contact the Environmental Center at (304) 696-5453 for further information.





# The Graduate School

# The Graduate School

In October, 1938, The West Virginia Board of Education authorized Marshall University to conduct graduate instruction leading to the Master of Arts and the Master of Science degrees. Graduate work was first offered during the summer session of 1939. The first master's degrees were conferred at the spring commencement of 1940. The Graduate School was organized in 1948. The first Ph.D. degree was conferred in 1992.

## MISSION OF THE GRADUATE SCHOOL

The fundamental responsibility of the Graduate School is to make graduate education available to qualified persons desiring it. The Graduate School does this through its commitment to students, to research, to scholarship, to the region, and to upgrading the credentials of professional educators.

### Commitment to the Students

Since the majority of the graduate students are part-time, the Graduate School will continue to provide programs and courses which will give these students the opportunity to complete their degree in a reasonable period of time. Alternative delivery systems are being used now to meet these needs.

### Commitment to Research

Marshall University Graduate School has a commitment to research. Within an ever changing society where the technology, bodies of knowledge, and information are rapidly changing, it is imperative that graduate students have the skills of problem solving and learning which come from research. Marshall University has made a financial commitment and the faculty have invested their time and energy to provide an environment in which research can thrive.

### Commitment to Scholarship

Scholarship involves the cooperative effort of the graduate faculty and graduate students in their search for knowledge. While excellence in instruction is the aim of all graduate faculty, this excellence is enhanced by the research which the faculty and graduate students conduct. From the classroom to the lab; from participation in graduate seminars to papers presented at professional meetings; from the formal academic setting to informal gatherings, both graduate faculty and graduate students are dedicated to excellence in scholarship.

### Commitment to Professional Educators

The Graduate School is committed to providing competent teachers, administrators, and counselors for the public schools in West Virginia. This commitment involves programs from the master's to the doctoral level. The Graduate School meets the needs of the public school teachers by providing these programs both on and off campus.

### Commitment to further Graduate Work

Marshall University has committed itself to provide graduate students with the best skills and techniques needed for further graduate work. The various programs are designed to provide graduate students with the theory, research skills, and basic knowledge needed in further professional and graduate education.

### Commitment to the Region

Marshall University diligently serves the complex needs of this region. Through cooperative endeavors by various departments, and with varied programs, the graduate faculty and graduate students have contributed much to the region. Programs range from interns working with both public

and private firms, the Office of Research and Economic Development, services provided on campus such as speech/hearing clinics and various counseling programs. Together, graduate faculty and graduate students help serve the needs of the people and the region.

A commitment to the region also serves the unique needs of the students. Courses which promote an understanding of the history, culture and social values of the region are important to those who will work and serve in the region.

Marshall University Graduate School attempts to provide students with knowledge and a sense of professional maturity in their fields so that they may live a productive life in this ever-changing world.

## ADVANCED DEGREES

The Graduate School awards the Master of Arts, the Master of Science, the Master of Arts in Teaching, the Master of Arts in Journalism, the Master of Business Administration, the Master of Science in Nursing, the Education Specialist, and the Ph.D. degrees. A graduate degree may be earned in the graduate programs which follow. Note that a number of the degrees have various areas of emphasis which are explained in the catalog section dealing with that degree.

Adult and Technical Education	M.S., Ed.S.
Art	M.A.
Biological Sciences	M.A., M.S.
Biomedical Sciences	M.S., Ph.D.
Business and Commerce	M.B.A.
Chemistry	M.S.
Communication Disorders	M.A.
Communication Studies	M.A.
Counseling	M.A.
Criminal Justice	M.S.
Curriculum and Instruction	Ed.S.
Education, Early Childhood	M.A.
Education, Elementary	M.A.
Education, Secondary	M.A.
Educational Administration	M.A., Ed.S., Ed.D.*
English	M.A.
Exercise Science	M.S.
Family and Consumer Sciences	M.A.
Forensic Science	M.S.
Geography	M.A., M.S.
Health and Physical Education	M.S.
History	M.A.
Humanities	M.A.*
Journalism	M.A.J.
Mathematics	M.A.
Music	M.A.
Nursing	M.S.N.
Physical Science	M.S.
Political Science	M.A.
Psychology	M.A.
Reading Education	M.A.
Safety	M.S.
Sociology	M.A.
Special Education	M.A.
Teaching	M.A.T.
Technology Management	M.S.

\*Indicates a cooperative degree program. An M.A. in Humanistic Studies is available in cooperation with West Virginia Graduate College. The Doctor of Education in Educational Administration is available in cooperation with West Virginia University. The Master of Forestry (M.F.) and the Master of Environmental Management (M.E.M.) are offered in cooperation with Duke University. The Doctor of Medicine Degree (M.D.) is offered by the Marshall University School of Medicine. The University also offers an Education Specialist Degree (Ed.S.).

## RESPONSIBILITY

Students admitted to the Graduate School are assumed to be mature adults and are expected to behave accordingly. The advisory services provided for in the operation of the various graduate programs assist the students. However, the student alone is responsible for following the procedures and completing the steps required in his or her program. Failure of an advisor to remind a student of a requirement or deadline date is not acceptable as a basis for waiver of the requirement. Requirements of the Graduate School, both procedural and substantive, may be waived only by written request of the student and must have the written approval of the Graduate Dean.

## RESEARCH

The Graduate School has a particular interest in research by students and faculty. It is the responsibility of the Graduate Dean to promote research by all available means. A Research Committee composed of faculty members advises the Dean on such matters. Students and faculty interested in research opportunities or who need assistance in their research activities may contact the Graduate School Office.

Training in the Graduate School at Marshall University is based upon the students' active participation in the teaching and research programs in their major areas of interest. It may not always be possible to provide all students with financial aid. However, the Graduate School requires that all students, regardless of receipt of financial assistance or its ultimate source, participate in the departmental programs (teaching, research, etc.) as an integral part of their advanced training.

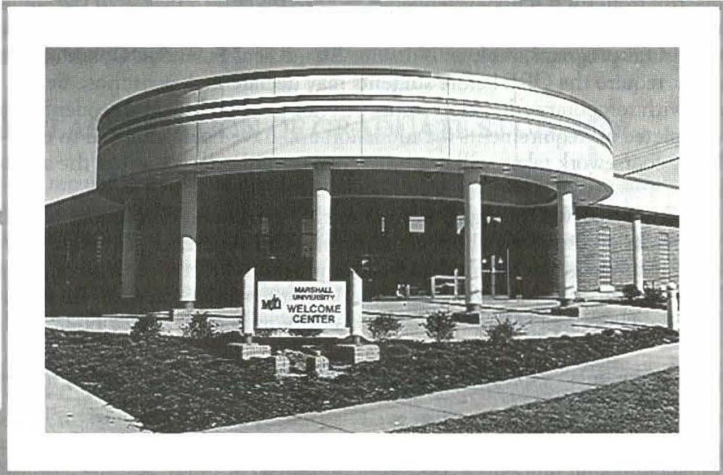
## ANIMAL AND HUMAN SUBJECT RESEARCH

Graduate students conducting research involving experiments that utilize animals must work under the supervision of faculty advisors who have written permission from the Institutional Animal Care and Use Committee (IACUC) before the students can start the research. Information about procedures and protocol forms may be obtained from the Animal Resources Facility at 696-7374.

Graduate students who conduct research involving the use of human subjects must have the approval of the Institutional Review Board (IRB) before starting the research. Information about procedures and approval forms may be obtained from the IRB at 696-7320.

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Admissions

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# Admission Information

## ADMISSION TO THE GRADUATE SCHOOL

Prospective graduate students should initiate application for admission as early as possible. The first step for a student interested in a degree program should be to obtain admission information from the department offering the program desired. Admission information will include instructions for applying to and the admission requirements of the particular program.

Admission to the Graduate School is based on a baccalaureate degree from a regionally accredited college or university, the quality point average, the scores of required examinations and the information provided on the "Application for Graduate Admissions" form. Students who have previously taken graduate coursework at another institution must submit all pertinent transcripts and also meet these undergraduate and examination requirements. Poor academic performance in prior graduate work may serve as the basis for the denial of admission to Marshall University Graduate School, at the discretion of the Graduate Dean.

The application for admission must be filed in the Office of Admissions at least two weeks prior to the opening of the term of enrollment. One official copy of the applicant's undergraduate transcript showing the degree earned and the date on which it was conferred must be mailed directly from the student's undergraduate college or university to the Office of Admissions when the application is filed. A transcript from each school attended is required.

Applicants for admission must complete GRE requirements no later than their first semester of enrollment. Certain programs, such as Nursing, Biomedical Sciences, Communication Disorders, and Psychology, require the GRE before students may declare majors in those fields.

Students with temporary admission status will not be eligible for subsequent registration unless they have completed all requirements for admission and have been admitted to their requested program. Credit for coursework taken will not be applied toward a degree unless the admission process is completed.

The University reserves the right, even after the arrival and enrollment of students, to make individual curricular adjustments whenever particular deficiencies or needs are found. These deficiencies will be determined by the student's major program director or department chairman. Students may be required to take such courses without credit toward the master's degree and at their own expense. This could also apply to additional coursework in Speech and/or English whenever necessary.

Further requirements or exceptions applicable to special fields are noted in the departmental statements in this catalog.

## ADMISSION TO THE GRADUATE SCHOOL FOR OFF-CAMPUS COURSES

For those students who wish to begin or to complete graduate work in off-campus sites, the same admission and graduation requirements apply as for all other graduate students. Off-campus students who fail to comply with these regulations may be refused admission to the Graduate School or be withdrawn from courses by administrative action of the Graduate Dean.

## THE GRADUATE RECORD AND OTHER EXAMINATIONS

The Graduate Record Examination (GRE) General Test is required of all applicants to the Graduate School except those pursuing the MBA degree and non-degree students. The GRE scores must be sent by the Educational Testing Service directly to Marshall University when the student applies for admission. MBA students are required to take the Graduate Management Admission Test (GMAT) prior to admission to the program. Technology Management students have the option of taking either the GRE or the GMAT.

Advanced Graduate Record Examinations and the National Teacher Examination may be required by specific departmental programs and will be so indicated in the program or departmental description in the catalog.

These examinations will be administered at Marshall University and other testing centers on dates listed in the Office of the Graduate School and the Registrar's Office. The student wishing to take any of these examinations must make proper application and pay the required fees directly to



the organization in charge of the examination, which should be notified to send an official copy of the examination scores to the Graduate admissions, Marshall University, Huntington, West Virginia 25755.

The GRE (or GMAT for College of Business students) must be taken prior to regular admission to the Graduate School. Provisionally admitted students may initially enroll without the GRE but will be barred from subsequent registration until official GRE scores are reported to the university. Non-degree students are exempt from this requirement, but must take the GRE prior to changing their status to degree seeking.

Minimum GRE scores can be established at the department level.

Undecided students, and those applying to departments that have not established separate standards, will be admitted to the Graduate School as regular graduate students on the following basis. GRE scores will be used in conjunction with undergraduate grade point averages (GPA) to determine admission status to the Graduate School. To be admitted with regular status, those students taking the GRE must achieve an undergraduate GPA of 2.5 plus a 1500 score on the GRE (total of the three subtests) or a GPA of 3.0 plus a 1200 score on the GRE. Students not meeting these standards may be academically provisionally admitted to the Graduate School. Academically provisional status requires obtaining a 3.0 in the first 18 hours of graduate work to be regularly admitted.

Students who are admitted in the "undecided" category may not take more than 12 credit hours before declaring a specific major. "Undecided" students will be barred from subsequent registration until they are admitted to a degree program.

If a student has a master's or higher degree from an approved accredited institution of higher education, the GRE requirement may be waived for any future master's program at Marshall University.

## ADMISSION CLASSIFICATION OF GRADUATE STUDENTS

**REGULAR** — A regular graduate student is a degree-seeking student who meets all criteria for regular admission to a program of his/her choice. The student must possess a baccalaureate degree from an approved accredited college or university, must have an undergraduate grade point average of at least 2.5 on a 4.0 scale, have scores on the Graduate Record Examination or GMAT which are acceptable to the program of his/her choice (and meet the formula above), have met all the criteria established by the degree program, and be under no requirements to make up deficiencies.

**PROVISIONAL** — A student may be admitted as provisional or academically provisional in a degree program when the student possesses a baccalaureate degree but does not meet the criteria for regular admission. Provisionally admitted students have incomplete credentials. Academically provisional students may have deficiencies to make up, or may have an undergraduate scholastic record which shows promise, but less than the combination of GRE scores and undergraduate grade point average specified above. To be reclassified as a regular student, a student must meet the conditions stated in the letter of admission and achieve a minimum grade point average of 3.00 on all graduate course work taken during the provisional period. An academically provisional student must be reclassified as a regular student no later than the completion of the 18th credit hour. If it appears that a student will be unable to meet the requirements of regular student status, he/she must transfer to another program or be considered for dismissal from the graduate program in which he is enrolled. (See Admission to Program and Candidacy.)

**NON-DEGREE ADMISSION** — Persons who desire university instruction without wishing to become graduate degree candidates may be admitted as non-degree students, provided they present transcripts or diplomas denoting graduation from an approved accredited undergraduate college or university. Before enrolling in a class, non-degree graduate students must obtain permission from the instructor or Dean of the Graduate School. Students wishing to take courses offered by the College of Business must secure approval of the MBA program advisor. The fees for attendance as a non-degree student are the same as those set for other graduate students. Non-degree enrollment for graduate courses is not available to persons under suspension by the university.

A non-degree student may take a maximum of 15 semester hours. All such graduate students will complete a non-degree application for admission not later than the scheduled time of registration. A person holding a graduate degree may take an unrestricted number of additional courses for which he/she has the prerequisites and departmental permission.

Non-degree graduate students may apply later for regular or provisional graduate student status by filing the necessary documents, provided they meet the admission requirements described in the current Marshall University Graduate Catalog. However, work taken as a non-degree student cannot in itself qualify a person for admission as a degree candidate. Only credit approved by the assigned program advisor and the Dean of the Graduate School will be counted toward a degree awarded by the University.

**TRANSIENT** — Visiting graduate students who are duly enrolled at another approved accredited institution may, upon submission of an application and a letter of good standing from their home university, enroll for Marshall University graduate course work. This admission is valid for one semester only. The student must submit a new application and letter of good standing each semester he/she wishes to attend.

Normally, up to twelve credit hours of coursework may be transferred back to the home institution. Permission to transfer credits is arranged with the home university. Transient students who wish to register for coursework beyond twelve credit hours at Marshall are required to obtain the approval of Marshall University's Graduate Dean.

**PROFESSIONAL DEVELOPMENT** — Teachers approved by their county schools may use a special form to be admitted in the Professional Development category. Students admitted in this category are restricted to registering for Professional Development classes (560 series, College of Education) for which they will receive credit/non-credit grades. Such classes cannot be used for degree purposes. Students who wish to mix regular and Professional Development classes must seek regular admission to the Graduate School.

**SENIORS** — On recommendation by the Department Chairman and with the approval of the undergraduate Dean and the Dean of the Graduate School, Marshall University seniors with superior academic undergraduate records may be permitted to enroll in graduate courses. Students with an overall GPA of 3.0 or better who have attained senior status have standing eligibility to take courses at the graduate level (500 and 600 series) upon application. Complete applications must be on file in the Graduate School Office and permission secured prior to the opening of the term of enrollment. Credit for graduate courses completed as a senior can be applied to either an undergraduate or a graduate degree at Marshall University but not to both.

## **POLICY REGARDING CLASSIFICATION OF STUDENTS AS RESIDENTS AND NON-RESIDENTS FOR ADMISSION AND FEE PURPOSES**

(Board of Trustees Series No. 34)

### **Section 1. Classification for Admission and Fee Purposes**

1.1 Students enrolling in a West Virginia public institution of higher education shall be assigned a residency status for admission, tuition, and fee purposes by the institutional officer designated by the President. In determining residency classification, the issue is essentially one of domicile. In general, the domicile of a person is that person's true, fixed, permanent home and place of habitation. The decision shall be based upon information furnished by the student and all other relevant information. The designated officer is authorized to require such written documents, affidavits, verifications, or other evidence as is deemed necessary to establish the domicile of a student. The burden of establishing domicile for admission, tuition, and fee purposes is upon the student.

1.2 If there is a question as to domicile, the matter must be brought to the attention of the designated officer at least two weeks prior to the deadline for the payment of tuition and fees. Any student found to have made a false or misleading statement concerning domicile shall be subject to institutional disciplinary action and will be charged the nonresident fees for each academic term theretofore attended.

1.3 The previous determination of a student's domiciliary status by one institution is not conclusive or binding when subsequently considered by another institution; however, assuming no change of facts, the prior judgment should be given strong consideration in the interest of consistency. Out-of-state students being assessed resident tuition and fees as a result of a reciprocity agreement may not transfer said reciprocity status to another public institution in West Virginia.

## Section 2. Residence Determined by Domicile

2.1 Domicile within the State means adoption of the State as the fixed permanent home and involves personal presence within the State with no intent on the part of the applicant or, in the case of a dependent student, the applicant's parent(s) to return to another state or country. Residing with relatives (other than parent(s)/legal guardian) does not, in and of itself, cause the student to attain domicile in this State for admission or fee payment purposes. West Virginia domicile may be established upon the completion of at least twelve months of continued presence within the State prior to the date of registration, provided that such twelve months' presence is not primarily for the purpose of attendance at any institution of higher education in West Virginia. Establishment of West Virginia domicile with less than twelve months' presence prior to the date of registration must be supported by evidence of positive and unequivocal action. In determining domicile, institutional officials should give consideration to such factors as the ownership or lease of a permanently occupied home in West Virginia, full-time employment within the State, paying West Virginia property tax, filing West Virginia income tax returns, registering of motor vehicles in West Virginia, possessing a valid West Virginia driver's license, and marriage to a person already domiciled in West Virginia. Proof of a number of these actions shall be considered only as evidence which may be used in determining whether or not a domicile has been established. Factors militating against the establishment of West Virginia domicile might include such considerations as the student not being self-supporting, being claimed as a dependent on federal or state income tax returns or the parents' health insurance policy if the parents reside out of state, receiving financial assistance from state student aid programs in other states, and leaving the State when school is not in session.

## Section 3. Dependency Status

3.1 A dependent student is one who is listed as a dependent on the federal or state income tax return of his/her parent(s) or legal guardian or who receives major financial support from that person. Such a student maintains the same domicile as that of the parent(s) or legal guardian. In the event the parents are divorced or legally separated, the dependent student takes the domicile of the parent with whom he/she lives or to whom he/she has been assigned by court order. However, a dependent student who enrolls and is properly classified as an in-state student maintains that classification as long as the enrollment is continuous and that student does not attain independence and establish domicile in another state.

3.2 A nonresident student who becomes independent while a student at an institution of higher education in West Virginia does not by reason of such independence alone, attain domicile in this State for admission or fee payment purposes.

## Section 4. Change of Residence

4.1 A person who has been classified as an out-of-state student and who seeks resident status in West Virginia must assume the burden of providing conclusive evidence that he/she has established domicile in West Virginia with the intention of making the permanent home in this State. The intent to remain indefinitely in West Virginia is evidenced not only by a person's statements, but also by that person's actions. In making a determination regarding a request for change in residency status, the designated institutional officer shall consider those actions referenced in Section 2. The change in classification, if deemed to be warranted, shall be effective for the academic term or semester next following the date of the application for reclassification.

## Section 5. Military

5.1 An individual who is on full-time active military service in another state or a foreign country or an employee of the federal government shall be classified as an in-state student for the purpose of payment of tuition and fees, provided that the person established a domicile in West Virginia prior to entrance into federal service, entered the federal service from West Virginia, and has at no time while in federal service claimed or established a domicile in another state. Sworn statements attesting to these conditions may be required. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

5.2 Persons assigned to full-time active military service in West Virginia and residing in the State shall be classified as in-state students for tuition and fee purposes. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

## Section 6. Aliens

6.1 An alien who is in the United States on a resident visa or who has filed a petition for naturalization in the naturalization court, and who has established a bona fide domicile in West Virginia as defined in Section 2 may be eligible for in-state residency classification, provided that person is in the State for purposes other than to attempt to qualify for residency status as a student. Political refugees admitted into the United States for an indefinite period of time and without restriction on the maintenance of a foreign domicile may be eligible for an in-state classification as defined in Section 2. Any person holding a student or other temporary visa cannot be classified as an in-state student.

## Section 7. Former Domicile

7.1 A person who was formerly domiciled in the State of West Virginia and who would have been eligible for an in-state residency classification at the time of his/her departure from the state may be immediately eligible for classification as a West Virginia resident provided such person returns to West Virginia within a one year period of time and satisfies the conditions of Section 2 regarding proof of domicile and intent to remain permanently in West Virginia.

## Section 8. Appeal Process

8.1 The decisions of the designated institutional officer charged with the determination of residency classification may be appealed to the president of the institution. The president may establish such committees and procedures as are determined to be appropriate for the processing of appeals. The decision of the president of the institution may be appealed in writing with supporting documentation to the University of West Virginia Board of Trustees in accord with such procedures as may be prescribed from time to time by the Board.

Adopted: West Virginia Board of Regents February 2, 1971

Revised: February 8, 1973; November 13, 1973; October 2, 1981; October 8, 1985; April 8, 1986; June 1, 1986; June 18, 1986

Board of Trustees Policy June 1, 1989

## ADMISSION OF INTERNATIONAL STUDENTS

Marshall University is authorized under U. S. Federal law to enroll nonimmigrant students with F-1 or J-1 visa status.

International applicants must submit the following documents to be considered for admission:

1. A Marshall University application form, which is obtained by writing to the Director of Admissions, Marshall University, Huntington, West Virginia 25755, U.S.A.
2. Official transcripts in English of all high school, college or university academic credits and grades. The transcripts must be sent directly by the institution attended to the Marshall University Admissions Office.
3. Evidence of proficiency in the English language as indicated by one of the following:
  - a. The Test of English as a Foreign Language (TOEFL) minimum score of 525 reported directly to Marshall University Admissions Office by the Educational Testing Service, Princeton, New Jersey 08540. Results from the test taken more than two years prior to the date submitted will not be considered.
  - b. Michigan Test of English Language Proficiency (MTELP) equated score of 82 minimum.
  - c. Completion of the advanced level in an intensive English language program comparable to level 9 of an English Language School (ELS).
  - d. A degree or diploma from an accredited high school, college or university in which the language of instruction is English.
  - e. English is the official native language of the country of permanent residence (England, Canada, New Zealand, etc.)

4. An affidavit of financial support either from a personal sponsor (parent, relative, friend, etc.) or scholarship agency (government, corporation, etc.) stating the availability of funds and the intention to support the educational and living expenses of the applicant for the duration of studies at Marshall University. Applicants who are self-supporting should provide a statement so indicating and accompany the statement with documentary evidence (bank statement, letter of employer, verifying study leave and salary arrangements, etc.) that funds are available for study.
5. The American Association of Collegiate Registrars and Admissions Officers (AACRAO) World Education Series Books will be used to determine admissibility of international students.

Upon receipt of the above documents, the applicant's credentials are evaluated and a letter of admission and I-20 Certificate of Eligibility are sent; however, an \$10,000 deposit must be received in the International Students' Program Office before an I-20 form is issued to applicants from countries of proven credit risk, including Ghana, Iran, and Nigeria. Of this deposit, one-half (1/2) of the full-time tuition and fees for one year, and room and board for one year, if contracted with the University, is to remain on deposit as long as the student is enrolled. If the student subsequently moves off-campus, the money held for room and board will be refunded.

All nonimmigrant student applicants currently in the United States are required to submit an "International Student Advisor's Report" which should be completed by an official at the United States educational institution last attended or currently being attended in the United States. Forms may be obtained from the Marshall University Admissions Office.

The International Student Office will provide a list of courses designed to enable students to improve English proficiency and aid them in their studies. Special courses include: Diction for International Students; and Independent Skills Study offered by the Community and Technical College.

The international student must meet the measles/rubella vaccination requirement of the University of West Virginia Board of Trustees.

International students should address questions regarding their immigration status or other areas to the Coordinator for International Students' Programs, 212 Old Main (304/696-2379).

## ADMISSION TO MASTER'S PROGRAMS AND CANDIDACY

Admission to Graduate School does not guarantee admission to any specific graduate program. Before being accepted into a program the student must meet the requirements of the department to which application is made. If accepted, the student must, in conference with a program advisor, develop an outline of specific requirements which are to be successfully completed before being eligible for graduation. This outline should include: (a) the specific courses to be included as requirements, together with any deficiencies to be corrected; (b) the level of competence in basic skills required; (c) research or thesis requirements; and, (d) any other specific department requirements for completion of the program.

In the event that a student does not confer with an advisor to outline specific program requirements prior to enrollment in graduate courses, the department may choose to accept or not accept those courses which were taken without consultation with a departmental representative.

Admission to candidacy may be granted by the Dean of the Graduate School when the department determines that a student has shown sufficient progress to warrant it. Candidacy is defined as written approval given to the student by the Graduate School to proceed as a candidate for a graduate degree. The student cannot be admitted to candidacy in the semester of graduation. To be considered for such admission on the master's level, the student must have earned a quality point average of 3.0 (B) at Marshall University in no less than 12 or more than 18 hours of graduate credit appropriate for the degree sought, must be enrolled in the program for which the degree is sought, must have completed courses required by the program or department for candidacy and must have completed the Graduate Record Examination or GMAT in the MBA program. Students with a graduate major in the College of Education must complete EDF 621 or an approved equivalent course to be admitted to candidacy. The clinical psychology graduate program shall allow application to candidacy only after the student has completed one semester of approved clinical experience.

Students in the Ph.D. program may be admitted to candidacy only after passing the qualifying examination. (See Doctoral Degree below).

Admission to candidacy does not insure that a student will graduate if the department determines the overall performance is inadequate. Departments may establish procedures for periodic review of a student's progress and communicate the result of such review to the student. If the department determines a student has not made satisfactory progress toward the requirements and goals outlined when the student was accepted into the program, the department may follow the procedures in Policy Bulletin Number 60 to drop the student from the program.

## TIME LIMITATION

All requirements for the master's degree must be met within five years from date of enrollment in the first graduate course to be used in a graduate degree program, except in Counseling where degree requirements must be met within seven years. An extension in time not to exceed three years may be granted by the Graduate Dean, except in Counseling where the student may have up to a two year extension. Absence due to military obligations, long serious illness, or similar circumstances may be regarded as proper reasons for an extension of time.

Courses more than eight years old are considered outdated, except in Counseling where courses more than nine years old are considered outdated. It is the option of the major department to allow by special examination the validation of up to six credit hours of outdated course work. In such cases, validation cannot apply to workshop, practicum, or internship courses; and expertise to validate the course must reside within a Marshall University department whether the course was taken at this institution or elsewhere. It is the option of the major department to require validation by special examination of courses that are more than five years old. When this option is initiated by the department to validate classes less than eight years old, there will be no limit on the number of credit hours so tested and students will not be charged a fee.

The minimum requirement of a validation exam shall be that it is equivalent to a comprehensive final exam for the course. In most cases, validation must be done by a written exam with the results reported to the Graduate School. The appropriate forms are available in the Graduate School Office.

Outdated courses will not be used in computing grade point averages for graduation, but they remain on the record.

Students completing programs in the College of Education which lead to certification should contact the Dean of the College of Education for additional information on time limitations.

## TRANSFER OF GRADUATE CREDIT

The Graduate Dean may grant a student who has been admitted to candidacy the privilege of transferring to Marshall University credit earned in graduate course work completed at another accredited graduate institution provided that the courses are appropriate to the student's program and the grades earned are "B" or better or equivalent and acceptable to advisor and dean. On the master's level, transfer credits may not exceed 12 hours. Graduate credits transferred from other institutions will not become a part of the GPA recorded on the student's transcript and will simply meet credit hour requirements toward graduation. All such accepted courses must meet time requirements at the time of the student's graduation.

## THE GRADUATE ADVISOR

The Graduate Dean in consultation with the major department assigns an advisor to each student. The advisor assists the student in planning his/her program for the graduate degree. If the student writes a thesis or dissertation, the advisor or other designated person directs the student in that work. The advisor usually serves as chairman of the committee to conduct the student's comprehensive examinations, assembles questions for the written and oral examination and reports the result of the examination to the Graduate School office. Admission to candidacy for the master's degree and admission to the comprehensive examination must have the approval of the advisor. Admission to candidacy for the Ph.D. degree must likewise have the approval of the advisor. The student should keep in close touch with his or her advisor during the progress of his/her work.

## DOCTORAL DEGREE IN BIOMEDICAL SCIENCES

The doctorate is a research or performance degree and does not depend solely on the accumulation of credit hours. The three requirements for receipt of the degree are admission to candidacy, residency, and completion and successful defense of a dissertation. The degree signifies that the holder has the competence to function independently at the highest level of endeavor in the chosen profession.

### Candidacy Requirements

Admission to graduate study and enrollment in graduate courses does not of itself imply acceptance of the student as a candidate for a doctoral degree. This is only accomplished by satisfactorily passing a qualifying examination and by meeting all other specified requirements.

A student will be given a comprehensive qualifying examination to demonstrate knowledge of the important phases and problems of the field of major study, their relation to other fields, and the ability to employ the instruments of research. The examination is intended to determine whether the student has the academic competence to undertake independent research in the discipline, and to ensure that the student possesses a thorough grasp of the fields outlined in a plan of study.

### Qualifying Examination for Admission to Candidacy

The qualifying examination assesses whether the student has attained sufficient knowledge of the discipline and supporting fields in order to undertake independent research. The examination occurs after most course work has been completed, and consists of written and oral examinations covering all areas specified in a plan of study. After the component parts of the qualifying examination have been successfully passed, the student is admitted to candidacy for the degree. No one is a doctoral candidate until this first requirement for the degree has been met.

Because the qualifying examination attests to the academic qualification of the student to conduct independent research, the examination can not precede the degree by too long a period of time. Consequently, doctoral candidates are allowed no more than five years in which to complete remaining degree requirements. In the event a student fails to complete the degree within five years after admission candidacy, an extension of time can be obtained only by repeating the qualifying examination, and meeting all additional requirements specified by the student's doctoral committee.

Scheduling and results of qualifying examinations must be processed through the Office of Research and Graduate Education and then forwarded to the Graduate School Dean for approval. Approval by consensus of the doctoral committee is required for passage of the examination. Only one dissenting vote is permitted. If necessary, a single portion of the examination may be repeated at the discretion of the committee. However, if two or more members cast dissenting votes, the entire qualifying examination must be repeated. The student must have the approval of his/her doctoral committee to repeat a qualifying examination. The committee should specify a time period during which the student will have the opportunity to correct deficiencies prior to readministration of the examination. The qualifying examination can be administered a maximum of three times. The student is admitted to candidacy only after successful completion of the qualifying examination. Failure to successfully complete the qualifying examination will result in dismissal from the program by the Graduate Studies Committee and the Graduate School Dean upon recommendation of the student's doctoral committee.

### Dissertation

The candidate must submit a dissertation pursued under the direction of the graduate faculty on some topic in the field of biomedical sciences. The dissertation must present the results of the candidate's individual investigation and must embody a definite contribution to knowledge. While conducting research or writing a dissertation, the student must register at the beginning of each semester or summer during which credit is being earned. No more than fifteen hours of doctoral research will be credited toward the degree.

Candidates are to follow "Regulations Governing the Preparation of Dissertations" regarding format and organization of the dissertation. A copy of this document can be obtained from the Office of Research and Graduate Education and the Graduate School Office.

## Final Defense of the Dissertation

The final defense of the dissertation is held during the semester or summer session in which all other requirements for the degree are to be met. After the candidate's dissertation has been tentatively approved, the final oral defense of the dissertation will be scheduled. The student's committee chairperson will indicate in advance the time and place, and receive clearance from the Office of Research and Graduate Education and the Graduate School before the examination can be given. Such notification of oral defense of dissertation will occur at least three weeks before the date of the final defense. All final defenses of dissertation are open examinations and lead time is required for public notice to the University community.

Successful completion of the final defense requires the approval of all but one of the members of the doctoral committee. Results of each final defense must be reported to the Office of Research and Graduate Education and then forward to the Graduate School for approval within 24 hours. Reexamination may not be scheduled without approval by the doctoral committee, the Office of Research and Graduate Education and the Graduate School.

All doctoral committee members are to be present for the final defense of the dissertation. If the final defense cannot be scheduled at a time convenient to all committee members, the Graduate School Dean or his/her designee may permit one substitute for an original committee member. A substitute for the chair of the committee will not be permitted. A request for a substitute must be submitted in writing, and prior to the final defense to, the Office of Research and Graduate Education and then forwarded to the Graduate School for approval. The request for a substitute will be signed by the committee chair, the student, and both the original committee member and the substitute. A substitute must have the same or higher graduate faculty status as the original committee member and represent the same academic discipline or specialization.

## Acceptance of Dissertation

The requirements for a doctorate include acceptance of the dissertation. An accepted dissertation must bear the original signatures of at least all but one of the doctoral committee members. If more than one member of the committee, whatever the size of the committee, dissents from approving the dissertation, the degree cannot be recommended. If a substitute faculty member attends the final examination, the substitute signs the approval sheet; however, the original committee member is to sign the dissertation. The dissertation must be accepted by The Graduate School not later than one week before the end of the semester or summer session in which the degree is expected to be granted.

## Publication

All doctoral dissertations and their abstracts will be microfilmed through University Microfilms, Ann Arbor, Michigan. This requirement will not be satisfied by any other publication but does not preclude publication elsewhere, which is both permitted and encouraged.

## Completion of Requirements

One week before the close of the semester or summer session in which the degree is expected to be conferred the candidate must submit the following to the Graduate School Office:

1. The typed, unbound original dissertation in a form suitable for microfilming and two excellent machine-reproduced copies. All three copies must have signatures of the candidate's doctoral committee.
2. One extra abstract using no more than 350 words. This separate abstract must have at the top of the first page the centered exact title of the dissertation, followed on the next line by the full name of the candidate, and on the next line by the word ABSTRACT. The pages of the extra abstract must be unnumbered.
3. A completed and signed University Microfilms contract together with the appropriate fee to cover the cost of microfilming the dissertation and publication of the abstract in *Dissertation Abstracts*, a bi-monthly journal which receives wide distribution. This fee is payable by certified check or money order made out to University Microfilms Inc. If



desired, copyright service can be provided through University Microfilms upon receipt, along with the dissertation, of a certified check or money order in the appropriate amount made payable to University Microfilms, Inc.

4. Payment in the appropriate amount to Marshall University to cover the cost of binding the original and two copies of the dissertation.
5. A completed questionnaire entitled "Survey of Earned Doctorates."

### **Time Limitation**

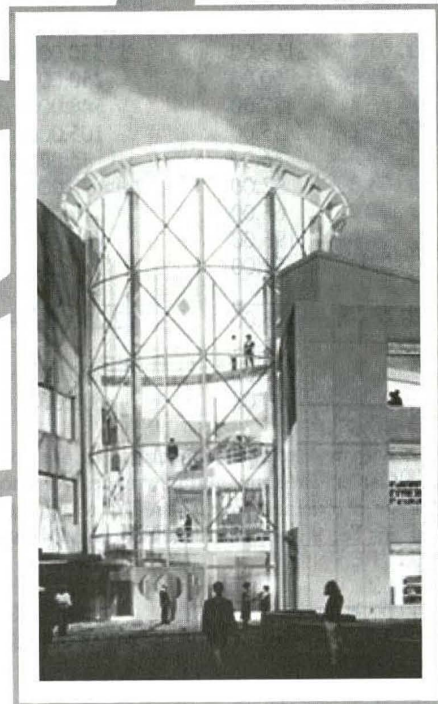
Students must meet all requirements for the doctor of philosophy degree in Biomedical Sciences within seven years from the date of enrollment in the first course to be used in the degree program. An extension in time may be granted by the Graduate Dean upon recommendation by the Graduate Studies Committee of the Biomedical Sciences Graduate Program. Absence due to military obligations, long serious illness, or similar circumstances may be regarded as proper reasons for an extension of time. It is the option of the student's doctoral committee to require validation by special examination of courses which members deem to be outdated.

### **Summary of Procedures for the Doctoral Degree**

1. Letter of inquiry from prospective student to the Office of Research and Graduate Education or Office of Admissions.
2. Mailing of application from the Office of Research and Graduate Education or Office of Admissions.
3. Receipt of application materials and required fee by the Office of Research and Graduate Education or Office of Admissions.
4. Referral of application materials and required fee by the Office of Research and Graduate Education or Office of Admissions.
5. The Office of Research and Graduate Education notifies the Office of Admissions and the prospective student of the admission decision of the Graduate Studies Committee.
6. The accepted student arrives, reports to the Office of Research and Graduate Education, is assigned an interim advisor, and registers for course work.
7. Selection of a department/advisor must be achieved by the end of the student's second semester. After a permanent advisor has been selected, a doctoral committee is formed. A plan of study should be developed by the end of the next semester.
8. The student completes requisite course work and other program requirements.
9. The student takes written and oral qualifying examination for admission to candidacy. These examinations should be scheduled within one month of each other. The results are communicated to the Office of Research and Graduate Education and then forwarded to the Graduate School for approval.
10. The student continues doctoral research under the guidance of his/her doctoral committee. The dissertation phase begins with the approval of a dissertation prospectus by the doctoral committee, the Office of Research and Graduate Education and the Graduate School Dean.
11. A copy of the preliminary draft of the dissertation is given to each member of the doctoral committee and the Graduate School Dean at least one month prior to the final defense of the dissertation.
12. The chair of the doctoral committee requests clearance for the final defense from the Office of Research and Graduate Education and the Graduate School for approval no later than three weeks before the scheduled date of the defense.
13. The time and place of the final defense of the dissertation are announced.
14. The student defends the dissertation in an oral defense.
15. The student delivers the original and two copies of the approved dissertation, required completed questionnaires and fees to the Graduate School at least one week prior to the end of the term or semester.

## CONTINUING EDUCATION AND CERTIFICATE RENEWAL

Marshall University, in addition to offering teacher preparation programs, is actively involved in the continuing education of all professional teachers. The West Virginia Board of Education has approved a program of continuing education for all professional teachers and school service personnel. Information relative to a teacher renewing his/her professional certificate is available from the Office of the Dean, College of Education. Please note that the teacher must have prior approval of his/her renewal advisor before enrolling in any course which is to be utilized for certificate renewal and/or salary classification and/or additional certification endorsements.



# Financial Information

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# Financial Information

## FEES

The university and its governing board reserve the right to change fees and rates without prior notice. Fee assessments are calculated on student level, not course level.

Please Note: All fee listings in the fee section of this catalog show the rates authorized and in effect for the 1997-98 academic year. When the rates for the 1998-99 academic year are authorized and approved, fee schedules will be available in the Office of the Bursar and the Office of the Registrar.

## ENROLLMENT FEES

### Regular Semester

	Resident Rate	Metro Fee <sup>1</sup> Rate	Nonresident Rates
Tuition Fee	\$155.00	\$ 550.00	\$ 550.00
Registration Fee	50.00	250.00	250.00
Higher Education Resources Fee	477.00	548.00	1,200.00
Faculty Improvement Fee	35.00	105.00	105.00
Student Center Fee	36.00	36.00	36.00
Activity Fee	92.00	92.00	92.00
Athletics/Title IX	65.00	65.00	65.00
Operations Fee	198.00	484.00	927.00
Library/Computing Fee	50.00	100.00	100.00
<b>Total Regular Student Fees</b>	<b>\$1,158.00</b>	<b>\$2,230.00</b>	<b>\$3,325.00</b>
<sup>2</sup> College of Business Fee	100.00	\$ 200.00	\$ 200.00
Health Professions Fee	200.00	600.00	600.00

(1) Fee is applicable to students with residency classifications in the county of Lawrence, state of Ohio, and the counties of Boyd, Carter, Greenup, and Lawrence, Commonwealth of Kentucky.

(2) Program Specific Fees. College of Business Fee is assessed to all junior and senior College of Business majors. Health Professions Fee is assessed to the School of Nursing.

## RESIDENCE HALLS FEES

	Room and Board Total Per Semester		
Regular Semester - 16 weeks	19-Meal	15-Meal	10-Meal
Double Occupancy:			
Buskirk, Twin Towers	\$2,210.00	\$2,175.00	\$2,098.00
Hodges, Holderby, Laidley	2,099.00	2,064.00	1,987.00
Single Occupancy:			
Buskirk, Twin Towers	2,526.00	2,491.00	2,414.00
Hodges, Holderby, Laidley	2,273.00	2,238.00	2,161.00
Deluxe Single Occupancy:			
Buskirk, Twin Towers	2,579.00	2,544.00	2,467.00
Hodges, Holderby, Laidley	2,547.00	2,512.00	2,435.00

## SUMMER TERM - 5 WEEKS

Double Occupancy	692.00
Single Occupancy	790.00

## COMMUTER MEAL PLANS

Sixty Meals	\$295.00
Thirty Meals	150.00
Twenty Meals	105.00

## RATES FOR MARRIED STUDENT HOUSING

Efficiency Apartment	\$274.00
One Bedroom Apartment - Building One	306.00
Two Bedroom Apartment - Building One	337.00
Renovated One Bedroom - Building One	337.00
One Bedroom Apartment - Building A, B, & C	411.00
Two Bedroom Apartment - Building A, B, & C	443.00
Storage Rooms in A, B, & C (per month)	25.00

## SPECIAL STUDENT FEES

### \*Application Fees:

Resident - Undergraduate	\$ 10.00
Resident - Graduate	\$ 15.00
Non-Resident - Undergraduate	\$ 25.00
Non-Resident - Graduate	\$ 25.00
Resident - School of Medicine	\$ 40.00
Non-Resident - School of Medicine	\$ 80.00
Physical Therapy Program - CC	\$ 30.00
School of Nursing	\$ 30.00
Clinical Lab Fee - COE	\$100.00

### Damage Deposits:

Married Student Housing	\$ 150.00
Dormitories	\$ 50.00

### \*Diploma Replacement

	\$ 20.00
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### \*Graduate Fees:

Associate Degree	\$ 20.00
Baccalaureate Degree	\$ 25.00
Master's Degree	\$ 30.00
First Professional Degree	\$ 50.00

### \*Improper Dormitory Check-out Fee

	\$ 25.00
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### Late Fee-Rent - After 15th of Month

	\$ 10.00
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### Late Registration/Payment Fee

	\$ 20.00
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### Mail Box - Re-Key (per lock)

	\$ 10.00
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### Meal Card/ID Replacement

	\$ 5.00
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### Off Campus Course Fee

	\$ 60.00
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### Orientation Fee

	\$ 40.00
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### Placement Fee - Course Schedule

	\$ 10.00
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### Regents BA Degree Evaluation

	\$ 200.00
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### Reinstatement Fee - Course Schedule

	\$ 10.00
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### Reservation Deposit - Dormitory

	\$ 100.00
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### Returned Check Fee

	\$ 15.00
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### Room Re-Key - Per Lock

	\$ 15.00
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### Transfer Evaluation Fee

	\$ 50.00
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### Transcript (After First)

	\$ 5.00
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### Validation Exam Fee

	\$100.00
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\*Non-refundable

## PAYMENT OF FEES

Tuition fees for a regular semester, a Summer Term, an Intersession, and any special class are due and payable to the Office of the Bursar in accordance with dates established and listed in the Marshall

University Schedule of Courses, the university's official Bulletin of Course Listings and Registration Instructions as published by the Office of the Registrar for each term of enrollment. Enrollments (registrations) not paid on or before the official due dates will be cancelled and the student will be subject to withdrawal from the university (see Withdrawal/Reinstatement Policy). Failure to receive an invoice will not be accepted as a reason for missing the payment deadline. Reregistration for enrollments not paid by the official due dates will be required when allowed and approved by the appropriate academic dean and the Office of the Registrar.

Students may pay fees by VISA/Mastercard or Discover at the Office of the Bursar, 101 Old Main or by phone at (800) 696-MILO or (304) 696-MILO.

Student deferred payment plans for tuition will be offered for the fall and spring semester. All available financial aid from the term must be credited to the student's account prior to determining the amount available for deferral. Contact the Office of the Bursar for current deferred payment plan information. A student's residence services fees (room and board) are due at a semester rate payable in accordance with dates established by the Office of Residence Services.

Students who are recipients of financial aid through the university's loan or scholarship program, the university's Department of Intercollegiate Athletics, or any governmental agency, or by private loan or scholarship, must complete arrangements for payment through the Director of Student Financial Aid (Room 122, Old Main Building) and the university Bursar (Room 101, Old Main Building).

A student's registration is not complete until all fees are paid.

A student's registration will be cancelled when payment is made by a check which is dishonored by the bank. A charge of \$15.00 will be made for each check returned unpaid by the bank.

A student who owes a financial obligation to the university will not be permitted to enroll in subsequent semesters until the obligation is paid.

Students who withdraw properly and regularly from the institution will receive refunds of fees paid in accordance with the student refund policy published each semester in the university schedule of courses.

A student who is required to withdraw from the institution for disciplinary reasons may not receive refunds of fees paid.

## REFUND PROCEDURE

During the period designated by the Office of the Registrar for Registration, Late Registration, and Schedule Adjustments for a regular semester or a summer term and published in the Marshall University Schedule of Courses Bulletin, enrollment fees (tuition fees) will be refunded to students for:

1. Classes officially dropped from the student's course schedule that reduce the student's total scheduled semester hours from full-time status to part-time status. Example: Undergraduate enrollment dropping of classes to adjust course schedule from 12 or more hours to less than 12 hours.

2. Classes officially dropped from the student's course schedule when the enrollment is in a current part time status that reduce the student's total scheduled semester hours. Example: Undergraduate enrollments dropping classes to adjust course schedule from 11 hours to 10 hours to 9 hours, etc.

3. Official complete withdrawals from all classes from the student's course schedule. Example: Undergraduate withdrawal from enrollment - 12 or more hours to 0 hours, 11 hours to 0 hours, 10 hours to 0 hours, etc.

4. Title IV Financial Aid first time enrollees who officially withdraw before or during their first period of enrollment shall have their refund calculated in accordance with the provisions contained in the 1992 amendments to the federal Higher Education Act.

At the conclusion of the Late Registration and Schedule Adjustment period, refunds will be processed only to students who completely withdraw from the semester or summer term.

### Cancellation of Class:

When it becomes necessary to cancel a class by administrative and/or faculty action, a student is granted a full refund of the fee for the class cancelled unless he/she registers in another course of like

value in terms of semester hours. This action does not apply to withdrawals due to disciplinary action or withdrawals due to nonpayment of financial obligations.

## RESIDENCE SERVICES

Request for withdrawal from Marshall University on campus housing must be addressed in writing to the Department of Residence Services. Refunds, if applicable will be based on the date cancellations are received. Fall cancellations must be received before July 1 and Spring or Summer cancellations must be received ten (10) business days or more prior to the official opening date of Housing, in order to receive deposits back. Voluntary withdrawal following these dates and prior to the opening of residence halls will result in a full refund less fifty dollars (\$50.00) reservation deposit. Withdrawal between the opening day for Housing and the first Friday will result in a refund of fifteen weeks room and board. Withdrawals after the first Friday will result in a forfeiture of monies paid for room. A prorated refund will be processed for any unused portion of the Board plan. Students whose residence is terminated automatically forfeit all monies paid for that semester. Students who are denied admission, declared academically ineligible to return, or are unable to return for medical reasons, will be refunded on a prorated basis.

Refunds to students called to armed services - enrollment fee only will be processed in accordance with policy established by the Office of the Registrar.

Late fees are nonrefundable.

## WITHDRAWAL/REINSTATEMENT FOR NONPAYMENT OF FEES AND OTHER FINANCIAL OBLIGATIONS

### A. ENROLLMENT AND RESIDENCE HALL FEES

1. Through late registration each semester, a schedule of withdrawal for nonpayment will be included in the Marshall University Schedule of Courses. Following late registration, the Bursar will send written notification to the student advising of administrative withdrawal for nonpayment of Enrollment or Residence Hall Fees.
2. Upon notice from the Bursar, the Registrar will initiate a complete withdrawal for students not paying fees. The withdrawal will be "Administrative-Nonpayment of Enrollment Residence Hall Fees".
3. The Registrar will notify the instructors that the student should not be permitted to continue attendance in the class.
4. If the student fulfills the financial obligation, the Bursar's Office will notify the student and his/her academic dean. The academic dean will have discretion to approve registration. In case of approval by the dean, the student, the instructors, and the Registrar will be notified in writing immediately.
5. Upon receipt of notice from the academic dean, the Registrar will initiate the procedure to register the student in the courses for which the student was enrolled at the time of withdrawal.
6. Students who do not meet their financial obligation for enrollment and residence hall fees will have all entries of that registration on the Registrar's permanent record erased.
7. A student who owes a financial obligation to the university will not be permitted to enroll in subsequent semesters until the obligation is paid.
8. If a student disputes an administrative withdrawal, he/she may file an appeal with the Student Grievance Board through the Office of Student Affairs. (The Student Grievance Board is a subcommittee of the Student/ Conduct and Welfare Committee). This appeal must be filed before the effective date of withdrawal established by the Bursar. The administrative withdrawal will be suspended until the President of the university acts upon the recommendation of the Student Grievance Board.

### B. OTHER OBLIGATIONS

1. Failure to properly fulfill other types of financial obligations may result in administrative withdrawal from the university.

2. Upon notice from the Bursar, the Registrar will initiate a complete withdrawal for a student not paying financial obligations. The withdrawal will be "Administrative-Nonpayment of Financial Obligations" and will be dated with the effective date of processing of the withdrawal. Under these conditions, the procedures outlined under A-3, A-4 and A-5 above will be followed.
3. Students who do not meet these "Other Financial Obligations" and who are administratively withdrawn from the university will receive the grade determined by the withdrawal policy in effect at the time the administrative withdrawal was initiated.
4. A student who owes other types of financial obligations to the university will not be permitted to enroll in subsequent semesters until the obligation is paid.
5. If a student disputes an administrative withdrawal, he/she may file an appeal with the Student Grievance Board through the Dean for Student Affairs. (The Student Grievance Board is a subcommittee of the Student/ Conduct and Welfare Committee). This appeal must be filed before the effective date of withdrawal established by the Bursar. The administrative withdrawal will be suspended until the President of the university acts upon the recommendation of the Student Grievance Board.

## GRADUATE ASSISTANTSHIPS AND FINANCIAL ASSISTANCE

Most departments offering the master's degree have funds for graduate assistantships. The amount of the award may vary but includes the waiver of tuition and some fees. Graduate assistants will normally carry a nine hour load. Special permission to carry a reduced load must be obtained from the Department Chairperson and the Graduate Dean. Information about graduate assistantships may be secured by contacting the department chairmen or the Graduate School Office.

Note: By an act of Congress, all graduate assistants must submit an approved I-9 form. Payment of the GA stipend will not be authorized until this form is accepted by the Personnel Office.

Inquiries about graduate fellowships, work-study opportunities, loans, and other forms of financial assistance for graduate students should be directed to the Graduate School Office or to the Office of Student Financial Assistance, Marshall University, Huntington, WV 25755.

A limited number of **graduate and professional tuition waivers** are available through the Graduate School in line with Board of Trustees Series 49. Announcements are made at the appropriate time concerning procedures and deadline dates for each term.

## SPECIAL FINANCIAL ASSISTANCE CONCERNS

**Satisfactory Academic Progress Standards for Financial Assistance Eligibility - Graduate Students:** In order to be able to receive financial assistance, Federal Regulations require that a student be making satisfactory progress toward the completion of his/her degree or program. Marshall University has adopted standards by which to monitor financial aid recipients' progress. (These standards insure the proper distribution of financial assistance to eligible students.)

Satisfactory academic progress will be questioned of graduate students only when their grade point average drops below 3.00 or the completion ratio drops below 67%. Students will be eligible for a maximum of six (6) full-time semesters. Students attending on less than a full-time basis will be given a maximum of ten (10) regular semesters of eligibility. (Please note that regular semesters include only the fall and spring semesters and that full-time is enrollment for nine (9) semester hours or more.) Eligibility for graduate students seeking a master's degree will cease with the completion of the first masters degree. Students seeking a second degree at the doctoral or professional degree level will be given consideration on a case by case situation.

Withdrawing from classes after the drop/add period can have a negative effect on continued eligibility as it can serve to increase the time required to complete one's program. Repetitions will be dealt with according to the University's policy governing grade point averages and will be included in classes registered for and completed. Audits will be dealt with similarly.

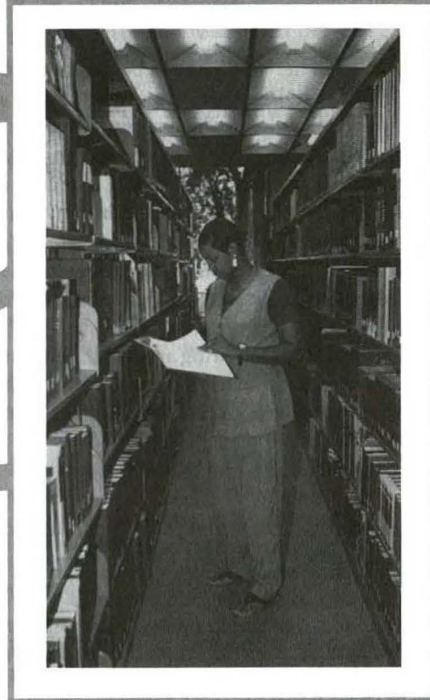
Students not meeting the above standards will receive notification from the Director of Financial Aid as soon as such status is discovered. This notification will indicate ineligibility for financial aid, suggest that academic assistance can be found through the Student Development Center and inform the student about his or her right to appeal. All appeals must be made in person to the Director of Financial Aid.



Financial assistance recipients who are eligible for refunds of fees paid to the University for tuition, fees, room and/or board will receive a refund only after the assistance disbursed to the student for the payment period has been recovered.

Answers to questions regarding these and other concerns with financial assistance, including more specific information are available from the Office of Student Financial Assistance, phone 1-800-438-5390 (in-state only) or 1-304-696-3162.





Academic  
Information

# Academic Information

## CATALOG TERMS AND DEFINITIONS

Following are definitions of terms used in the academic sections of this catalog.

**AREA OF EMPHASIS:** A specific subject area of study which has limited course offerings within an approved degree program and major.

**CREDIT HOUR:** One lecture credit hour is given normally for each 15 classroom contact hours plus 30 hours of outside preparation or equivalent. One laboratory credit hour requires at least 30 hours of laboratory work per one lecture credit plus necessary outside preparation or equivalent. Laboratory experiences are complements to classroom courses that focus on the theory and principles of the discipline. They are organized activities involving the observation and verification of experiments and experimental techniques.

**DEGREE PROGRAM:** A degree program is a unified, complementary series of courses or learning experiences that lead to a degree.

**FULL-TIME GRADUATE STUDENT:** The West Virginia Board of Trustees defines a full-time graduate student at Marshall University as carrying nine or more semester hours in a regular semester. During a single summer term a full-time graduate student carries four or more semester hours. This may differ from the definition for fee purposes. (See Fees and Expenses.)

**INDEPENDENT STUDY:** Independent Studies are tutorials, directed and independent readings, directed and independent research, problem reports, and other individualized activities designed to fit the needs of students within the major. Written objectives of each independent study course, approved by the chair and dean, must be maintained in departmental files.

**INTERNSHIP:** Internships are supervised, contractual work-study arrangements with professional agencies or institutions.

**MAJOR:** A major is an area of concentration requiring at least 18 semester credits for completion. It is offered within one department or by a combination of two or more departments. A field of study within an approved degree program, having its own prescribed curriculum. A degree program may have more than one major.

**MINOR:** A minor is a program of study outside the major department requiring at least 6 semester credit hours for completion.

**PRACTICUM:** A practicum is a learning activity that involves the application of previously learned processes, theories, systems, etc. Generally credit is assigned on the same basis as that of a laboratory.

**PROGRAM:** A program is a unified, complementary series of courses or learning experiences that lead to a degree.

**SEMESTER HOURS:** The semester hour is the basis of college credit within the institution. A semester hour is the credit received for passing a subject taken one hour per week for one semester. Laboratory courses require two or three hours per week for each semester hour of credit.

**SEMINAR:** A seminar is a small group of students engaged in advanced study of the original research or some important recent advancements in the field. Seminars are organized under the direction of a faculty member, and credit is allowed according to university regulations for granting semester-hour credit.

**SPECIAL TOPICS:** Special Topics are experimental courses that may be offered twice by a given department with no prior committee approval. Such courses may satisfy university, college or department requirements toward a given degree and may carry specific requisites.

**TRANSCRIPT:** A transcript is a copy of the student's permanent academic record. An official transcript can only be issued by the Office of the Registrar. For additional information on the procedure for obtaining a transcript, see Transcripts of Academic Record.

**WORKSHOP:** Workshops are highly practical, participatory courses usually designed for advanced students or professionals. They provide experience or instruction in a new technique, theory or development in a given discipline. If credit is granted, appropriate university guidelines will be followed.

## STUDENT SCHEDULES AND COURSE INFORMATION

### Semester Load

A normal load for a full-time graduate student is twelve semester hours in the Fall and Spring semesters, and six semester hours in each of the two summer terms. Enrollment for more than the normal load described here requires approval of the Graduate Dean. Graduate assistants schedule a nine hour load during the regular semesters.

### Part-Time Graduate Students

Graduate students who are employed should limit their schedules in proportion to the time available for graduate study. As a general practice, the maximum graduate load recommended for a student who is employed full-time is six hours in a regular semester or three hours in a summer term.

### Schedule Adjustment

Schedule adjustment is the adding of courses or dropping of courses, or the changing of class hours or days after a person has registered in any semester or term. The specific Schedule Adjustment Period for any semester or term is specified in the Schedule of Courses for that semester or term. After the conclusion of the Schedule Adjustment Period, students are not permitted to add classes or make changes in class hours or days, nor are late registrations permitted except with the permission of the Graduate Dean. Dropping of classes after the Schedule Adjustment Period is discussed in the section entitled "Regulations on Dropping Courses. . ."

### Course Numbering

Graduate courses numbered 500-599 are similar to certain undergraduate 400-499 series courses and meet jointly with undergraduate students. A Marshall University course taken at the 400 level cannot be retaken at the 500 level. Courses numbered 600-699 and 700-899 are open only to graduate students. Exception to this policy is sometimes granted to seniors with excellent academic records.

### Professional Development Courses

Professional Development Courses, 560-4 CR/NC series in the College of Education, may not be used to satisfy graduate degree requirements.

### In-Service Teacher Restriction

In addition to offering teacher preparation programs, Marshall University is actively involved in the continuing education of all professional teachers. The West Virginia Board of Education has approved a program of continuing education for teachers and school service personnel. Information relative to a teacher's renewing a professional certificate is available from the Office of the Dean, College of Education. The teacher must have approval of his/her renewal advisor prior to enrolling in any course which is to be utilized for certificate renewal, salary classification, or additional endorsements. Note that regulations of the West Virginia Board of Education, and similar regulations in other states, limit the amount of credit for which teachers in service may enroll.

## FACULTY-STUDENT ADVISORY PROGRAM

Each student admitted to a graduate degree program at Marshall University is assigned to a graduate faculty advisor. The advisor renders academic guidance by assisting in the preparation of class schedules, by counseling the student in meeting degree requirements, and by checking on academic progress. It is vital to consult with one's advisor on a regular basis.

## REGULATIONS ON DROPPING COURSES OR COMPLETELY WITHDRAWING FROM THE UNIVERSITY

### 1. Dropping of Courses

Dropping a course after the schedule adjustment period requires that a drop form bearing the instructor's signature be submitted to the Registrar's Office. Students on academic probation must have Dean's approval to drop a course.

Off-campus or night courses may be dropped by mailing a request to drop to the Registrar's Office. The postmark on such a request will be the official date of withdrawal.

2. **Withdrawal from the University**

Withdrawal from the University is defined as dropping all classes for which a student is registered.

Withdrawal requires that a withdrawal form be submitted to the Registrar's Office or that a request for withdrawal be mailed to the Registrar's Office. It is not possible to withdraw by telephone.

The effective date of withdrawal is the date that the withdrawal form is submitted to the Registrar's Office. The postmark on mail requests will be the official date of withdrawal.

3. **Grades Assigned in Case of Dropping Courses or Withdrawal from the University**

In all cases of dropping courses or withdrawal from the university the instructors will report grades as follows:

- a. A student dropping courses or withdrawing from the University on or before the tenth Friday after the first class day of the regular semester will receive a grade of "W". For eight-week courses, summer sessions and other courses of varying lengths, the "W" period ends the Friday immediately following the two-thirds point in the course. Exact "W" dates are identified in the annual University Academic Calendar.
- b. A "W" grade (withdrew) will have no bearing on the student's grade point average.
- c. Students who drop courses without approval, or who do not follow regulations provided in the preceding paragraphs, receive a grade of "F" at the end of the Semester or summer term.

4. **Final Date for Dropping or Withdrawing**

The final date for dropping an individual class is the tenth Friday in a regular term. The last date for complete withdrawal from the University is the last day of classes. In both cases, "W" grades are assigned.

5. **Military Service**

Men and women called to active duty in the armed services of the United States shall be granted full refund of fees, but no credit, if the call comes before the end of the first three-fourths of the semester or term, and full credit, but no refund of fees, shall be granted if the call comes thereafter; provided, however, that credit as described above will be granted only in those courses in which the student is maintaining a passing mark at the time of departure to military service. The term "called to active duty" is herein defined as being called to active duty as the result of the federal activation of a total reserve component, National Guard unit, or any portion thereof which involves a particular student or an individual who is a bona fide member of the reserve component or a National Guard unit. The final grades, both passing and failing, for three-fourths of a semester or more are to be shown on the student's permanent record.

## MANDATORY WITHDRAWAL FOR MEDICAL REASONS

1. A student will be subject to a mandatory medical withdrawal if it is determined by the Dean of Student Affairs and/or designee that the student is endangering himself or other members of the university community by his/her continued membership in the university community.
2. Through an approved designee, the Dean of Student Affairs reserves the right to request a complete mental or physical evaluation if it is reasonably believed that said student behavior or health habits warrant it.
3. The student shall be referred to the appropriate health physician and a written document of evaluation and recommendations will be requested and forwarded to the university designee. The university will then act upon the evaluation and recommendations with regard to the student's continuation at Marshall University.
4. If evaluation supports or indicates a recommendation for a medical withdrawal from the university, the appropriate Student Affairs office will facilitate the withdrawal.
5. Students will be accorded an informal hearing before the Dean of Student Affairs or a designee to obtain an understanding of the evaluation and rationale for the mandatory withdrawal.
6. In the event that the student declines the opportunity for such an evaluation, a withdrawal for medical reasons may be unilaterally effected by the university.

7. Withdrawal for medical reasons will be done without academic penalty to the student. Fees will be refunded in accordance with university policy.
8. A decision to withdraw may be appealed to the Student Conduct and Welfare Committee or a special subcommittee thereof appointed by the chairperson.

Adopted by Student Conduct and Welfare Committee, December 7, 1984;  
approved by the President, January 22, 1985.

## COURSE SYLLABI POLICY

During the first two weeks of semester classes (3 days of summer term), the instructor must provide each student a copy of the course requirements which includes the following items: 1) attendance policy, 2) grading policy, 3) approximate dates for major projects and exams, and 4) a description of the general course content.

This policy may not apply to the following types of courses: thesis, seminar, problem report, independent study, field work, internships and medical clerkships.

Adopted by University Council, March 12, 1980; amended by Academic Planning and Standards Committee, April 10, 1980; approved by the President, May 5, 1980.

## CLASS ATTENDANCE POLICY

It is the responsibility of each individual instructor to evaluate the importance of student class attendance. Accordingly, each instructor prepares at the beginning of each semester a written statement setting forth his or her policy for consideration of unexcused absences, make-up examinations, and related matters, which will be in force for the semester. This statement is filed with the chair of the department and a statement of policy on attendance appropriate to each class is made available to students.

Absences such as those resulting from illness, death in the family, or institutional activities (those approved by the academic deans, such as debate, artistic performances and athletics) are to be excused when a student reports and verifies them to the instructor. For such excused absences, the student should not be penalized.

## AUDITING COURSES

Audit students are those who enroll only for purposes of refreshing or acquainting themselves with the material offered in the course. Audit students receive no academic credit. Auditing is allowed only when there is space available in the class and the instructor authorizes audit status. Enrollment for audit is limited to the regular registration period for the semester or term. Students who want to audit classes must enroll and pay fees in the same manner and at the same tuition rate as students enrolling for credit. Faculty members wanting to audit courses must secure approval of the instructor of the course and must enroll in the regular manner.

Attendance and other requirements for auditors shall be determined by the instructor of the course being audited. It is the prerogative of the instructor to notify the respective Dean and the Registrar's Office to withdraw the auditor from the class if attendance or other requirements are not met. It is the responsibility of the instructor to discuss the requirements of the course with the auditor.

Professional Development courses are offered exclusively as Credit/No Credit. They may not be taken under the audit option and may not be applied toward the credit hour requirement for a graduate degree.

It is not possible to change a registration from credit to audit or audit to credit after the close of the schedule adjustment period at the beginning of a semester or summer term

## CONTINUING EDUCATION

Marshall University, through the Office of Community Services in the Community and Technical College, offers a non-college credit "Continuing Education Unit" program designed to give recognition to persons continuing their education through certain types of short courses, seminars, and conferences. The program is designed for industrial, business, educational, civic, professional, and other groups.

One Continuing Education Unit is defined as: Ten contact hours of participation in an organized educational experience under responsible sponsorship, capable direction and qualified instruction.

Continuing Education Units may be awarded as whole units or as tenths of units. For example, a fifteen contact-hour short course would produce 1.5 C.E.U.'s, a ten contact-hour offering 1.0 C.E.U., and a five contact-hour offering 0.5 C.E.U.

A permanent record will be maintained by the Community and Technical College of all C.E.U.'s earned.

For further information, please contact the Coordinator of Continuing Education, Marshall University Community and Technical College, 696-3646.

## ACADEMIC COMMON MARKET

### Out-of-State Programs at Reduced Tuition

West Virginia provides for its residents who wish to pursue academic programs not available within the State through the Academic Common Market and through contract programs. Both programs provide for West Virginians to enter out-of-state institutions at reduced tuition rates. Contract programs have been established for study in veterinary medicine, optometry, architecture, and podiatry. The Academic Common Market, which provides access to numerous graduate programs, is restricted to West Virginia residents who have been admitted to one of the specific programs at designated out-of-state institutions. Further information may be obtained through the Office of Academic Affairs, the Graduate School Office, or the West Virginia Board of Trustees.

## GRADE INFORMATION AND REGULATIONS

### Grades and Quality Points

The following system of grades and quality points is used for graduate courses:

- A. For achievement of distinction. Four quality points are earned for each semester hour with a grade of A.
- B. For competent and acceptable work. Three quality points are earned for each semester with a grade of B.
- C. For below average performance. Two quality points are earned for each semester hour with a grade of C. (No more than six hours of C may be applied toward a degree.)
- D. For patently substandard work. One quality point is earned for each semester hour with a grade of D. (No grade of D may be applied toward a degree.)
- F. Failure, given for unsatisfactory work. No quality points.
- W. Withdrawn on or before the tenth Friday after the first class day of the regular semester or the Friday after the two-thirds point in the summer session. "W" grades are assigned for complete withdrawals.
- I. An I grade (Incomplete) is given to students who do not complete course requirements because of illness or for some other valid reason. The I grade is not considered in determining the quality point average. The student has the responsibility of completing the work within the period defined by the instructor, not to exceed twelve calendar months from date of receipt of the incomplete. If the work is completed satisfactorily, one of the four passing marks will be awarded. If the work is unsatisfactory or the student fails to complete the work within the twelve-month period, an F or failing grade will be recorded. All grades remain on the student's permanent record as originally submitted by the course instructor. Any grade change is added to the permanent record.
- CR/NC. Recorded as CR (for satisfactory performance) or NC (for unsatisfactory performance) for courses designated by the department for credit/no credit grading. CR and NC are not considered in determining the quality point average.
- PR. Indicates progress on a thesis, dissertation or chemistry research. It is replaced by the final grade upon completion up to established credit limits.



# GRADE APPEAL POLICY, ACADEMIC PROBATION, INELIGIBILITY FOR SCHOLASTIC DEFICIENCIES, AND ACADEMIC DISHONESTY

Marshall University's policies in regard to the academic rights and responsibilities of students are in keeping with the Board of Trustees Series 60, which is reproduced in its entirety following this section. The Academic Rights and Responsibilities of Students policy statement provides details with respect to student rights and procedures on these and similar matters relating to academic appeals.

## Marshall University Academic Rights and Responsibilities of Students

This policy statement implementing Board of Trustees Series 60 (July 11, 1986) supersedes previous policies which concern grade appeals, academic dishonesty, and any other procedures relating to academic appeals. Any revision of this policy may be found in the latest Student Handbook.

I. Statement of Philosophy: Marshall University is an academic community and as such must promulgate and uphold various academic standards. Failure of a student to abide by such standards may result in the imposition of sanctions pursuant to Series 60 of the West Virginia Board of Trustees. A student, by voluntarily accepting admission to the institution or enrolling in a class or course of study offered by Marshall University, accepts the academic requirements and criteria of the institution. It is the student's responsibility to fulfill course work and degree, or certification requirements, and to know and meet criteria for satisfactory academic progress and completion of the program.

### II. Definitions

A. Graduate Dean: the chief academic officer of the Graduate School who will also serve in an advisory capacity to the student. The student is encouraged to contact the Graduate Dean for guidance on appeal.

B. Academic Deficiency: failure to maintain the academic requirements and standards as established by Marshall University and its constituent colleges and schools other than those relating to academic dishonesty. This shall include but is not limited to the criteria for maintenance of satisfactory academic progress, i.e. quality point average, special program requirements, professional standards, etc.

C. Academic Dishonesty: any act of a dishonorable nature which gives the student engaged in it an unfair advantage over others engaged in the same or similar course of study and which, if known to the classroom instructor in such course of study, would be prohibited. This shall include, but is not limited to, the following: securing or giving unfair assistance during examinations or required work of any type; the improper use of books, notes, or other sources of information; submitting as one's own work or creation any oral, graphic, or written material wholly or in part created by another; securing all, or any part of assignments or examinations, in advance of their submission to the class by the instructor; altering of any grade or other academic record; and any other type of misconduct or activity which manifests dishonesty or unfairness in academic work. Each classroom instructor may modify the general definition of academic dishonesty to fit the immediate academic needs of a particular class, provided the instructor defines, in writing, the details of any such departure from the general definition.

Academic dishonesty also includes conspiring with or knowingly helping or encouraging a student to engage in academic dishonesty.

D. Day: shall refer to a calendar day.

E. Limited Enrollment Program: any academic program which imposes admissions requirements in addition to general admissions to the University.

F. Student: any individual who has been admitted to, and is currently enrolled in, a course or in a certificate or degree program at Marshall University, or for whom the institutional appeal period has not expired.

G. University Community: faculty, staff, or students at Marshall University.

H. President's Designee: Vice President of Academic Affairs.

- I. Appeal Deadlines: the time allowed for each level of appeal. There will be no time extensions unless granted by the Academic Appeals Board for good cause. If the appeals do not meet the established deadlines, the issue is no longer appealable.
- III. Student Academic Rights concomitant with other academic standards and responsibilities established by Marshall University and its constituent colleges and schools, each student shall have the following academic rights:
- A. The student shall be graded or have his/her performance evaluated solely upon performance in the course work as measured against academic standards.
  - B. The student shall not be evaluated prejudicially, capriciously, or arbitrarily.
  - C. The student shall not be graded nor shall his/her performance be evaluated on the basis of his/her race, color, creed, sex, sexual orientation, or national origin.
  - D. Each student shall have the right to have any academic penalty, as set forth herein, reviewed pursuant to the procedures in Section V. Except in those cases where a specific time is provided, this review shall occur within a reasonable time after the request for such review is made.
  - E. Each student shall have access to a copy of a University catalog or program brochure in which current academic program requirements are described (e.g., required courses, total credit requirements, time in residence standards, minimum grade point average, probation standards, professional standards, etc.).
  - F. Each student shall receive from the instructor written descriptions of content and requirements for any course in which he/she is enrolled (e.g., attendance expectations, special requirements, laboratory requirements including time, field trips and cost, grading criteria, standards and procedures, professional standards, etc.).
  - G. The instructor of each course is responsible for assigning grades to the students enrolled in the course consistent with the academic rights set out in the preceding sections.
  - H. Marshall University and its constituent colleges and schools are responsible for defining and promulgating:
    1. the academic requirements for admission to the institution, for admission to limited enrollment programs, and for admission to professional and graduate degree programs;
    2. the criteria for maintenance of satisfactory academic progress, for the successful completion of the program, for the award of a degree or certification, for graduation;
    3. the requirements or criteria for any other academic endeavor, and the requirements for student academic honesty, consistent with the Policies, Rules, and Regulations of the Board of Trustees and with the fundamentals of due process; and
    4. probation, suspension, and dismissal standards and requirements.
  - I. Normally, a student has the right to finish a program of study according to the requirements under which he/she was admitted to the program. Requirements, however, are subject to change at any time, provided that reasonable notice is given to any student affected by the change.

#### IV. Academic Sanctions

A student who fails to meet the academic requirements or standards, or who fails to abide by the University policy on academic dishonesty, as defined by Marshall University and its constituent colleges and schools may be subject to one or more of the following academic sanctions:

- A. A lower final grade in or a failure of the course or exclusion from further participation in the class (including laboratories or clinical experiences, any or all of which may be imposed by the instructor of the course involved).
- B. Academic Probation
  1. For Academic Deficiency:
    - a. Graduate Students  
Any student who has less than a 3.0 grade will be placed on academic probation by the Graduate Dean.

Following notification of probation and prior to subsequent registration, a student will be counseled by his/her advisor or the chairperson of the department of

his/her program. During this session, the student will be advised of his/her deficiencies and the requirements for removing the deficiency within the next nine (9) semester hours of enrollment. A second advising period will follow the first grading of subsequent enrollment and will be designed to check the progress. If probationary status is not removed, the student may be subject to further academic action pursuant to these policies, including academic dismissal.

b. Medical Students

Medical School students should consult the appropriate Medical School publications for the description of this sanction.

2. For Academic Dishonesty

In those cases in which a student has been found guilty of academic dishonesty he/she may be placed on academic probation for a period of time not to exceed one academic year. During this period the student is given an opportunity to prove that he/she can become a responsible and positive member of the University community. Conditions and restrictions for probation may be imposed, as deemed appropriate, including but not limited to:

a. Exclusion from representation of the University in any extracurricular activities such as intercollegiate athletics, debate teams, university theater, band, etc.; however, the student may participate in informal activities of a recreational nature sponsored by the University.

b. Self-Improvement: A program of self-development will be planned in conjunction with a faculty or staff person assigned in a counseling/ guidance capacity.

c. Surrender of Student Activity Card: Upon request the Student Activity Card is to be yielded to the Vice President of Academic Affairs and all rights and privileges pertaining thereto forfeited for a specified period of time not to exceed one academic year.

A student violating any term of academic probation while on such probation will be subject to further academic sanction up to and including academic dismissal from the University.

C. Academic Suspension

1. For Academic Deficiency

a. Graduate Students:

Graduate students should consult college and program publications for a description of the conditions under which academic suspension may be imposed for academic deficiency.

b. Medical Students:

Medical School students should consult Medical School publications for a description of the conditions under which academic suspension may be imposed for academic deficiency.

2. For Academic Dishonesty

In those cases in which a student has been found guilty of academic dishonesty he/she may be academically suspended for a period of time not to exceed one academic year. During such period the student may not enroll in any course or program offered by Marshall University or any of its constituent colleges or schools. A student violating any term of academic suspension while on suspension will be subject to further academic suspension up to, and including, academic dismissal from the University.

D. Academic Dismissal

This is defined as termination of student status, including any right or privilege to receive some benefit, or recognition, or certification. A student may be academically dismissed from a limited enrollment program and remain eligible to enroll in courses in other programs at Marshall University; or a student may be academically dismissed from the institution and not remain eligible to enroll in other courses or programs at Marshall University. The terms of academic dismissal from a program for academic deficiency shall be determined, defined, and published by each program and/or the Graduate School. Typically, a student unable to get off of probation is subject to dismissal. Academic dismissal from a program or from the University may

also be imposed for violation of the University policy on academic dishonesty.

- V. Academic Appeals In cases where a student is appealing a grade, the grade appealed shall remain in effect until the appeal procedure is completed, or the problem resolved.
- A. Student Appeals for Instructor-Imposed Sanctions: The intent of the appeals process is to treat all parties fairly, and to make all parties aware of the appeals procedure. In those cases in which a student has received an instructor-imposed sanction, the student shall follow the procedures outlined below:
1. Graduate Students:
    - a. The student should first attempt a resolution with the course instructor. This initial step must be taken within ten (10) days from the imposition of the sanction or, in the case of an appeal of a final grade in the course, within thirty (30) days of the beginning of the next regular term. The student who makes an appeal is responsible for submitting all applicable documentation. If the instructor is unavailable for any reason, the process starts with the department chairperson.
    - b. If the procedure in Step 1 does not have a mutually satisfactory result, the student may appeal in writing to the department chairperson within ten (10) days after the action taken in Step 1, who will attempt to resolve the issue at the departmental level. When a student appeals a final grade, the faculty member must provide all criteria used for determining grades.
    - c. Should the issue not be resolved at the departmental level, either the student or instructor may appeal in writing to the Dean of the Graduate School within ten (10) days of the action taken in Step 2. The Dean will attempt to achieve a mutually satisfactory resolution.
    - d. Should the issue not be resolved by the Dean, either the student or instructor may appeal in writing within ten (10) days of the action taken in Step 3 to the Chairperson of the Graduate Committee who shall at the recommendation of the Graduate Committee appoint a Hearing Panel to resolve the matter.
  2. Medical Students  
Medical School students who desire to appeal an instructor-imposed sanction should consult the appropriate Medical School publication for the proper procedures to follow.
- B. Appeals for Academic Dishonesty:  
Primary responsibility for the sanctioning for academic dishonesty shall lie with the individual instructor in whose class or course the offense occurred; however, charges of academic dishonesty may be filed by any member of the University community. Sanctions for academic dishonesty may range from an instructor-imposed sanction, pursuant to Sec. IV. A, herein, to dismissal from the institution.
1. In those cases where the instructor imposes a sanction pursuant to Section IV, A, only and does not refer the matter to the department chairperson for additional sanctions, the student may appeal the sanction in accordance with the procedures described in Section V, A.
  2. Where the offense is particularly flagrant or other aggravating circumstances are present, such as a repeat violation, the instructor may refer the matter to the department chairperson for additional sanctions as permitted by this policy. In addition, any member of the University community may refer a case of academic dishonesty to the chairperson of the department in which the course involved is being offered. Allegations of academic dishonesty must be referred to the department chairperson within thirty (30) days from the date of the alleged offense.  
In those cases where the matter is referred to the department chairperson the following procedures are applicable:
    - a. The department chairperson shall bring together the student involved, and the faculty member, and/or other complainant within ten (10) days from the date of referral. A written admission of guilt at this level may be resolved with a maximum penalty of "F" in the course.
    - b. If the student denies guilt or disagrees with the sanction imposed, or if the faculty member, other complainant, or chairperson feels that the penalties in Step (a) are insufficient for the act complained of, the case shall be forwarded in writing by the

chairperson to the Graduate Dean within ten (10) days from the date of the meeting. The Graduate Dean shall bring together the student, faculty member or other complainant, and the department chairperson to review the charges within ten (10) days from the date of referral. The Graduate Dean may impose any sanction permitted by Section IV of this policy.

- c. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Graduate Dean, the case may be appealed in writing within ten (10) days of the Dean's written decision to the Chairperson of the Graduate Committee who shall at the recommendation of the Graduate Committee appoint a Hearing Panel to resolve the matter.
- d. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Hearing Panel, then he/she may file an appeal with the Vice President of Academic Affairs within thirty (30) days from the receipt of the written decision of the Hearing Panel. The decision of the Vice President of Academic Affairs shall be final.

C. Appeals for Academic Deficiencies:

- 1. In those cases in which a graduate student has been denied admission to a program, has been or may be placed on academic probation or academic suspension for academic deficiencies, the following procedures are applicable:
  - a. The student is entitled to written notice; (1) of the nature of the deficiency or reason for denial of admission to a program; (2) of the methods, if any, by which the student may correct the deficiency, and; (3) of the penalty which may be imposed as a consequence of the deficiency.
  - b. The student shall be given the opportunity to meet with the person or persons who has judged his/her performance to be deficient, to discuss with this person or persons the information forming the basis of the judgment or opinion of his/her performance; to present information or evidence on his/her behalf; and to be accompanied at any such meeting by an advisor of his/her choice from the University (faculty, staff, or student). Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless given specific permission to do so by the person conducting the meeting. The student is not entitled to an attorney in such meetings and the formal rules of evidence are not applicable. The student must request such a meeting in writing within ten (10) days from receipt of the notice.
  - c. If the student is dissatisfied with the outcome of the meeting outlined in (b) above, the student may appeal the judgment to the Vice President of Academic Affairs within (30) days after receipt of written notice of the judgment.
  - d. The decision of the Vice President of Academic Affairs is final.
- 2. In those cases in which a student has been or may be dismissed from a graduate academic program, or has been or may be dismissed from the institution for academic deficiencies, the following procedures are applicable:
  - a. The student is entitled to written notice:
    - (1) of the nature of the deficiency;
    - (2) of the methods, if any, by which the student may correct the deficiency, and;
    - (3) of the penalty which may be imposed as a consequence of the deficiency.
  - b. The student shall be given the opportunity to meet with the person or persons who have judged his/her performance to be deficient. The student must request such meeting in writing within ten (10) days from receipt of the notice. The student shall be given the opportunity to discuss with this person or persons the information forming the basis of the judgment or opinion of his/her performance, to present information or evidence on his/her behalf, and to be accompanied at any such meeting by an advisor of his/her choice from the University (faculty, staff, or student). Such advisor may consult with but may not speak on behalf of their advisee or otherwise participate directly in the proceedings, unless given specific permission to do so by the person conducting the meeting. The student is not entitled to an attorney in such meetings and the formal rules of evidence are not applicable.

- c. If the student is dissatisfied with the outcome of the meeting outlined in (b) above, the student may file an appeal with the Chairperson of the Graduate Committee who shall at the recommendation of the Graduate Committee appoint a Hearing Panel to resolve this matter. This appeal must be filed within ten (10) days after receipt of written notice of the decision.
  - d. If the student is dissatisfied with the decision of the Hearing Panel, the student may appeal the decision to the Vice President of Academic Affairs within thirty (30) days after receipt of written notice of the decision.
  - e. The decision of the Vice President of Academic Affairs is final.
3. Medical School Students
- In those cases in which a Medical student has been or may be placed on academic probation, or academic suspension, or has been or may be dismissed from Medical School for academic deficiencies, he/she should consult the appropriate Medical School publications for the proper procedure to be followed.

## VI. Graduate Academic Appeals Board

### A. Description and Jurisdiction:

The Graduate Academic Appeals Board is a permanent branch of the Graduate Committee. All individual Hearing Panels (see section VI-C below) will be made up of persons sitting on the Graduate Academic Appeals Board. From its membership, the chair of the Graduate Committee will appoint a panel to hear an appeal. It is established to hear all appeals arising from the following:

- 1. Instructor-imposed sanctions, including: lowering of final course grade, failure of course, or exclusion from further participation in the class.
- 2. Final course grades.
- 3. Sanctions imposed for academic dishonesty.
- 4. Dismissal from an academic program.
- 5. Dismissal from the University.
- 6. Such other cases as may be referred to the Board by the Graduate Committee.

### B. Composition of the Board:

The Hearing Panel shall be composed of faculty and student members chosen in the following manner:

#### 1. Faculty Members:

The Graduate Dean shall appoint three (3) faculty members from each college and school having a graduate program to serve on the Board. Such appointments shall be made annually in the Fall semester.

#### 2. Student Members:

The President of Graduate Student Council shall appoint two (2) graduate from each college and school having a graduate program to serve on the Board. All student members of the Board must be in good academic, financial, and disciplinary standing with the University and must have been enrolled for at least two (2) semesters at Marshall. If, for any reason, the President of the Graduate Student Council fails or is unable to appoint student members then the Graduate Dean may appoint such graduate student members.

#### 3. Hearing Officers:

The Graduate Committee chairperson shall appoint the Hearing Officer and two (2) alternates. The Hearing Officer and alternates must have previously served on a Hearing Panel.

### C. Selection of Members for an Individual Hearing:

An individual Hearing Panel shall be composed of two (2) faculty members, one (1) student member, and one (1) non-voting Hearing Officer. The members of the Hearing Panel shall be chosen by the Chairperson of the Graduate Committee or his/her designee.

## VII. Hearing Procedures

It is the intent of these procedures to insure that Marshall University students receive appropriate due process in academic matters. This includes fundamental fairness, just sanctions, and all rights in accordance with the belief that academic appeal hearings at an institution of higher education such as Marshall University should have an educational objective. Academic appeals, pursuant to these procedures, are informal and not adversarial in nature.

- A. The time and place of the hearing are determined by the Hearing Officer. The hearing should be held within sixty (60) days of receiving the written request. Upon written request, the Hearing Officer may, at his/her discretion, grant a continuance to any party for good cause.
- B. The Hearing Officer will notify the appellee, appellant, and other appropriate parties in writing at least five (5) days prior to the hearing, of the date, time, and place of the hearing. A statement of the facts and evidence to be presented in support of the student's grounds for appeal will be provided to the appellee in appropriate cases.
- C. The appellant student and the appellee have the right to an advisor. Advisors must be members of the University community (faculty, staff, or student). Such advisors may consult with, but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the Hearing Officer. Attorneys are not permitted to appear on behalf of any appellant or appellee.
- D. Prior to the scheduled hearing, the members of the Hearing Panel may convene in closed session to examine the content of the appeal, the specific issues to be considered, and all supporting documents.
- E. The student with his/her advisor if any, will be called before the Hearing Panel and the Hearing Officer will then restate the nature of the appeal and the issues to be decided.
- F. The hearing shall be closed. All persons to be called as witnesses, other than the appellant, with his/her advisor, if any, and the appellee and his/her advisor, if any, will be excluded from the hearing room. Any person who remains in the room after the hearing has begun will be prohibited from appearing as a witness at the discretion of the Hearing Officer.
- G. Anyone disrupting the hearing may be excluded from the hearing room if, after due warning, he/she engages in conduct which substantially delays or disrupts the hearing, in which case the hearing shall continue and the Hearing Panel shall make a determination based on the evidence presented. If excluded, the person may be readmitted on the assurance of good behavior. Any person who refuses the Hearing Panel order to leave the hearing room may be subject to appropriate disciplinary action pursuant to Marshall University policy. In the event a student is excluded under the terms of this provision, a representative shall be appointed by the Hearing Officer to participate in the student's behalf during the continuation of the proceedings.
- H. Except as provided in G and K herein, all evidence must be presented in the presence of the student.
- I. The student or other parties involved may petition the Hearing Officer for a subpoena or a request for appropriate written information or documents.
- J. The student will be given the opportunity to testify and present evidence and witnesses on his/her own behalf and to discuss with, and question, those persons against whom the appeal is filed.
- K. The Hearing Panel may admit as evidence any testimony, written documents, or demonstrative evidence which it believes is relevant to a fair determination of the issues. Formal rules of evidence shall not be applicable in academic appeal hearings.
- L. If the student appellant or the appellee fails to appear at a hearing and fails to make advance explanation for such absence which is satisfactory to the Hearing Panel, or if the student appellant or the appellee leaves before the conclusion of the hearing without permission of the Hearing Panel, the hearing may continue and the Hearing Panel may make a determination on the evidence presented at the hearing, or the Hearing Panel may, at its discretion, dismiss the appeal.
- M. Upon completion of the testimony and presentation of evidence, all persons, except Hearing Panel members will be required to leave the room. The Hearing Panel will then meet in closed session to review the evidence presented. The Hearing Panel shall make its findings based upon a preponderance of evidence. The Hearing Panel shall reach its determination by a majority vote. The results shall be recorded in writing and filed with the Chairperson of the Graduate Committee and the Vice President of Academic Affairs. If the Hearing Panel's decision includes the imposition of academic sanction, the sanction given and its duration must be specified for the record. A report of a dissenting opinion or opinions may be submitted to the Chairperson of the Graduate Committee and the Vice President of Academic Affairs by the Hearing Officer. The actual vote of the Hearing Panel will not be disclosed. The Hearing Officer is a non-voting member of the Board.

- N. The findings of the Hearing Panel, and any sanction, shall be announced at the conclusion of the hearing. The student, faculty member, and the Graduate Dean shall be notified in writing of the findings and any sanction at the conclusion of the hearing. A record of the hearing shall be prepared in the form of summary minutes and relevant attachments and will be provided to the student upon request.
- O. The student, or any other person, may not tape the proceedings.
- P. In an appeal related to a final grade the Hearing Panel will complete the change of grade forms and submit that information to the Registrar, the faculty member and the Graduate Dean.
- Q. Within thirty (30) days following receipt of the Hearing Panel's decision, the student may file an appeal with the Vice President of Academic Affairs who shall review the facts of the case and take such action as deemed appropriate under all the circumstances. The Hearing Panel's findings and sanction, if any, may be affirmed, modified, or remanded to the original Hearing Board for further action as deemed appropriate by the Vice President of Academic Affairs. A written brief stating grounds for the appeal should be presented by the student to the Vice President of Academic Affairs with the appeal. The scope of review shall be limited to the following:
  - 1. Procedural errors.
  - 2. Evidence not available at the time of the hearing.
  - 3. Insufficient evidence to support the findings of the Hearing Panel.
  - 4. Misinterpretation of University policies and regulations by the Hearing Panel.
  - 5. A sanction disproportionate to the offense.
  - 6. Lack of jurisdiction.
- R. The decision of the Vice President of Academic Affairs is final. The student, the faculty member, the Graduate Dean, and the Registrar shall be notified in writing of the Vice President of Academic Affairs' decision.

Approved by the Graduate Committee

## **SERIES 60**

### **STUDENT ACADEMIC RIGHTS**

#### Section 1. General

- 1.1. Scope - Policy regarding academic rights and responsibilities of students.
- 1.2. Authority - West Virginia Code 18-26-8
- 1.3. Filing Date - May 17, 1986
- 1.4. Effective Date - July 11, 1986
- 1.5. Revises and Replaces Existing Section 7 of Series 57, and Series 60 dated November 13, 1984.

#### Section 2. Academic Rights and Responsibilities of Students

- 2.1. The institution and its constituent colleges and schools shall define and promulgate, consistent with the policies, rules and regulations of the Board of Regents, the academic requirements for admission to the institution, for admission to limited enrollment programs, and for admission to professional and graduate degree programs (where offered); the criteria for maintenance of satisfactory academic progress, for the successful completion of the program, for the award of a degree or certification, for graduation; the requirements or criteria for any other academic endeavor; and the requirements for student honesty and originality of expression.
- 2.2. A student, by voluntarily accepting admission to the institution or enrolling in a class or course of study offered by the institution, accepts the academic requirements and criteria of the institution. It is the student's responsibility to fulfill course work and degree or certificate requirements and to know and meet criteria for satisfactory academic progress and completion of the program.



### Section 3. Academic Rights

- 3.1. Concomitant with the academic standards and responsibilities established pursuant to Section 3 of these rules, each student shall have the following academic rights:
  - 3.1.1. The student shall be graded or have his/her performance evaluated solely upon performance in the course work as measured against academic standards. The student shall not be evaluated prejudicially, capriciously, or arbitrarily. The student shall not be graded nor shall his/her performance be evaluated on the basis of his/her race, color, creed, sex, or national origin.
  - 3.1.2. Each student shall have the right to have any academic penalty, as set out in Section 4.2 of these rules below and more specifically defined by his/her institution, reviewed.
  - 3.1.3. Each student shall have access to a copy of the college or university catalog or program brochure in which current academic program requirements are described (e.g., required courses, total credit requirements, time in residence requirements, special program requirements, minimum grade point average, probation standards, professional standards etc.). Students have the right to receive from the instructor written descriptions of content and requirements for any course in which they are enrolled (e.g., attendance expectations, special requirements, laboratory requirements including time, field trips and costs, grading standards and procedures, professional standards, etc.).
  - 3.1.4. The instructor of each course is responsible for assigning grades to students enrolled in the course, consistent with the academic rights set out in the preceding sections.

### Section 4. Application of Policy to Students

- 4.1. Student—any person who has been admitted to an institution to pursue a course of study, research, or service, who is currently engaged in an institutionally sponsored activity, and who has some right or privilege to be on the campus or in the facilities of the institution, or to use the same, in connection with study, research, or service, or one who yet has some right or privilege to receive some benefit or recognition or certification from the institution, under the rules, regulations, or policies of the Board of Trustees or the institution.
- 4.2. A student, as defined in this policy, shall be subject to any applicable penalties for failure to comply with the academic requirements and standards promulgated by the institution and/or its constituent colleges and schools according to Section 2.1 of these rules. Students are expected to adhere to these academic standards in all academic settings, classrooms, laboratories, clinics, and any other activities which are part of academic requirements.

### Section 5. Academic Requirements and Consequences of Failure to Meet Requirements

- 5.1. The institution and its constituent colleges and schools shall define and promulgate the academic requirements, criteria and standards as set out in Section 2.1 of these rules above. Normally, students may finish a program of study according to the requirements under which they were admitted to the program. However, requirements are subject to change at any time, with reasonable notice provided to the students.
- 5.2. A student who fails to meet the academic requirements or standards, including those for academic honesty as defined by the institution and its constituent colleges and schools according to Section 2.1 of these rules may be subject to one or more of the following penalties:
  - 5.2.1. A lower grade or failure of the course or exclusion from further participation in the class (including laboratories or clinical experiences), all of which may be imposed by the instructor.
  - 5.2.2. Academic probation as determined and defined by the institution and its constituent colleges and schools.
  - 5.2.3. Academic suspension as determined and defined by the institution and its constituent colleges and schools.
- 5.3. Academic dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification. A student may be academically dismissed from a limited enrollment program and remain eligible to enroll in courses in other programs at the institution, or a student may be academically

dismissed from the institution and not remain eligible to enroll in other courses or programs at the institution.

- 5.4. A student may appeal any penalty according to the procedures in Sections 6 below. Each institution and its constituent colleges and schools shall determine and specify the point at which penalties, excluding those specified in Section 6.3.1 of these rules, may be imposed. Each instructor determines the point at which the penalties specified in Section 6.3.1 of these rules, may be imposed. Each institution and its constituent colleges and schools shall determine the method(s), if any, by which a student may correct the condition(s) leading to imposition of these penalties and thereby have them removed.

#### Section 6. Appeals

- 6.1. Each institution and its constituent colleges and schools shall establish policies and procedures by which a student may appeal or challenge any academic penalties imposed by a faculty member or by the institution or one of its constituent colleges and schools, including those described in Section 5.2 above.
- 6.2. Additional procedures may include but not be limited to:
  - 6.2.1. Appeals of a grade penalty or exclusion from class,
  - 6.2.2. Appeals of final course grades;
  - 6.2.3. Appeals of imposition of academic probation,
  - 6.2.4. Appeals of imposition of academic suspension,
  - 6.2.5. Appeals of dismissal from undergraduate programs,
  - 6.2.6. Appeals of dismissal from graduate programs,
  - 6.2.7. Appeals of dismissal from professional degree programs,
  - 6.2.8. Appeals of dismissal from the institution.
- 6.3. Policies and procedures relating to appeals of academic penalties shall be governed by due process and shall include, as a minimum:
  - 6.3.1. Written notice to the student (1) of his/her failure to meet or maintain an academic standard, (2) of the methods, if any, by which the student may correct the failure, and (3) of the penalty which may be imposed.
  - 6.3.2. An opportunity for the student to meet with the faculty member(s) or other individual(s) who have judged his/her performance to be deficient, to discuss with these faculty member(s) or other individual(s) the information forming the basis of the judgment of his/her performance, to present information or evidence on his/her behalf, and to be accompanied at any such meeting by an advisor of his/her choice from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal.
  - 6.3.3. An opportunity for the student to appeal the decision or judgment of faculty members through the established institutional appeals procedure within thirty calendar days after written notice of the decision or judgment.
  - 6.3.4. An opportunity to appeal to the president of the institution or his/her designee within 30 calendar days after the receipt of written notice of the decision or judgment.
  - 6.3.5. The decision of the president or his/her designee regarding an academic appeal is final.

#### Section 7. Appeals Procedure for Academic Dismissal

- 7.1. The appeal will be subject to the following conditions:
  - 7.1.1. The appeal must be filed within thirty calendar days after written notice of the decision.
  - 7.1.2. The appeal to the appropriate academic officer or appeals committee is not adversarial in nature; the formal rules of evidence do not apply.
  - 7.1.3. The student may be advised by a person of his/her choice from the institution; likewise, the faculty member, academic officer, or committee recommending academic dismissal may have an advisor from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal.
  - 7.1.4. Witnesses may be called by any of the parties involved.
  - 7.1.5. A record of the appeal shall be prepared in the form of summary minutes and relevant attachments and will be provided to the student upon request.

7.1.6. The decision of the president or his/her designee regarding academic dismissal is final.

## Section 8. Publication

8.1. All standards, criteria and procedures of the institution shall be published in one or more appropriate institutional publications such as catalogs, student handbooks, academic pamphlets, and handouts. Such requirements are subject to change with reasonable notice provided to the students.

## ABSENCES FROM EXAMINATIONS

Students are required to take all regular examinations. If a student attends a course throughout the semester and is absent from the final examination without permission, the instructor counts the examination as zero and reports the final grade of F. If the absence is the result of illness or some other valid reason beyond the control of the student, the grade of I is reported, and the student may, upon application, take the examination at a later date. (See "Incomplete" under Grades and Quality Points.)

## REPORTING OF FINAL GRADES

Grades of the current semester or summer term and the cumulative quality point average are mailed to the student as soon as possible following each semester or term of enrollment by the Office of the Registrar. Grades usually are available on the University's voice response system (MILO) within 48 hours of the deadline for submission of the final grades each term.

## TRANSCRIPTS OF ACADEMIC RECORD

Every student is entitled to one free official transcript of his or her record. Each additional copy costs \$5 in cash, check or money order. Two weeks may be required to process an application for a transcript at the close of a semester or summer term. At other times the service is approximately 24 hours from receipt of the request.

Students who default in the payment of any university financial obligation forfeit their right to claim a transcript.

An application for a transcript of credit earned must furnish the date of last attendance at Marshall University and student identification number. A married woman should supply previous last names if different from her married name.

All requests for transcripts must be sent directly to the Registrar.

Transcript requests must be in writing; no phone requests are accepted.

All requests must be signed by the student.

## GRADUATION INFORMATION

### GENERAL REQUIREMENTS FOR MASTER'S DEGREE

In programs requiring a thesis, a student must earn a minimum of 32 hours credit in graduate courses. A department can require more than 32 hours including thesis. Of these hours, credit not to exceed 6 hours may be granted for the thesis. If a thesis is not required, the student must complete a minimum of 36 hours of graduate course work. Students majoring in chemistry must earn 32 hours of graduate credit. Of these 32 hours, no more than 12 hours may be in Chemistry 682, Research, which includes a thesis. A master's degree in Counseling requires a minimum of 48 semester hours.

A minimum of 18 hours must be earned in the major subject. The major department may optionally require a minor with a minimum of 6 hours in another subject. Courses may be taken in a third closely related field if approved by the advisor. In special teacher-education curriculums, courses may be distributed among several fields with the approval of the advisor.

Graduate courses are numbered 500 to 899. Selected courses with 400 series numbers for undergraduate credit have 500 series numbers for graduate credit. A Marshall University course taken at the 400 level cannot be retaken at the 500 level; it will not be applicable to the master's degree. In courses open to both graduate and undergraduate students, graduate students are required to do more work than undergraduates. This may include more extensive reading, an extra research paper, and

other individual work. At least one-half of the minimum required hours for the master's degree must be taken in courses numbered 600 to 799.

To receive a master's degree, students must have a scholastic average of not less than 3.0 (B) in all current work completed at Marshall University. (See Time Limitations for outdated course work.) In addition, the student must have a 3.0 in the major or in CORE courses of an interdisciplinary program. All grades of C or less are counted in computing averages, but no more than six hours of C and no grades below C may be applied toward the degree. Up to six hours of CR grades may be included within a degree program but they will not affect the quality point computation.

Meeting minimum requirements in hours of credit does not necessarily constitute eligibility for the degree. The work taken must constitute a unified and approved program in the field. (See Admission to Program and Candidacy.) Students must take appropriate national exams in order to graduate.

A student who wishes to earn a second master's degree at Marshall University must make formal application to the department in which the second master's degree is sought. A maximum of 9 semester hours from a first degree may be applied toward the second master's degree, with the approval of the department from which the second degree is sought. Such approval must be obtained in writing and put on file in the Graduate School Office at the time the student begins the second master's program. All applicable coursework must meet time limitations.

Students planning to graduate in a particular semester or term must provide all data to be applied toward the graduation to the Graduate School Office by the advertised last day for the submission of the final grades for the semester or term. This documentation is to include official transcripts from institutions external to Marshall. Said transcripts must be received in the Graduate School Office by the (below) stated deadline. All incomplete grades must be officially removed by the accepted University procedure by this same deadline. Failure on the part of students to comply with this policy will result in their being removed from the graduation list for the term in question.

1. All transfer credit (and official transcripts) must be sent directly to the Graduate School Office and received no later than the date for submitting final grades established by the Registrar. Should the transcript not be received by this deadline, the student's name will be removed from the final graduation list.

2. All grades of "I" must be removed by the end of the term and the Grade Change Form for said grade must be received by the Graduate School Office no later than the date for submitting final grades established by the Registrar. This also applies to the recording of grades for thesis. Failure to meet this deadline will cause the student's name to be removed from the final graduation list.

## GRADE POINT AVERAGE REQUIRED FOR GRADUATION

The grade point average is computed on all graduate course work taken at Marshall University with the exception of outdated course work and courses with grades of W, PR, NC or CR. The grade of I is computed as an F in determining qualifications for candidacy or graduation. An average of B (3.0) or better in current Marshall University graduate courses is required for a master's degree. A more detailed statement is presented above.

It is the responsibility of the students to keep informed on their grade point standing and degree requirements. This information can be obtained from the Graduate School Office.

## APPLICATION FOR GRADUATION

Applicants for Graduation **MUST** be filed in the Office of the Graduate School **NOT LATER** than the date printed in the calendar of the final term or semester in which the degree requirements will be completed. Note: the student cannot graduate in the same semester he or she has been admitted to candidacy. Forms for applying for graduation may be obtained from the Office of the Graduate School. For master's students, a receipt for a diploma fee of \$30.00, payable at the Bursar's Office, must be attached to the application before it will be accepted by the Graduate School Office. Students who fail to apply may not take the master's comprehensive examination and will not be graduated. Ph.D. students are required to pay a \$50.00 diploma fee when they apply for graduation.

## RESIDENCE REQUIREMENTS

Except for transfer credit, all work counted toward a master's degree must be taken in courses offered or approved by the Graduate School of Marshall University. Such courses shall be considered as resident credit whether they are taken on or off the Huntington campus.

## COMPREHENSIVE EXAMINATIONS

In addition to these general requirements for the master's degree, a comprehensive examination must be taken under the direction of the Graduate Dean. The examination may be written, oral or both. The examination is not solely based upon the specific courses completed, but affords the student an opportunity to demonstrate a broad comprehension and synthesis of the major subject.

Except for M.B.A. students, the examination is graded and/or conducted by an examining committee consisting of three (3) to five (5) graduate faculty selected by the graduate student and his/her advisor, and approved by the Graduate Dean. It is the responsibility of the student and the advisor to obtain the written assent of the graduate faculty to serve on the examining committee. M.B.A. students should consult with the director of the program for comprehensive examination information.

Before students take the comprehensive examination they must apply for graduation because this is the mechanism triggering the paperwork necessary for students to set up their comprehensive examination committees. At the appropriate time, the Graduate School will mail the necessary forms to the student after the diploma fee has been paid and the application for graduation has been submitted by the deadline.

The graduate advisor, who acts as chair of the examining committee, prepares the questions for the written examination in consultation with other faculty on the committee, and conducts the oral examination. In many cases sample examination questions are on file in each department office, in the Graduate School Office, and in the University Library, and shall be made available to the graduate student.

The grade given on the examination is "pass" or "not pass." The decision on the grade is made by a majority vote of the members of the committee, and forwarded by the chair to the Graduate Dean on a form provided by the Graduate School Office. All graduate students must pass a final comprehensive examination to be eligible for graduation. Only two reexaminations are permitted. In the event students fail to pass an examination, they will be placed on probation and, prior to reexamination, must meet with their examining committee to discuss deficiencies and steps to correct them. Students may be examined only one time a term or semester. When students fail the second reexamination, the department will recommend their dismissal by the Graduate School.

## THESIS

### REGULATIONS GOVERNING THESIS REQUIREMENT

The graduate student shall submit three (3) unbound copies of his/her thesis to the Graduate School with a receipt for the binding fee for three (3) copies. Information on current binding fees is available through the Bursar's Office. These copies are to be bound through the library, with two (2) copies to be kept by the library and one (1) to be sent to the student's department. It is the student's responsibility to bind personal copies.

The appropriate form must be completed and stamped paid or accompanied by a receipt from the Bursar's Office and then returned to the Graduate School Office when a student applies for graduation.

A thesis in the major field, completed to the satisfaction of the department, may be submitted. The maximum amount of credit that may be earned for the thesis is 6 hours for all departments except chemistry. Research and thesis in chemistry is permitted to a maximum of 12 hours. Students who will profit more by doing additional course work in lieu of a thesis must earn at least 36 course hours of credit. The thesis advisor and student are guided by departmental requirements and the student's needs and interests in determining whether he/she is to write a thesis.

Students in departments other than chemistry register for the thesis 681. Chemistry majors register for research 682. The student continues to register for thesis 681 or research 682 in chemistry, and pay tuition for the number of hours per semester as agreed to between the student and the thesis advisor. The thesis advisor reports a mark of PR (progress) for satisfactory work at the end of each term or semester for which the student is registered with the total amount of credit to be allowed. When the thesis is completed, it is submitted to the advisor and a thesis committee for tentative approval. This committee should have the same composition as the examining committee for the comprehensive examinations. The candidate must then give a presentation open to the academic

community based upon the results of the thesis and give a satisfactory defense of the thesis before his/her thesis committee. Upon successful defense of the thesis, the advisor with the concurrence of the committee assigns a grade which applies to all hours earned for the thesis. The advisor may report a final grade of F at the end of any semester or term when in his/her opinion, because of irregular reports or unsatisfactory progress, the student should not be permitted to continue to register for research.

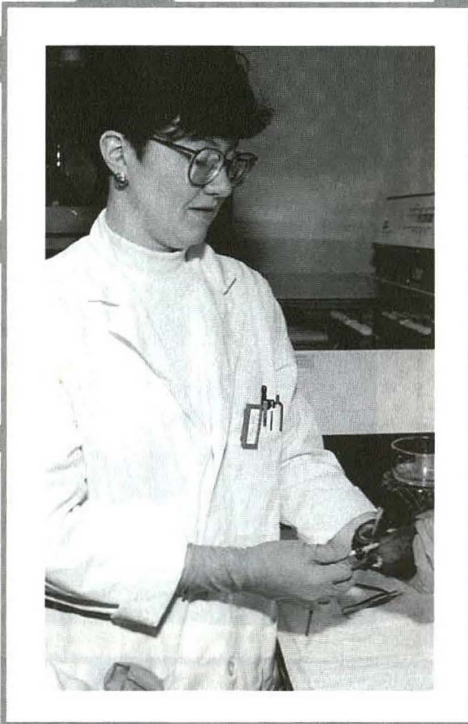
The mark of PR (progress) may be used only in reporting on thesis 681 or research 682 (chemistry). It may not be used in connection with other courses in the Graduate School.

The thesis must be prepared according to the form furnished by the Graduate School Office, or according to guidelines (available in the department) which have been approved by the Graduate Dean. Three unbound copies of the thesis must be submitted to the advisor and filed with the Dean of the Graduate School by the dates printed in the calendar of the term in which the student intends to graduate. If the student fails to meet these dates, the Graduate Dean may postpone his or her graduation until the end of the following term.

## VALUE AND NATURE OF THESIS

The experience of collecting, assembling and interpreting a body of information for a thesis is essential in developing the capacity to do independent work. This is a primary difference between graduate and undergraduate work. For capable graduate students, preparation of the thesis may be of great value. To be urged to write a thesis is a compliment to one's ability. The presentation and oral defense of the thesis is designed to emphasize the importance of graduate student research in the academic environment and give public credit to the student's achievements.

The thesis consists of a written interpretation of a body of facts and opinions gained through critical reading and independent study or it reports the results of a research project. For teachers, it may be a presentation of a directed learning activity showing the purpose, problems involved, procedure, and effectiveness of the project.



School of  
Medicine

# School of Medicine

The School of Medicine offers the degree of Doctor of Medicine.

Established in the mid-1970s, the School of Medicine quickly became a force in improving both health care and educational opportunities for West Virginians. The School's curriculum prepares students for all medical specialties. However, because of the state's continuing shortage of physicians in primary-care specialties (such as general internal medicine and family practice), Marshall particularly emphasizes the special personal and medical skills needed for such fields.

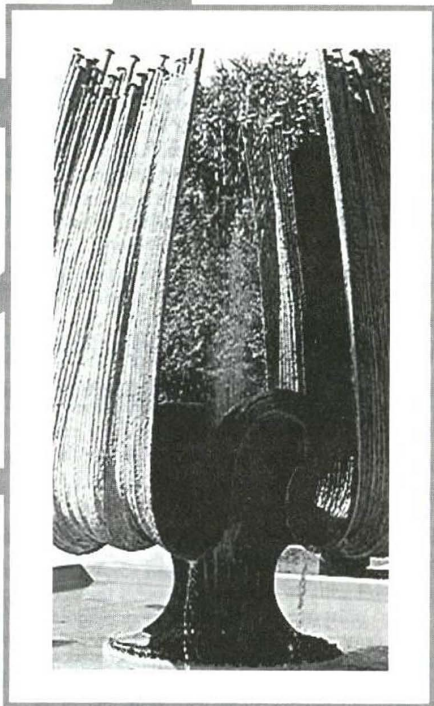
The School is affiliated with the Veterans Affairs Medical Center, St. Mary's Hospital, Cabell Huntington Hospital and University Physicians & Surgeons, the faculty practice group. Through a network of other agreements, the school also provides health care at sites as varied as Huntington State Hospital and small rural clinics.

The result is a dynamic educational setting which exposes students to the full spectrum of medical care. They work in rural outpatient clinics as well as on busy hospital medical and surgical services. They choose from a variety of primary-care and specialty electives at Marshall, at other medical centers, and in numerous overseas locations.

The School of Medicine is accredited by the Liaison Committee on Medical Education of the American Medical Association and the Association of American Medical Colleges.

Information concerning admission may be found in the School of Medicine Bulletin.





# Courses of Instruction

# Graduate Degree Programs and Courses of Instruction

## ABBREVIATIONS

- PR: Prerequisite  
 CR: Corequisite  
 REC: Recommended  
 I,II,S: I-Fall semester; II-Spring semester; S-Summer  
 -lec. -lab-lecture and laboratory hours per week (e.g., 2 lec-4 lab-two hours lecture and four hours laboratory per week)

## ACCOUNTING (ACC) (See Business)

## ADULT AND TECHNICAL EDUCATION (ATE)

The Master of Science in Adult and Technical Education is a field-based program designed to serve persons who are employed on a full-time basis. The program is intended for persons who serve in an instructional, training, leadership, or professional role in human services areas of business, industry, government, community agencies or education. The areas of emphasis in Adult and Technical Education allow a program to be tailored to meet the personal and professional needs of a broad spectrum of graduate students. The courses provide students with the opportunity to continue their graduate education in a flexible program through a state-wide delivery system. Most courses are taught in the evening or at other convenient times. Every effort is made to tailor the program to meet the needs of the student.

The following plans provide the framework for the candidate's program of study:

1. Minimum requirements (Thesis option not available in all areas) .....	33-36 Hours
Major Field (includes Thesis credit) .....	24-27
Minor Field (6 hours)** and Elective (3 hours) .....	9

In consultation with the advisor, the student will select an area of study and plan the program. Areas of study available in the Master of Science degree program are:

- a. Adult Education
- b. Interdisciplinary Studies
- c. Occupational Leadership
- d. Training and Development

In most areas of study, students may complete 33 hours in the thesis option or 36 hours in the non-thesis option to satisfy the Master of Science degree requirements.

## ADULT EDUCATION

The Adult Education program is designed to serve persons who work with adults in either an instructional or an administrative mode and is a professional development program. As such, its participants are drawn from various areas such as the human services agencies, those with staff development, or inservice responsibilities in hospitals, business or government as well as those in adult preparatory programs at the post-secondary or community college level.

Minimum Requirements .....	36 Hours
Major Field (Thesis Option: 24 hours) .....	27

### Required:

- ATE 603 Introduction to Adult Education and Adult Learners
- ATE 618 Literature of Adult and Continuing Education
- ATE 628 Adult Instruction: Environmental and Personal Aspects
- ATE 675 Literature & Applied Research in ATE or Equivalent
- ATE 679 Problem Report (3 hours only)

### Elect 12 hours from the following

- ATE 580-584 Special Topics
- ATE 585-588 Independent Study
- ATE 590-594 Workshop
- ATE 600 Aspects of Training and Development
- ATE 609 Developing Training in Business and Industry

- ATE 656 Instructional Planning for Adult Populations
- ATE 666 Practicum in Adult and Continuing Education
- ATE 671 Evaluation of Adult and Technical Education
- ATE 690-692 Seminar

Minor Field and Elective or Thesis ..... 9

Select Courses for minor field from Counseling, Curriculum and Instruction, Economics, English, Family and Consumer Sciences, Instructional Technology, Mathematics, Management, Marketing, Psychology, Reading Education, Safety Technology, Sociology, or other approved disciplines but not in Adult and Technical Education. Elective may be completed in any program area including Adult and Technical Education.

### INTERDISCIPLINARY STUDIES

The Interdisciplinary Studies program involves a combination of courses from disciplines within the broad field of Adult and Technical Education. The program is designed to permit students to forge specific links among courses from various disciplines. Students can tailor the program to their particular interests and needs. The program differs from traditional graduate programs in that it promotes acquisition of knowledge that transcends traditional disciplinary boundaries.

Minimum Requirements ..... Hours  
 33-36

Major Field (Thesis Option: 24 hours) ..... 24-27

Required:

ATE 675, 677 or equivalent

Elect 21-24 additional hours of ATE course credit

Minor Field and Elective 9

Select courses for minor field from any discipline but not in Adult and Technical Education. Elective may come from any program area including Adult and Technical Education.

### OCCUPATIONAL LEADERSHIP

The Occupational Leadership program prepares individuals to be more effective in roles requiring advanced competencies in the disciplines found in secondary workforce preparation programs (Agriculture Education, Business Education, Family and Consumer Sciences, Marketing Education, Technology Education, Technical Industrial Education). The program is based on the student's educational background, experience, and professional goals. It serves individuals who desire graduate study in teaching, coordinating, curriculum development, cooperative education and/or for teacher certification renewal.

Minimum Requirements ..... Hours  
 33-36

Major Field (Thesis Option: 24 hours) ..... 24-27

Required:

ATE 601 Philosophy of Workforce Preparation

ATE 603 Introduction to Adult Education and Continuing Education

ATE 612 Historical Developments in Workforce Preparation

ATE 616 Community Relations in Adult/Technical Programs

ATE 640 Program Design in Occupational Education

ATE 675, 677 or equivalent

ATE 690-692 Seminar

Elect ATE 681 or 6 hours of additional ATE course credit

Minor Field and Elective ..... 9

Select Courses for minor field from Counseling, Curriculum and Instruction, Educational Foundations, English, Family and Consumer Science, Mathematics, Psychology, Reading Education, Safety Technology, Sociology, Special Education, or other approved discipline but not in Adult and Technical Education. Elective may be taken in any program area including Adult and Technical Education.

### TRAINING AND DEVELOPMENT

The Training and Development program is designed to serve persons employed in business, industry, or other organizations involved in the advancement of knowledge, competencies, and skills of their employees. Graduate students are drawn from areas such as management, marketing, personnel, training, and safety whose responsibilities include instructional design and preparation of employees for current jobs, future assignments, and/or personal enhancement.

Minimum Requirements ..... Hours  
 33-36

Major Field (Thesis Option: 24 hours) ..... 24-27

Required:

- \*ATE 503 Introduction to Adult Learning Theory
- ATE 600 Aspects of Training and Development
- \*ATE 609 Developing Training in Business and Industry
- \*ATE 628 Adult Instruction: Environmental and Personal Aspects
- \*ATE 652 Field Based Job Analysis and Curriculum Design
- ATE 666 Practicum in Adult and Continuing Education
- ATE 675, ATE 677 or equivalent
- Elect ATE 681 or 6 hours from the following:
- ATE 585-588 Independent Study (with prior approval)
- ATE 591-594 Workshop (with prior approval)
- ATE 671 Evaluation of Adult and Technical Instruction
- ATE 690 Seminar (with prior approval)

Minor Field and Elective or Thesis ..... 9

Select courses for a minor field from Counseling, Instructional Technology, Management, Marketing, Psychology, Safety Technology, Speech, or other approved disciplines. but not in Adult and Technical Education. Elective may be completed in any program area including Adult and Technical Education.

\*Students may register for Internship after successful completion of: ATE 503, ATE 609, ATE 628, ATE 652,

### EDUCATION SPECIALIST (Ed.S.)

Admission to the Program:

1. Admission to the Graduate School.
2. Master's degree in Adult Education, Adult and Technical Education, Business Education, Home Economics, Industrial Education, Marketing Education, or related area.
3. Acceptance by Adult and Technical Education.

Program:

The program is designed to permit specialization in the field of Adult and Technical Education. Upon admission, the department will assign an advisor who will work with the student in developing an approved program. The program is considered approved when an agreement is signed by the student, advisor and one other member of the ATE program. All programs must be completed in five years from admittance and conform to the following standards:

1. Completion of a minimum of 36 hours of planned, approved graduate study with a 3.25 GPA, including the following:

Core course work .....	18-24
(credit will not be given for courses used in a Master's program)	
Minor field (approved area of specialization) .....	6-12
Research Component (ATE 675, 677 or equivalent course by approval) .....	3
Applied Research (Problem Report, 3 hours or Thesis, 6 hours) .....	3-6
<b>TOTAL HOURS</b> .....	<b>36</b>

2. Completion of a comprehensive oral examination covering the course work and the research paper or thesis. The examination will be administered by three full-time ATE faculty members, as selected by the student.

Admission to Candidacy:

All students enrolled in the Ed.S. Program must apply for admission to candidacy following completion of the first twelve hours of their approved coursework. Admission may be granted by the Dean of the Graduate School when the student's plan for completion of his/her program is approved by his/her advisor and one other ATE faculty member and it is verified that the student has maintained a 3.25 GPA. (Note: Admission for Candidacy may not be granted during the semester in which the student intends to graduate.)

Application for Graduation:

Applications for Graduation MUST be filed in the Office of Graduate School NOT LATER than the date printed in the calendar of the final term or semester in which the degree requirements will be completed. Forms for applying for graduation may be obtained from the Office of the Graduate School. A receipt for a diploma fee of \$20.00, payable at the Cashier's Office must be attached to the application before it will be accepted by the Graduate School Office. Students who fail to apply and to pay the diploma fee may not take the final comprehensive examination and will not be included on the graduation lists.

## COURSES

- 503 Introduction to Adult Learning Theory. 3 hrs.**  
Designed to acquaint the student with the field of adult education and its underpinnings and the various adult learning theories and/or approaches.
- 505 Methods of Teaching Marketing Subjects. 3 hrs.**  
Unit and lesson planning; cooperative education as a method of instruction, project plan of instruction, classroom management and control, demonstration techniques, evaluation methods, field experience in Marketing Education classroom.
- 510 Developing Selling Curriculum. 3 hrs.**  
Conduct library research, review selling content, select content objectives, identify content appropriate for the target group, prepare teaching outlines, and design evaluation instruments.
- 525 Computer Applications in Business and Marketing Education. 3 hrs.**  
Study of computer applications and software for Business and Marketing Education.
- 540 Developing Merchandising/Sales Promotion Curriculum. 3 hrs.**  
Conduct library research, review merchandising and sales promotion content, objectives, identify content appropriate for the target group, prepare teaching outlines, and design evaluation instruments.
- 542 Principles of Prevocational Exploration. 3 hrs.**  
Study of the prevocational exploration delivery system and develop instructional units which include goals, objectives, and criteria for evaluation of students.
- 544 Practicum in Prevocational Exploration, I. 3 hrs.**  
Participants make revisions to instructional units, organize a Career Exploration Club and recognize apprenticeship opportunities. (PR: ATE 542)
- 546 Practicum in Prevocational Exploration, II. 3 hrs.**  
Participants modify the 36-lesson plan project, incorporate additional "hands-on" activities, examine teaching strategies, and design activities for community involvement such as an advisory committee. (PR: ATE 542 or 544)
- 560-563 Professional Development. 1-4 hrs.**
- 570 Practicum in Adult and Technical Education. 1-4 hrs.**  
Individually designed field experience under supervision of the faculty; such experience related to the student's future professional role. (Grading: CR/NC)
- 580-584 Special Topics. 1-4 hrs.**
- 585-588 Independent Study. 1-4 hrs.**
- 591-594 Workshop. 1-4 hrs.**
- 600 Aspects of Training and Development. 3 hrs.**  
Overview of the training and development profession and theories that support the profession; emphasis on the variety of solutions used by HRD professionals to help improve individual and organizational performance.
- 601 Philosophy of Workforce Preparation 3 hrs.**  
Overview of the historical origins of technical education and their relationship to educational philosophies; foundations of areas of technical education; analysis of questions fundamental to a philosophy of technical education.
- 603 Introduction to Adult Education and Adult Learners. 3 hrs.**  
Designed to acquaint the student with the field of adult and continuing education, its foundations and development in this country and future trends.
- 605 Foundations of Business and Marketing Education. 3 hrs.**  
Application of philosophy and principles of business and marketing education to the objectives, curriculum, guidance, and teacher preparation, emphasizing the techniques for coordination of federally aided programs.
- 609 Developing Training Plans for Business and Industry. 3 hrs.**  
Analysis of factors in developing local plans for business and industry; emphasis on implications of federal guidelines; factors which impinge upon programs during implementation; developing evaluation procedures.
- 610 Current Issues in Business and Marketing Education. 3 hrs.**  
Individual and group analysis of current issues in business and marketing; identification of issues significant to the direction of sound business education and marketing education programs.
- 612 Historical Developments in Workforce Preparation. 3 hrs.**  
An overview of the historical evolution of technical education legislation analysis of Technical Education Acts as they relate to state and local planning of technical education programs.
- 614 Adult/Technical Education and Economic Development. 3 hrs.**  
Study of the sources of data on employment needs; relationship to planning techniques for conducting a community survey; organizing data for analysis and applying the findings to the planning process.

- 615 Student Career Organizations. 3 hrs.**  
A study of various facets of existing state/national student organizations. Special emphasis is placed upon the organizations of student career organizations and parliamentary procedures. (PR: ATE 607 or equivalent)
- 616 Community Relations in Adult/Technical Programs. 3 hrs.**  
Study of community organization and the relationship of adult/technical education; consideration of models for analyzing employment opportunities and occupational training needs and the process in securing community commitment.
- 618 Literature of Adult and Continuing Education. 3 hrs.**  
A program of readings and reports on specific areas in adult education or particular problems within an area of adult and continuing education. Readings to be selected cooperatively with advisor.
- 624 Principles of Cooperative Education. 3 hrs.**  
Principles for planning, implementing, and evaluating the cooperative design within the various service areas of technical education; analysis of factors which must be considered in selection of the cooperative design.
- 628 Adult Instruction: Environmental and Personal Aspects. 3 hrs.**  
The course examines both environmental and personal factors which may impact on the adult learning process and is designed to foster awareness, which will be translated into appropriate intervention strategies.
- 631 Survey Practicum in Computer Applications in Business and Industry. 3 hrs.**  
An introductory course for persons who want to become familiar with the application of computers in the business/industrial fields represented by adult and technical education.
- 635 Specialized Practicum Computer Applications in Business and Industry. 3 hrs.**  
An advanced course for persons who want to further their knowledge of the application of computers in the business/industrial fields represented by adult and technical education.
- 637 Individual Computer Program Applications. 3 hrs.**  
Individually designed learning activities that involve the application of previously learned theories, processes, operations, techniques or systems. The applications are studied, analyzed, and evaluated.
- 640 Program Design in Occupational Education. 3 hrs.**  
An overview of technical education history, philosophy, legislation, certification, evaluation, and operations. Comparison to academic programs to emphasize similarities and differences.
- 649 Occupational Analysis and Instructional Design. 3 hrs.**  
Analyzing an occupation to identify knowledge and skills; use of the analysis to develop problem solving objectives and instructional plans; emphasis on approach to facilitate student achievement of objectives.
- 650 Career Education Curriculum Development. 3 hrs.**  
Instructional unit is developed to assist children and youth achieve academic, general, or technical education and also career education goals; includes goals, objectives, procedures, student activities, resources, and evaluation.
- 651 Developing Marketing Curriculum. 3 hrs.**  
Conduct library research, review marketing content, select content objectives, identify content appropriate for the target group, prepare teaching outlines, and design evaluation instruments.
- 652 Field Based Job Analysis and Curriculum Design. 3 hrs.**  
Field study of job analysis, curriculum, course, and program design.
- 653 Developing Management Curriculum. 3 hrs.**  
Conduct library research, review management content, select content objectives, identify content appropriate for the target group, prepare teaching outlines, and design evaluation instruments.
- 655 Developing Personal Curriculum. 3 hrs.**  
Conduct library research, review personal content, select content objectives, identify content appropriate for the target group, prepare teaching outlines, and design evaluation instruments.
- 656 Instructional Planning for Adult Populations. 3 hrs.**  
An examination and application of the process involved in the development, operation, and evaluation of adult programs in the community, business, and industry.
- 662 Applied Field Experience in Prevocational Exploration. 3 hrs.**  
Participants are assisted in making revisions in instructional units, organizing an advisory committee, and organizing a Career Exploration Club as an integral part of the classroom instruction. (PR: ATE 607)
- 664 Occupational Education Practicum. 3 hrs.**  
Individually designed to provide field experience under the supervision of the faculty, such experience to be related to the student's profession.
- 666 Practicum in Adult and Continuing Education. 3 hrs.**  
Individually designed to provide field experience under the supervision of the faculty, such experience to be related to the student's project role in adult and continuing education.
- 667 Cooperative Education Work Force Experience. 1-10 hrs.**  
Alternating or parallel periods of study and paid employment for experiential learning related to student's academic and/or professional goals (Min. 50 hours of paid work experience per credit hour)

- 668 Field Based Internship in Business and Industry. 3 hrs.**  
Internship in the technical content areas of marketing, merchandising, management or technology; evaluating methods, and procedures in marketing, merchandising, management, or technology. (CR/NC Grading) (PR: ATE 609, 628, 654 and 656)
- 671 Evaluation of Adult and Technical Instruction. 3 hrs.**  
An examination of the design and evaluation processes used in adult learning areas with emphasis on the T&D and technical fields as well as the general field.
- 673 Tests and Measurement in Adult/Technical Education. 3 hrs.**  
Evaluation procedures in adult/technical education including principles of test construction; survey of standardized and published tests; utilization in the classroom or training department; review of statistical methods.
- 675 Literature and Applied Research in Adult/Technical Education. 3 hrs.**  
Program of readings and reports on specific areas of adult/Technical education or particular problems within an area of adult and technical education; reading selected cooperatively with advisor.
- 677 Research Methodology and Design in Adult/Technical Education. 3 hrs.**  
Study of methodology, application, analysis and synthesis of research; a review of current studies with attention to statistical techniques, data collecting, data handling, and the impact of particular research.
- 679 Problem Report. 1-6 hrs.**
- 681 Thesis. 1-6 hrs.**
- 690-692 Seminar. 1-4 hrs.**

## ADULT FITNESS/CARDIAC REHABILITATION

(See Health and Physical Education)

## ANTHROPOLOGY (ANT)

(See Sociology)

- 505 Applied Anthropology. 3 hrs.**  
Principles of applied anthropology in community development. (PR: 6 hours of anthropology or sociology or equivalent)
- 526 African Cultures. 3 hrs.**  
Comparative analysis of the tribal cultures of Africa. (PR: 6 hours of anthropology, or equivalent)
- 527 Ethnic Relations. 3 hrs.**  
Analysis of cultural contact situations with emphasis on the role of western Europe cultures. (PR: 6 hours of anthropology or equivalent)
- 530 The American Indian. 3 hrs.**  
Comparative analysis of Indian tribal cultures of the Americas. (PR: 6 hours of anthropology or equivalent)
- 537 World Cultures: An Anthropological View. 3 hrs.**  
Anthropological analysis of the major culture areas of the world. (PR: 6 hours of anthropology or permission)
- 541 Oceania. 3 hrs.**  
Comparative analysis of the original cultures of the Pacific Islands area. (PR: 6 hours of anthropology or permission)
- 543 Anthropological Theory. 3 hrs.**  
Introduction to ethnological theory and to the development of grounded theory. (PR: 6 credit hours of anthropology or departmental permission)
- 551 Anthropological Analysis. 3 hrs.**  
Examination of the analytical procedures utilized in ethnographic and comparative approaches to anthropological data, and an introduction to computer processing of cross-cultural data using the Human Relations Area Files. (PR: ANT 201)
- 553 Cognitive Anthropology. 3 hrs.**  
Analysis of the relations between cultural, social and personality systems. (PR: 6 hours of sociology or anthropology, 6 hours of psychology or equivalent)
- 555 Appalachian Cultures. 3 hrs.**  
Analysis of the Cultures of Appalachia. (PR: 6 hours of anthropology or departmental permission)
- 561 Theory and Analysis in Archaeology. 3 hrs.**  
An introduction to archaeological theory and its application to the material record of cultures, past and present (PR: 6 credit hours of anthropology or departmental permission)
- 570 Appalachian Field Experience I. 3 hrs.**  
Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. Four afternoons each week plus one class hour. (PR: ANT 455, or equivalent)

- 571 **Appalachian Field Experience II.** 3 hrs.  
Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. Four afternoons each week plus one class hour. (PR: ANT 555)
- 580-583 **Special Topics.** 1-4 hrs.  
Study of topics of interest not covered in regularly scheduled classes. (PR: Graduate status and permission)
- 585-588 **Independent Study.** 1-4 hrs.  
Individual study of topics not offered in regularly scheduled classes. (PR: Graduate status and permission)
- 597-598 **Instructional Television Course.** 1-4 hrs.  
A course based upon Instructional Television Series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements announced by the department.
- 600 **Ethnographic Methods.** 3 hrs.  
Introduction to anthropological data-gathering and interviewing methods (PR: ANT 201; for students who have not had ANT 333 and 343)

### ART (ART)

(See also Education: Art)

Applicants for admission to the graduate program should have adequate preparation in art. A portfolio or slides of previous art work, to be evaluated by the graduate Art Department faculty, is required. Applicants revealing deficiencies will be required to do preliminary work in areas of weakness and will be admitted conditionally. Remedial work required will be decided in conference with the Advisor in the major and the Chairperson. A review of work is required after the completion of 6 studio hours. The quality of the student's work is reviewed for a second time when application for admission to candidacy is made. At least eighteen hours must be completed after passing the candidacy review. Transfer students must complete 30 hours in the Marshall Art Department and complete all other requirements.

A thesis is optional in the M.A. Art program (except it is required in the Art Education Master's program). Students are required to complete three semesters of Art 500. A student is encouraged to include a drawing course in the program. Prior to graduation, the candidate shall exhibit creative work achieved during the program of study and pass a written comprehensive.

Course requirements .....	Hours
Minimum .....	36
Studio major in painting, sculpture, printmaking, ceramics, or weaving .....	15-21
Art history .....	6-9
Seminar .....	3
Electives in related courses selected with Advisor .....	6-9

### ART (ART)

- 500 **Co-Curricular Experiences in the Visual Arts.** 0 hrs.  
Students attend distinguished lectures, exhibitions, workshops, field trips, and other co-curricular visual arts events as part of their requirement for graduation.
- 501-502 **History of Art.** 3; 3 hrs. I or II or S.  
A survey of the development of architecture, sculpture, painting and the minor arts to 1400 A.D. and from 1400 A.D. to present. (Does not fulfill Art History requirements.)
- 504 **Iconography of Mary.** 3 hrs.  
Traces the sources and evolution of Catholic doctrine and images of the Virgin Mary.
- 505 **Art in America.** 3 hrs. I or II or S.  
A survey of the development of architecture, painting, and sculpture from colonial times to the present.
- 506 **Figure Drawing.** 3 hrs. I or II or S.  
Practice in drawing from the posed human figure.
- 507 **Tribal Arts.** 3 hrs. I or II or S.  
An introduction to the unique Arts of so-called precivilized peoples with a twofold emphasis: First, the European Pre-Historic, Second, the Non-European Primitive.
- 509 **Nineteenth Century Art.** 3 hrs. I or II or S.  
A survey of the development of architecture, painting, and sculpture in the western world during the last century.
- 512 **20Th Century Art To WW II.** 3 hrs.  
A survey of the development of architecture, painting and sculpture in the Western World from 1900 to World War II.
- 513 **20Th Century Art After WW II.** 3 hrs.  
A survey of the development of architecture, painting and sculpture in the Western World from World War II to the present.



- 514 The Art of the Renaissance in Italy and Northern Europe. 3 hrs. I or II or S.**  
The course discusses the art of the Renaissance in Italy and Northern Europe within the context of social, political, theological and philosophical developments.
- 519 Spinning, Dyeing, and Tapestry. 3 hrs. I or II or S.**  
Basic procedures in hand spinning, dyeing and tapestry weaving.
- 540 Advanced Graphic Design. 3 hrs.**  
Directed study in which student may select subject from any area of commercial design with the goal of developing specific area of expertise. Emphasis on original design and research.
- 548 Ceramic Materials and Processes. 3 hrs.**  
Practical and empirical investigation of ceramic materials, techniques and approaches to their use in clay and glazes.
- 550 2 & 3 Dimensional Designs for Fabrics. 3 hrs.**  
Exploring the potentialities of fabric as an art experience in two and three dimensional art form.
- 554 Designing for Multimedia. 3 hrs.**  
Current topics and techniques in multimedia design. Topics include animation, incorporating digital video and sound, interaction design, information design, Web site design and advanced image processing.
- 555-556 Painting: Acrylic and Oil. 3; 3 hrs. I, II, S.**  
Study and practice of painting in expressing still life, landscape and the human figure.
- 560 History and Philosophy of Art Education, 3 hrs. I.**  
A survey of the evolution of art education and philosophy, and a study of problems related to art education on the elementary and high school level.
- 566 Problems in Curriculum Development for Public School Art K-12, 3 hrs.**  
Exploring considerations for curriculum development in Art Education, developing individualized curriculum for specific situations on grade levels K-6 or 7-12.
- 569 Printmaking Processes. 3 hrs. I, II, S.**  
Experiments in the media of Intaglio, Lithography, Serigraphy, Relief, Collagraphs and new techniques of printmaking.
- 570-573 Practicum. 3 hrs. I, II, S.**  
To be used for learning activities that involve the application of previously learned processes, theories, systems or techniques
- 580-583 Special Topics. 1-4 hrs.**  
To be used for experimental courses. By permission only.
- 585-588 Independent Studies. 1-4 hrs.**  
To be reserved for tutorials, directed and independent research and readings, problem reports, and other activities designed to fit the needs of individual students within the major.
- 601 Advanced Problems in Art Education (Grades K-12). 3 hrs. I, II, S.**  
For graduate students with limited experience in the arts and crafts wishing to familiarize themselves with methods and materials used in art education.
- 650-656 Advanced Studio Sequence. 3; 3; 3; 3; 3; 3 hrs. I, II, S.**  
The student will select special studies from art education, art history, drawing, painting, sculpture, ceramics, graphics, and other related approved projects.
- 670 Seminar. 3 hrs. II. Even years only.**  
Discussion and research in selected areas of art.
- 679 Problem Report. 1-3 hrs. I or II or S.**
- 681 Thesis. 1-6 hrs. I or II or S.**

## ART EDUCATION

The degree of Master of Arts in Art with an area of emphasis in Art Education requires a minimum of 36 hours. General Graduate School admission requirements must be fulfilled. A student must demonstrate to the department his/her preparation for admission to the program by submitting a portfolio, slides, and/or examples of written work to be reviewed by a graduate faculty committee. For certification, state requirements must be met. Discuss with your advisor.

	Hours
Minimum requirements .....	36
1. Education .....	6
2. Art Education Core Classes (ART 560, 566, 670) .....	9
3. Electives: Additional Art Education, Studio Art courses, Art History .....	18
4. Thesis, ART 681 .....	3

A comprehensive examination is required. In addition, a student may elect to have an exhibition with department approval.

**BIOCHEMISTRY (BIC)**  
(See Biomedical Sciences)

**BIOLOGICAL SCIENCES (BSC)**

The Master of Arts or the Master of Science degree with a major in the biological sciences is preparation for teaching and research and for positions in public health, food sanitation, governmental and industrial biology, biological technical sales, conservation, game and wildlife management, park naturalist, genetics, pest control, and microbiology.

The Master of Science degree requires the submission of an acceptable thesis. The Master of Arts degree will be awarded to students electing the non-thesis option.

The Graduate Record Examination in Biology, in addition to the general exam, is required of all students and must be taken prior to the student's first semester. Graduate Record Exam scores will be considered in awarding graduate assistantships.

Admission to the graduate program in the biological sciences will depend upon the student's admission to the Graduate School and acceptance by the department. The student will select a tentative graduate program in consultation with his or her advisor usually during the first semester of graduate work. The student and the advisor will select a graduate committee to include at least two additional faculty members. The committee will assist in planning the remainder of the program. During the semester in which the student is completing his 12th semester hour of work, the student will apply to the Graduate School for candidacy.

Graduate students must complete either as undergraduates or prior to candidacy a core of science courses equivalent to a bachelors degree in Biological Sciences at Marshall University. These include basic courses in Ecology (BSC 320), Cell Biology (BSC 322), and Genetics (BSC 324), each with lab; 6 hours of Organic Chemistry lecture and Organic Chemistry Lab. (CHM 355, 356, 361); Introductory Biochemistry (CHM 365) may be substituted for CHM 356. All courses at the graduate level and/or undergraduate courses to make up deficiencies must be taken for a letter grade, except BSC 585-588 and BSC 650-652. And all students are required to score a minimum of 530 on the Graduate Record Subject exam in Biology prior to admission to candidacy.

Theses must conform to the guidelines established by the Graduate School and the department. The maximum amount of credit that may be earned for the thesis is six hours. It must be completed and submitted to the department and to the Graduate School by the dates specified in the University Calendar. Students electing the thesis option must complete at least thirty-two hours of graduate work including the thesis.

Students who elect the non-thesis option must complete a minimum of thirty-six hours of graduate work.

Each candidate must complete three semester hours credit in Seminar (BSC 661-662). Not more than four semester hours credit in Independent Study (585-588) or special problems (650-652, 679) may be used to meet the minimum number of required hours and these may only be applied beyond the hours (18) for the major.

A student may elect to take six hours of graduate work in a minor field.

Upon the completion of the course requirements and of the thesis (if the thesis option is selected), the candidate must pass a comprehensive oral examination.

**BIOLOGICAL SCIENCES (BSC)**

- 501 **Ichthyology. 4 hrs. II. (Alternate years)**  
Anatomy, physiology, ecology, zoogeography, economic importance and classification of major groups and representative local species of fishes. 2 lec-4 lab and field. (PR: BSC 120-121, 214 or 310)
- 504 **Cellular Physiology. 4 hrs. I, II, S.**  
The physio-chemical nature of intracellular processes in plant and animal cells with emphasis on the functional significance of microscopic and submicroscopic structure and organization. 3 lec-3 lab. (REC: Background in chemistry and physics; PR: 12 hours biological sciences)
- 505 **Economic Botany. 3 hrs. I, S.**  
Plants used by man for food, ornamental purposes, building materials, textiles and other industrial purposes: economic importance of conservation. No laboratory. (PR: BSC 120-121 or equivalent)
- 506 **Herpetology. 4 hrs. II, S. (Alternate years)**  
A survey of the reptiles and amphibians of the world with special emphasis placed on forms resident to West Virginia including aspects of zoogeography, morphology, taxonomy, and behavior. 2 lec-4 lab. (PR: BSC 120-121, 214)
- 507 **Genetics. 4 hrs. I, II.**  
The fundamental principles and mechanisms of inheritance. 3 lec-4 lab. (PR: BSC 120-121 or equivalent)
- 508 **Ornithology. 4 hrs. II, S.**  
An introduction to avian biology: Identification, distribution, migration and breeding activities of birds. 2 lec-4 lab. (PR: BSC 120, 121; REC: BSC 214)
- 509 **Mammalogy. 4 hrs. I, S.**  
A study of the structural features, evolution and classification of the mammals; other topics will include ecology, zoogeography, behavior, reproductive strategies, physiological adaptations to extreme environments and economic aspects. 2 lec-4 lab. (PR: BSC 120-121, 214 or 310)

- 513 Principles of Organic Evolution. 3 hrs. II.**  
The facts and possible mechanisms underlying the unity and diversity of life with emphasis on Neo-Darwinian concepts of the role of species in evolutionary phenomena. (PR: 16 hours BSC)
- 514 Entomology. 4 hrs. I, S.**  
Entomology, anatomy, physiology, identification, classification, life histories and economic importance of representative insect groups. 2 lec-4 lab. (PR: BSC 120-121 or equivalent)
- 515 Morphology of Plants and Fungi. 4 hrs. I, II, S.**  
Form, structure, and development of plants and fungi. 2 lec-4 lab.. (PR: BSC 120, 121 or equivalent)
- 516 Plant Taxonomy. 4 hrs. I, II, S.**  
Identification and classification of seed plants and ferns of eastern United States. Readings in history and principles of taxonomy, rules of nomenclature and related topics. 2 lec-4 lab. (PR: BSC 120-121 or equivalent)
- 518 Mycology. 4 hrs. I. (Alternate years)**  
Nature, cause and control of plant diseases. 2 lec-4 lab. (PR: BSC 120-121)
- 519 Plant Anatomy. 4 hrs. II.**  
Investigations in plant anatomy with emphasis on seed plants. 2 lec-4 lab. (PR: BSC 120 and 121 or permission)
- 520 Plant Physiology. 4 hrs. II.**  
Experimental study of plant life processes to include applicable biophysical and biochemical principles. 2 lec-4 lab. (PR: BSC 322 or equivalent)
- 521 Phycology. 4 hrs. II. (Alternate years)**  
Taxonomy and morphology of algae. Techniques used in the study of algae with emphasis upon application of ecological principles to current water quality problems. 2 lec-4 lab. (PR: BSC 105 or 121)
- 522 Animal Physiology. 4 hrs. I.**  
Physiological principles operating in the organ systems of vertebrate animals. (PR: BSC 104, 105 or 120, 121 or equivalent)
- 524 Animal Parasitology. 4 hrs. I, S.**  
Morphology, life histories, classification, and host relationships of common parasites. 2 lec-4 lab. (REC: BSC 212 or equivalent)
- 526 Medical Entomology. 4 hrs. II, S.**  
The characteristics and control of certain insects and other arthropods which transmit disease-causing organisms. 2 lec-4 lab. (REC: BSC 212 or equivalent)
- 530 Plant Ecology. 4 hrs. I, II, S.**  
The study of plants and their interactions with their environment at different levels of ecological organization: individuals, populations, communities, and ecosystems. Emphasis on quantitative analysis of ecological data.
- 531 Limnology. 4 hrs. I, S.**  
The study of inland waters; ecological factors affecting lake and stream productivity and various aquatic communities. 2 lec-4 lab. (PR: BSC 120-121 or equivalent; REC: BSC 212)
- 542 Advanced Microbiology. 4 hrs. I.**  
An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology of microorganisms. 2 lec-4 lab. (PR: BSC 302)
- 552 Molecular Biology Lab Techniques. 2 hrs.**  
Current techniques in molecular biology with focus on recombinant DNA methodology. (PR: BSC 322 or equivalent; CR: BSC 450 or BMS 600)
- 560 Conservation of Forests, Soil and Wildlife. 3 hrs. I, S.**  
Primarily for students in the biological sciences, general and applied sciences. Includes fieldwork, seminars, and demonstrations related to conservation. 3 lab. (PR: BSC 105 or 121 or equivalent)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Permission)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. CR/NC**  
(PR: Permission)
- 601 Vertebrate Embryology. 4 hrs. I.**  
Vertebrate development based on frog, chick and pig embryos. 2 lec-4 lab.
- 608 Plant Physiology: Growth and Development. 4 hrs. II.**  
Comprehensive advanced study of correlative growth in plants with emphasis on germination, dormancy, growth substances and physiological phenomena associated with phases of development. (PR: BSC 322 or 420 or 520)
- 620-622 Taxonomy of Vascular Plants. 1-2; 1-2; 1-2 hrs. II.**  
Field studies in the taxonomy of higher plants. (Limited to 4 hours credit per student). (PR: BSC 516 or equivalent)

- 625 Advanced Physiology. 4 hrs. II**  
Lecture, current literature and introduction to research in physiological systems. 3 lec-3 lab. (PR: 4 hrs. physiology or permission)
- 626 Protozoology. 4 hrs. (Offered every third semester)**  
A study of free-living and parasitic protozoa important to agriculture, wildlife, and man. Morphology, physiology, reproduction, ecology, and life histories of parasitic protozoa will be emphasized.
- 631 Animal Ecology. 4 hrs. I, S.**  
A study of population and behavior ecology; community dynamics and field techniques. 2 lec-4 lab.
- 650-652 Special Problems. 1-3; 1-3; 1-3 hrs.**  
By permission of adviser, graded CR/NC.
- 661 Seminar I. 2 hrs. I.**  
In depth group discussion of current biological issues.
- 662 Seminar II. 1 hr. II.**  
Oral presentation of individual topics. (PR: BSC 661)
- 681 Thesis. 1-6 hrs.**  
(PR: By permission of advisor).

## BIOMEDICAL SCIENCES

The basic Science Departments of the School of Medicine offer a program leading to the Master of Science and Doctor of Philosophy degrees in Biomedical Sciences.

Students who wish to enroll in the Biomedical Sciences Graduate Program must apply for admission through the Graduate School. They must meet the admission requirements of the Graduate School and the Graduate Studies Committee of Marshall University School of Medicine. Interested persons should contact the Director of Graduate Studies, Biomedical Sciences Graduate Program, Marshall University School of Medicine, Huntington, WV 25755.

Applicants for the Biomedical Sciences Graduate Program should have one year of collegiate preparation in each of the following: general biology, general physics, general chemistry and organic chemistry, all with associated laboratories. Although calculus and physical chemistry are not general requirements for admission to the Program, they may be required for certain disciplines since physical chemistry is a prerequisite to advanced course work in certain areas of concentration. Applicants must also submit Graduate Record Examination scores (General Aptitude and an Advanced Test in one of the sciences) along with three letters of recommendation from references familiar with the applicant's relevant academic/professional performance.

Neuroscience is a new area of emphasis within the Biomedical Sciences Graduate program. A detailed description of the curriculum in neuroscience is available from the Office of Graduate Studies in Biomedical Sciences.

## MASTER OF SCIENCE DEGREE

To qualify for the Master of Science degree in Biomedical Sciences, a minimum of thirty-six credit hours are required for a non-thesis degree, a minimum of thirty-two credit hours are required for a thesis degree. No more than six hours of thesis may be credited toward the thirty-two hour requirement. Each student must specialize and be accepted into one of the following disciplines: Anatomy and Cell Biology, Biochemistry, Microbiology, Neuroscience, Physiology or Pharmacology. In addition, each student, with approval of his/her advisory committee must successfully complete at least one basic course of four credit hours or greater in a minimum of three basic biomedical science disciplines. All students are also required to take Cellular and Molecular Biology (BMS 600), Statistics (PSY 517 or EDF 517), Introduction to Research (BMS 685), and Seminar (BMS 680). The remaining courses necessary to meet the credit hour requirement will be chosen from graduate course offerings with the concurrence of the student's advisory committee.

## DOCTOR OF PHILOSOPHY DEGREE

For full admission to the Doctor of Philosophy Degree Program, students must have completed at least thirty-two hours of the course work towards the requirements for the Marshall University Master of Science degree in Biomedical Science or the equivalent. This includes courses in cellular and molecular biology, introduction to research, seminar and statistics, and one basic course of four credit hours or greater in each of three different basic biomedical science disciplines. Additional course work may be required by the student's doctoral committee. Doctoral students will also be expected to participate in seminar while in residence and complete a research project which will result in a dissertation. All students in the Doctoral Degree Program, regardless of receipt of financial assistance, must participate in the teaching and research as an integral part of their advanced training.

Admission to candidacy for the Doctor of Philosophy Degree is accomplished by successfully passing a candidacy examination which will consist of both written and oral portions administered by the student's doc-

total committee. To receive the doctoral degree, candidates must complete and successfully defend a dissertation. The Doctor of Philosophy Degree Program will normally require two to three years of full-time graduate work beyond Master of Science equivalency. This must include the equivalent of at least two semesters of residence in graduate study at Marshall University.

### BIOMEDICAL SCIENCE (BMS)

- 600 **Cellular and Molecular Biology. 3 hrs. I.**  
A study of the molecular biology of the cell and its organelles, cell interactions and evolution. (PR: One year of Biology and Organic Chemistry and consent of instructor)
- 614 **Basic Human Genetics. 2 hrs.**  
This course will focus on the study of heritable human diseases. Major topics include the metabolic/molecular basis and detection of inherited disease, gene mapping and genetic risk assessment. (PR: BIC 620 or permission of instructor)
- 624 **Human Genetics. 4 hrs., II.**  
An introduction to the study of heritable diseases, their molecular basis and their detection and treatment. Clinical cases will be presented in the second half of the class. (PR: Graduate status in one of the biomedical sciences)
- 630 **Neuroscience. 5 hrs., II.**  
The structure and function of the nervous system. (PR: Permission of instructor)
- 670 **Basic Methods in Molecular Cloning. 2 hrs.**  
This course is designed to expose students to basic molecular cloning techniques, such as genomic library construction, preparation of plasmid DNA, subcloning, nucleic acid hybridization and DNA sequencing. (PR: Undergraduate biology or chemistry majors or graduate student status in one of the biomedical sciences or third year medical student and permission of instructor.)
- 679 **Special Problems. 1-3 hrs. I, II, S.**  
Intensive study of a selected topic or problem. Emphasizes independent study. (PR: Consent of advisor)
- 680 **Seminar. 1 hr. I, II. CR/NC**  
Study and discussion of current topics related to the Biomedical Sciences.
- 681 **Thesis. 1-9 hrs. I, II, S. CR/NC**
- 685 **Introduction to Research. 1-6 hrs. I, II, S. CR/NC**  
Directed research activities requiring a completed prospectus for an advanced research project, a written report, or a research thesis. A minimum of three (3) hours required for all M.S. candidates. (PR: Consent of instructor)
- 882 **Research. 1-15 hrs. I, II, S. CR/NC**

### ANATOMY, CELL AND NEUROBIOLOGY (ACB)

- 620 **Gross Anatomy/Embryology. 8 hrs. I.**  
The course presents a comprehensive study of the structures of the human body and their development. Although the course is centered in dissection, additional learning resources include examination of non-invasive images such as CAT scans, MR images and radiographs, and the study of models and the use of computer programs. Clinical correlates and cases are used extensively to establish the anatomical basis of the practice of medicine.
- 624 **Microscopic Anatomy and Ultrastructure. 4 hrs. II.**  
Students study the functional and microscopic aspects of cell and tissue types found in different regions of the human body. Presentation of topics correlates with the physiology course, which runs concurrently and provides an organ system approach to the material. In the laboratory portion of the course, tissues from medical histology slide sets and electron micrographs are studied.
- 626 **Advanced Histological Techniques. 4 hrs., II.**  
Advanced theories and techniques of tissue preparation, staining, and histochemistry. (PR: Consent of instructor)
- 628 **Anatomy of the Nervous System. 4 hrs. II.**  
The gross and fine structure of the nervous system is correlated with function at each level of the spinal cord and brain. Lectures are supplemented in the laboratory by the study of microscopic sections and gross sections of the spinal cord, brain stem and whole brain. (PR: Consent of instructor)
- 632 **Principles of Mammalian Development. 3 hrs. I.**  
A lecture course designed to present the salient features of normal human development so that students will have a basis for comprehending normal adult anatomic relations and variations, and a basis for interpreting congenital pathologic conditions. (PR: Consent of instructor)
- 637 **Neuroanatomy Literature Review. CR/NC, II.**  
Published neuroscience articles are reviewed and presented by all students. Each presentation includes a summary of the background, introduction, methods, results, and discussion sections of the article. (PR: Consent of instructor)

- 639 Neuroanatomy Research Techniques. 3 hrs. S.**  
Students rotate through neuroanatomy faculty research laboratories where they have the opportunity to see state-of-the-art neuroanatomy research skills demonstrated. Each student has the opportunity to participate in neuroanatomical research. (PR: Consent of instructor)
- 640 Current Topics in Cellular Biology. 1-3 hrs. II.**  
Students carry out a guided comprehensive review of the literature on a current research topic. The topic is selected by agreement of the student and faculty member. Consent of instructor is required.
- 641 Electron Microscopy. 3 hrs. I.**  
The theory and practice of transmission electron microscopy (TEM). Sample preparation, TEM operation, darkroom work, manuscript preparation, and an individualized research project. (PR: Consent of instructor)
- 643 Independent Study in Electron Microscopy. 1-5 hrs. II.**  
Supervised individual research projects in electron microscopy and advanced EM Techniques: STEM, SEM, Diffraction, Darkfield. (PR: ACB 641 or approval of instructor)
- 650 Research in Cellular Processes. 1-4 hrs. II.**  
Provides the student with an introduction to research in cellular biology and neurobiology. The education program is arranged in consultation with an individual faculty member. Consent of instructor required.
- 660 Current Topics in Neurobiology. 1-3 hrs. II.**  
Students carry out a guided comprehensive review of the literature on a current research topic in neurobiology. The topic is selected by agreement of the student and faculty. Consent of instructor required.
- 675 Special Topics. 1-4 hrs. I, II.**  
Present course material on special areas of research or topics which are not routinely covered in existing courses. Consent of instructor is required.
- 676 Special Topics. 1-4 hrs. I, II.**  
Present course material on special areas of research or topics which are not routinely covered in existing courses. Consent of instructor is required.
- 677 Special Topics. 1-4 hrs. I, II.**  
Present course material on special areas of research or topics which are not routinely covered in existing courses. Consent of instructor is required.

#### BIOCHEMISTRY AND MOLECULAR BIOLOGY (BIC)

- 620 Human Biochemistry. 6 hrs. I.**  
A study of structure and metabolism of biological compounds with special reference to the human. (PR: Organic chemistry and consent of instructor)
- 628 Molecular Mechanisms in Growth and Differentiation. 2 hrs.**  
Advanced graduate course will acquaint students with the latest information on control of cell growth & differentiation at the molecular level. Lecture & student presentations. A short grant proposal is also required. Prerequisite: Cellular & Molecular Biology; BMS 600.
- 630 Radioisotope Methodology. 3 hrs. II.**  
A study of the methodology of radioisotopes and ionizing radiation, means of detecting radiation, preparation of biological samples for radio assay, sources of error in assay and radiation safety. (PR: Consent of instructor)
- 634 Lipid Biochemistry. 2 hrs. II.**  
Advanced study of lipid structure and metabolism. (PR: Biochemistry and consent of instructor)
- 636 Enzymology. 3 hrs. I.**  
A study of enzyme function, including purification, assay, kinetics, inhibition, pH, temperature effects, active site probes, subunit studies, isotope effects, allosterism, and mechanisms. Current literature will be discussed. (PR: Biochemistry and consent)
- 638 Nucleic Acids and Protein Synthesis. 3 hrs. II.**  
An advanced course in molecular biology and molecular genetics emphasizing current research in these areas. (PR: Biochemistry and consent of instructor)
- 640 Carbohydrate Biochemistry and Metabolic Regulation. 2 hrs. II.**  
Advanced study of the metabolism of carbohydrates with emphasis on metabolic regulation. (PR: Biochemistry and/or Enzymology and consent of instructor)
- 642 Biochemical Techniques. 3 hrs. I, II.**  
Modern biochemical techniques for the preparation, purification and characterization of biochemical materials. (PR: consent of instructor)
- 643 Molecular Signal Transduction. 3 hrs.**  
An advanced exploration of the newest information on cellular signalling pathways. Special emphasis will be placed on current literature in following signal transduction from the plasma membrane to the nucleus. (PR: BMS 600 or equivalent)

**675 Special Topics. 1-4 hrs.**

Present course material on special areas of research or topics which are not routinely covered in existing courses.

**MICROBIOLOGY, IMMUNOLOGY AND MOLECULAR GENETICS (MCB)**

**620 Principles of Medical Microbiology. 5-7 hrs. I.**

The study of microorganisms, immunobiology, immunologic diseases, host resistance and the means by which diseases are produced and prevented. (PR: Organic Chemistry, General Microbiology and consent of instructor)

**621 Microbial Physiology. 4 hrs., I, II, S.**

Selected aspects of microbial cell structure, intermediary metabolism, genetics, macromolecular structure and biosynthesis, and the growth cycle will be considered in depth. (PR: MCB 642, BIC 620)

**630 Microbial Genetics. 3 hrs., I, II, S.**

Analysis of concepts and techniques in microbial genetics through evaluation of current research. Emphasis will be on genetic engineering, transfer of genetic information and phage genetics. (PR: MCB 620 or 646)

**642 Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.**

An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.

**643 Principles of Immunology. 3 hrs. I.**

Basic principles of the immune response system of humans and related mammals. Concepts of B & T cell function and interrelationships emphasized. (PR: Cellular and Molecular Biology)

**648 Molecular Aspects of Pathogenesis. 3 hrs.**

An in depth study of molecular mechanisms of bacterial, viral, and immunemediated disease processes. Course Requirements: BMS 600 and BIC 620

**650 Bacteriophage Genetics. 2 hrs., II.**

An in depth study of the molecular biology of bacterial viruses. (PR: MCB 630, MCB 642)

**655 Regulation of Prokaryotic Gene Expression. 2 hrs., II.**

An in depth study of prokaryotic gene function including discussions of operons, regulons, stimulons, repressor functions, etc. (PR: MCB 630, MCB 642)

**660 Diagnostic Virology. 3 hrs., II.**

A comprehensive survey of methodologies used to detect and characterize viral specific antibodies and antigens and the status of cellular immunity in virus infected hosts. (PR: MCB 620)

**PATHOLOGY (PTH)**

**620-621 Human Pathology. 7; 7 hrs., I, II.**

General principles of pathology, systemic pathology, and holistic integration with laboratory medicine and autopsy-clinical-and-cytologic material. (PR: Consent of instructor)

**PHARMACOLOGY (PMC)**

**610 Introduction to Pharmacology. 3 hrs., I.**

An indepth presentation of the history and introductory principles of pharmacology. Designed to acquaint students with pharmacology as a scientific discipline and provide the basis for more advanced courses. (PR: Consent of instructor)

**615 Pharmacology Reviews. 1 hr., I, II.**

A course designed for students to read and discuss recent and classic papers in pharmacological sciences. Students become acquainted with the pharmacology literature and classic advances in the field.

**620 Medical Pharmacology. 6 hrs., II.**

An introduction to the basic concepts of drug actions and therapeutic principles governing drug therapy. Emphasis is placed on general mechanisms, therapeutic uses and toxicity of prototypic drugs. (PR: BIC 620, PHS 629 desirable; consent of instructor)

**625 Drug Metabolism. 3 hrs., I.**

Topics will include a discussion of the metabolizing enzymes, enzyme induction and inhibition, toxic metabolites, prodrugs, metabolic disorders and analytical methods for studying drug metabolism. (PR: consent of instructor)

**630 Chemical Aspects of Pharmacology. 3 hrs., I.**

An introduction to the chemical principles of pharmacology. The chemical classification, acid-base chemistry and stereochemical properties of drugs and the reactivity of drugs with biological systems will be discussed. (PR: organic chemistry, consent of instructor)

- 633 **Vistas in Pharmacology.** 3 hrs., I.  
A discussion and study of recent advances in the various fields of pharmacological investigation. This course is designed to acquaint students with state-of-the-art techniques and developing areas of pharmacology. (PR: PMC 620)
- 635 **Neuropharmacology.** 3 hrs., I.  
A study of the actions of drugs on the nervous system.
- 640 **Behavioral Pharmacology.** 3 hrs., I.  
Behavioral methods for assaying drug action. (PR: consent of instructor)
- 643 **Introductory Cardiopulmonary Pharmacology.** 3 hrs.  
A general overview of the principles of pharmacology and the mechanisms and effects of cardiovascular and respiratory drugs. (PR: PHS 629 or BSC 522, consent of instructor)
- 645 **Advanced Cardiopulmonary Pharmacology.** 3 hrs., I.  
To differentiate this advanced course from a newly proposed introductory course in cardiopulmonary pharmacology. (PMC 643)
- 650 **General Toxicology.** 3 hrs., I.  
An in depth presentation of the general principles and methods of toxicology. Mechanism, distribution and organ system responses to toxins and methods of toxicological evaluation will be discussed. (PR: PMC 620 or consent of instructor)

#### PHYSIOLOGY (PHS)

- 628 **Mammalian Neurophysiology.** 2 hrs.  
This course is a basic introductory, survey course covering neurophysiology from subcellular level to behavioral level. (PR: Consent of instructor)
- 629 **Mammalian Physiology.** 6 hrs. II.  
A study of mammalian systems including pulmonary, renal, cardiovascular, gastrointestinal, endocrinological and nervous systems. Emphasis will be placed on homeostatic mechanisms and on experimental approaches to physiology. (PR: PHS 628)
- 630 **Experimental Physiology.** 1 hr. II.  
A laboratory course in mammalian physiology which includes instruction in surgical preparation, bioinstrumentation technique and open-chest surgery in dogs. (PR: PHS 629 and consent of instructor. This course may be taken concurrently with 629)
- 631 **Physiology Practicum.** 2 hrs. II.  
Experience in laboratory instruction of medical and graduate students in the mammalian physiology laboratory. (PR: PHS 630 and consent of instructor)
- 632 **Physiology of Sleep.** 1 hr.  
Detailed examination of changes in EEG, EMG, cardiorespiratory function and ocular motility during sleep. (PR: PHS 628, 629)
- 634 **Advanced Neurophysiology.** 1-2 hrs., I.  
Bioelectric potentials. A.C. and D.C. potentials, transcortical potentials, E.E.G., cornea-retinal potential, blood-CSF potential, etc. (PR: PHS 628, 629)
- 636 **Advanced Respiratory Physiology.** 1-2 hrs., I.  
Neural control of respiration with emphasis on biofeedback regulation (PR: PHS 629)
- 637 **Neurophysiology Literature Review.** 1 hr.  
Published articles will be presented by all class members. Each presentation will include a summary of the background, introduction, methods, results, and discussion sections of the neurophysiology article.
- 638 **Advanced Cardiovascular Physiology.** 1-2 hrs., I.  
(PR: PHS 629)
- 639 **Neurophysiology Research Techniques.** 3 hrs.  
Class participants will be exposed to state-of-the-art neurophysiology research techniques while in the laboratories of neurophysiology faculty.
- 640 **Advanced Renal and Electrolyte Physiology.** 1-2 hrs., I.  
(PR: PHS 629)
- 641 **Recent Advances in Physiology.** 1 hr., I., II.  
Recently published articles in a selected area of physiological investigation will be presented by participants in the class. Each presentation will be followed by a discussion and evaluation of the paper. (PR: Consent of instructor)
- 650 **Immunophysiology.** 3 hrs. I.  
This course examines immune-neuroendocrine interactions in the control of human function in response to inflammation, infection and hypersensitivity reactions. (PR: Consent of instructor)
- 661 **Endocrinology.** 3 hrs.  
An in depth study of the endocrine system with special emphasis on the role of experimentation in the development of concepts in endocrine physiology (PR: BMS 600 or equivalent, consent of instructor)



**666 Physiology of the Cell. 3 hrs.**

An in-depth study of selected topics in cell physiology.

**675 Special Topics. 1-4 hrs.**

Present course material on special areas of research of topics which are not routinely covered in existing courses.

**676 Special Topics. 1-4 hrs.**

Present course material on special areas of research or topics which are not routinely covered in existing courses.

**677 Special Topics. 1-4 hrs.**

Present course material on special areas of research or topics which are not routinely covered in existing courses.

**BUSINESS (ACC, ECN, FIN, MGT, MKT)**

Marshall University, through its Graduate School and Lewis College of Business, offers the Master of Business Administration degree: MBA.

**MASTER OF BUSINESS ADMINISTRATION PROGRAM**

Qualified candidates are given an excellent opportunity to earn the Master of Business Administration degree. In keeping with its purpose of providing professional preparation and foundation, the M.B.A. program gives emphasis to building a strong fundamental framework and the development of skills in managerial problem-solving and decision-making.

**PROGRAM DESIGN**

Business policies and procedures, reflecting rapid advancement in technology, are subject to change over time. Methods and practices in current use may be totally inadequate for coming decades. For this reason, greater emphasis is placed on sound general principles and decision-making techniques which provide a base for continuous learning.

To accomplish this purpose the program involves:

1. A series of business foundation courses (MBA core) which enable the student to continue professional development. The foundation courses required will be determined in consultation with the MBA director.
2. A broad study of functional areas of business and their interrelationships, with emphasis on application of knowledge, concepts, and analytical methods for problem-solving.
3. Elective subject matter areas to provide for each candidate's specific professional objectives. Within the framework of the basic program, each candidate has considerable choice in selecting an area of professional concentration. Areas currently offered are: accounting, economics, marketing, finance, and management.

The program may be completed in one calendar year, attending on a full-time basis and depending on the candidate's previous training.

The M.B.A. program includes	Hours
Business foundation courses (MBA core) required as determined by the M.B.A. director .....	0-30
M.B.A. Functional studies courses .....	30
Electives or thesis (with prior permission) .....	6
<b>Total</b>	<b>36-66</b>

The University reserves the right, even after the arrival and enrollment of students, to make individual curricular adjustments whenever particular deficiencies or needs are found. These deficiencies will be determined by the M.B.A. program director. Students may be required to take such courses without credit toward the master's degree and at their own expense. This will apply to additional course work in Speech and/or English whenever necessary. Students must consult with and obtain approval from the M.B.A. director prior to registration each semester.

**ADMISSION TO THE M.B.A. PROGRAM**

Admission to the Graduate School is the first step. The second action required is admission to the MBA Program. Each applicant is required to submit the Graduate Management Admissions Test (GMAT) score prior to regular admission. Decisions on applications for admission to the M.B.A. program shall be based upon a careful consideration of the applicant's total record, including undergraduate grade point average, scores on the GMAT, and the graduate grade point average earned prior to enrollment in the M.B.A. courses.

The minimum requirement for admission is a score of 1000 computed by multiplying the undergraduate grade point average (A = 4.0) by 200 and by adding the GMAT score. The composite GMAT score must meet or

exceed a minimum of 500. Undergraduate preparation in business administration is not a prerequisite for admission to the program; however, students must complete the prerequisite foundation courses with a 2.5 or better average before enrolling in M.B.A. classes. Applicants may elect to use only the upper-level (latter half) course work and meet the criteria of an admissions index of 1050 or greater, calculated as above.

Applicants with a masters degree may use the following formula: 200 times the graduate grade-point average (A = 4.0) plus the GMAT, the resulting index must meet or exceed 1100. The GMAT composite score must meet or exceed a minimum of 500.

Students 1) with GMAT scores 450 or greater but less than 500 who meet the 1000 criteria or 2) whose composite score is less than 1000 but greater than or equal to 950 and whose GMAT scores are greater than 500 may petition for provisional admission to the MBA program.

Students on provisional admission status must earn a grade of "B" or better in each of the first 12 hours of MBA course work to qualify for full admission.

### ADMISSION TO CANDIDACY

A student must be admitted to candidacy for the degree of Master of Business Administration. The requirements for such admission are the completion of the necessary foundation courses (MBA core) and a minimum of four (4) M.B.A. functional studies courses, with an average of 3.0 or higher.

Upon completion of these requirements students are expected to apply for candidacy.

### TRANSFER OF COURSES

Only a student who has been admitted to candidacy may request the transfer of a graduate course taken at some other accredited institution. Such a request may be granted if the course taken is similar to a graduate course in business administration offered by Marshall University, and was passed with a grade of "B" or better.

No student may transfer more than 12 semester hours of graduate course work, not more than nine (9) semester hours in one field. Graduate credits transferred from other institutions may only be accepted if they are not superannuated toward meeting degree requirements by time limitations.

Evaluation of transfer credit is made by the Graduate Dean in consultation with the MBA director, and in consultation with the Department Chairperson in the field in which the student has completed the course work. The student may be requested to present course descriptions and course textbooks to facilitate the evaluation.

Once admitted to the M.B.A. program the student may take courses and transfer credits with a grade of "A" or "B" from another university only if authorized to do so by the M.B.A. director prior to registration for graduate study at another university.

### DEGREE REQUIREMENTS

1. Each candidate is required to complete from 36 to 66 semester hours depending upon previous training and educational background. Each candidate must exhibit competence in the functional studies by satisfactory completion of designated courses with a quality point average of 3.0 (B) or better.
2. Candidates must pass a two-part written comprehensive examination. Both parts are graded by a panel of examiners appointed by the Graduate Committee of The College of Business.

### COURSE REQUIREMENTS

#### BUSINESS FOUNDATION (MBA core) COURSES

It is to be expected that students applying for admission to the M.B.A. degree program will hold different undergraduate degrees and have diverse backgrounds. Students can be accepted into the program by meeting admission standards; however, students must complete the business foundation courses designed to prepare them for specific graduate level courses in the College of Business. Generally, these business foundation courses are:

	Hours
Management 320-Principles of Management .....	3
Finance 323-Principles of Finance .....	3
Marketing 340-Principles of Marketing .....	3
Accounting 215/216-Principles of Accounting .....	6
Economics 250-Principles of Microeconomics .....	3
Economics 253-Principles of Macroeconomics .....	3
Math 203-Introductory Calculus or equivalent .....	3
Management 218-Business Statistics .....	3
Computer Science 101 or equivalent .....	3

## MBA FUNCTIONAL STUDIES

All students are required to take the following courses:

	Hours
Management 601-Quantitative Controls in Business .....	3
Accounting 613-Profit Planning and Controls .....	3
Finance 620-Financial Management .....	3
Management 672-Theories of Management .....	3
Marketing 682-Advanced Marketing Management .....	3
LE 691-Government and Business Relationships .....	3
Management 674-Operations and Production Management .....	3
Economics 630-Managerial Economics .....	3
Economics-620 - US and The Global Economy .....	3
Business Policy 699 (Mgt., Mkt., Acc., Ecn., or Fin) .....	3

## ELECTIVES

Six additional elective hours must be selected from any of the following Business areas, from some area outside the College of Business (with advisory approval) or a thesis may be written.

### ACCOUNTING ELECTIVES:

	Hours
Accounting 612 Accounting Functions in Business .....	3
Accounting 614 Theory of Accounting .....	3
Accounting 615 Auditing Theory and Practice .....	3
Accounting 616 Advanced Income Tax Procedure .....	3
Accounting 617 Advanced Controllershship .....	3
Accounting 618 Accounting Research .....	3

### ECONOMICS ELECTIVES:

	Hours
Economics 644 Advanced Economic Theory .....	3
Economics 656-Labor Economics .....	3

### FINANCE ELECTIVES:

	Hours
Finance 625-Financial Problems in Business .....	3
Finance 626-Security Analysis and Portfolio Management .....	3
Finance 627-Financial Institutions and Markets .....	3

### MANAGEMENT ELECTIVES:

	Hours
Management 673-Problems in Personnel Management .....	3
Management 675-Problems in Labor-Management Relations .....	3
Management 676-Organization Theory and Design .....	3
Management 678-Management Information Systems .....	3
Management 692-Business Responsibilities and Social Issues .....	3

### MARKETING ELECTIVES:

	Hours
Marketing 683-Advanced Marketing Research .....	3
Marketing 685-Marketing Problems .....	3
Marketing 687-Seminar in Marketing .....	3
Marketing 688-Advanced Transportation .....	3
Marketing 689-Advanced Physical Distribution .....	3

NOTE: Students who receive more than two C grades or any grade below C in the graduate courses in the 36 hours of M.B.A. functional studies coursework will be subject to disciplinary action, and possible termination from the M.B.A. program.

## ACCOUNTING (ACC)

**510 Financial Accounting. 3 hrs.**

Application of accounting as an information development and communication function that supports economic decision making. Topics include principles, concepts, problems, financial analysis, personal and organizational decisions, business entities, and government. (PR: Permission of MBA Director)

**580-583 Special Topics. 4 hrs.**

**612 Accounting Functions in Business. 3 hrs.**

The meaning, uses, and limitations of the historical and projected quantitative data produced by the accounting process. Emphasis is given to the utilization of accounting information: (1) by marketing, production, and financial executives in planning and controlling business operations and (2) by investors, creditors, governmental agencies, and other external groups having an interest in the operating results and financial position of business firms. (PR: Full MBA admission or permission of MBA Director)

**613 Profit Planning and Controls. 3 hrs.**

Determination, analysis, and reporting of data for planning and controlling operations. Includes flexible budgets, standard costs, and systems of determining historical costs. (PR: Full MBA Admission or Permission of MBA Director)

**614 Theory of Accounting. 3 hrs.**

History and development of accounting principles; intensive study of theoretical problems related to determination of income and presentation of financial conditions. (PR: Accounting 613 and full MBA admission or permission of MBA director)

**615 Auditing Theory and Practice. 3 hrs.**

Legal and social responsibilities of the auditor. Verification of financial statements by independent public accountants and internal auditors. (PR: ACC 429 and full MBA admission or permission of MBA director)

**616 Advanced Income Tax Procedure. 3 hrs.**

A study of selected topics in the Internal Revenue code and Regulations with emphasis on tax accounting and research. (PR: ACC 348 and full MBA admission or permission of MBA director)

**617 Advanced Controllership. 3 hrs.**

Functions of the modern corporate controller. Topics and problems demonstrating the integrative nature of the controller's role are investigative. The use of the computer is integrated into the course. (PR: ACC 613 and full MBA admission or permission of MBA director)

**618 Accounting Research. 3 hrs.**

Examination and evaluation of current theories, issues, and problems relating to accounting. Primary emphasis on accounting theory and research. (PR: ACC 614 and full MBA admission or permission of MBA director)

**650-651 Special Topics. 1-3, 1-3 hrs.**

(PR: Permission of the division head and full MBA admission)

**660 Independent Study. 1-4 hrs.**

Study of a specific nature under the supervision of a faculty member with graduate status. Hours determined by the magnitude of the project. (PR: Permission of the division head and full MBA admission or permission of MBA director)

**681 Thesis. 1-6 hrs.**

**699 Business Policy and Strategy. 3 hrs.**

Study of administrative decision making under conditions of uncertainty. Policy construction at top administrative level with emphasis on strategy with consideration of major functions of the business organization. (PR: Full MBA admission and permission of MBA director)

## ECONOMICS (ECN)

The Department of Economics offers a minor field of study which is appropriate to many graduate programs, such as Business Administration, Business Education, History, Home Economics, Political Science, and Social Studies. Students who have taken the Social Studies workshop in American Capitalism Seminar for credit, may not take ECN 561 and ECN 562, American Capitalism Seminar, for credit.

**501 Principles of Economics. 3 hrs.**

Overview of the basic principles of both microeconomics and macroeconomics. (PR: Permission of MBA Director)

**505 Environmental Economics. 3 hrs.**

The application of basic economic theory to a consideration of wide range of environmental problems, including pollution, natural resource exhaustion, population and economic growth. (PR: ECN 253 or permission)

- 508 Comparative Economic Systems. 3 hrs.**  
Marxism, capitalism, communism, fascism and socialism considered as theories, movements and actual political economics. (PR: ECN 253, or permission)
- 515 Regional Economics. 3 hrs.**  
A study of location theory and regional development within a framework of economic theory. (PR: ECN 253 or permission)
- 520 International Economics. 3 hrs.**  
Movement of goods and balance of payments among nations; exchange rates; exchange controls and tariffs; problems and policies. (PR: ECN 253 or permission)
- 522 Introduction to Mathematical Economics. 3 hrs.**  
Modern mathematical methods for use in economics and other social sciences. (PR: ECN 253 and Mathematics 203, or permission)
- 540 History of Economic Thought. 3 hrs.**  
Economic theories and ideas from the earliest economists to those of Marshall and Keynes. (PR: ECN 253 or permission)
- 550 Public Finance. 3 hrs.**  
Analysis of governmental activities pertaining to raising of revenue and expenditure of monies; analysis of public debt and fiscal programs at all levels of government. (PR: ECN 253 or permission)
- 560 Economic Development. 3 hrs.**  
A study of the problems, dynamics and policies of economic growth and development in underdeveloped and developed countries. (PR: ECN 253 or permission)
- 561 Economics Education Workshop. 3 hrs.**  
Intensive review of subject matter and teaching methods in economics for elementary and high school teachers. (PR: Consent of instructor or grant scholarship)
- 562 Economics Education Workshop II. 3 hrs.**  
Intensive review of subject matter and teaching methods in economics for elementary and high school teachers. (PR: Consent of instructor or grant scholarship)  
Note: Students who have taken the Social Studies workshop in American Capitalism Seminar for credit, may not take ECN 561 and 562. American Capitalism Seminar, for credit.
- 620 The United States and The Global Economy. 3 hrs.**  
A study of the interdependent and transnational nature of the global economy with an emphasis on contemporary global economic issues, commercial policies, trading blocs, developing countries and world economic agencies. (PR: Full MBA admission or permission of MBA director.)
- 630 Managerial Economics. 3 hrs.**  
Utilization of microeconomic theory and optimization techniques for management decision making. (PR: MGT 601 and full MBA admission or permission of MBA director)
- 644 Advanced Economic Theory. 3 hrs.**  
Macroeconomic theory. The aggregate consumption function; other determinants of the level of aggregate income. Post Keynesian theory. General equilibrium theory, economics of welfare. (PR: MTH 190, ECN 326 and full MBA admission or permission of MBA director)
- 650-651 Special Topics. 1-3; 1-3 hrs.**  
Members of the department may teach, when necessary, any economics subject not listed among current course offerings. (PR: Nine hours of economics and consent of the instructor and full MBA admission or permission of MBA director)
- 656 Labor Economics. 3 hrs.**  
Theoretical and empirical analysis of labor markets, wage determination, hours of work, unemployment and inflation, unions and collective bargaining and related subjects in their social and legal contexts. (PR: Full MBA admission or permission of MBA director)
- 660 Independent Study. 1-4 hrs.**  
Independent study of a specific nature under the supervision of qualified faculty member. Hours of credit are determined by magnitude of the project. (PR: ECN 253 and permission of department chair and full MBA admission or permission of MBA director)
- 681 Thesis. 3-6 hrs.**
- 699 Business Policy and Strategy. 3 hrs.**  
Study of administrative decisions making under conditions of uncertainty. Policy construction at top administrative level with emphasis on strategy with consideration of major functions of the business organization. (PR: Full MBA admission and permission of MBA director)

#### FINANCE (FIN)

- 510 Principles of Business Finance. 3 hrs.**  
Business finance from the viewpoint of the financial manager. Use of financial statements, tools, and concepts for measuring and planning for profitability and liquidity. (PR: ACC 216, ECN 253, MGT 218, MTI 190 and permission of MBA Director)

- 580 **Special Topics. 1-4 hrs.**
- 620 **Financial Management. 3 hrs.**  
An examination of business corporations practicing at the level of the individual firm with emphasis on quantitative analysis of the variables which affect liquidity and profitability. (PR: MGT 601, ACC 613 and full MBA admission or permission of MBA director)
- 625 **Financial Problems in Business. 3 hrs.**  
Recognizing and solving financial problems through the use of case presentations and/or corporate annual and interim reports. (PR: FIN 620 and full MBA admission or permission of MBA director)
- 626 **Security Analysis and Portfolio Management. 3 hrs.**  
Analytical procedures used by institutional portfolio managers to measure both past performance of holdings and anticipated market performance of current offerings. Emphasis in this course may be expected to be more centralized in the area of fundamental analysis. (PR: FIN 620 and full MBA admission or permission of MBA director)
- 627 **Financial Institutions and Markets. 3 hrs.**  
An in-depth study of the flow of funds in the aggregate financial systems, with emphasis on those in the United States. Because interest rates, and bank reserve requirements of Federal Reserve System are all dynamic in character, the content of this course may be expected to vary as financial events of the future dictate. (PR: FIN 620 and full MBA admission or permission of MBA director)
- 650 **Special Topics. 1-3 hrs.**  
(PR: Permission of the department chairman and full MBA admission or permission of MBA director)
- 660 **Independent Study. 1-4 hrs.**  
Independent study of a specific nature under the supervision of qualified faculty member. Hours of credit are determined by magnitude of the project. (PR: FIN 620 and permission of department chair and full MBA admission or permission of MBA director)
- 681 **Thesis. 1-6 hrs.**
- 699 **Business Policy and Strategy. 3 hrs.**  
Study of administrative decisions making under conditions of uncertainty. Policy construction at top administrative level with emphasis on strategy with consideration of major functions of the business organization. (PR: Full MBA admission and permission of MBA director)

#### LEGAL ENVIRONMENT (LE)

- 691 **Government and Business Relationships. 3 hrs.**  
Preparing business executives for dealing with problems of the firm in its relationships with government. Applies case analysis to the board categories of antitrust, trade regulation, and agency regulation. (PR: Full MBA admission)

#### MANAGEMENT (MGT)

- 500 **Analytical Methods and Techniques. 3 hrs.**  
Provides competency in some of the basic quantitative skills necessary for analytical work in business administration. Required of all candidates who have had little or no undergraduate background in mathematics.
- 501 **Statistics for Business. 3 hrs.**  
An introductory course in statistics for MBA students with little or no statistics. Covers descriptive statistics, probability distributions, confidence limits, hypothesis testing and an introduction to regression analysis.
- 510 **Management Theory and Practice. 3 hrs.**  
Application of current management theory to everyday business practices. Topics include employee motivation, diversity, leadership, the use of technology, organizational planning, group dynamics, quality control, and international business. (PR: Permission of MBA Director)
- 601 **Quantitative Controls in Business. 3 hrs.**  
Advanced preparation in the practical use of quantitative techniques applicable to managerial decision making, emphasizing planning and control. The course also covers decision theory, network analysis models, matrix algebra, linear programming, inventory control models, queuing theory, game theory, and simulation models. (PR: Full MBA admission or permission of MBA director.)
- 650-651 **Special Topics. 1-3; 1-3 hrs.**  
(PR: Permission of the department chairman and full MBA admission or permission of MBA director)
- 660 **Independent Study. 10-4 hrs.**  
Independent study of a specific nature under the supervision of qualified faculty member. Hours of credit are determined by magnitude of the project. (PR: permission of Department Chair and full MBA admission or permission of MBA director)

- 672 Theories of Management. 3 hrs.**  
Basic ideas and concepts for the effective management of an organization. Major topics include motivation, communication and decision-making processes, group dynamics, leadership study, conflict management, work and organizational design, and organization development. Emphasis on the organizational behavior and theory. (PR: Full MBA admission or permission of MBA director)
- 673 Problems in Personnel Management. 3 hrs.**  
Principles and procedures of the personnel system in the firm; selected areas of recruitment and selection; training and development; performance appraisal and evaluation; general communications system; role of government in manpower administration. (REC: MGT 672 and full MBA admission or permission of MBA director)
- 674 Production/Operations Management. 3 hrs.**  
Managerial organization, identification of major problem areas and development of production concepts and decision processes for problem solving. Includes plant design and layout, effective utilization of resources through various planning and scheduling techniques. (PR: MGT 601 and full MBA admission or permission of MBA director)
- 675 Problems in Labor-Management Relations. 3 hrs.**  
Comprehensive coverage of the development of the field of industrial relations. The impact of organized labor and federal social legislation of management decision. Alternative directions for future developments are studied. (REC: MGT 672 and full MBA admission or permission of MBA director)
- 676 Organization Theory and Design. 3 hrs.**  
Analysis of organizational systems and subsystems incorporating traditional, behavioral, and situational approaches to organizational and work unit design. Emphasizes environmental interface and interdependencies as function of internal systems phenomena. (PR: MGT 320 or permission; REC: MGT 672 and full MBA admission or permission of MBA director)
- 678 Management Information Systems. 3 hrs.**  
To familiarize students with the characteristics and functions of management information systems, as well as the benefits, limitations, and applications for advanced management information systems. (PR: Full MBA admission or permission of MBA director)
- 681 Thesis. 1-6 hrs.**
- 692 Ethics and Global Aspects of Business. 3 hrs.**  
An examination of the administrator's social, ethical, and environmental responsibilities to his employees, customers, and the general public and other external factors which management must be cognizant of in modern society. (PR: Full MBA admission or permission of MBA director)
- 699 Business Policy and Strategy. 3 hrs., I, II.**  
Study of administrative decisions making under conditions of uncertainty. Policy construction at top administrative level with emphasis on strategy with consideration of major functions of the business organization. (PR: Full MBA admission and permission of MBA Director)

## MARKETING (MKT)

- 510 Marketing Fundamentals. 3 hrs.**  
The course examines the planning, implementation, and control of marketing in business today. Topics include the macro environment, product, price, distribution, promotion, consumer behavior, international, marketing research, and ethics. (PR: Permission of MBA Director)
- 580-581 Special Topics. 1-4; 1-4 hrs.**
- 650-651 Special Topics. 1-3; 1-3 hrs.**  
(PR: Permission of the department chairman.)
- 660 Independent Study. 1-4 hrs.**  
Independent study of a specific nature under the supervision of qualified faculty member. Hours of credit are determined by magnitude of the project. (PR: MKT 682 and permission of Department Chair and full MBA admission or permission of MBA director)
- 681 Thesis. 1-6 hrs.**
- 682 Advanced Marketing Management. 3 hrs.**  
An integrated approach to marketing from a managerial point of view-making use of economic, quantitative, and behavioral concepts in analyzing and developing a framework for the decision-making and implementation of the firm's marketing program. (PR: Full MBA admission or permission of MBA director)
- 683 Advanced Marketing Research. 3 hrs.**  
A study of research methods and procedures used in the marketing process; emphasis will be given to the sources of market data, sampling, preparation of questionnaires, collection and interpretation of data. (PR: MKT 682 and full MBA admission or permission of MBA director)
- 685 Marketing Problems. 3 hrs.**  
Determination of the marketing mix within the framework of the problem-solving and decision-making process. (PR: MKT 682 and full MBA admission or permission of MBA director)

- 687 Seminar in Marketing. 3 hrs.**  
An advanced study of basic concepts of current problems in Marketing. Seminar discussions and research projects. (PR: MKT 682 and full MBA admission or permission of MBA director)
- 688 Advanced Transportation. 3 hrs.**  
Current national transportation problems and a review of the various modes including history of the modes. (PR: MKT 682 and full MBA admission or permission of MBA director)
- 689 Advanced Physical Distribution. 3 hrs.**  
Study of activities concerned with efficient movement of products from the sources of raw materials supply, through production to the ultimate consumer. These include freight transportation, warehousing, order processing, forecasting, etc. (PR: MKT 682 and full MBA admission or permission of MBA director)
- 699 Business Policy and Strategy. 3 hrs.**  
Study of administrative decisions making under conditions of uncertainty. Policy construction at top administrative level with emphasis on strategy with consideration of major functions of the business organization. (PR: Full MBA admission)

## CHEMISTRY (CHM)

### DEGREES OFFERED

**MASTER OF SCIENCE (CHEMISTRY):** This program is intended primarily for individuals interested in advanced training in chemistry and related disciplines in preparation for doctoral programs or for careers in industry, government, or post-secondary school education. Two routes to the degrees are available.

With Thesis (CHM 682): a minimum of thirty-two semester hours is required, of which no more than twelve may be in Chemistry 682 (Research). The candidate is required to present an acceptable thesis based upon original research. The candidate must also give a public lecture based upon the results of the thesis and give a satisfactory oral defense of the thesis before his committee. All full-time students and students receiving department stipends must elect this route.

With Problem Report (CHM 679): a minimum of thirty-six hours is required, of which none may be in CHM 682 and three must be in Chemistry 679 (Problem Report). This route will be open to students authorized by the department, generally part-time students who are unable to enroll in CHM 682.

No more than six hours of Special Topics may be counted in the minimum hours required by either route; any exceptions require specific Departmental approval.

Students whose research is in the area of organic chemistry are required to take these courses: 565, 566, 548 (or 549 if credit was previously received for 548 or its equivalent), 540, or 542 and 522 or 526, and additional courses needed to complete the 32 or 36 credit hour minimum. Students whose research is in the area of analytical, inorganic, and physical chemistry are required to take at least one graduate course in each of the four major areas (analytical, inorganic, organic, and physical): specific course requirements are to be determined in consultation with one's research advisor.

**MASTER OF SCIENCE (PHYSICAL SCIENCE):** This degree program, offered in cooperation with the Departments of Geology, Mathematics, and Physical Science and Physics, is intended to provide a broadly based advanced science program for individuals whose undergraduate program in science lacks depth or breadth.

Programs will be designed to meet individual needs. The writing of a thesis is optional. Specific degree requirements are listed in the section: Physical Science and Physics.

**ADMISSION TO CANDIDACY:** After being admitted to the Graduate School, and prior to registration, the student will meet with his designated advisor to determine the specific program of studies necessary to prepare for admission to candidacy for the degree. Programs will be adjusted to reflect major interests and prior training of the student. Normally, the student will be eligible to apply for admission to candidacy after the satisfactory completion of twelve hours of graduate course work.

## CHEMISTRY (CHM)

- 510 Advanced Synthesis and Analysis. 4 hrs.**  
Advanced problems in synthesis, separation and analysis with emphasis on modern instrumental methods. 1 lec-6 lab. (REC: CHM 356 or equivalent)
- 520 Fundamentals of Chemistry. 4 hrs. S. Offered on demand.**  
An introductory chemistry course for College of Education graduate students.
- 522 Spectrophotometric Methods of Analysis. 3 hrs.**  
Modern theories and methods of spectrophotometric analysis, including atomic absorption, infrared, UV-visible and colorimetric methods. 1 1/2 lec.-3 lab. (PR: CHM 345 and 307 or 358)
- 523 Environmental Analytical Chemistry. 4 hrs.**  
Sampling and modern instrumental analysis of water, air and sediments according to EPA methodology. (PR: Graduate standing; C or better in CHM 345 or equivalent experience.)



- 526 Chromatographic Methods of Analysis. 3 hrs.**  
Modern theories and methods of chemical separations with emphasis on gas and liquid chromatography. (PR: 345, 356, 307 or 357) 2 lec.-2 lab.
- 530 Introduction to Polymer Chemistry. 3 hrs.**  
Properties of macromolecules. Methods of preparation and characterization. Industrial applications and processes. (PR: CHM 307 or 357, and 356 or permission of instructor)
- 540 Thermodynamics. 3 hrs.**  
An introduction to chemical thermodynamics and statistical mechanics. (REC: CHM 358 or equivalent)
- 542 Quantum Mechanics. 3 hrs.**  
An introductory course in quantum mechanics. (REC: MTH 231 or equivalent)
- 548 Advanced Inorganic Chemistry I. 4 hrs.**  
Study of physical properties and periodic relationships of inorganic materials. 3 lec-2 lab. (PR: CHM 356 and 307 or 357)
- 549 Advanced Inorganic Chemistry II. 3 hrs.**  
A detailed consideration of bonding, structure, reaction rates and equilibrium involving inorganic materials. (PR: CHM 448 or equivalent)
- 550 Industrial Chemistry. 3 hrs.**  
Modern industrial processes for making chemicals, with emphasis on petrochemicals. An introduction to the engineering, economic, and environmental aspects of these processes. (PR: CHM 307 or 357, and 356 or permission of instructor)
- 553 Magnetic Resonance in Chemistry. 3 hrs.**  
Applications of analysis by magnetic resonance. Emphasis will be placed on proton and heteronuclear magnetic resonance theory and applications. 2 lec.-2 lab. (PR: CHM 356)
- 560 Molecular Spectroscopy. 3 hrs.**  
A study of the emission and absorption of radiant energy and its relation to molecular structure. (REC: CHM 358 or equivalent)
- 562 Nuclear Chemistry and Physics. 3 hrs.**  
An introduction to the phenomena of nuclear physics and chemistry. (REC: MTH 231 or equivalent)
- 563 Nuclear Chemistry and Physics Laboratory. 2 hrs. 4 lab.**  
(REC: CHM 462 or equivalent)
- 565 Advanced Organic Chemistry I. 3 hrs. I.**  
Studies of the dynamics of organic reactions with emphasis on mechanisms and stereochemistry. (REC: CHM 356 or equivalent)
- 566 Advanced Organic Chemistry II. 3 hrs.**  
A continuation of Chemistry 565 with emphasis on synthetic methods. (PR: CHM 565)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 604 Theories of Analytical Chemistry. 2 hrs.**  
Offered on demand. (PR: CHM 556)
- 607 Theoretical Organic Chemistry. 2 hrs.**  
The application of quantitative methods to problems in structure and dynamics. (PR: CHM 565)
- 618 Kinetics. 3 hrs.**  
An advanced study of reaction rates and mechanisms.
- 627 Physical Chemistry for Teachers. 3-5 hrs. S.**  
Offered on demand. 3 lec-6 lab. (PR: CHM 520 or equivalent)
- 628 Special Topics (Inorganic). 1-3 hrs. Offered on demand.**
- 629 Special Topics (Organic). 1-3 hrs. Offered on demand**
- 630 Special Topics (Physical). 1-3 hrs. Offered on demand**
- 631-632 Seminar. 1; 1 hr. I, II.**
- 639 Advanced Quantum Mechanics. 3 hrs.**  
Offered on demand. (PR: CHM 542)
- 679 Problem Report. 3 hrs.**  
Preparation of a comprehensive written report on a topic in Chemistry of current importance. Registration only by permission of Department.
- 682 Research. 1-12 hrs. I, II, S.**  
Credit in the course is earned by pursuing a directed original investigation in a field of chemistry. Twelve semester hours credit in research are applied toward the M.S. degree. Students may sign for one or more credit hours per semester depending upon the time to be spent on research. A grade of PR may be reported at the close of each term or semester. (PR: Approval of Department Chairman)

#### CLASSICAL STUDIES (CL)

The Department of Classical Studies offers minor fields of study in Latin and in classics. These minors are appropriate for graduate programs in English and in history.

## CLASSICS (CL)

These courses are given in English and require no knowledge of Greek or Latin.

**535 Greek Civilization. 3 hrs.**

Study of ancient Greek culture, emphasizing parallels with present-day issues.

**536 Roman Civilization. 3 hrs.**

Study of ancient Roman culture, emphasizing parallels with present-day issues.

**580-583 Special Topics in Classics. 1-4; 1-4; 1-4; 1-4 hrs.**

(PR: Consent of the instructor)

**585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

**599 Humanities Seminar. 3 hrs.**

## COMMUNICATION DISORDERS (CD)

The graduate program of the Department of Communication Disorders is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association. The Department of Communication Disorders offers an M.A. degree. CD majors at the graduate level follow a prescribed program leading to eligibility for national certification in Speech-Language Pathology by the American Speech-Language-Hearing Association and West Virginia licensure. Students wishing to be eligible for West Virginia certification as public school speech-language pathologists must also meet the requirements for such certification.

### Admission to the Program

The minimum requirements to be considered for admission include the following:

1. A completed application for admission to the Graduate School must be received by the Office of Admissions by the specified deadline and must include official GRE scores and transcripts from all undergraduate schools attended.
2. An undergraduate degree in Communication Disorders from an accredited institution is required. Students with deficits in undergraduate coursework or those wishing public school certification may need to complete additional requirements after admission.
3. An overall and communication disorders grade point average of at least 3.0 is required for full time admission. Students with grade point averages above 2.5 may be considered for part-time enrollment if space permits. Students who are admitted full time may elect to attend full or part time.
4. Submission of a completed application form to the Communication Disorders program (available from the Communication Disorders department).
5. Students with undergraduate degrees from institutions other than Marshall University must submit three letters of recommendation (written on appropriate letterhead) from individuals who can comment on their academic and clinical performance and potential. At least one letter must be from a classroom instructor.
6. Students with undergraduate degrees from Marshall University must submit three names of faculty who will serve as references.

The program admits students once per year. Generally, more students apply than can be accepted and therefore, the selection process is competitive. All completed applications are reviewed in the spring after the specified deadline for submission. Students who are accepted into the program may elect to begin in the next summer, fall, or the following spring semester. Students admitted to the program who fail to enroll in the selected semester, as well as students already in the program who fail to enroll for a semester without prior permission from their academic advisor, are considered withdrawn from the program and not eligible for future enrollment.

**NOTE:** Applicants who are accepted for the graduate program will be simultaneously admitted as students in the Graduate School.

### Program Requirements

A minimum of 33 graduate credit hours of academic coursework (without the thesis) or 30 hours (with the thesis) in addition to academic hours of clinical practicum necessary to complete certification requirements is required for graduation. The Speech-Language Pathology specialty area of the ETS Praxis Series (NESPA) serves as the comprehensive examination which is required for all students. A score of 620 or better is considered passing. In addition to the comprehensive examination, a candidate who writes a thesis will be required to pass an oral examination on the thesis.

Students who apply for clinical practicum assignments are expected to fulfill the responsibilities of these assignments for the full semester. Students who fail to do so may not be assured of future assignments. Students should consult the department chair, their Communication Disorders academic advisor, and the clinic handbook regarding all academic and clinical requirements and standards specific to the program.

## COMMUNICATION DISORDERS (CD)

- 518 Communication Disorders of School Children. 3 hrs.**  
A survey of the causes, symptoms, and treatment of communication disorders encountered in the classroom. Not open to communication disorders majors.
- 570 Clinical Practicum. 1 hr.**  
Supervised clinical practicum in the Marshall University Speech and Hearing Center. (PR: Permission of instructor)
- 572 Clinical Practicum in the Schools. 3-6 hrs.**  
Supervised clinical practicum with school-aged children; fulfills student teaching requirements for West Virginia Certification as a Speech Language Pathologist. (PR: Permission of instructor)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Permission of chair)
- 585-588 Independent Study. 1-4 hrs.**  
(PR: Permission of chair)
- 601 Introduction to Graduate Studies. 3 hrs.**  
An introduction to graduate studies, including clinical and research applications; quantitative and qualitative research methodology; critical analysis of clinical instruments and research literature. (PR: Permission of instructor)
- 620 Communication Disorders Related to Cleft Palate and Voice. 3 hrs.**  
Intensive study of the anatomy and physiology of laryngeal and maxillofacial structures; voice production and resonance; nature and etiology of voice and resonance disorders; principles of assessment and treatment. (PR: Permission of instructor)
- 622 Phonological Processes and Disorders. 3 hrs.**  
Advanced study of the phonological component of the linguistic system. Emphasis on phonological disorders in children; social dialects; critical analysis of literature. (PR: Permission of instructor)
- 623 Fluency Disorders. 3 hrs.**  
Detailed evaluation of theories of fluency disorders and relevant therapies; critical analyses of research literature. (PR: Permission of instructor)
- 624 Motor Speech Disorders. 3 hrs.**  
Study of the neurological bases of speech; etiologies and symptoms of dysarthrias and apraxias; principles of assessment and treatment. (PR: Permission of instructor)
- 625 Acquired Aphasia. 3 hrs.**  
Advanced study of the acquired aphasia; critical analysis of research literature. (PR: Permission of instructor)
- 628 Language Acquisition. 3 hrs.**  
Advanced study of the development of language; language sampling procedures, analysis and application. (PR: Permission of instructor)
- 629 Child Language Disorders. 3 hrs.**  
Advanced study of current topics in language disorders in children; critical analysis of research literature. (PR: Permission of instructor)
- 630 Communication Disorders Associated with Neurophathologies. 3 hrs.**  
Intensive study of the nature and etiology of communication disorders associated with traumatic brain injury, right hemisphere lesions, dementia, and other neurophathologies; diagnosis and treatment; critical analysis of research literature. (PR: Permission of instructor)
- 660 Assisted Communication. 3 hrs.**  
Examination of current trends in assisted communication with emphasis on assistive strategies/devices for individuals with hearing and speech disorders; principles of assessment and treatment. (PR: Permission of instructor)
- 670-671 Advanced Clinical Practicum. 1-4 hrs.**  
Supervised clinical practicum in the Marshall University Speech and Hearing Center and in affiliated educational, rehabilitation and medical settings. (Both 670 and 671 may be repeated, but only a total of six hours in both courses may be applied to a master's degree. PR: CD 570 or equivalent; permission of instructor).
- 677-678 Special Topics. 1-4 hrs. I, II.**  
Program of study not normally covered in other courses. Topics vary from semester to semester. (PR: Permission of chair)
- 681 Thesis. 1-6 hrs. I, II.**  
(PR: Permission of chair)
- 685-688 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Permission of chair)
- 690-693 Seminar. 1-4; 1-4; 1-4; 1-4 hrs.**  
Topics in communication disorders not covered in other courses; topics vary from semester to semester. (PR: permission of chair)

## COMMUNICATION STUDIES (CMM)

The M.A. degree in Communication Studies provides an opportunity for students to develop individual programs of theory, research and application among the areas of interpersonal, organizational, educational and public communication. The program is designed for students who seek careers as communication professionals or who intend to pursue further graduate study in the field.

To be admitted to the program, students must meet the requirements of the Graduate School, including completion of the Graduate Record Examination. The Director of Graduate Studies in the department will serve as a student's initial advisor. During the first semester of graduate study a student will select an advisor from the department's graduate faculty. During the next semester additional members of the department's graduate faculty will be selected by the student in consultation with the advisor to constitute the student's committee. At least one member of the committee must have full graduate faculty status.

With the approval of the committee, the student will plan a program of study which must include CMM 601 and 606. A total of 36 credit hours is required for graduation. Students who write a thesis may earn six of those credit hours for the thesis. A minor or cognate outside the department may be approved by a student's committee.

A comprehensive exam, including written and oral sections, is required. The exam will be prepared and evaluated by the student's committee. A candidate who writes a thesis is also required to pass an oral examination on the thesis.

## COMMUNICATION STUDIES (CMM)

- 501 Organizational Communication. 3 hrs.**  
Investigation of information flow in organizations with emphasis on identifying communication problems.
- 502 Rhetorical Theory. 3 hrs.**  
An exploration of theories of rhetoric from the Greek philosophers to the present. This course will examine the strategic use of symbols in persuasive discourse.
- 506 Interviewing. 3 hrs.**  
Skill development in the question-answer-response process as it applies to a variety of interviewing situations.
- 508 Leadership and Group Communication. 3 hrs.**  
A study of the variables affecting, and affected by, the communication process in small groups, with particular emphasis upon leadership variables.
- 509 Theories of Persuasion and Change. 3 hrs.**  
Study of the relationship between persuasion and social change, including theories of attitude and behavioral change and contemporary theories of persuasion.
- 511 Communication Study and Research. 3 hrs.**  
Introduction to the advanced study of theory and research areas with emphasis on communication research methods and reporting.
- 513 Theories of Interpersonal Communication. 3 hrs.**  
A survey and analysis of theories related to interpersonal communication in relationships. Emphasis is on the communication processes and contingencies underlying relationship development, maintenance, and disengagement in various interpersonal contexts.
- 520 Communication and Conflict. 3 hrs.**  
An exploration of the theory, research, and practice of communication in understanding and negotiating interpersonal conflict.
- 541 Development and Appreciation of Film Since 1930. 3 hrs.**  
A study of important directions in modern film, including style, genre, and the relationship to contemporary society. A variety of films will be viewed for analysis.
- 550 Direction of Speech Activities. 3 hrs.**  
Direction of extracurricular speech activities/assemblies, forensic events, etc. (PR: Fifteen hours of speech or permission of departmental chairman)
- 556 Computer-Mediated Communication. 3 hrs.**  
This course explores the impact of computer-mediated communication on human organization. (PR: Email capability; web search capability)
- 574 Health Communication. 3 hrs.**  
Explores communication demands of human healthcare and healthcare promotion; examines communication controversies in the modern healthcare system, and examines communication strategies to resolve healthcare problems.
- 576 Communication for Classroom Teachers. 3 hrs.**  
Knowledge and utilization of interpersonal communication skills in all teaching-learning environments.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Permission of chair)

585-588 Independent Study. 1-4 hrs.

(PR: Permission of chair)

597-598 Instructional Television Course. 1-4 hrs.

A course based upon Instructional Television Series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements announced by the department.

601 Problems and Methods in Communication Research. 3 hrs.

602 Communication Consultation Strategies. 3 hrs.

An in-depth analysis of diagnostic and intervention strategies employed by communication consultants. Strategies include communication network analysis, communication process observation and consultation, communication role and norm negotiation, and team building.

606 Studies in Communication Theory. 3 hrs.

An extensive investigation into the major concepts of contemporary communication theory.

650 Leaders and Movements in Communication Education. 3 hrs.

The study of speech-communication education from the time of the Greeks to the present, with emphasis upon the evolution of communication education to meet the needs of contemporary society.

656 Seminar in Public Communication. 3 hrs.

673 Seminar in Interpersonal Communication. 3 hrs.

Intensive treatment of principles and processes underlying dyadic communication. Designed to enable the student to diagnose and intervene to resolve communication problems.

674 Seminar in Communication Pedagogy. 3 hrs.

Primarily for graduate teaching assistants to develop instructional skills of preparation, presentation and evaluation; to understand instructor duties and requirements, and to exemplify interpersonal skills in dealing with students.

675-676 Seminar. 1-3; 1-3 hrs.

Program of study not normally covered in other courses. Topics vary from semester to semester.

677-678 Special Topics. 1-3; 1-3 hrs.

Program of study not normally covered in other courses. Topics vary from semester to semester.

681 Thesis. 1-6 hrs.

685-688 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.

(PR: Permission of chair)

## COMPUTER SCIENCE AND SOFTWARE DEVELOPMENT (CSD)

Marshall University does not have a master of science degree program. The graduate courses listed below are provided to permit graduate students to support their approved majors with additional computer education and/or to develop a higher level of computer understanding and skills. Students are encouraged to consult with an advisor or the course instructor to select the courses which will best meet their educational objectives.

509 Software Development for Health Care. 3 hrs. II, S.

Software development and maintenance approaches for the health care industry. Shared database approaches; instrumentation interfacing and control; inquiry/response methods and effective user interfaces. Participation in team projects. (PR: permission of instructor)

519 Decision Systems. 3 hrs. I, S.

System/software approaches to decision support systems. On-line group decision systems, knowledge-based systems, interactive user interfacing methods, electronic conferencing and teleconferencing, statistical software, distance learning/response techniques, trends. Project participation. (PR: permission of instructor)

529 Introduction to Computer Graphics. 3 hrs. II.

Introduction to underlying theory and techniques of computer graphics. Historical perspective. Display hardware technology, 2D raster operations, 2D and 3D geometric transformations, and 3D projection and viewing techniques. Project participation. (PR: MTH 330 or equivalent, or permission of instructor)

539 Introduction to Artificial Intelligence. 3 hrs. I.

Concepts and methods. Heuristic search, planning, hypothesis formation, modeling, knowledge acquisition and representation. Languages, methodologies, tools. Applications including automatic programming, theorem proving, machine vision, game playing, robots. Project participation. (PR: CSD 240 or equivalent, or permission of instructor)

542 Communication Networks and Distributed Systems. 3 hrs. II.

Network structures, architectures, topology. Layers, protocols, interfaces, local area networks. Coverage of current networks. Distributed processing concepts; architectural trade-offs, distributed databases. Operating system and application software issues. Project participation. (PR: CSD 322 or equivalent, or permission of instructor)

549 Formal Languages and Automata Theory. 3 hrs. I.

Concepts and formalisms of formal languages and automata theory. Fundamental mathematical concepts.

- Grammars and corresponding automata. Deterministic parsing of programming languages. (PR: MTH 340 or equivalent, or permission of instructor)
- 557 **Database Systems, 3 hrs. II.**  
Basic concepts, semantic models. Data models: object-oriented and relational, lesser emphasis on network and hierarchical. Query languages and normal forms. Design issues. Security and integrity issues. (PR: Permission of instructor)
- 559 **Computer Simulation and Modeling, 3 hrs. I.**  
Concepts of model building and computer-based discrete simulation. Special-purpose simulation languages. Experimental design, analysis of results. Statistical aspects, random number generation. Model validation issues and methods. Project participation. (PR: MTH 445 or equivalent, or permission of instructor)
- 567 **Compiler Design, 3 hrs. I.**  
Compilation of modules, expressions, and statements. Organization of a compiler including compile-time and run-time aspects; symbol tables, lexical analysis, syntax analysis, semantic analysis, optimization, object-code generation, error diagnostics. Compiler writing tools. Participation project. (PR: CSD 325 or equivalent, or permission of instructor)
- 568 **Image Processing, 3 hrs.**  
Image Processing focuses on the application of technology to scientific analysis of images. Topics include: measurement techniques, scientific methods of reconstruction and interpretation of images and video. (PR: Graduate standing in COS or the Medical School)
- 570 **Introduction to Applied Automation, 3 hrs. I.**  
Introduction to production economics; programmable logic control, sensors and actuators, digital and analog I/O design. Introduction to robotics and flexible manufacturing systems. (PR: Permission of instructor)
- 579 **Software Engineering, 3 hrs.**  
Current techniques in software design and development using Ada, Modula-2, or C for software projects. Formal models of structured programming, top-down design, data structure design, object-oriented design, program verification methods. (PR: CSD 239 and 320)
- 580-583 **Special Topics, 1-4 hrs.**  
(PR: Permission of instructor)
- 585-588 **Independent Study, 1-4 hrs.**  
(PR: Permission of instructor)
- 603 **Advanced Educational Computing, 3 hrs.**  
Allows the educator to develop a more in-depth understanding of the 'BASIC programming' language and become familiar with other languages used on microcomputer.
- 610 **Using the Computer as a Decision-Making Tool, 3 hrs.**  
Introduction to statistical software packages and packaged microcomputer software serving as a productivity tool for lower and middle level managers. Spreadsheet, text-editing and file management packages for microcomputers. Open to all graduate students.

## COUNSELING (CR)

All specializations in the Counseling Program require a minimum of 48 semester hours designed to serve the needs of professional counselors. Curricula are developed for specialties in elementary school counseling, secondary school counseling, agency counseling, and student affairs counseling. School counseling curricula meet the State Department of Education certification standards. An alternative school counseling program is available for students without a teacher education background to qualify for West Virginia certification as elementary or secondary school counselors.

Admission to the Counseling Program is selective, competitive, and restricted to a limited number of students. Admission decisions are rooted in the requirements of the Marshall University Graduate School and the specific standards required by the Counseling Program, including the student's performance on the aptitude tests of the Graduate Record Examination, grade point averages documented on undergraduate or graduate transcripts, a personal statement of reasons for pursuing graduate study in counseling, and three letters of recommendation. Applicants who satisfy minimum standards relative to these criteria are invited for an on-campus interview with the Counseling Program faculty. The number of students admitted each year is established by the program faculty. Applications received prior to March 15 of each year are given priority and those received after that date are considered only when openings remain. Students are admitted to specific specializations and must indicate their chosen specialization prior to admission.

It is the responsibility of all admitted students to meet with his/her advisor prior to the beginning of course work. Following the completion of 12 semester hours, the student must apply for Admission to Candidacy. Courses required for Admission to Candidacy are selected with the approval of the advisor. A minimum grade point average of 3.0 and recommendations by the advisor and one other faculty member are required for Candidacy. A 3.0 grade point average in all counseling courses attempted and a 3.0 grade point average in all courses required for the Master's Degree are required prior to enrollment in CR 651 (Practicum), prior to enrollment in Internship, and for graduation.

The following 30 semester hours of core courses are required of all students:

	Hours
EDF 621 Research and Writing .....	3
CR 648 Advanced Studies in Human Development and Adjustment .....	3
CR 599 Principles and Practices of Counseling .....	3
CR 646 Theory and Practice of Human Appraisal .....	3
(The above courses are taken during the fall semester by all entering students)	
CR 605 Group Counseling or CR 642 Group Theories and Techniques .....	3
CR 614 Theories of Counseling .....	3
CR 647 Vocational Development and Decision Making .....	3
CR 651 Practicum .....	3
CR 666 Consultation Roles in Counseling .....	3
CR 574 Multicultural Perspectives in Counseling .....	3

In addition to the 30 semester hours of core courses, students must complete additional requirements consistent with one of the following sub-specialities:

<b>Student Affairs Counseling</b>	Hours
CR 660 Introduction to Student Affairs Counseling .....	3
CR 661 Current Issues in Student Affairs .....	3
CR 656 Internship in Student Affairs Counseling .....	6
Advisor Approved Electives .....	6

<b>Elementary School Counseling</b>	Hours
CR 576 Counseling with Parents .....	3
CR 613 Organization and Administration of Counseling Programs .....	3
CR 657 Internship in Elementary School Counseling .....	6
Advisor Approved Electives .....	6

<b>Secondary School Counseling</b>	Hours
CR 613 Organization and Administration of Counseling Programs .....	3
CR 667 Vocational Development in School Counseling .....	3
CR 658 Internship in Secondary School Counseling .....	6
Advisor Approved Electives .....	6

<b>Agency Counseling</b>	Hours
A prerequisite to Agency Counseling is Abnormal Psychology or equivalent.	
CR 579 Pharmacology in Counseling .....	3
CR 555 Crisis Intervention .....	3
CR 671 Community Agency Counseling .....	3
CR 672 Seminar in Community Agency Counseling .....	3
CR 653 Internship in Agency Counseling .....	6

### COUNSELING (CR)

- 535 **Group Process and Analysis. 3 hrs.**  
Study of practice of dynamics involved in task and therapeutic groups: a thorough analysis of group process.
- 545 **Manual Communication. 3 hrs.**  
Psychological characteristics of the hearing impaired and techniques of manual communication.
- 554 **Advanced Manual Communication. 3 hrs.**  
Advanced course in the grammar, syntax and idioms of American Sign Language and a comprehensive overview of the effect of hearing impairment. Emphasis will be upon communicating in ASL. (PR: CR 445 or 545)
- 555 **Crisis Intervention. 3 hrs.**  
This course is directed to anyone who at sometime has felt inadequate in responding effectively to and identifying people in crisis. Topics will include situational and developmental crisis.
- 556 **Death and Dying. 3 hrs.**  
Death and dying orientation for professionals, nonprofessionals about essentials of life in its terminal stages. Presents practical, theoretical, social and psychological aspects to promote healthy, accepting attitudes.
- 560-563 **Professional Development. 1-4 hrs.**  
To meet needs of school, student personnel, mental health, and other workers. Credit may be used for certificate renewal and salary upgrading, but not degree programs. Titles vary. (CR/NC grading)

- 573 Hypnosis: Implications and Applications for Counselors. 3 hrs.**  
An introduction to hypnosis and its application in a counseling framework. Emphasis will be upon the Milton H. Erickson model of hypnosis. (PR: CR 425 or 614, or special permission)
- 574 Multicultural Perspectives in Counseling. 3 hrs.**  
Recognize and use appropriate resources for effective counseling of people of different cultural, ethnic, social, class, racial, geographic, or other backgrounds. Learn when counseling is appropriate and in what form.
- 575 Counseling in Chemical Use and Abuse. 3 hrs.**  
Course topics will include historical, medical, psychological, family dynamics of the disease process, and treatment modalities which enhance the likelihood of successful counseling with the dependent person and indirect victims.
- 576 Counseling with Parents. 3 hrs.**  
Consideration of effective parent counseling, primarily from an Adlerian point of view. Techniques for counselor intervention via lecture, demonstration and laboratory experiences.
- 577 Stress Management Counseling. 3 hrs.**  
Provides beginning counselors and others with comprehensive information and strategies for successful management of stress and its consequences. Students explore theoretical and practical alternatives in counseling the stressed individual.
- 578 Counseling the Elderly. 3 hrs.**  
Counseling techniques and theories applied to problems of the elderly.
- 579 Pharmacology in Counseling. 3 hrs.**  
Provide basic understanding of the role of Therapeutic drugs in the treatment of psychiatric disorders, familiarize with most commonly prescribed drugs, side effects, and adverse reactions in specific mental illnesses. (PR: CR 548, 599)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 591-594 Counseling Workshop. 1-4; 1-4; 1-4; 1-4 hrs.**  
A practical participatory course designed for advanced students and professionals in the counseling field or related fields.
- 597 Family Counseling. 3 hrs.**  
Survey course in history, theory, process, techniques and research in family counseling.
- 598 Introduction to Marriage Counseling. 3 hrs.**  
An introduction to the theory, techniques, and multidimensional aspects of marriage counseling.
- 599 Principles and Practices of Counseling. 3 hrs.**  
Focus upon acquiring basic skills and includes a pre-practicum. Deals with social and cultural influences and past and present work areas and clients. (Not available to B.A. graduates of the Marshall University Counseling Program)
- 605 Group Counseling. 3 hrs.**  
Gives graduate students an understanding in the use of procedure for guidance and counseling in groups CR/NC (PR: Permission of instructor)
- 613 Organization and Administration of Guidance Programs. 3 hrs.**  
Problems in planning, organizing and administering guidance programs in elementary and secondary schools.
- 614 Counseling Theories. 3 hrs.**  
Survey of philosophies of counseling as related to the interpersonal relationships involved in the counseling process. (PR: CR 548, 599; CR: CR 649)
- 617 Field Course in Current Problems in Counseling and Rehabilitation. 3 hrs.**  
Investigations in current problems of counseling agencies; content determined by needs of student.
- 619 Advanced Individual Counseling Theories. 3 hrs.**  
A postmasters course designed to expand already existing knowledge of the student on the main theories of individual counseling. An in-depth exploration of a continuum of levels of helping relationships within the domain of counseling and psychotherapy.
- 640 Literature. 1-3 hrs.**  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to counseling and rehabilitation; readings selected with guidance of advisor. Only one registration for Counseling and Rehabilitation 640 is permitted. (PR: Permission of advisor)
- 641 Seminar. 2-3 hrs.**  
A guided program of reading, reports and discussions. No student may register for this course a second time. (PR: Permission of advisor)
- 642 Group Theories and Techniques. 3 hrs.**  
Study of theories and techniques used in group counseling; will include demonstration and practice of popular approaches in group counseling.
- 646 Theory and Practice of Human Appraisal. 3 hrs.**  
Techniques of collecting, recording and interpreting data with emphasis on psychological testing.



- 647 Career Development and Decision Making. 3 hrs.**  
Course designed to facilitate the vocational decision making process, taking into account social economic status, gender, health, and educational factors in the changing world.
- 648 Advanced Studies in Human Development and Adjustment. 3 hrs.**  
Psychological foundations of personality development with emphasis on principles of mental health as related to problems of everyday living.
- 649-649A Seminar in Counseling. 3; 3 hrs.**  
The nature of the counseling relationship with emphasis upon self-evaluation.
- 650 Seminar in Counseling. 3 hrs.**  
Counseling tools and techniques with emphasis on problem categories and patterns as related to the psychology of individual differences. (PR: Permission of advisor)
- 651-651A Practicum in Counseling. 3; 3 hrs.**  
Practical experiences in counseling under professional supervision. (PR: CR 614 and admission to candidacy)
- 653 Internship in Agency Counseling. 12 hrs.**  
Supervised on-the-job experiences in counseling. (PR: CR 651 and 672 and permission of instructor.)
- 654 Supervision of Counseling. 3 hrs.**  
Supervisory experiences of counselor-candidates in practicum. Limited to students with a master's degree in counseling who are employed as supervisors, expect to be employed as supervisors, or plan to work toward an advanced degree in the field. (PR: Permission of instructor)
- 656 Internship in Student Affairs Counseling. 3-12 hrs.**  
Supervised on the job experience in student affairs counseling. (PR: CR 651 and 661)
- 657 Internship in Elementary School Counseling. 3-12 hrs.**  
Supervised on the job experience in elementary school counseling. (PR: CR 651 and CR 613; CR 617 if student does not hold teacher certification)
- 658 Internship in Secondary School Counseling. 3-12 hrs.**  
Supervised on the job experience in secondary school counseling (PR: CR 651 and 613; CR 617 if student does not hold teacher certification)
- 660 Introduction to Student Affairs Counseling. 3 hrs.**  
Basic orientation to research, application, management, and delivery of Student Affairs Services (Counseling) in Higher Education. (PR: Permission of advisor)
- 661 Current Issues in Student Affairs. 3 hrs.**  
To enhance the student's awareness and understanding of educational, environmental, administrative, legal, and ethical issues in the field of Student Affairs in colleges and universities. (PR: CR 660, Candidacy)
- 666 Consultation Roles in Counseling. 3 hrs.**  
This course provides an examination of consultation roles of professional counselors in the various settings in which they work. Content includes an orientation to consultation, its definition, processes, and future. (PR: Approved Candidacy)
- 667 Vocational Development in School Counseling. 3 hrs.**  
Introduction to: (1) the major theories of vocational development; (2) the materials, information, and the resources available to the school counselor; and (3) the development of techniques for the implementation of theory. (PR: Permission of advisor)
- 671 Community Agency Counseling. 3 hrs.**  
The first specialization course in the Community Agency Counseling emphasis provides a comprehensive examination of the diagnostic classification system (DSM) of the American Psychiatric Association. Content includes ethical and legal implications. (PR: CR 599, 648)
- 672 Seminar in Community Agency Counseling. 3 hrs.**  
The second specialization course in the Community Agency Counseling emphasis provides a range of practice concepts applicable to agency counseling. Content includes intake reports, treatment plans, progress notes, and structured interviews. (PR: CR 671)

### CRIMINAL JUSTICE (CJ)

The Criminal Justice Department is committed to those items enumerated in the mission statements of Marshall University and its College of Liberal Arts. First and foremost, the Criminal Justice Department strives to prepare future leaders by providing undergraduate and graduate students with a quality liberal arts criminal justice education. This education includes critical thinking skills, problem solving skills, research skills, language/communication skills, and development of students' intellectual capabilities. The Criminal Justice Department is also committed to: (1) applied and basic research; (2) leadership and public service to the community; and (3) developing insight into multicultural and global issues.

The Criminal Justice Department offers a M.S. degree in Criminal Justice which is intended to prepare students for government service, law school, additional graduate work and research. To be eligible for candidacy in Criminal Justice, a student must have met all requirements of the graduate school, and (1) have earned fifteen

hours of undergraduate Criminal Justice credit, including three hours of statistics; (2) have fulfilled the undergraduate Criminal Justice writing requirement; and (3) have earned no fewer than twelve, and no more than eighteen (18) hours of graduate credit at Marshall University with a 3.0 average. Subject to the discretion of the department chair, if the third requirement has been met, either, or both, of the other two requirements may be waived.

All graduate students must complete at least eighteen hours of six hundred level courses including CJ 603, 604, 621, 655, and 656. In addition, students must complete a minor of at least six hours in another graduate area.

### CRIMINAL JUSTICE (CJ)

- 502 **Seminar in Crime Prevention.** 3 hrs.  
Techniques for crime prevention analyzed from two orientations; crime prevention by environmental engineering and crime prevention by behavior modification. (PR: CJ 211 or permission)
- 504 **Theoretical Criminology.** 3 hrs.  
A critical analysis of the major criminological theories and their empirical foundations. Current theory and research receive greater emphasis than historical development.
- 510 **Police Administration II.** 3 hrs.  
Police department organizations. Development of personnel and employment practices in law enforcement. Issues concerning unions and unionization. Problems and techniques of management.
- 512 **Community Relations.** 3 hrs.  
Law enforcement and the community; relation to schools, public education functions of law enforcement personnel; community attitudes. (PR: CJ 211 or consent of instructor)
- 513 **Business and Industry Security.** 3 hrs.  
Selection, training and staffing of a security force; security devices available, techniques of internal security; ground security; security techniques applicable to personnel selection; legal problems. (PR: CJ 211)
- 521 **Corrections and the Law.** 3 hrs.  
Review of criminal law principles and theory as related to corrections. (PR: CJ 231 or permission)
- 522 **Law of Evidence.** 3 hrs.  
Leading rules and principles of exclusion and selection; burden of proof, nature and effect of presumptions; proof of authenticity and contents of writings; examinations, competency and privilege of witnesses. (PR: CJ 321 or permission)
- 525 **Juvenile Justice Administration.** 3 hrs.  
A survey of the process (the police, the courts and corrections) through which the juvenile delinquent passes. (PR: CJ 321 or permission)
- 531 **Criminal Rehabilitation.** 3 hrs.  
Legal and historical background of rehabilitation; roles of correctional workers; and nature of the rehabilitation process. (PR: CJ 231 or permission)
- 532 **Correctional Institutions.** 3 hrs.  
Analysis of the theory of organizations and administration of correctional institutions; principles of institutional corrections. (PR: CJ 231 or permission)
- 533 **Correctional Administration.** 3 hrs.  
Objectives of correctional institutions; records; personnel, program development, security; educational programs. (PR: CJ 231 or permission)
- 580-583 **Special Topics in Criminal Justice.** 1-4; 1-4; 1-4; 1-4 hrs.  
A study of special interest criminal justice topics under the supervision of a qualified faculty member. (PR: Consent of instructor)
- 585-588 **Independent Study.** 1-4; 1-4; 1-4; 1-4 hrs.  
This course permits the student to undertake supervised research (field or library) in any area where there is no appropriate course. (PR: Consent of instructor)
- 590 **Internship.** 1-6 hrs.  
The placement of an individual into a criminal justice agency (police, probation, courts, jails) to observe and participate in its operation. Grading is CR/NC. (PR: Consent of instructor)
- 601 **Seminar in Criminal Justice.** 3 hrs.  
A forum to acquaint students, faculty and guests with each others' research and experiences in dealing with criminal justice issues.
- 602 **Law and Social Control.** 3 hrs.  
An examination of the nature of law and crime with a view towards determining the nature of control of social behavior by the legal system.
- 603 **Criminal Justice Planning.** 3 hrs.  
A systematic review of procedures to plan and evaluate criminal justice organizations and their operations.
- 604 **Advanced Theory in Criminal Justice.** 3 hrs.  
Course is designed to provide the student already familiar with the basic concepts of criminological theory the opportunity to examine in depth a selected set of theories (PR: CJ 504, its equivalent, or permission of instructor)

- 605 **Juvenile Delinquency. 3 hrs.**  
Juvenile delinquency in the modern world; nature, extent, causes, treatment, and control.
- 620 **Criminology. 3 hrs.**  
Seminar in crime and delinquency. (Same as SOC 620)
- 621 **Advanced Criminal Law and Procedure. 3 hrs.**  
A review of contemporary legislation and court decisions relating to criminal law and procedure. (CJ 322 or permission)
- 632 **Community Corrections. 3 hrs.**  
A survey of probation, parole, pre-release centers, halfway houses and other forms of community corrections as elements of a total correctional system. Historical development, contemporary organization, and legal issues are emphasized.
- 651 **Comparative Criminal Justice. 3 hrs.**  
A comparative study of criminal justice systems in other countries. The course may center on either law enforcement agencies, court systems, or correctional institutions
- 655 **Research Methods in Criminal Justice. 3 hrs.**  
Elements of scientific research; interaction between research and theory; use of data processing resources. (PR: Undergraduate Statistics Course and Permission)
- 656 **Applied Statistics in Criminal Justice. 3 hrs.**  
Principles of statistical techniques with emphasis upon their application in the Criminal Justice system. (PR: Undergraduate statistics course and permission)
- 679 **Problem Report. 3 hrs.**  
The preparation of a written report on a research problem or field study in Criminal Justice. (PR: CJ 655 and Permission)
- 681 **Thesis, 1-6 hrs.**

**ECONOMICS (ECN)**  
(See Business)

**EDUCATIONAL LEADERSHIP STUDIES (EDA)**

Requirements for the Master's Degree in Educational Leadership Studies, and for WVSDE certification may be obtained from the office of Educational Leadership, Jenkins Hall, Room 238, or by calling (304) 696-6430. You may also contact the EDLS Homepage at: <http://www.marshall.edu/edulead/eda/EDA.html> or E-mail your request to: [lanham@marshall.edu](mailto:lanham@marshall.edu).

The EDLS program in the College of Education and Human Services offers an interdisciplinary Master's option (Administrative Specialist) and a post Master's degree of Education Specialist (EdS). Each program requires 36 credit hours. Both programs carry an emphasis in **Educational Leadership and Policy Studies**.

Students may apply for either of these degree programs by contacting the graduate school office and requesting admittance to the Educational Leadership Studies program. Upon being admitted to the program in EDLS, the student will be assigned an advisor. The student and the advisor will develop a program which meets the expectations of the student, the EDLS program, and the University academic requirements.

**DOCTORAL DEGREE IN EDUCATIONAL LEADERSHIP**

Through a cooperative arrangement with West Virginia University it is possible to complete the requirements for a Doctoral Degree in Educational Leadership from WVU while attending Marshall.

Students who are interested in obtaining information concerning the Doctoral Degree in Educational Leadership in either Public School or Higher Education Administration, may do so by contacting the addresses listed above.

**EDUCATIONAL LEADERSHIP STUDIES (EDA)**

- 500 **General School Administration: Basic Course. 3 hrs.**  
This is the introductory course in Educational Administration. Its purposes are: (1) to familiarize the student with content of knowledge related to the administration of large organizations, (2) to provide activities for the development of administrative skills, and (3) to help the student develop a self concept which will enable him/her to feel comfortable with a leadership role. (PR: One year teaching experience)
- 505 **The Teacher and School Administration. 3 hrs.**  
Background of the fundamentals of school administration for the classroom teacher. Not acceptable in administrative programs and not open to students who have completed Educational Administration.
- 560-563 **Professional Development. 1-4 hrs.**  
Courses and activities designed to meet the specific inservice needs to public school administrators. Credit in these courses may be used for certificate renewal and salary upgrading but not in degree programs. CR/NC grading.

- 580-583 **Special Topics.** 1-4 hrs.
- 585-588 **Independent Study.** 1-4 hrs.
- 600 **Staff Personnel Administration.** 3 hrs.  
Recruitment, selection, orientation, education, professional growth and staff differentiation of personnel will be considered. (PR: EDA 500)
- 610 **Supervision of Instruction: Basic Course.** 3 hrs.  
Principles; procedures used in improving instructional program in schools. Course content is adjusted to the needs of either elementary or secondary school principals.
- 630 **School Community Relations.** 3 hrs.  
Basic principles, rationale and need for a school-community relations program. Roles of the various participants, structure and form of an effective program. Communication theory and practice and community involvement are emphasized.
- 631 **Gender and Education,** 3 hrs.  
The course focuses on gender relations in education and schooling. The course addresses gender in relation to curriculum and knowledge, pedagogy and instructional arrangements, and administration and policy issues. (PR: EDF 621 or equivalent)
- 640 **School Business Management.** 3 hrs.  
Development of the basic skills involved in school business management. Includes personnel, finance, budgeting, purchasing, school lunch program, pupil transportation, plant maintenance and operation, and federal programs.
- 642 **School Law,** 3 hrs.  
The legal basis of education in the United States in constitutions, statutes, court decision, and in administrative ruling and practices with some emphasis on West Virginia.
- 650 **Field Based Experience.** 3; 3 hrs. I (650), II (655)  
Investigations in current problems of local schools; content determined by needs of students. CR/NC: grading. (PR: Permission of instructor)
- 666 & 667 **Professional Practice in Supervision.** 3; 3 hrs.  
On-the-job practice of techniques in theory courses. Full responsibility for supervisory program in a school system. Student must hold a supervisory position. (CR/NC. (PR: EDA 660-665))
- 679 **Problem Report.** 1-3 hrs.  
The preparation of a written report on a research problem, experiment or field project in education. This report is not a thesis.
- 681 **Thesis.** 1-6 hrs.  
May be taken for 3 hours of credit by students whose reports in 679 were excellent and are of such character as to warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 26 hours of credit. Students completing 681 must defend their thesis in an oral examination.
- 685 **Advanced Supervision of Instruction.** 3 hrs.  
Duties of the school supervisor with emphasis on needs assessment process, curriculum development, in-service education and the process of change.
- 690 **Decision Making, Planning and Evaluation in Educational Administration.** 3 hrs.  
The study of alternative planning and evaluation methods and their application to decision-making in educational institutions. Provides a comprehensive analysis of personnel evaluation including observation, conference, and follow-up procedures. (PR: EDA 500 and 621)
- 695 **Practicum: The School Principal.** 3 hrs.  
Practical application of concepts, theory, and information acquired in the principal program courses using discussion, individual and group activities and simulation/games. (PR: All principal's required courses)
- 700 **Superintendency.** 3 hrs.  
The examination of the technical, human, and conceptual roles, relationships, behaviors and competencies which characterize school superintendents and their staffs. (PR: EDA 500 or 715)
- 705 **Administration Theory.** 3 hrs.  
Analysis of administration theories and their application to organizational leadership and management.
- 710 **Advanced Leadership Techniques.** 3 hrs.  
Leadership: A study of the characteristics and behaviors of leaders. Emphasis is upon the development of understandings and abilities which will work in different situations.
- 715 **Administration of Higher Education.** 3 hrs.  
This course will identify the various task areas of administration in higher education and the problems associated with them.
- 720 **General School Administration: Financial Aspects.** 3 hrs.  
Basic principles of school finance; taxation for school support; budgeting; accounting and auditing; insurance; excess levies and bond issues. (PR: EDA 500)

- 725 Organizational Analysis. 3 hrs.**  
An interdisciplinary approach to the study of organizational structure, relationships, and functions. Will focus on problems and alternatives for coping with them.
- 730 General School Administration: Plant and Equipment. 3 hrs.**  
The use of the school building survey and educational specification are studied in relation to how the building may enhance the educational program. Some field trips are taken to exemplary school buildings. (PR: EDA 500)
- 735 Computer Applications in Education Administration. 3 hrs.**  
Computer applications in decision making in educational institutions. (PR: M.A. incl. EDA 500 and EDF 517, or permission of instructor)
- 742 Educational Law and Policy. 3 hrs.**  
The course provides all administrators with learning experiences in the area of law and policy for their future roles as leaders.
- 745 Higher Education Law. 3 hrs.**  
The legal basis of higher education in the United States as based on constitutions, statutes, court decisions, and administration of colleges and universities.
- 750-751 Field Based Superintendent Experience. 3; 3 hrs.**  
The student is required to demonstrate competence in curriculum, research, law, finance, and school plans. The course will be conducted in the student's system and by seminar. CR/NC grading.
- 755 Current Issues in Higher Education. 3 hrs. II, odd years**  
Focuses on current and emerging problems of higher education. Deals with both societal and internal factors which impinge on the administration of colleges and universities.
- 765 Higher Education Finance. 3 hrs.**  
Focus on sources of revenue, budgeting, and accounting for higher education finances.
- 775 Seminar. 2-3 hrs.**  
A guided program of readings, reports and discussions. No student may register for this course a second time. (PR: Permission of instructor)
- 790 Research Colloquium in Educational Administration. 3 hrs.**  
Identification of research problems in education, consideration of alternative designs and methods of investigations, and development of a research proposal at the advanced graduate level. (PR: EDA 735 and EDF 517)
- 795 Literature. 1-3 hrs.**  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of adviser. Only one registration for Educational Administration 795 is permitted. May not be substituted for scheduled courses without approval of the department chairman. (PR: Permission of instructor)
- 797 Doctoral Research. 1-12 hrs.**  
Research. (PR: Consent)

## EDUCATION-CURRICULUM AND INSTRUCTION (CI) (Teacher Education)

The undergraduate prerequisite for a graduate major is 21 semester hours in Professional Education. Obtaining a teaching certificate by passing the National Teacher Examination does not exempt the applicant from the undergraduate Professional Education course requirements. College graduates who do not meet this requirement may take a limited number of graduate courses in education concurrently with the undergraduate courses required for certification.

To be admitted to candidacy for the master's degree students must:

1. Earn a 3.0 grade point average in at least 12 semester hours of graduate work presented for the degree. To be considered for such admission, the student must have earned quality point average of 3.0 (B) in all graduate work.
2. Complete Educational Foundations 621 or an equivalent course.
3. Have a professional teaching certificate valid in West Virginia or the equivalent.
4. Must have completed Graduate Record Examination.

All students shall earn a minimum of twelve credit hours after admission to candidacy.

Teachers with a master's degree who wish to qualify for additional certification or endorsement must apply for admission to the program selected and meet the admission requirements of that program.

Graduate Students who wish to strengthen their preparation in Early Childhood Education should take the five required graduate courses in Elementary Education (CI 609, EDF 560, EDF 616, EDF 621, and EDA 505) and the following courses: CI 511, CI 630, CI 631, CI 632, CI 633, CI 634 and CI 672 (A performance Assessment in lieu of CI 672 is available for those who have had at least three years of elementary teaching experience.)

## A. ELEMENTARY EDUCATION

	Hours
Minimum requirements .....	32-36
1. Education .....	27-36
a. Educational Administration 500 or 505 .....	3
b. Educational Foundations 560, 616, 621 or 625 .....	9
c. Curriculum and Instruction 609 .....	3
d. Electives (All elective courses must be approved by the advisor prior to enrollment) .....	12-21

Select from the following courses:

Educational Foundations 502, 515, 535, 615, 619

Curriculum and Instruction 501, 503, 505, 517, 518, 530, 557, 618, 623, 624, 631, 635, 636, 656, 657, 660, 670, 671, 675, 678, 679; other courses including outside education courses may be considered through agreement of the student advisor.

## B. SPECIAL EDUCATION

For endorsement of teachers with professional certificates for teaching special education pupils. Students without a background in education must acquire certification in regular education prior to endorsement in Special Education, except for the Preschool Handicapped endorsement. In some Special Education areas students with a background in education should anticipate additional study. A minimum grade of 3.0 (B) is required in C&I 520 prior to admission to any program in Special Education.

	Hours
Minimum requirements .....	36
1. General Education (Preschool Handicapped see #4) .....	21
a. Educational Foundations 616, 621 or 625 .....	6
b. Educational Administration 505 .....	3
c. Curriculum and Instruction 520, 535, 626, 629 .....	12
2. Special Education select one area of emphasis	
a. Behavioral Disorders	
Curriculum and Instruction 524, 645, 649 .....	9
b. Mentally Impaired**	
Curriculum and Instruction 533, 553, 651 .....	9
c. Specific Learning Disabilities**	
Curriculum and Instruction 523, 646, 647 .....	9
d. Physically Handicapped**	
Curriculum and Instruction 529, 531, 532, 648.12	
e. Gifted	
Curriculum and Instruction 526, 601, 602, 603 .12	
3. Electives .....	6
Teachers with Secondary Education Degrees wishing Certification in Learning Disabilities, Mentally Impaired or Physically Handicapped may pursue the Alternate Special Education Certification Program, inquire in the College of Education Dean's Office.	
4. Preschool Handicapped	
a. General Education	
Educational Foundations 621 .....	3
Curriculum and Instruction 629 .....	3
b. Early Childhood Education	
Curriculum and Instruction 632 and 634 .....	6
c. Special Education	
Curriculum and Instruction 520, 529, 554, 661, 663, 665, 666, 673, 674 .....	27
TOTAL .....	39

## C. MIDDLE CHILDHOOD CERTIFICATION

Public school teachers needing to add a middle childhood certification may do so by taking CI 501, CI 503, completing requirements for the 5-8 specialization, passing the Praxis II, and completing a performance assessment in a middle school setting. Performance assessments will be done only for those teachers with three years teaching experience.

## D. READING EDUCATION

For teachers who wish to have a professional certificate endorsed for serving as reading specialist in kindergarten through grade 12.

Minimum requirements ..... 36

1. Curriculum and Instruction 501 or 609 or 610, 613 or 614, 621, 636, 637, 639, 642, 643, and 644
2. Educational Foundations 517 or 535, 619, and 621

**E. SECONDARY SCHOOL**

(For programs in art, music, reading, and special education, refer to Sections E, G, H, and D, respectively).  
 For library science see Instructional Technology and Library Science (ITL).

Teachers eligible for the following programs must have, before completing the requirements for the master's degree, professional certificates valid for grades five through twelve or must be teaching in a junior high or middle school and be certified to teach grades one through nine. The latter must complete Curriculum and Instruction 501.

**SECONDARY EDUCATION**

A program open to teachers of all subject areas at the middle school, junior high and senior high school levels. Student programs are planned on an individual basis according to the background and interests of the individual. You will have a chance to work closely with the secondary education advisor in developing and scheduling your program. If you wish to discuss the specific requirements of the program before applying for admittance to graduate school see the program coordinator of secondary education.

The course work consists of professional education courses designed to increase the teacher's professional skills and to give them more professional choices and also personalize the masters program; see item 4 below.

Hours

Minimum requirements ..... 36

1. Humanistic and Behavioral Sciences ..... 3-9
  - a. EDF 616 Advanced Studies in Human Development
  - b. Electives to be selected from:  
EDF 560, 619, EDA 610, CI 520, or CI 521
2. Theory Relevant to the program ..... 12-21
  - a. CI 610 Curriculum in the Modern Secondary School or CI 501 Middle Childhood Curriculum, on advice of the advisor
  - b. CI 623 Instructional Models and Assessment Techniques
  - c. CI 624 Advanced Instructional Strategies
  - d. CI 641 Seminar in Education
  - e. Electives with advisor approval
3. Research and Measurement ..... 3-9
  - a. EDF 621 Research and Writing or EDF 625
  - b. Elective EDF 517 and/or EDF 535
4. Options for an Area of Concentration ..... 12-18
  - a. Content courses in the teaching specialization(s) - The student may select 12-18 hours in his/her teaching specialization(s).
  - b. Middle Childhood courses - The student may select 12 hours in middle childhood education and may receive certification by including CI 501 and CI 503 among the 12 hours and completing a performance assessment.
  - c. Education of the Gifted - Students may take 18 hours of classes in the education of the gifted and receive certification in education of the gifted.

**MASTER OF ARTS IN TEACHING**

The Master of Arts in Teaching degree (MAT) is designed for college graduates from liberal arts, fine arts, business, and other professional fields, excluding education. The MAT combines the academic content of an undergraduate degree with graduate professional education and clinical experiences. This combination of educational experiences is designed to prepare an individual for the teaching profession. The intent of the program is to provide an alternative and accelerated means to prepare individuals to teach. Program completion culminates in a Master's Degree. Recommendation for certification typically takes place at the same time, unless there are West Virginia Department of Education requirements that are still pending.

Individuals interested in obtaining more information regarding this program should contact the chair, Division of Teacher Education.

**Admission to Candidacy**

Students must apply for candidacy after completing 12 and before completing 18 hours of graduate work.

**Admission to candidacy requires that the student:**

1. Earn 3.0 GPA in all graduate work.

2. Complete EDF 621.
3. Take the GRE (Graduate Record Examination).

## COURSE REQUIREMENTS

### Program Option - Grade K-12

Foundations of Education	12 Hours
EDF 621 or 625, PE 670, ITL 621, or VTE 570, Research and Writing .....	3
EDF 560, 565, or 615 - Social and Cultural Foundations .....	3
EDF 616 - Advanced Studies in Human Development .....	3
Clinical Experience I - Lab to accompany EDF 616	
EDF 619 - Educational Psychology .....	3
Curriculum and Instruction	18 Hours
CI 503, Method and Materials of Teaching in the Middle Childhood Grades .....	3
CI 521, Behavioral Characteristics of Exceptional Children .....	3
CI 623, Instructional Models and Assessment Techniques .....	3
Clinical II - Lab to accompany CI 623	
CI 624, Advanced Instructional Strategies .....	3
CI 631, Current Influences on Early Childhood .....	3
CI 644, Teaching Content Reading .....	3
Supervised Student Teaching .....	6 Hours
CI 672, Clinical Practicum III	
In addition to the above courses students must complete all courses in their teaching specialization.	
TOTAL	36 Hours

### Program Option - Grade 5-12

Foundations of Education	12 Hours
EDF 621 or 625, PE 670, or ATE 677, Research and Writing .....	3
EDF 560, 565, or 615, Social and Cultural Foundations .....	3
EDF 616, Advanced Studies in Human Development .....	3
Clinical Experience I - Lab to accompany EDF 616, CR EDF 270	
EDF 619, Educational Psychology .....	3
Curriculum and Instruction	18 Hours
CI 501, Middle Childhood Curriculum .....	3
CI 503, Methods and Materials of Teaching in the Middle Childhood Grades .....	3
CI 521, Behavioral Characteristics of Exceptional Children .....	3
CI 623, Instructional Models and Assessment Techniques .....	3
Clinical II - Lab to accompany CI 623, CR CI 470	
CI 624, Advanced Instructional Strategies .....	3
CI 644, Teaching Content Reading .....	3
Supervised Student Teaching .....	6 Hours
CI 672, Clinical Practicum III .....	6
In addition to the above courses students must complete all courses in their teaching specialization.	
TOTAL	36 Hours

### Program Option - Grade 9-12

Foundations of Education	12 Hours
EDF 621 or 625, PE 670, or ATE 677, Research and Writing course in content area in which student is to be certified .....	3
EDF 560, 565 or 615, Social and Cultural Foundations .....	3
EDF 616, Advanced Studies in Human Development .....	3
Clinical Experience I - Lab to accompany EDF 616, CR EDF 270	
EDF 619, Educational Psychology .....	3
Curriculum and Instruction	12 Hours
CI 521, Behavioral Characteristics of Exceptional Children .....	3
CI 623, Instructional Models and Assessment Techniques .....	3
Clinical II, Lab to accompany CI 623, CR CI 470	
CI 624, Advanced Instructional Strategies .....	3
CI 644, Teaching Content Reading .....	3
Approved Electives (selected from content area in which student is to be certified) .....	8-9 Hours
Supervised Student Teaching .....	6 Hours
In addition to the above courses students must complete all courses in their teaching specialization.	
TOTAL	38.39 Hours



## EDUCATION SPECIALIST PROGRAM (Ed.S.)

### Introduction

The Education Specialist Degree is earned by completion of specified course work and experiences, and with the recommendation of the student's advisory committee.

### Objectives

The following objectives may be met by the program of studies leading to the certificate.

1. Give directed study for courses leading to salary classification M.A. + 15 and M.A. + 30.
2. Extend the applicant's teaching and professional skills.
3. May lead to additional endorsements (if directed in this way).
4. Prepare the applicant for additional roles such as department chairperson, curriculum planner, lead teacher, teacher education associate, etc.

### Entrance Requirements

1. Possess M.A. in education.
2. Be admitted to the Marshall University Graduate School.

### Admission and Program Activities

1. Apply for admission on forms provided by the Dean of Graduate School, Marshall University, Huntington, WV 25701.
2. Following admission the student will:
  - a. Select an advisory committee to help plan and develop his program (minimum of three members). The student will first choose an advisor with whose help the additional members of the committee will be chosen.
  - b. The student's advisory committee may include a member outside the department if the professional objectives call for such.
  - c. Submit a letter of intention, indicating the objectives the student has in mind for pursuing the two-year program.
3. All additional work required for completion of the program shall be determined by the student in consultation with the advisory committee. Courses may be selected outside the field of education with the approval of the advisory committee. The number of hours to be completed beyond the M.A. will be 30-36. The program of studies adopted by the student and the committee shall be filed with the graduate dean and the chairman of the department and shall include the following:
  - a. A minimum of one three semester hour course in curriculum development or curriculum assessment at both the elementary and secondary levels - CI 501, 609, 610, 615, 635 - 6 hours.
  - b. A minimum of one three hour course in the history and/or philosophy of education - EDF 560, 615 - 3 hours.
  - c. A minimum of one three hour course in instructional strategies and/or instructional models - CI 618, 623, 624, EDF 619, or other advanced methods at option of committee - 3 hours.
  - d. A minimum of one three hour course in Human Growth and Development - EDF 616 - 3 hours.
  - e. Electives to complete program objectives.
4. A laboratory, practicum, internship or similar experience is required in all programs. This requirement may be met by inservice teachers and other professional school personnel having a minimum of one year experience.
5. Other departments will be consulted relative to courses that will be useful in helping the student meet his objectives.
6. Transfer of credit from other graduate schools to be applied toward the two-year program shall be left to the discretion of the student's advisory committee.
7. The research and theory requirement for the two-year program shall be determined by the student's advisory committee in terms of the research already completed and the student's objectives which necessitate advanced research projects.
8. At least ten weeks of full-time residence study is required.
9. The student shall be required to take either a written comprehensive examination, or a general oral examination in keeping with his planned objectives. These examinations will be given under the supervision of the advisory committee as the final step in completing the two-year program. Upon the completion of the two-year program, the student will be awarded a Marshall University Certificate of Education Specialist.

10. A thesis may be written by the student. The total number of hours may be reduced by the student's committee up to a maximum of six hours. (See item no. 7.)

## G. ADDITIONAL CERTIFICATION FOR TEACHERS

Teachers with at least three years teaching experience, who want to add another teaching specialization, may do so by completing the course requirements and a performance assessment at the appropriate grade level. For additional information contact the chair, Division of Teacher Education.

### CURRICULUM AND INSTRUCTION (CI)

- 501 **Middle Childhood Curriculum. 3 hrs. I, II, S.**  
The study of procedures for creating a functional middle childhood curriculum with emphasis upon the needs of middle childhood learners.
- 503 **Methods and Materials of Teaching in the Middle Childhood Grades. 3 hrs. I, II, S.**  
The study of methods appropriate for teaching in the middle childhood grades and the production and utilization of materials and resources in these grades. (PR: CI 501)
- 511 **Analysis of Teaching in Early Years. 2 hrs.**  
The analysis and appraisal of teaching strategies employed in the teaching of young children. (CR: CI 630)
- 517 **Comprehensive Classroom Discipline Techniques. 3 hrs.**  
Identification of common classroom discipline problems and techniques for dealing with behavioral incidents in school settings K-12.
- 518 **Classroom Motivation. 1-3 hrs. I, II, S.**  
Classroom motivation with an emphasis on theoretical constructs and practical applications for teachers of students from early childhood through adolescence.
- 520 **Special Education: Introduction to Exceptional Children. 3 hrs. I, II.**  
An introduction to the study of children who deviate from the average in mental, physical, and social characteristics, including a study of the characteristics of such children and the adaptation of educational procedures to their abilities and disabilities.
- 521 **Special Education: Behavioral Characteristics of Exceptional Children. 3 hrs. I, II, S.**  
Behavioral characteristics of children with exceptional development, dynamics of family- community interaction, and attitudes toward exceptional conditions. Implications for amelioration and educational planning. (Not for Special Education majors)
- 523 **Special Education: Introduction to Learning Disabilities. 3 hrs. I, II.**  
An integrated, concise overview of specific learning disabilities; definitions, etiology; observable and identifiable symptoms and implications for amelioration. (CI 520 or permission)
- 524 **Introduction to Emotional Disturbances. 3 hrs. II.**  
Characteristics of emotional-social disturbances in children; dysfunction in behavior, academic achievement, and social relationships, etiology and educational implications are presented. (CI 520 or permission)
- 526 **Introduction to the Gifted. 3 hrs.**  
An overview of giftedness in children, definitions, etiology, observable characteristics and implications for educational agencies. (CI 520 or Perm)
- 527 **Introduction to Autism. 3 hrs.**  
This is a lecture-discussion course designed to survey current autism definitions, rates of incidence conceptual models and educational designs relating to autistic children, youth, and adults. (PR: Permission)
- 529 **Introduction to the Physically Handicapped. 3 hrs. I.**  
An introduction to the characteristics and needs of crippled and other health impaired children. The medical aspects of physically handicapping conditions are considered. (PR: CI 520; CR: Field Experience)
- 530 **Computer Software and Methodology in Education. 3 hrs.**  
This course is designed for inservice teachers who want to become familiar with how to use the microcomputer to improve their instruction.
- 531 **Education of the Physically Handicapped. 3 hrs. II, S.**  
Principles and current trends in the teaching of crippled and other health impaired children. Curriculum development for teaching physically handicapped children as well as various methods and materials used in their education. (PR: CI 520)
- 532 **Curriculum and Methods for the Severely and Multiply Handicapped. 3 hrs. I, II, S.**  
A review of curriculum development and methods used to teach severely and multiply handicapped persons. Evaluation techniques, program development, adaptation of materials and equipment and teaching methods are presented. (PR: CI 520; CR: Field experience)
- 533 **Special Education: Introduction to the Mentally Retarded. 3 hrs. I, S.**  
Acquaints teachers with the characteristics and needs of the mentally retarded child. The status of the

mentally retarded in our society and the impact of mental retardation on education. (PR: CI 520. CR: Field experience)

- 535 **General Special Education Programming. 3 hrs., I, II, S.**  
Address the educational/curricular needs of students with mild learning problems in the categorical areas of mental retardation, behavior disorders, and specific learning disabilities. (PR: CI 320/520 and 433/533 or 423/523 or 424/524 or permission of instructor)
- 549 **Classroom Management Techniques for Secondary and Middle Childhood Teachers. 3 hrs.**  
Classroom management with an emphasis on practical techniques for dealing with management problems in secondary and middle school settings.
- 553 **Special Education: Curriculum and Methods for the Mentally Retarded. 3 hrs. I, II.**  
Principles and current trends in curriculum development are reviewed and evaluated toward the development of specific curricula for the mentally retarded. Methods and materials are presented in relation to this development. (PR: CI 520 and 533)
- 554 **Working with Families of Exceptional Students. 3 hrs. I, II.**  
Principles and information designed to give the student an understanding of the needs and rights of parents of exceptional children and techniques to involve parents successfully in their child's education.
- 557 **Elementary Education: Teaching Contemporary Mathematics. 3 hrs.**  
Application of modern methods and techniques in the implementation of a contemporary elementary mathematics program.
- 559 **Multicultural Influences in Education: Materials and Techniques. 3 hrs. I, S.**  
Multicultural education with an emphasis on methods and materials for teaching students from diverse cultural backgrounds.
- 560-564 **Professional Development: (Identifying content title to be added). 1-4; 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.**  
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not in degree programs. CR/NC grading.
- 580-583 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.**
- 585-588 **Independent Study. 1-4 hrs. I, II, S.**  
Permission of Chair, GPA 3.0 to take class, limit of 6 hrs. of Ind. Study to be used in Masters Program in the Division of Teacher Education.
- 591-594 **Workshop. 1-4 hrs.**  
A study of practical applications in teacher education and related fields for advanced students and professionals. Experience in new techniques and application of new knowledge.
- 597-598 **Instructional Television Course. 1-4 hrs.**  
A course based upon Instructional Television Series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements announced by the department.
- 600 **Grant Writing in Special Education. 3 hrs.**  
A review of the federal and state guidelines for writing grants in Special Education. The priority areas of special education in which monies are currently available will also be examined.
- 601 **Psychological Foundations of Giftedness. 3 hrs.**  
A study of measures used to identify the gifted and interpretation of results, psychological development of the gifted and psychological pressures, problems and adjustments strategies towards mental health in the gifted child. (PR: CI 520)
- 602 **Education of the Gifted. 3 hrs.**  
Educational models, identification techniques, teaching strategies and resources available for gifted children. Current trends in curriculum development for the gifted are also examined. (PR: CI 526)
- 603 **Field Experience: Gifted. 3 hrs.**  
Supervised experiences (one semester) in field work with children who exhibit potential giftedness. (PR: CI 520, 526, and 602 and permission of instructor)
- 604 **Practicum in Emotional Disturbances. 3 hrs., II, S.**  
An initial participation and observation experience with children experiencing behavior problems. Course evolves around bi-weekly seminar and selected projects. (PR: CI 520 and 524 and permission)
- 609 **Elementary Education: Curriculum in the Modern Elementary School. 3 hrs. I, II, S.**  
Examination of traditional and current assumptions undergirding the modern elementary school curriculum with emphasis on converting theoretical bases into plans for curriculum change and modernization.
- 610 **Secondary Education: Curriculum in the Modern Secondary School. 3 hrs. II, S.**  
Analysis of the social and political factors which affect secondary school curriculum with emphasis upon trends and developments in high schools today.
- 613 **Reading Methods. (K-8): Literature and Skill Development. 3 hrs.**  
An examination of teaching methods and of children's literature that are conducive to promoting permanent interests, skills, and interests in reading for ECE and MCE.

- 614 **Reading Methods (9-Adult): Literature and Skill Development. 3 hrs.**  
Analysis of the roles of the teacher in developing a reading program for the late adolescent and adult. The utilization of children's literature as a medium for bridging the content fields with the process of reading will be a major concept that will be utilized.
- 618 **Elementary Education: Informal Learning in Primary and Middle Schools. 3 hrs.**  
Informal learning in the primary and middle school with emphasis on the significance of natural child development, learning through games and play, and the British model for infant and junior schools, and related activities for the middle years (ages 10-14) in middle school settings.
- 619 **Reading Leadership: Roles, Responsibilities, and Problems. 3 hrs. S.**  
Analyses of administrators/supervisor's roles, responsibilities, problems, and practices in reading programs K-12. Presents practical solutions for problems encountered in a comprehensive reading program.
- 621 **Current Issues and Problems in Reading. 3 hrs.**  
A seminar course especially designed to explore problems and issues in reading, K-12. Professional literature, empirical research, and practical experience will be used to identify problems and solutions.
- 623 **Instructional Models and Assessment Techniques. 3 hrs. I, S.**  
Selected teaching models are analyzed with implications for the role of the teacher; assessment of influences of the teacher.
- 624 **Advanced Instructional Strategies. 3 hrs. II, S.**  
Performance-based laboratory experiences in a micro-teaching laboratory development of a personalized teaching repertoire.
- 626 **Special Education: Diagnostic-Clinical Practices. 3 hrs. I, II, S.**  
Team approach to diagnosis and treatment of exceptional children. (PR: CI 520)
- 629 **Special Education: Seminar 3 hrs. I, II, S.**  
Research methods and current significant findings in special education. Guest speakers. Advanced special education students only.
- 630 **Early Childhood Education: Practicum in Kindergarten Education. 4 hrs. I, S.**  
Supervised experience in teaching kindergarten with a concurrent seminar in organization and administration. (CR: CI 511)
- 631 **Early Childhood Education: Current Influences on Early Childhood Education. 3 hrs. I, S.**  
A study of recent findings in the behavioral sciences and their implications for early childhood education.
- 632 **Early Childhood Education: Early Childhood Programs. 3 hrs. II, S.**  
An examination of past and present programs for young children with opportunity provided for curriculum development. (PR: CI 631)
- 633 **Early Childhood Education: Adult Involvement in Early Education. 3 hrs. II, S.**  
Ways of communicating and involving paraprofessionals, parents, volunteers, staff in the education of young children. (CR: CI 632)
- 634 **Language and Cognition in Early Childhood. 3 hrs. II, S.**  
Examination of selected studies in language acquisition and cognitive development of children from birth to eight years of age.
- 636 **Modern Developmental Reading Program. 3 hrs. I, S.**  
Principles and practices of teaching developmental reading. (PR: CI 343 for elementary majors; 445 for secondary majors)
- 637 **Reading Education: Diagnosis and Correction of Reading Difficulties. 3 hrs. II, S.**  
Study and the causes of reading difficulties, diagnostic devices and techniques, and remedial methods and materials. (PR: CI 636 or 644)
- 639 **Reading Education Seminar: Planning, Organizing and Supervising a Reading Program. 3 hrs. II, S.**  
This course is designed as an in-depth study and analysis of the planning and organizing of reading programs at various administrative levels. (PR: CI 643)
- 640 **Literature. 1-3 hrs. I, II, S.**  
A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of advisor. Only one registration for Curriculum and Instruction 640 is permitted. (PR: Permission of chair)
- 641 **Seminar. 3 hrs. I, II, S.**  
A guided program of readings, reports and discussions. No student may register for this course a second time. (PR: Permission of chair)
- 642 **Reading Education Seminar: Reading Instruction for Individuals with Special Needs. 3 hrs. I, S.**  
Study of research findings, methodology and instructional materials for atypical learners, illiterate adults and others. (CR: Curriculum and Instruction 643)
- 643 **Practicum in the Diagnosis and Correction of Reading Difficulties - Elementary and Secondary. 3 hrs. I, S.**  
Clinical experiences in the diagnosis and corrective treatment of reading disabilities. (PR: CI 637)

- 644 **Teaching Content Reading. 3 hrs. I, II.**  
Principles underlying the teaching of reading in the content fields.
- 645 **Special Education: Education of Persons with Emotional Disturbances. 3 hrs. II, S.**  
Recognition of emotional-social, disturbances, assessment of educational needs, establishment of programs to implement behavioral change and provide necessary modification in educational programs to remediate learning and behavioral difficulties of children. (PR: CI 520 and 524)
- 646 **Special Education: Field Experiences: Learning Disabilities. 3 hrs. S.**  
Supervised experiences of one semester in field work with children or youth who exhibit symptoms of problems in learning. (PR: CI 523, 647, and permission of instructor)
- 647 **Special Education: Education of the Learning Disturbances. 3 hrs. I.**  
Theories, diagnosis, and teaching strategies concerning children who exhibit symptoms of any or several learning disabilities. (PR: CI 520 and 523)
- 648 **Field Experience: Physically Handicapped. 3 hrs. I, II.**  
Teaching under supervision in cooperating public schools. (PR: CI 529 and CI 520 and permission)
- 649 **Special Education: Field Experiences: Emotional Disturbances. 3 hrs. II, S.**  
Supervised field experiences (one semester) working with children who exhibit symptoms of emotional disturbances-behavioral disorders. (PR: CI 520 and 524 and permission)
- 650 **Special Education: Diagnostic Evaluation and Prescriptive Teaching Techniques. 3 hrs. I, II.**  
Educational assessment and diagnostic evaluation for remediation-amelioration; advanced course for providing understanding and utilization of evaluation, teacher assessment, and analysis for programming for exceptional individuals. (PR: CI 520 and 626)
- 651 **Special Education: Field Experience: Mental Retardation. 3 hrs. S.**  
All-day supervised teaching in special classes in the public schools required of all students who are completing curriculum for teachers of mentally retarded children. (PR: Perm)
- 656 **Elementary Education: Teaching Language Arts. 3 hrs. S.**  
A unified Reading-Language instructional approach to develop a basic understanding of reading- language related principles derived from disciplines, research, and innovative classroom practices.
- 657 **Elementary Education: Advanced Techniques in Teaching Elementary Mathematics. 3 hrs. II, S.**  
Historical, social, psychological, and philosophical foundations of mathematics education; investigation of current trends and issues in contemporary programs. (PR: CI 300 or 557)
- 660 **Using Computers to Improve Instruction in the Classroom. 3 hrs.**  
This course is designed for inservice teachers who are familiar with the "BASIC programming" language and who want to learn how the microcomputer can be utilized in a content area. (PR: CI 530)
- 661 **Introduction to Preschool Special Education. 3 hrs.**  
An overview of early childhood special education programs including historical events, legislation, the population served, program models and components and current issues and trends. (PR: CI 520)
- 662 **Instructional Characteristics of Autism. 3 hrs.**  
A lecture-discussion course, designed to provide students with an understanding of the learning characteristics of autistic children and research-based instructional techniques for teaching and managing behavior. (PR: CI 427 or 527)
- 663 **Developmental Issues in Preschool Special Education. 3 hrs.**  
An examination of the normal development of young children, the interrelated effects of impairment in various areas of development and strategies for intervention. (PR: CI 661)
- 664 **Practicum in Autism. 3 hrs. I, II.**  
This course contains two components: a competency-based practicum experience with autistic students and a seminar with regular discussions and readings on practical issues concerning the education of autistic children. (PR: CI 427 or 527 and 662)
- 665 **Assessment in Preschool Special Education. 3 hrs.**  
An overview of issues in the identification, screening and assessment of young handicapped children, specific assessment techniques for working with families and interdisciplinary teams in the assessment process. (PR: CI 663)
- 666 **Curriculum and Methods in Preschool Special Education. 3 hrs.**  
A review of curriculum development and methodology used to teach young children with handicaps. Evaluation techniques, program development and management, adaptation of materials and equipment and program models are presented. (PR: CI 665)
- 670 **Elementary Education: Teaching Social Studies in Elementary Schools. 3 hrs. I, II, S.**  
Materials and procedures for teaching social studies with emphasis on a survey of successful programs of instruction.
- 671 **Elementary Education: Advanced Techniques in Teaching Science. 3 hrs.**  
Intensive concentration on helping children inquire into the earth, physical, and biological sciences through modern methods and media. (REC: CI 307 or equivalent)
- 672 **Practicum in Education. 3-6 hrs.**  
Clinical Experience: Directed activity in a clinical setting. (PR: Permission)

- 673 **Field Experience: Preschool Special Education. 3 hrs.**  
Supervised participation and directed teaching activities in an early childhood special education program across ages, disabilities and severity levels. Activities with non-handicapped preschoolers are also required. (PR: CI 666)
- 674 **Practicum: Preschool Special Education. 3 hrs.**  
Supervised teaching in a variety of early childhood special education programs across ages, disabilities, and severity levels. Experiences with non-handicapped preschoolers are required. Specific competencies will be individually determined.
- 675 **Curriculum Theory. 3 hrs.**  
Analysis of the assumptions undergirding curriculum development. (PR: CI 501 or 609 or 610)
- 677 **Writing for Publication in Professional Education. 3 hrs.**  
For professional educators and students who wish to study and practice writing articles for publication in scholarly journals in the field of education.
- 678 **The Supervising Teacher. 3 hrs.**  
Duties and responsibilities of the teacher who supervises student teachers.
- 679 **Classroom Management for Elementary Teachers. 3 hrs.**  
This course is designed for elementary teachers. The content includes methods of managing the physical and social environment in the classroom.
- 681 **Thesis. 1-6 hrs. I, II, S.**  
Students completing 681 must defend their thesis in an oral examination.

#### EDUCATIONAL-FOUNDATIONS (EDF)

- 502 **Psychology of the Middle Childhood Student. 3 hrs.**  
A course in the study of developmental principles relating to the physical, cognitive, social, and moral development of the middle childhood student 10-14 years old.
- 510 **Contemporary Issues in Education. 3 hrs.**  
The impact of contemporary forces in education with emphasis on current educational issues.
- 515 **History of Modern Education. 3 hrs.**  
Our debt to the ancient Hebrews, Greeks, and Romans. Emphasis also is placed upon the movements since the beginning of the Renaissance.
- 517 **Statistical Methods. 3 hrs.**  
A foundation course in descriptive and inferential statistics as applied in education and the social sciences.
- 535 **Tests and Measurements. 3 hrs.**  
History, philosophy and elementary statistical methods for testing, measuring and evaluating pupil behavior are studied.
- 560 **Philosophy of Education. 3 hrs.**  
Surveys basic philosophy schools and concepts and their application to educational practice.
- 565 **Sociology of American Schools. 3 hrs.**  
American school organizational patterns interpreted sociologically; role of power and bureaucracy, social and cultural change, stratification and social mobility, and values; analysis of school rituals and ceremonies.
- 580-583 **Special Topics. 1-4 hrs.**
- 585-588 **Independent Studies. 1-4 hrs.**
- 615 **History of Education in the United States. 3 hrs.**  
Development of public and private educational systems in the United States.
- 616 **Advanced Studies in Human Development. 3 hrs.**  
The nature of human growth and development from infancy through adulthood.
- 617 **Multiple Regression Analysis. 3 hrs.**  
A first course in Multiple Regression Analysis and its application. Designed to be cross-disciplinary. Of interest to students in Education, the Social, Behavioral and Natural Sciences.
- 619 **Educational Psychology. 3 hrs.**  
Study of learning theories and their applications to teaching.
- 621 **Educational Research and Writing. 3 hrs.**  
Research methods, techniques, and their application to education.
- 625 **Qualitative Research in Education. 3 hrs.**  
Study of qualitative research methods: understanding historical and philosophical foundations of qualitative research and developing expertise in qualitative research strategies including participant observation, interviewing and inductive content analysis of data.
- 630 **Comparative Education. 3 hrs.**  
The study of the origins, nature, scope, basic literature and methodology of comparative education.
- 631 **Gender and Education. 3 hrs.**  
The course focuses on gender relations in education and schooling. The course addresses gender in relation to curriculum and knowledge, pedagogy and instructional arrangements, and administration and policy issues. (PR: EDF 621 or equivalent)

**635 Policy Studies in Education. 3 hrs.**

The course focuses on current policy issues facing educators today. The course offers conceptual and analytical tools for a critical examination of the uncertain political environment of schooling.

**640 Literature. 1-3 hrs.**

A program of reading, either extensive or intensive, and reports on a group of outstanding contributions to education; readings selected with guidance of advisor. Only one registration for this course is permitted. (CR: Permission of instructor)

**641 Seminar. 2-3 hrs.**

A guided program of readings, reports and discussions. No student may register for this course a second time.

**679 Problem Report. 1-3 hrs.**

The preparation of a written report on a research problem, experiment or field project in education. This report is not a thesis; students must complete an additional 33 credit hours unless 697 is followed by 681 for 3 hours credit.

**681 Thesis. 3-6 hrs.**

May be taken for 3 hours of credit by students whose reports in 679 were excellent and are of such character as to warrant further research. Students completing 679 and 681 for a total of 6 hours may qualify for the master's degree by earning an additional 26 hours of credit. Students completing 681 must defend their thesis in an oral examination.

### ENGLISH (ENG)

Graduate courses in English provide detailed consideration of authors, literary types, and periods of literary history, as well as English language history and linguistics. Students are expected to acquire a broad acquaintance with the whole range of English and American literature and the English language and to become thoroughly familiar with the forms of literature, critical standards, and the materials and methods of literary research.

Each candidate for the Master of Arts in English must select an area of specialization. The areas include the literature of the following periods: Medieval; Renaissance and 17th Century; Restoration and 18th Century; Romantic and Victorian; 19th Century American; Modern British and Modern American. Other areas are: Language and Linguistics; Critical Approaches to Literature; Writing. The candidate may complete the specialization by taking three courses in an area or by taking two courses and writing a thesis in an area. In addition to this specialization each candidate must take at least one course in four other areas.

Students who major in English must have at least 15 undergraduate hours in English and American literature. Students taking English as a minor must have six hours' credit in literature on the undergraduate level. Students with deficiencies may enroll for graduate work but may be asked to take undergraduate courses suggested by the department before admission to candidacy for the degree. A minimum of six hours of college credit in a foreign language or demonstrated reading ability to the satisfaction of the English Department is required for admission to candidacy.

English 630 is required for a major in English and is offered in the fall semester. This course should be scheduled among the first 12 hours of graduate study.

To complete the work for the Master's degree in English the candidate must take 36 hours of course work or, with a thesis, 32 hours, six of which may be earned by writing the thesis. The required grade average is 3.0 (B), and the candidate must pass a comprehensive examination upon the completion of the course work.

Graduate students in English should discuss their programs frequently with the Director of Graduate Programs. Further and more particular information may be found in the document, "A Handbook for Graduate students in English," available from the English Department.

### ENGLISH (ENG)

**502 Composition and Rhetoric for Teachers. 3 hrs. S.**

Study of rhetorical invention and models of composing process, with intensive practice in writing.

**503 Advanced Rhetoric and Composition for Teachers. 3 hrs. I.**

The study of characteristics of effective writing instruction, strategies of effective writers; field research in writing. Readings in research in written composition. (Credit/non credit grading. This course may not be used in degree programs.) (PR: ENG 502)

**508 Advanced Expository Writing. 3 hrs.**

An advanced general composition course for all graduate students. Practice in the rhetorical types and styles used by professionals in all fields. Assignments adapted to the student's major.

**509 Milton. 3 hrs.**

Biographical and critical study, including Milton's English poetry and prose, and his literary and intellectual milieu.

**510 Shakespeare's Comedies, Tragicomedies, and Romances. 3 hrs.**

Intensive study of Shakespeare's comedies, tragicomedies, and late romances. Also includes the Sonnets and Venus and Adonis. (PR: Graduate Students Only)

- 511 **Chaucer. 3 hrs.**  
The poetry of Chaucer, chiefly the *Canterbury Tales*, in the light of medieval tradition and critical analysis.
- 512 **Shakespeare's Histories and Tragedies. 3 hrs.**  
Intensive study of Shakespeare's *Histories and Tragedies*. (PR: Graduate Students Only)
- 513 **English Novel to 1800. 3 hrs.**  
Defoe, Richardson, Fielding, Smollett, and Sterne, with supporting study of their most important predecessors and contemporaries.
- 514 **Nineteenth Century English Novel. 3 hrs.**  
Austen, Scott, the Brontës, Eliot, Dickens, Thackeray, Trollope, Meredith, Hardy, Bulwer-Lytton, and their contemporaries.
- 515 **Victorian Poetry. 3 hrs.**  
Emphasis on Tennyson, Browning, Arnold, Hopkins, Hardy and the pre-Raphaelites.
- 517 **English Drama to 1642. 3 hrs.**  
Non-Shakespearean English drama from its beginnings to the closing of the theatres.
- 521 **American Literature to 1830. 3 hrs. Alternate years.**  
Study of American literature of the Puritan, Colonial, and Federal periods, including such authors as Jonathan Edwards, Edward Taylor, Benjamin Franklin, Phillis Wheatley, Washington Irving, and William Cullen Bryant.
- 522 **American Literature, 1830-1865. 3 hrs. Alternate years.**  
American literature of the Romantic Period, including such authors as Emerson, Poe, Melville, Hawthorne, Whitman, and other figures of the period.
- 523 **American Literature, 1865-1914. 3 hrs. Alternate years.**  
American literature of the Realistic and Naturalistic periods, including such authors as Howells, Twain, James, Dreiser, Dickinson.
- 525 **Southern Writers. 3 hrs.**  
A survey of the poetry, fiction, nonfiction, and drama indigenous to the American South, including Old South, post-Civil War, and Modern periods, and emphasizing the Southern Literary Renaissance.
- 533 **Contemporary English Poetry. 3 hrs.**  
Principal poetry since the Victorian period.
- 534 **Contemporary American Poetry. 3 hrs.**  
Principal poetry since 1900.
- 536 **Medieval English Literature. 3 hrs.**  
Old English elegiac and heroic poetry; Middle English lyrics and romances; the Ricardian poets and Malory.
- 537 **Tudor Literature: Poetry and Prose of the Sixteenth Century. 3 hrs.**  
Survey may include works by More, Skelton, Wyatt, Sidney, Spenser, Nashe, Marlowe, Raleigh, Lyly, and Shakespeare, excluding drama.
- 538 **Seventeenth Century Literature: Poetry and Prose. 3 hrs.**  
Survey may include Donne and the Metaphysical poets, the Cavalier lyricists, Bacon, Browne, Herbert, Jonson, Burton, Walton, Hobbes, and Bunyan.
- 546 **Drama of the Restoration and 18th Century. 3 hrs.**  
Trends, movements, and dramatic types in the English theatre of this period.
- 547 **English Romantic Poets. 3 hrs.**  
Emphasis on Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.
- 555 **Literary Criticism. 3 hrs.**  
Historical study, with application of principles.
- 562 **Restoration and Eighteenth Century English Poetry and Prose. 3 hrs.**  
British poetry and prose of the Restoration and eighteenth century (1660-1800), exclusive of the novel. Authors studied include Dryden, Swift, Pope, Johnson, Boswell, Wollstonecraft. Emphasis on satire, biography, essay. (PR: English 102 and 201H.)
- 575 **Introduction to Linguistics. 3 hrs.**  
The structural and descriptive approach to the study of the English language.
- 576 **Modern Grammar. 3 hrs.**  
A descriptive analysis of the structure of present-day American English, utilizing the basic theory of generative transformational grammar.
- 580-583 **Special Topics. 1-4 hrs. each.**  
(PR: Permission of the chair)
- 585-588 **Independent Study. 1-4 hrs.**  
(PR: Permission of the chair)
- 591 **Creative Writing: Poetry Workshop. 3 hrs.**  
A practical and intensive class in exploring the varieties of creative expression; exercises on the creating of verse in different forms and styles.
- 592 **Creative Writing: Fiction Workshop. 3 hrs.**  
A forum for presentation, discussion, and refinement of the student's work, either short stories or novels.



- 600 Shakespeare. 3 hrs.**  
Intensive reading of Shakespeare's plays. Problems of Shakespearean scholarship.
- 601 Folk and Popular Literature. 3 hrs.**  
A study of types, variants, backgrounds, and influences.
- 610 Readings in English and American Literature. 2-3 hrs.**  
Independent reading in a field not covered by regularly scheduled courses. Limited to English majors who have been admitted to candidacy. (PR: Permission of the chair)
- 611 Independent Readings. 3 hrs.**  
Independent readings and research. Open only to students with an M.A. degree with a major in English or English Education.
- 616 Essayists of the 19th Century. 3 hrs.**  
Major British writers of the period.
- 620 Twentieth Century Drama. 3 hrs.**  
Major British and American dramatists since 1870.
- 624 Twentieth Century British Novel. 3 hrs.**  
Major British novelists of the twentieth century.
- 625 Twentieth Century American Novel. 3 hrs.**  
Major American novelists of the twentieth century.
- 628 Twentieth Century African-American Literature. 3 hrs.**  
An intensive study of selected novels, plays and poems of the period.
- 630 Materials and Methods of Research. 4 hrs.**  
Instruction and practice in scholarly literary research. Required among first 12 hours of course work and prior to admission to candidacy for the Master of Arts degree with a major in English.
- 631 Major American Authors. 3 hrs.**  
An intensive study of one, two, or three selected American authors. (PR: ENG 630 or permission of the chair)
- 632 Topics in American Literature. 3 hrs.**  
Concentrated study of continuing themes or influences in American literature; for example, narrative perspectives, regional influences, or conflicting agrarian and industrial values. (PR: ENG 630 or permission of the chair)
- 636 Selected English Writers. 3 hrs.**  
An intensive study of a small group of selected English writers such as the Metaphysical Poets, the Cavalier Poets, or the Bloomsbury Group. (PR: ENG 630 or permission of the chair)
- 637 Topics in English Literature. 3 hrs.**  
A concentrated study of themes or influences in English literature; for example, narrative strategies, medievalism, the pastoral mode, or conflicting moral, social or literary values. (PR: ENG 630 or permission of the chair)
- 640 Teaching College English. 3 hrs.**  
Required for graduate assistants in English.
- 679 Problem Report. 1-3 hrs.**
- 681 Thesis. 1-6 hrs.**

#### FINANCE (FIN)

(See Business)

#### FAMILY AND CONSUMER SCIENCE (FCS)

Acceptance into the program of study for the Master of Arts in Family and Consumer Sciences requires a minimum of 12 hours of undergraduate course work in family and consumer sciences. Students who do not have this background may fulfill the requirement by completing 12 hours of approved undergraduate family and consumer sciences courses prior to being accepted into the Family and Consumer Sciences Program. Students entering the area of study for dietetics must also have approved undergraduate work in biochemistry, management and physiology or fulfill that requirements prior to being accepted into the Dietetics emphasis. Students are required to submit a tentative course of study to their advisor for approval.

The Master of Arts in Family and Consumer Sciences requires 32 semester hours of graduate work, of which not more than 6 hours may be earned by a thesis. If a thesis is not submitted, a minimum of 36 hours of course work must be completed. Each graduate is expected to conduct independent research through a special problem and problem report or thesis. Courses in statistics and research methods are required of all students. EDF 517 and 621 are often selected.

A minimum of 18 hours in family and consumer sciences is required, including FCS 600. The remaining hours are to be planned to meet the individual student's professional needs. One or two minors with a minimum of 6 hours in each are required. Suggested minors include Adult and Technical Education, Education, Sociology, Economics, Business (Management/Economics), Psychology, Biochemistry, Counseling and Rehabilitation, and Journalism.

Areas of emphasis available in family and consumer sciences are Dietetics, Family and Child Development, general Family and Consumer Sciences, and Family and Consumer Sciences Education. Prospective students should contact the Family and Consumer Sciences Program office for further information.

Post baccalaureate study to qualify to take the registration exam to become a Registered Dietitian (RD) is available. Students who have an undergraduate major in Dietetics may be selected to enroll in the Approved Preprofessional Practice Program (AP4) to receive the supervised practice component required before taking the exam. Enrollment is by a selective competitive process. The AP4 program has been granted approval status by the American Dietetic Association, Council on Education, Division of Education Accreditation/Approval. This is a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education. This program may be combined with work toward a Master of Arts degree in Family and Consumer Sciences.

### FAMILY AND CONSUMER SCIENCE (FCS)

- 501 **Maternal and Child Nutrition. 3 hrs.**  
Nutritional requirements during prenatal and early growth periods; surveys of nutritional status.
- 502 **Foods of the World. 3 hrs.**  
Characteristics and cultural aspects of the foods of the world.
- 503 **Advanced Nutrition. 3 hrs.**  
Metabolism of food nutrients as related to nutritional requirements of man. Reports of current research and other topics to add depth and perspective in nutrition.
- 505 **Quantity Food Production. 3 hrs.**  
Basic principles of quantity food selection, preparation, and service. Laboratory application in local food institutions.
- 506 **The Vocational Education Program. 3 hrs.**  
Education at the secondary, post secondary and adult levels with emphasis on types and organization of programs, legislation, and groups served.
- 507 **Food Service Systems Management. 3 hrs.**  
Administration of food service in institutions.
- 508 **Nutrition in Cardiac Disease. 3 hrs.**  
Role of nutrition in cardiac disease prevention and rehabilitation. Working with families to improve patient compliance.
- 510 **Nutrition in Aging. 3 hrs.**  
Nutritional needs of the elderly and diseases responding to nutritional therapy. Government food programs for the elderly.
- 513 **Experimental Foods. 3 hrs.**  
Experimental study of chemical and physical factors affecting food preparation.
- 515 **Family Relationships. 3 hrs.**  
Relationships in the family during its life cycle, with some consideration of family life in other cultures.
- 516 **Prenatal and Infant Care. 3 hrs.**  
Prenatal and postnatal care for mothers, development of the fetus and care of the infant throughout the first three years.
- 519 **Tailoring. 3 hrs.**  
Contemporary methods of custom tailoring with emphasis on suitable fabric and construction processes of particular styles.
- 520 **Household Equipment. 3 hrs.**  
Principles underlying the selection, care and use of household equipment.
- 527 **Family Resource Management Laboratory. 3 hrs.**  
Home management laboratory to develop competencies in decision making, activity analyses, use of limited resources, and work simplification through individual and group analysis.
- 528 **Cooperative Education in Family and Consumer Science Programs. 3 hrs.**  
Principles of planning cooperative occupational education programs in FCS—emphasis on roles and responsibilities and coordination of in-out-of-school experiences.
- 531 **Guidance of the Young Child: Practicum. 3 hrs.**  
Techniques of guidance of young children with emphasis on adult child interaction.
- 532 **Parenting. 3 hrs.**  
Examination of current challenges, problems, and issues in the field; analysis of effective strategies for parenting.
- 535 **Administration of Day Care Centers. 3 hrs.**  
Instruction and practice in the development of day care centers for three and four year old children and administration of programs in these centers. Laboratory participation required.
- 540 **Nutrition in the Home and School. 3 hrs.**  
Fundamental principles of human nutrition and their application in the home and school. Designed primarily for elementary teachers.

- 544 Consumer Education. 3 hrs.**  
Analysis of economic factors related to provision of consumer goods and services; investigation of sources of consumer information; and means of providing economic security for families.
- 560 Professional Development. 1-4 hrs.**  
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit may be used for certificate renewal and salary upgrading, if approved, but not in degree programs. CR/NC grading.
- 562-564 Professional Development. 1-4; 1-4; 1-4 hrs.**  
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit may be used for certificate renewal and salary upgrading, if approved, but not in degree programs. CR/NC.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 591-594 Workshop. 2-3; 2-3; 2-3; 2-3 hrs.**  
Workshop in selected areas of Family and Consumer Sciences. Credit for not more than two workshops may be counted for the master's degree.
- 600 Philosophy and Trends in Family and Consumer Sciences. 3 hrs.**  
Major contemporary educational theories and their relationship to trends in the field of Family and Consumer Sciences. (PR or CR: EDF 621)
- 601 Evaluation in Family and Consumer Sciences. 3 hrs.**  
Procedures for appraising student progress in the attainment of objectives; construction of evaluation instruments; analysis and interpretation of data.
- 602 Curriculum Development in Family and Consumer Sciences. 3 hrs.**  
Examination of bases for Family and Consumer Sciences curricula; development of curricula for junior and senior high school programs, utilizing various organizational patterns.
- 605 Recent Developments in Clothing. 3 hrs.**  
Survey of recent literature and theory in the field of clothing.
- 606 Recent Developments in Foods. 3 hrs.**  
Survey of recent literature and theory in the field of foods.
- 607 Functions of Nutrients. 3 hrs.**  
Metabolic functions, determination of requirements and interrelations of proteins vitamins, minerals and energy sources.
- 661 Family Economics. 3 hrs.**  
Factors affecting material level of living for families, expenditure patterns, and impact of social change on resource allocation. (PR: FCS 544)
- 665 Family Resource Management Theory and Research. 3 hrs.**  
Analysis of home management theory and concepts as revealed through current research in the field. (PR: FCS 527)
- 670 Nutrition Intervention in Dietetics. 3 hrs.**  
Integrates normal and clinical nutrition with behavioral, natural, and social sciences to enhance dietary compliance among populations at nutritional risk. Systematic approach to assessment, instruction, and evaluation. Applied research in dietetics. (PR: AP4 Dietetic Internship students or permission)
- 673 Administrative Dietetics. 3 hrs.**  
Overview of management/administrative concepts for directing resources within a variety of food and nutritional service/programs. Planning, implementing, and evaluation techniques to measure organizational performance. Applied research in dietetics. (PR: AP4 Dietetic Internship students or permission)
- 679 Problem Report. 1-3 hrs.**
- 681 Thesis. 1-6 hrs.**
- 684-685 Special Problems in Family and Consumer Sciences. 1-3; 1-3 hrs.**  
Problems of particular interest to the graduate student. Registration by permission of advisor. Not more than four hours of seminar credit may be counted toward a master's degree.
- 690-691 Seminar. 1-3; 1-3 hrs.**  
Extensive readings and reports from current literature in selected areas of Family and Consumer Sciences. Not more than six hours of seminar credit may be counted toward a master's degree.

### FORENSIC SCIENCE (FSC) (also see Biomedical Sciences)

The master's degree program in Forensic Science is a two-year curriculum and will require the successful completion of 47 credit hours, for both the non-thesis and thesis track. The thesis track will stress a research component where students conduct original research and write a thesis based on their investigations. The second, non-thesis track, requires that additional electives be taken in lieu of thesis research hours. All students are required to take Human Biochemistry, Cellular and Molecular Biology, and Statistics, which are offered through the Biomedical Science program or other departments. Students must pass a written, comprehensive examination on material covered in Forensic Science I and II and Intro. to Microscopy at a time near the completion of course work and with the approval of their advisory committee.

Students who wish to enroll in the Forensic Science master's degree program must apply for admission through the Graduate School. They must meet the admission requirements of the Graduate School and the Graduate Studies Committee of Marshall University School of Medicine. Interested persons should contact the Director of Forensic Science Program, Marshall University School of Medicine, Huntington, WV 25704.

Applicants for the Forensic Science program must satisfy requirements that include one year of collegiate preparation in each of the following: general biology, general physics, general chemistry, and organic chemistry all with their associated laboratories. It is highly recommended that Criminal Justice 321 (law and evidence) or its equivalent be taken before entering the program. If the student is admitted to the Forensic Science program without CJ 321 or its equivalent, the student will be required for graduation to take the course and pass it with a grade of B or better. Applicants must provide to the Graduate School, as part of a formal application, the scores from the Graduate Record Exam for the General Aptitude and an Advanced Subject Test in one of the sciences, with minimum scores of 1500 and 500, respectively. Three letters of reference from individuals familiar with the applicant's relevant academic/professional performance are also required.

Non-degree students can register for up to 15 hours of course work without having to meet all of the admissions requirements listed above.

An individual can be admitted into the Master's Degree program as a regular or provisional student depending on GRE scores, quality point average, and information required on the "Application for Graduate Admissions" form.

### FORENSIC SCIENCE (FSC)

**604 Forensic Science I. 3 hrs.**

An introduction to crime scene investigations, physical evidence collection, inorganic and organic analysis, serology, fingerprints, arson, drugs, documents, firearms and DNA technologies.

**608 Forensic Science II. 3 hrs.**

In depth discussions dealing with current and future DNA technologies and toxicology, expert witnessing in mock trials, quality assurance/quality control issues, CODIS and DNA banking.

**612 Introduction to Microscopy/Scientific Photography. 2 hrs.**

Introduction to various types of microscopy used in forensics, including scanning electron microscopy, light and fluorescence microscopy and polarizing microscopy.

**616 Forensic Laboratory Techniques I. 4 hrs.**

Introduction to laboratory techniques used to test evidentiary materials collected at crime scenes.

**620 Forensic Laboratory Techniques II. 4 hrs.**

A continuation of FLT I, but with emphasis on DNA technologies and toxicological procedures.

**650-653 Special Topics. 1-4 hrs.**

Present course material on special areas of research or topics which are not routinely covered in existing courses.

**679 Special Problems. 1-4 hrs.**

Students will be assigned specific areas of study for independent investigation. (PR: Consent of advisor)

**680 Seminar. 1 hr.**

Faculty, student and guest speaker presentations of topics pertinent to forensic science and molecular biology and toxicology.

**681 Thesis. 1-6 hrs.**

Research conducted in the laboratories at MU which is focused on a problem of forensic importance. The original research problem will be written up as a formal document and submitted as part of the requirements to fulfill a MS degree in the research track.

**685 Introduction to Research. 1-6 Hrs.**

Directed research which can be used to satisfy requirements for a Master's Degree in Forensic Science.

### FRENCH (FRN)

The following courses may serve as a minor in some programs.

**535 19th Century Literature. 3 hrs.**

The French romantic movement as exemplified in the poetry, drama, and the novel of the period. (PR: 6 hours of literature numbered 317 or above or equivalent)

**536 19th Century Literature. 3 hrs.**

Realistic and naturalistic fiction, realism in the theatre, and selected poems of Baudelaire, the Parnassians, and the Symbolists. (PR: 6 hours of literature numbered 317 or above or equivalent)

**580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. On demand.**

A course for advanced students sufficiently prepared to do constructive work in phases of the language or literature of interest to them. (PR: 6 hours of literature numbered 317 or above or equivalent and consent of instructor.)

**585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

## GEOGRAPHY (GEO)

Students wishing to earn a master's degree in geography have the option of selecting either a M.A. or M.S. degree. While the core requirements are the same for both degrees, the M.S. degree requires that the student obtain a minor in the College of Science and take an additional statistics course. The M.S. option allows students to specialize in a more technical/science-based program leading to employment in environmental planning, computer cartography, GIS/remote sensing, conservation, or physical geography. Both degree options prepare the graduate for advanced work at the doctoral level.

By tailoring the program to the specific needs of the individual student, offering a flexible curriculum, and keeping our offerings updated with changes in the field and the job market, many of our students secure employment as professional geographers before graduation. Graduates of the program include urban and regional planners, cartographers, environmental specialists, economic development consultants, city/county government workers, and international trade consultants, just to name a few.

The undergraduate prerequisite for a graduate major is 12 semester hours of geography. For undergraduate social science majors three semester hours of work in another field closely related to geography may be accepted toward meeting the 12-hour admission requirement.

In general, requirements for admission to candidacy are identical with those required by the Graduate School, except that the department may require a qualifying examination and/or a personal interview. Requirements for the master's degree consist of meeting the general requirements and completing not fewer than 24 hours in geography. At least one-half of the hours must be earned in 600 series courses.

A major must include:

	Hours
Geography 529 and 530 .....	6
Geography 505 or 605 .....	3
Geography 602 or 604 or 608 .....	3
Geography 603 .....	3
Geography 606 or 609 .....	3
Geography 620 .....	3

## GEOGRAPHY (GEO)

- 501 Historical Geography of the United States. 3 hrs.**  
Study of coastal settlements, the population spread through Appalachia and the Mississippi Valley, and the development of intermountain and Pacific Coast centers.
- 502 Geography of Appalachia. 3 hrs.**  
A study of settlement, transportation, manufacturing, agriculture and resource potential.
- 503 Geography of Asia. 3 hrs.**  
Special attention given activities and environment in continental countries and nearby islands.
- 505 World Political Geography. 3 hrs.**  
A systematic and regional survey of world political problems and international relations stressing studies of the United States, Europe, and the Soviet Union.
- 508 Geography of Mexico and Central America. 3 hrs.**  
A geographical study of agriculture, transportation, settlement, geopolitics, and natural resources.
- 510 Urban Geography. 3 hrs.**  
Study of city function, patterns, past and current problems confronting the city including planning, zoning, housing, and urban renewal.
- 512 Geography of Russia and CIS. 3 hrs.**  
Geographical appraisal of cultural, political, and economic aspects of Russia and the Commonwealth of Independent States.
- 514 Methods and Techniques of Regional Planning. 3 hrs.**  
Introductory planning with emphasis on methods, techniques, tools and principles necessary to accomplish objective regional planning.
- 515 Regional Planning and Development. 3 hrs.**  
The philosophy, theories, and principles involved in planning of urban and rural areas.
- 516 Urban and Rural Land Use. 3 hrs.**  
A study of the principles and techniques of urban-rural land use, and the problems and issues encountered in the practices of land use.
- 517 Coal Industries Studies: Past & Present. 3 hrs.**  
An interdisciplinary study for all facets of the coal industry within a historic perspective. Emphasis is placed upon coal industry of West Virginia and the tri-state region.
- 518 Geography for Teachers. 3 hrs.**  
A study of elements of geography most essential for effective teaching of geographic content in elementary education and the social studies.

- 520 **Field Geography of West Virginia.** 3 hrs.  
Type areas in lumbering, mining, agriculture, and industry studied through field methods.
- 525 **Climatology.** 3 hrs.  
A study of elements of weather and climate, methods of climatic classification, and distribution and characteristics of world climatic regions.
- 529 **Cartography.** 3 hrs.  
Understanding principles and developing skills in the use of cartographic drafting equipment and in map making.
- 530 **Cartography and Geographic Information Systems.** 3 hrs.  
Introduction to computer use in mapping and geographic information systems.
- 580-584 **Special Topics.** 1-4 hrs.  
Selected geography subjects to cover unusual geography topics not in the regular course offerings of the department
- 585-588 **Independent Study.** 1-4 hrs.
- 601 **Problems in Geography of the Far East.** 3 hrs.  
Agriculture, industry, transportation, and trade of selected regions in eastern Asia and the islands of the western Pacific Ocean.
- 602 **Problems in Geography of Europe.** 3 hrs.  
Consideration of problems in selected countries following a geographical review.
- 603 **Problems in Geography of North America.** 3 hrs.  
Relationship of human activities to natural environment in selected regions.
- 604 **Problems in Geography of Latin America.** 3 hrs.  
Problems studied in each country following a geographical review.
- 605 **Geography in World Political Affairs.** 3 hrs.  
Key nations of world studied in light of significance of geographic items and their effects on international relations.
- 606 **Field Problems in Geography of the Tri-State Area.** 3 hrs.
- 607 **Problems in World Economic Geography.** 3 hrs.  
Problems of world exchange of outstanding trade items.
- 608 **Problems in Geography of Africa and Australia.** 3 hrs.  
Selected regions studied in both continents.
- 609 **Geographical Research.** 3 hrs.  
Research methods stressed with special attention given to a consideration of the literature of the field.
- 620 **Conservation Education.** 3 hrs.  
Presents elements of conservation education in the specific areas of soil, water, and human conservation.
- 679 **Problem Report.** 1-3 hrs.
- 681 **Thesis.** 1-6 hrs.
- 690 **Internship in Geography.** 3 hrs. I, II.  
Professional work experience in applied geography with an approved agency.

#### GEOLOGY (GLY)

**MASTER OF SCIENCE (PHYSICAL SCIENCE):** This degree program is offered in cooperation with the Departments of Chemistry, Mathematics and Physical Science and Physics. Programs will be designed for individual needs. With a Geology concentration, the writing of a thesis is required. Specific degree requirements are listed in the section: Physical Science and Physics, and the Department of Geology.

In addition, the Department offers coursework leading to a minor in Geology which is appropriate to the programs in Biological Sciences, Chemistry, Geography and Physical Science.

#### GEOLOGY (GLY)

- 510 **Big Bend Field Excursion.** 2 hrs.  
Field trip to Big Bend National Park, Texas to study the structure, stratigraphy, igneous geology, metamorphic geology, paleontology and natural history of this national park. (PR: 12 hours of geology)
- 518 **Invertebrate Paleontology.** 4 hrs. II. **Alternate years (even numbers)**  
Taxonomy, morphology, and paleoecology of body and trace fossils representing the major invertebrate phyla; analysis and interpretation of faunal assemblages; evolution and extinction of species. 3 lec. - 2 lab. (PR: GLY 201)
- 521 **Petrology.** 4 hrs. I. **Alternate years (even numbers)**  
Identification and classification of igneous and metamorphic rocks, their origin and occurrence; their geologic and economic importance. 2 lec-4 lab. (PR: GLY 200, 314 or consent)
- 522 **Economic Geology.** 4 hrs. II., **Alternate years (even numbers)**  
Origin, distribution and economics of the metallic and nonmetallic ore deposits. 3 lec-2 lab. (PR: GLY 200, 314, or consent)

- 523 Sedimentary Petrography. 4 hrs. I, Alternate years (odd numbers)**  
Megascopic and microscopic identification and a depositional and post-depositional interpretation of the sedimentary rocks. 3 lec-2 lab (PR: GLY 201 and 314 or consent)
- 525 Geochemistry. 4 hrs. II., Alternate years (odd numbers)**  
Introduction to the principles of geochemistry. The application of chemistry to the study of the Earth and to geologic problems. Laboratory work includes analysis of rocks, soils, and waters. 3 lec. - 2 lab (PR: GLY 200, CHM 211 and 217 or consent)
- 526 Geophysics. 4 hrs. II, Alternate years (even numbers)**  
Development of seismic, gravity, magnetism, electrical and thermal methods to study the structure and dynamics of the earth. 3 lec-2 lab. (PR: GLY 201, PHY 203, MTH 131)
- 527 Fossil Fuels. 4 hrs. II, Alternate years (odd numbers)**  
The origin and occurrence of petroleum, coal, and natural gas; the relationships of accumulations to depositional environments and structural history; methods used in exploration, evaluation and recovery. 3 lec-2 lab. (PR: GLY 313, 325 or consent)
- 530 Computer Methods in Geology. 4 hrs. II. Alternate years (odd numbers).**  
The computer will be used for compilation, reduction, data analysis and modelling from a wide range of geological problems. Existing and student developed programs will be used. (PR: 12 hrs. GLY and MTH 130.)
- 551 Principles of Geomorphology. 3 hrs. I, Alternate years (odd numbers), S.**  
Principles of identification and analysis of the world's features in terms of stratigraphy, structure, processes, tectonics and time. 3 lec-2 lab. (optional) (REC: GLY 200, 210L or equivalent)
- 551L Principles of Geomorphology Laboratory. 1 hr. I., Alternate years (odd numbers). S.**  
(CR: GLY 551, required of majors, non-majors elective).
- 555 Hydrogeology. 3 hrs. I, Alternate years (odd numbers)**  
The properties of water, the hydrologic cycle with emphasis on surface and groundwater processes. The uses, needs and problems associated with water resources. (PR: GLY 200; CR: GLY 555L for geology majors)
- 555L Hydrogeology Laboratory. 1 hr. I, Alternate years (odd numbers)**  
Laboratory and field experiments studying principles and concepts of hydrology. 2 lab. (PR: GLY 200; CR: GLY 555, required of majors, non-majors elective)
- 556 Environmental Geology. 3 hrs. II. Alternate years (even numbers)**  
Through lecture and demonstration, the interactions of man and the earth, dealing with natural resources, natural hazards, cultural and urban geology and future planning are explained. (PR: GLY 200, 210L)
- 556L Environmental Geology Laboratory. 1 hr. II, Alternate years (even numbers)**  
A laboratory to complement GLY 556, Environmental Geology, dealing with current solutions to environmental problems through real life exercises (PR: GLY 200, 210L, 451, 451L; CR 456 for Geology majors).
- 557 Engineering Geology. 3 hrs. I, alternate years (even numbers).**  
A course for geology majors employing geological principles and methods to solve geotechnical engineering problems. (PR: GLY 200, 210L, 451, 451L or by permission of instructor)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 640 Physical Aspects of Geology. 1-4 hrs. I, II.**
- 641 Biological Aspects of Geology. 1-4 hrs. I, II.**
- 642 Chemical Aspects of Geology. 1-4 hrs.**
- 681 Thesis. 1-6 hrs. I, II, S.**

## HEALTH AND PHYSICAL EDUCATION

(Division of Health, Physical Education and Recreation)

The Division of HPER offers graduate degrees in Health and Physical Education (M.S.) and Exercise Science (M.S.). Each of those degree programs has distinct areas of emphasis. The Health and Physical Education degree offers areas of emphasis in (1) Athletic Training, (2) Athletic Administration, (3) Park Resources and Leisure Services, and (4) Physical Education. The Exercise Science program has two areas of emphasis (1) Clinical Applied Area: Adult Fitness/Cardiac Rehabilitation and (2) Exercise Physiology.

Both programs require from 32 to 39 hours and successful completion of an oral comprehensive examination. Both thesis and non-thesis options are available.

Admission to the programs in good standing is different for both programs. However, students applying for all programs must have successfully completed an undergraduate course in either exercise physiology or human physiology. This requirement needs to be completed within the first 18 hours of graduate study. Also students are limited to six or fewer hours of transfer credit from other institutions, and limited to a maximum of three courses taught at the 400/500 level.

### A. Exercise Science, MS Degree

Research clearly shows that seventy percent (70%) of all premature death and chronic disability could be prevented with appropriate life-style changes. This includes sensible nutrition, exercise, stopping smoking, and

related behavioral changes. Such intervention and risk factor management can significantly reduce all-cause mortality and morbidity from cardiovascular disease, diabetes, osteoporosis, obesity, mental health disorders, and cancer. Our quality of life, as well, can be improved and our chances for longevity increased. Because of the awareness and the skyrocketing cost of contemporary treatment-oriented health care, allied health professionals are becoming major players in an alternative approach emphasizing health promotion, disease prevention, and rehabilitation.

The Division of Health, Physical Education and Recreation offers the Master of Science in Exercise Science to prepare students for allied health careers in the community, hospital and medical center, corporate wellness, cardiopulmonary rehabilitation settings, and related research positions. Preparation for such careers includes an emphasis on leadership roles and skills that permit one to work with individuals on a client/patient/subject continuum extending from the elite athlete to those with chronic disorder/disease to the cardiac transplantation patient as well as the in between - the recreational athlete and those simply wishing to stay healthy by living sensibly.

The course of study is a two-year program with a 39 hour requirement. Admission to the program requires a 2.75 GPA, an appropriate undergraduate/graduate background, personal interview, three letters of reference, and admission to the Graduate School. The Clinical Applied Area of Emphasis requires completion of a Clinical Internship. A thesis is required for the Exercise Physiology Area of Emphasis.

### COURSE REQUIREMENTS

Clinical Applied Area: Adult Fitness/Cardiac Rehabilitation Emphasis	Hours
Minimum requirements	39
Physical Education: 621, 670, 682, 683, 684, 685, 687	21
Restricted Electives: FCS 508; CR 535, 540, 577, 599; PE 578, 586, 601	9
Research Course: EDF 517, 621, 625, PSY 623, 624, MGT 500, MKT 683	3
Clinical Internship (Physical Education 660)	6
Exercise Physiology Emphasis Area	Hours
Minimum requirements	39
Physical Education: 578, (585, 586, 587, 588; independent studies) 601, 621, 651, 670, 683, 684	27
Research Course: EDF 517, 621, 625, PSY 623, 624	3
Restricted Electives	27
Thesis (PE 681)	6

### B. Health and Physical Education, MS Degree

Admission to the Health and Physical Education programs is the same as to the Graduate School with the exception that students must have successfully completed an undergraduate course in exercise physiology or human physiology or must do so within the first 18 hours of their graduate program.

If the thesis option is selected the student must complete 32 hours of which six hours are for the thesis. The non-thesis requires the completion of 36 hours. However both options require the successful passing of an oral comprehensive examination. Programs illustrated below are the non-thesis option:

Athletic Training Emphasis	36
Physical education required: PE 621, 670	6
Research Course: EDF 515, 621, 625, PSY 623 or 624	3
Physical Education 522, 576, 578, 622, 636, 642, 646	24
Home Economics 540	3
Athletic Administration Emphasis	36
Physical Education 621, 670	6
Research Course: EDF 517, 621, 625, HST 600, MGT 500 or MKT 683	3
Physical Education (Select from among) PLS 510, HE 530, PE 501, 530, 525, 524, 576, 578, 615, 620, 622, 624, 626, 642, 643, 652, 660	21
External Minor	6
Park Resources and Leisure Services Emphasis	36
Physical Education Required: PE 621, 670	6
Research Course: EDF 517, 621, 625, HSY 600, MGT 500 or MKT 683	3
HPER Electives: PLS 501, 502, 510, 511, 521, 520, 531	21
(Additional courses selected with advisor's approval)	6
External Minor	6
Physical Education Emphasis	36
Physical Education Required: PE 621, 670	6
Research Course: EDF 517, 621, PSY 623 or 624	3
Physical Education Elective (Select courses with the approval of advisor)	21
External Minor	6



## HEALTH EDUCATION (HE)

- 526 Curriculum in Health Education. 3 hrs. I.**  
A study of principles, objectives, and procedures in curriculum construction for elementary and secondary programs. Historical and philosophical perspectives. Study of existing curricular patterns. (PR: HE 220, HE 221, HE 321 and HE 325)
- 530 Health Issues in Physical Education and Athletics. 3 hrs.**  
A survey of current health issues such as sanitation, contagious diseases, substance abuse, ergogenic aids, and diet/nutrition in PE and athletics. (PR: HE 201, 215, 221, 435.)
- 560-564 Professional Development (Plus title that identifies content). 1-4; 1-4; 1-4; 1-4; 1-4 hrs.**  
Courses and activities designed to meet the specific in-service needs of public school personnel Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.
- 560-564 Professional Development (Plus title that identifies content). 1-4; 1-4; 1-4; 1-4; 1-4 hrs.**  
Courses and activities designed to meet the specific in-service needs of public school personnel Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.
- 580-583 Special Topics in Health Education. 1-4; 1-4; 1-4; 1-4 hrs.**  
An in-depth examination of selected Health Education topics through a course, seminar or workshop.
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 640 Health Evaluation for the Athletic Trainer. 3 hrs.**  
An indepth study of common problems and complaints of athletes and the proper method of evaluating those complaints.

## PARK RESOURCES AND LEISURE SERVICES (PLS)

- 501 Administration of Parks and Recreation. 3 hrs.**  
Considers administrative practice and various organizational structures. Includes administrative processes, supervision of personnel, budgeting, and public relations. Requires conducting a case study of an existing park and recreation department, including fiscal and personnel policies and an analysis of the effectiveness of such policies.
- 502 Assessment and Evaluation in Recreation and Leisure Services. 3 hrs.**  
Theoretical and practical approach to evaluation as applied to recreation and leisure services. Emphasis will be upon developing sound assessment and evaluation methodology applicable to recreation and leisure studies. (PR: PLS 101 or permission)
- 510 Recreation Area and Facility Maintenance. 4 hrs.**  
A study of the knowledge and skills necessary to supervise and administer the general development and maintenance of park and recreation areas and facilities.
- 511 Recreation Areas and Facilities. 3 hrs.**  
Basic considerations in the planning and design of recreational and sport areas, facilities, and structures including associated amenities.
- 521 Recreation for Special Populations. 3 hrs.**  
Study of the use of recreation activities with disabled persons. Techniques in programming and adaptation to meet the leisure needs of special groups in today's society. In association with a therapeutic recreation institution, student must develop a new/revised procedure for providing recreation programs at that institution. (PR: PLS 120 or permission)
- 522 Therapeutic Recreation in Institutional Settings. 3 hrs.**  
Designed to acquaint students with the role and practice of therapeutic recreation in treatment centers. Requires preparation of an annotated bibliography of current literature in this field and conducting of a case study of therapeutic recreation programmatic offerings in such an institution. (PR: PLS 120 or permission)
- 530 Environmental Interpretation. 4 hrs.**  
Principles and techniques of environmental interpretation as practiced in federal, state, and private agencies. Student must develop an interpretative brochure and evaluate both a facility and a program. 3 lec.-2 lab.
- 531 Forest Recreation Planning. 4 hrs.**  
Utilizes the functional planning approach based upon demand and site capability analysis. Student conducts an in-depth recreation capability analysis in an existing park facility, presents this in written form; reviews the current literature on forest recreation development, and makes a final oral report. 3 lec.-2 lab.
- 580-583 Special Topics in Recreation. 1-4; 1-4; 1-4; 1-4 hrs.**  
Study of an advanced topic not normally covered in other courses. 3 lec.-2 lab. (PR: Permission of Chairman)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
Requires conducting of individual survey/research projects beyond the requirements for undergraduates. Such projects will be individualized to meet the needs of students while accomplishing some practical need in the field. (PR: Permission)

## PHYSICAL EDUCATION (PE)

- 501 **Ethics in Sport. 3 hrs.**  
Philosophical and historical background to the development of values in contemporary society and examination of how these are manifested in the sports world.
- 515 **Physical Education in Pre-School, Elementary and Middle School. 3 hrs.**  
A study of motor skill principles/movement experiences as they influence the child's total development; specific movement activities are presented in the areas of games, rhythms, basic movements, gymnastics, etc.
- 516 **Planning & Developing HPER & Athletic Facilities. 3 hrs.**  
A course designed to familiarize students with the basic concepts of facility planning and construction. Current trends and innovative designs are reviewed. (Does not fulfill state certification requirements for a superintendent's license.)
- 517 **Teaching College Physical Education. 3 hrs.**  
Prepares students for teaching of college health and physical education courses.
- 522 **Prevention, Care and Treatment of Athletic Injuries. 3 hrs.**  
This course is designed to prepare the athlete for competition, the prevention and protection of the athlete from accidents, the etiology, examination and immediate care of the athlete, and the rehabilitation of the athlete following injury.
- 524 **Sport and Physical Education in the Twentieth Century United States. 3 hrs.**  
The development of recreation, organized sport and physical education programs in the United States, 1900 to present.
- 530 **Sport Law, 3 hrs.**  
The study of the basic principles of the legal system as they operate in the environment of American sport.
- 560-564 **Professional Development. (Plus title that identifies content). 1-4; 1-4; 1-4; 1-4; 1-4 hrs.**  
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees. CR/NC grading.
- 569 **Curriculum Development in Physical Education. 3 hrs.**  
A study of the general principles of curriculum development as they relate to physical education. Opportunities are provided to develop and evaluate curriculum.
- 575 **Seminar in Sports Management and Marketing. 3 hrs.**  
This course is designed to provide students with an overview of all aspects involved in the Sports Management and Marketing field through classroom lectures, guest speakers, and field trips.
- 576 **Theoretical and Practical Aspects of Coaching. 3 hrs.**  
An indepth study of the principles and problems of coaching.
- 578 **Energy Sources, Body Composition and Performance. 3 hrs.**  
Consideration of the energy sources and requirements for various types of physical activity as well as the impact that physical activity can have on body composition and performance. (PR: PE 621 or permission)
- 579 **Trends in Athletic Training. 3 hrs.**  
To provide an in-depth analysis of current trends with regard to administration, liability and insurance. In addition, will cover current standards in surgery, rehabilitation and evaluation of sports related injuries.
- 580-583 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Approval by the department chairman, instructor and student's committee)
- 585-588 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 591-594 **Workshop in Physical Education. 1-3; 1-3; 1-3; 1-3 hrs.**
- 608 **Motor Learning and Performance. 3 hrs.**  
Investigation of variables influencing the learning motor skills. Primary emphasis on psychological factors influencing motor performance. 2 lec-2 lab.
- 610 **Physical Growth and Motor Development. 3 hrs.**  
The study of physical growth and motor development of children from infancy through adolescence. Stages in the development of motor patterns and motor skills will be traced with consideration given to neurological changes and external forces which influence motor development. (PR: PE 621 or permission)
- 615 **Legal Concern in PE and Athletics. 3 hrs.**  
An indepth analysis of the legal implications of Sports and Physical Education.
- 620 **Substances of Abuse and the Athlete. 3 hrs.**  
An indepth study of commonly abused substances by athletes as well as current trends in drug testing of athletes. (PR: PE 621, permission)
- 621 **Scientific Aspects of Physical Education. 3 hrs.**  
The study of the scientific basis for physical activity. Consideration will be given to the psychological, sociological, neuromuscular, and physiological characteristics requisite to physical activity. (REC: PE 201 and 345 or equivalent)

- 622 Physical Education for the Atypical Individual. 3 hrs.**  
A study of the principles and philosophies in the general organization and supervision of programs of physical education for the physically handicapped. The course includes field trips to hospitals, clinics, etc.
- 623 Medical Aspects in Sports. 3 hrs.**  
Emphasis on the development of skills in recognition of symptoms of illness, injuries and proper procedures of medical care.
- 624 Issues in Physical Education. 3 hrs.**  
Critical selection and analysis of current controversies in physical education. Analysis includes identification of the content fostering each issue and the systematic probing of administrative tenets and philosophical positions taken by all factions. Attempts at resolution are secondary to exploration and analysis of viewpoints.
- 626 History and Philosophy of Physical Education and Sport. 3 hrs.**  
An investigation of historical events, political and social climates, and personalities as well as philosophies which have influenced physical education and sport from early civilizations to the present.
- 631-634 Performance Techniques and Analysis. 3 hrs.**  
Analysis of lead-up, intermediate and advanced techniques of a selected team, individual or dual sports. Emphasis given to mechanics of performance psychological stress components, psychological factors, strategies and teaching/coaching methodology.
- 636 Structural Kinesiology. 3 hrs.**  
Instruction and laboratory experiences involving musculoskeletal anatomy and biomechanics as applied to human movement.
- 641 Theories and Factors Relating to Athletic Performance. 3 hrs.**  
Examination of major psychological dimensions underlying the behavior manifested by sports participants. Emphasis given to understanding "why" an individual performs with consequent implications as to "how" he/she performs.
- 642 Devising and Implementing Training and Conditioning Programs. 3 hrs.**  
Application of neuromuscular and physiological knowledge to the examination of the administration and content of existing exercise programs as well as the development of new programs. (PR: PE 621)
- 643 Sport in the Social Process. 3 hrs.**  
An indepth analysis of the processes by which sport evolved as a significant component of modern American life.
- 646 Athletic Training I. 3 hrs.**  
Training in the diagnosis of injuries in athletics. The student will be expected to participate in diagnostic techniques under the supervision of a trainer.
- 647 Athletic Training II. 3 hrs.**  
Professional aspects of trainer-doctor and doctor-athlete relations will be taught and exploration of how to professionally handle injuries and cooperation with physicians.
- 651 Mechanical Analysis of Motor Skills. 3 hrs.**  
Analysis of motor skills through the application of the principles of physics. (REC: PE 321 or equivalent)
- 652 Administrative Theories in Physical Education and Athletics. 3 hrs.**  
The student is introduced to the background and development of administrative theories in physical education and athletics in a context of a social scientific milieu.
- 654 Contemporary and Comparative Physical Education. 3 hrs.**  
A study of objectives, methods, personnel, facilities, and program uniqueness of the physical education of selected nations and world regions. National sport programs, international sport programs and competition, and international professional organizations are considered.
- 660 Internship. 3-6 hrs.**  
Practical experience in a clinical setting. (PR: PE 682, 683, 684)
- 670 Research in Physical Education. 3 hrs.**  
An examination of experimental research design, laboratory methods, construction of instruments, execution of research, and presentation of research papers.
- 681 Thesis. 1-6 hrs.**
- 682 Preventive and Rehabilitative Physiology. 3 hrs. I or II.**  
Study of cardiorespiratory, neuromuscular, and renal pathophysiology and response to medical, nutritional, and exercise therapies. (PR: PE 621)
- 683 Cardiovascular Assessment. 3 hrs. I or II.**  
Emphasis on EKG and oxygen consumption stress testing, exposure to other medical evaluations such as: a) angiography, b) echocardiography, c) thallium-201 imaging. 2 lec.-2 lab/clinical experiences. (PR: PE 375, 621)
- 684 Developing Exercise, Nutritional, and Behavioral Prescriptions. 3 hrs. I or II.**  
Lecture and hands on experience in designing exercise, nutritional, and behavioral prescriptions for various populations. EX: average individual, the elite athlete, or the rehabilitating patient. 2 lec.-2 lab. (PR: PE 345, 375, 385, HEC 508)

- 685 Development and Administration of Preventive and Rehabilitative Medical Programs. 3 hrs.**  
Lecture and laboratory experiences in the development of preventive and rehabilitative programs. Special emphasis on program component development and management principles. 2 lec.-2 lab. (PR: PE 385).
- 686 Behavioral Aspects of Wellness, Disease, Rehabilitation. 3 hrs. I or II.**  
Survey course to include the pathophysiology of stress, psychology of health, behavioral modification, neuromuscular relation/stress reduction techniques, program compliance improvement, and health counseling. (PR: PE 641)
- 687 Cardiac Life Support. 3 hrs.**  
Course is designed to acquaint the student with the current methods in recognizing and treating cardiac conditions. (PR: PE 683 or permission)
- 696 Seminar in Physical Education. 3 hrs.**  
A course designed for library research and discussion of critical questions in physical education. Topics to be selected will vary according to the interests of the students.

## HISTORY (HST)

Students, who have not completed an undergraduate major in History, must have at least 15 hours of undergraduate courses in History, including 12 hours in the World and American history surveys. Students with deficiencies may enroll for graduate work but may be asked to take undergraduate courses suggested by the Director of Graduate Studies before admission of candidacy for the degree.

A student pursuing the Master of Arts degree in history must apply for admission to candidacy in the semester or term immediately following the semester or term in which 12-15 hours of Marshall University graduate credit are completed. To be considered for admission to candidacy a student must have earned a quality point average of at least 3.0 (B) on all graduate work applicable to the degree. The application, bearing a record of courses completed, must be made on a form secured from the Graduate School Office.

A student who receives a second grade of (C) or below at any time while pursuing the Master of Arts degree in History must withdraw from the program. In addition, MA students in History must earn at least a 3.0 (B) grade point average in all History courses as a requirement for graduation.

A history student whose program requires a thesis must earn 32 hours of credit in graduate courses. Of these 32 hours, credit not to exceed 6 hours may be granted for the thesis. The student must enroll in History 681 Thesis 1-6 hours, for which he or she is allowed not more than 6 hours of credit. A history student whose program does not require a thesis must complete 36 hours of graduate course work.

A minimum of 30 hours must be earned in the major field and a minimum of 6 hours in a minor field. Students choosing a minor field must do so with the approval of the departmental Director of Graduate Studies. On recommendation of the Graduate Dean the requirement of a minor may be waived. History students are required to complete History 600 Methodology Seminar in Historical Methods. Students must earn credit hours in as many 600 level courses as in 500 level courses.

New graduate students must obtain an MU net computer account by presenting their student ID card to the Computer Center on the 2nd floor of Hall or to the computer lab in Corbly 331. They must demonstrate a proficiency in computer literacy: (1) through examination or (2) through successful completion of a 3 credit course, CSD 101: Computers and Data Processing.

It is recommended that students earn credit hours in a wide distribution of historical areas and periods from a diversity of instructors.

## HISTORY (HST)

- 502 American Intellectual History 1865 to Present. 3 hrs.**  
A critical examination of intellectual, creative and literary movements in the modern era.
- 503 American Urban History. 3 hrs.**  
A study of the political, economic, social, and intellectual impact of the city upon American History, and the impact of history upon the growth of urbanization.
- 504 American Diplomacy, 1789-1900. 3 hrs.**  
American foreign policy from colonial times to 1900 emphasizing the gradual development of the United States and its achievement of membership in the family of nations
- 505 American Diplomacy. 1900-Present. 3 hrs.**  
American foreign relations in the 20th century. The gradual retreat from isolation in the period between World Wars I and II and modern American involvement in international commitments will be stressed.
- 506 Tudor and Stuart England, 1450-1688. 3 hrs.**  
A history of England under the Tudors and Stuarts, focusing primarily on demographic, social, cultural, and political developments.
- 509 American Revolution. 3 hrs.**  
A varied view of the American Revolution and its impact on the American people.

- 510 Conquering the Continent: America's Frontier Experience. 3 hrs.**  
A survey of the American frontier experience with particular emphasis on the fate of the American Indian, the impact on the environment, and the character of the American-created culture.
- 511 American Social and Cultural History 1607 to Present. 3 hrs.**  
A study of the changes and continuities in American Social and Cultural History from 1607 to present.
- 513 History of the Old South, 1492-1860. 3 hrs. Alternate years.**  
The History of the Old South is a study of the political, economic, social, and cultural conditions in the South that led to the development of the South as a distinct section in the United States.
- 514 Civil War and Reconstruction. 3 hrs.**  
The course will include a discussion of the economic, political, social, and cultural differences leading to the Civil War, the war itself, and an analysis of the political and economic importance of reconstruction.
- 515 History of the New South, 1877 to the Present. 3 hrs.**  
The History of the New South is a study of the political, economic, social, and cultural changes in the South after Reconstruction that explain conditions in the contemporary South.
- 516 American Social Movements. 3 hrs.**  
A study of the social movements which have influenced the course of American History. Includes abolition, women's rights, Progressivism, civil rights.
- 521 The Era of the Renaissance and Reformation. 3 hrs.**  
The impact of the Renaissance upon esthetic, economic, and political developments especially in the 15th and 16th centuries. The decline of Catholicism and the growth of the Protestant movement, and the influence of the two movements upon each other is stressed.
- 522 The French Revolution and the Napoleonic Era. 3 hrs.**  
Society and government in Europe before the French Revolution and the influence of the enlightenment; ideas and changes introduced by the revolution and Napoleon and their effect on the institutions and economy of Europe.
- 523 U.S. Latin American Relations. 3 hrs.**  
An appraisal of political, economic, and cultural relations of the U.S. and Latin America in a historical context with emphasis on the period since 1945.
- 524 U.S. Science and Technology. 3 hrs.**  
A study of the development and impact of science and technology in the U.S. with special emphasis on the modern period.
- 525 European History 1814-1914. 3 hrs.**  
A century of European political, economic, and social history. Its relationship to and influence upon the history of other world areas is noted. The impact of imperialistic rivalry is emphasized.
- 526 European History 1914 to Present. 3 hrs.**  
The impact of World War I upon Europe, the era between two world wars, the search for world peace, World War II and its aftermath are major topics of consideration.
- 528 Intellectual and Cultural History of Modern Europe. 3 hrs.**  
A survey of the main currents in European thought and culture in the 19th and 20th centuries.
- 529 Russia to 1917. 3 hrs.**  
A survey of Russian history to 1917 which examines Russia before the Russians, Kievan Russia, Appanage Russia, Muscovite Russia and Imperial Russia. Emphasis is on Imperial Russia.
- 530 Soviet Russia. 3 hrs.**  
A continuation of History 529 which examines the development of Soviet Russia from its beginnings to the present. Emphasis is placed on political and economic changes in the Soviet system and on Communist expansion in Europe and Asia.
- 531 America in the Gilded Age. 3 hrs.**  
A study of America's transformation from a rural, agrarian nation into an urban, industrial world power, the final destruction of the American Indian, the settlement of the West, and the farmers' revolt.
- 532 America Matures, 1900-1945. 3 hrs.**  
An examination of the social, political, and economic trends in the U.S. in the first half of the 20th Century, emphasizing social upheavals, conflicts, and reform movements at home and abroad.
- 533 In Our Time-America Since 1945. 3 hrs.**  
A study of America since World War II focusing mainly on domestic politics, foreign affairs, the civil rights movement, the rise of minorities, and the fragmentation of American society.
- 534 The American Experience in Vietnam. 3 hrs.**  
A study of the origin and escalation of American involvement in Vietnam, the domestic impact of the war within the United States and the collapse of the South Vietnamese government.
- 535 Modern Japan. 3 hrs.**  
Begins with an overview of nineteenth century Japan and stresses the twentieth century rise of Japan to the position of world power.
- 540 West Virginia History. 3 hrs.**  
An interdisciplinary study of the state, its people and its institutions within the national context.

- 580-583 **Special Topics.** 1-4 hrs.
- 585-588 **Independent Study.** 1-4 hrs.
- 600 **Methodology: Seminar in Historical Methods.** 3 hrs.  
A research and writing seminar in which students are taught and must exhibit the skills and methodologies of practicing research historians.
- 602 **Stuart England 1603-1714.** 3 hrs.  
An analysis of the Social, Intellectual, Economic, Cultural, and Political History of England in the Stuart Century.
- 603 **Seminar in U.S. Economic History.** 3 hrs.  
A reading and research course in which a student investigates topics related to the economic and business growth of the United States in the context of America's legal, government and social institutions. Emphasis will be on development of international economic institutions and the American role in the global environment.
- 605 **American Colonial History.** 3 hrs.  
A study of the English colonies in America with emphasis on slavery, minorities, and social and economic change.
- 607 **Problems in European History, 1890-1923.** 3 hrs.  
An analysis of the politics, diplomacy and military strategy of the period of the First World War. Special emphasis is given to the origin of the war, the war itself, the peace settlement and the Russian Revolution and its aftermath.
- 610 **Readings in History.** 2-3 hrs.  
Readings in topics fitted to the need of the individual student. They may deal with any graduate area. This course is ordinarily restricted to off-campus students and is used sparingly.
- 620 **Seminar in American Historical Biography.** 3 hrs.  
A reading and research course in which a student investigates biographical topics regarding the men and women whose lives illuminate the American experience. The course will cover a wide range of activities, including the social, political, cultural, and economic development of the United States and the region.
- 625 **Rebirth of Europe, 1939-Present.** 3 hrs.  
Background and course of World War II, European politics since 1945, developments in international affairs with emphasis on Cold War, economic and social trends, thought and culture.
- 632 **Seminar in Reconstruction.** 3 hrs.  
A reading and research course in which each student investigates a specific issue related to the reunification of the nation after the Civil War.
- 633 **Problems in American History, 1877-1917.** 3 hrs.  
A research course in which the student probes a selected problem within the chronological span, 1877-1917.
- 634 **Problems in American History Since 1917.** 3 hrs.  
A research course in which a student probes a selected problem within the period since 1917.
- 635 **Oral History Seminar.** 3 hrs.  
The course examines the basic roots of oral history and treats many important facets of the field including: the establishment of a program, equipment, interviewing techniques, the interview, processing of tapes, release form, ethics, and how to write grant proposals.
- 636 **Seminar in Women's History.** 3 hrs.  
A reading and research course in which the student investigates selected topics related to the history of women in America or Europe.
- 650-651 **Special Topics.** 1-4; 1-4 hrs.  
(PR: Permission of Instructor)
- 679 **Problem Report.** 1-3 hrs.
- 680 **Public History Internship.** 1-6 hrs.  
Internship in an approved setting in Public History, Archives, Museum, Oral History, or Historical Preservation. Interns will be supervised by on-site staff and History Faculty.
- 681 **Thesis.** 1-6 hrs.

#### HOME ECONOMICS

(See Family and Consumer Sciences)

#### HUMANITIES

The West Virginia Graduate College, in conjunction with Marshall University, affords the opportunity for students to earn an M.A. in Humanities. All the courses needed to fulfill the degree requirements can be taken on the campus of Marshall University. The WVGC will grant the M.A. in Humanities.

The Master of Arts in Humanities program adapts the advanced study of the humanities to the personal interests of a broad spectrum of adult students. Students with varied undergraduate backgrounds in the humanities are provided the opportunity to continue their studies at the graduate level in a flexible program with an

integrated and interdisciplinary perspective on human inquiry.

The program enhances the student's ability to deal critically with intellectual, social, political, historical, literary, or artistic issues with a broadly humanistic perspective.

The program requirements consist of three core courses to be selected from four, including a required course in writing for research. A thesis is optional. The remaining 21-30 hours are to be selected with the help of the advisor.

The required courses are detailed in the catalog of West Virginia Graduate college, and with the aid of an advisor, many electives may be chosen from either institution.

To be admitted to the program, the student must contact the Program Director at WVGC.

## INSTRUCTIONAL TECHNOLOGY AND LIBRARY SCIENCE (ITL)

### 515 Reference and Bibliography. 3 hrs.

Study of the basic reference sources for elementary and secondary school libraries. Emphasis on materials evaluation, the reference interview, search strategies, and the impact of new technologies.

### 520 Cataloging, 3 hrs.

Fundamentals of cataloging and classification, applying AACR2, the Dewey Decimal system, and related aids to the organization of library materials. Implications of new technology for technical services will be addressed.

### 525 Library Organization and Administration. 3 hrs.

Principles of administration for elementary and secondary school library-media centers and public libraries, including personnel, facilities, budgets, program planning and evaluation, publicity and public relations, audiovisual equipment and materials, computer hardware and software, and methods and materials, for teaching library skills.

### 550 Library Practice (Field Work). 3 hrs.

Experiences in the application of techniques of library service, adapted as far as possible to the student's needs.

### 560-563 Professional Development. 1-4; 1-4; 1-4; 1-4 hrs.

Course designed to meet the specific inservice needs of public school teachers, media personnel, and librarians. Credit may be used for certificate renewal and salary upgrading but not for degree programs.

### 565 Utilization of Instructional Technology, 3 hrs.

Utilization of instructional technology materials, equipment, and techniques.

### 566 Production of Instructional Materials. 3 hrs.

Basic techniques in making slides, photographs, dry and wet mountings, transparencies, posters, charts, and similar graphic instructional materials.

### 567 Basic Media Skills Development for Instructional Design. 3 hrs.

Basic techniques in producing and using a variety of audiovisual aids, i.e., photography, scripting, developing logos, audio-recording, and layout and design of manuals. This course also prepares one to produce a slide-tape presentation.

### 568 Computer Graphics in Instructional Technology. 3 hrs.

A basic course designed to assist the student in becoming familiar with a variety of software graphics packages.

### 580-583 Special Topics. 1-4 hrs.

(PR: Permission)

### 585-588 Independent Study. 1-4 hrs.

(PR: Permission)

### 591-594 Workshop in Instructional Technology. 1-4 hrs.

Workshop in selected areas of educational media.

### 607 The Library and the Curriculum. 3 hrs.

Survey of elementary and secondary school curricula with emphasis on materials which enrich the teaching of various subjects.

### 610 Advanced Administration of Libraries/Media Centers. 3 hrs.

Application of administrative techniques to processes and activities of various types of libraries and media centers. (PR: ITL 425 or 525 for Library Science majors)

### 615 Advanced Reference. 3 hrs. Study of specialized reference tools.

(REC: ITL 515 or permission of instructor)

### 620 Advanced Cataloging and Classification. 3 hrs.

Covers Library of Congress and Dewey Decimal classification systems. Practice in detailed descriptive and subject cataloging of special materials, including nonprint materials. (PR: ITL 520 or permission of instructor)

### 630 Camcorder Utilization. 3 hrs.

The participants develop the skills necessary to produce on-site instructional VHS videotapes and computer-generated instructor's guides. (PR: ITL 565/568 or permission).

- 632 Media in Instructional Design.** 3 hrs.  
Practical use of instructional design techniques in producing a slide/tape program along with instructor's guide. (PR: ITL 566 or 567 or permission of instructor)
- 640 Readings in Instructional Technology.** 3 hrs.  
Readings and reports on significant publications in the educational media field, stressing print, non-print, or both types of media. May be taken only once. (PR: Permission)
- 641 Seminar.** 3 hrs.  
Supervised program of readings, reports, and individual and group projects. (PR: Six hours of graduate work in ITL or permission)
- 679 Problem Report in Instructional Technology or Library Science.** 3 hrs.  
Preparation of a written, filmed, graphic or similar research project. Must be completed by those who later enroll for ITL 681, Thesis, but is not restricted to such persons. (PR: Six hours of approved graduate work in ITL and permission)
- 681 Thesis in Instructional Technology or Library Science.** 3 hrs.  
Available only to those whose work in ITL 679 was exemplary and worthy of expansion. Successful completion of ITL 679 and ITL 681 reduces the total credit hours required for the degree by three hours. (PR: ITL 679 or equivalent and permission)

### JOURNALISM AND MASS COMMUNICATIONS (JMC)

The W. Page Pitt School of Journalism and Mass Communications offers a flexible program designed to accommodate persons with or without an undergraduate degree in journalism and mass communications or professional media experience and whose career interests include one or more of the following: advertising, broadcast journalism, print journalism, public relations, radio-television, and journalism education.

During the first term of residence, students must plan with the graduate coordinator a detailed program of courses and discuss other requirements for the Master of Arts in Journalism and Mass Communications. Students are responsible for learning and for meeting all requirements, guidelines, and deadlines included in the Graduate Catalog. Students are required to complete EDF 517 (not required if student completed an acceptable statistics course before enrolling in the master's program), Journalism 601, Theory of Mass Communications, and Journalism 602, Mass Communications Research and Methodology. Some courses are not required of recent journalism and mass communications graduates who have taken the courses, but master's degree candidates who are not required to repeat these courses still must prepare themselves to pass the law, history, and ethics sections of the comprehensive examination. The courses are JMC 502, Law of Mass Communication or JMC 535, Radio-Television Law & Regulation; JMC 504, History of American Journalism & Mass Communications; and JMC 540, Mass Communications Ethics.

The remainder of each student's program is determined in consultation with and approval from the graduate coordinator. Professional track students must complete a minimum of 36 graduate hours (plus any undergraduate courses deemed by the graduate coordinator to be necessary) and the comprehensive examination.

Thesis track students must complete a minimum of 27 graduate hours (plus any undergraduate courses deemed necessary by the graduate coordinator), a five-credit-hour thesis, and the comprehensive examination.

A minor consisting of a minimum of six hours in one subject area may be approved by the graduate coordinator. Students who enter the master's program without undergraduate preparation in journalism and mass communications and also without any relevant professional experience may be permitted by the graduate coordinator to take all of their course work in journalism and mass communications.

A comprehensive written examination is required. The examination is not based exclusively on the specific courses completed but affords the student an opportunity to demonstrate comprehensive knowledge of the major subject. The five-part examination covers mass communications theory, research, law, ethics, and journalism and mass communications history.

### JOURNALISM AND MASS COMMUNICATIONS (JMC)

- 500 Photojournalism II.** 3 hrs.  
A course in advanced techniques for newspaper and magazine photography, concentrating on the creation, design and use of photographic essays and picture stories. (PR: JMC 360)
- 502 Law of Mass Communication.** 3 hrs. I, II, S.  
Legal aspects of mass communication as they apply to the professional journalist.
- 504 History of American Journalism and Mass Communications.** 3 hrs. I, II.  
The development of the press in the United States, the contributions of American journalists, the rise of radio and television, and the relationship of communication developments to political, economic and social trends in America.
- 508 Advertising Research.** 3 hrs. I.  
Lectures, readings, and discussions relating to all media advertising. Students may select special areas of interest.



- 510 Magazine Editorial Practices. 3 hrs.**  
Study of the organization and functions of the magazine editorial department, with practice in planning magazine content, laying out pages and establishing production procedures.
- 512 Mass Media Sales. 3 hrs.**  
A survey of the requirements, relationships, and functions of mass media sales in the context of the media buying environment.
- 514 Reporting Public Affairs. 3 hrs. II.**  
Instruction in reporting local, state and federal government; politics, finance and labor; social and environmental issues and other matter, with emphasis on background and interpretation. Course includes field trips and guest speakers.
- 525 Advertising Campaigns. 3 hrs. II.**  
Students function as an advertising agency to plan, prepare, and present local and national advertising campaigns. Problems of the advertiser and the agency are considered.
- 528 Supervision of School Publications. 3 hrs.**  
A comprehensive study of advising and producing school publications, with emphasis on methods, for teachers of journalism.
- 530 Magazine Article Writing. 3 hrs. I.**  
Fundamentals of researching and writing factual articles for popular magazines; techniques of selling articles to magazines.
- 532 Corporate and Instructional Video. 3 hrs.**  
Development of the use of video for communication and instruction in business, agencies, and education. Production and utilization of video units for specific objectives.
- 533 Radio-Television Programming. 3 hrs.**  
Principles of programming, including audience analysis, production, purchase, and scheduling of various formats.
- 534 Advanced Video. 3 hrs.**  
Development of the elements necessary for the production of detailed video projects. Students study the creation and production of public affairs, educational and creative video programming. (PR: JMC 332 or equivalent)
- 535 Radio-Television Law and Regulation. 3 hrs.**  
Development and current status of the legal structure of broadcasting in the United States. (PR: JMC 332 or equivalent)
- 536 International Communications. 3 hrs.**  
Development of various systems of mass communications and comparison with the United States.
- 537 Public Relations Writing. 3 hrs. I.**  
Theory and practice of various writing challenges encountered by public relations practitioners. Some consideration of publications design. (PR: JMC 201, 241 and 330 or equivalent)
- 538 Public Relations Case Studies. 3 hrs. I.**  
Examination of the handling of public relations problems and opportunities by business, educational, governmental, and social organizations, with particular emphasis on public relations analysis and problem solving. (PR: JMC 330 or equivalent)
- 539 Public Relations Campaign Management. 3 hrs. II.**  
Applying the four-step public relations process to an organization's program or campaign. Includes execution of public opinion research and development of original communication tools. Competitive agency model generally used. (PR: JMC 537 and 538)
- 540 Mass Communications Ethics. 3 hrs. I, II, S.**  
Study of basic concepts underlying contemporary American mass communications operations and practices and how those concepts affect professional ethics in the field. Examination of ethical conflicts encountered and application of ethical principles when determining solutions.
- 545 Advertising in Modern Society. 3 hrs.**  
An examination of issues and problems affecting the advertising industry and a study of advertising's impact on and responsibility to society.
- 550 Contemporary Issues in Radio and Television. 3 hrs.**  
An examination of the current political, social, economic and legal issues affecting the decision making process in the newsrooms and programming centers of the electronic media.
- 555 Women, Minorities and the Mass Media. 3 hrs.**  
A seminar that explores the portrayals and participation of women and people of color in the mass media.
- 560 Media Management. 3 hrs.**  
Problems and practices affecting all departments of the mass media including labor and personnel, editorial, business and production.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 590 Journalism and Mass Communications Internship I. 1-3 hrs. I, II, S.**  
Supervised journalistic work with the professional media. Course is for students without substantial professional media experience. Arrangements must be made in advance with the school's internship director.

- 591 **Journalism and Mass Communications Internship II.** 1-3 hrs., I, II, S.  
Supervised journalistic or mass communications work with professional media including newspapers, magazines, radio, television, advertising and public relations departments or agencies. Students must have completed a previous internship. (PR: Permission and JMC 590)
- 597-598 **Instructional Television Course.** 1-4 hrs.  
A course based upon Instructional Television Series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements announced by the department.
- 601 **Theory of Mass Communication.** 3 hrs. I, II.  
Major theoretical concepts in mass communications are studied as a basis for understanding the communication process and the institutional impact of the mass media on the individual and on society. Required of all majors.
- 602 **Mass Communications Research and Methodology.** 3 hrs. I, II.  
Research techniques applied to problems of mass communication including computer applications, with emphasis on mastery gained by participation in specialized research projects. Required of all majors.
- 606 **Depth Reporting.** 3 hrs.  
Depth reporting of social and environmental activities and problems, with emphasis on thorough research and documentation. Articles will be submitted for publication.
- 609 **Seminar in Public Relations.** 3 hrs.  
Theoretical and practical aspects of public relations, with special projects and readings to provide skills and insights requisite to success in the profession. Seminar discussions and research projects.
- 612 **History of Mass Communication, Specialized Study.** 3 hrs.  
Analysis of mass media development in the United States and of current media problems, with emphasis on research. (REC: JMC 404/504 or equivalent)
- 630 **Seminar in Media Criticism.** 3 hrs.  
Intensive critical analysis of broadcasting programs and programming procedures from the sociocultural, literary, political and industry points of view.
- 632 **Seminar in Public Broadcasting.** 3 hrs.  
Examination and evaluation of the unique content, policies, and prospects of public broadcasting.
- 634 **Issues in Radio and Television.** 3 hrs.  
Problems in the broadcast field on varied subjects which concern the industry.
- 650-651 **Special Topics.** 1-3 hrs.
- 681 **Thesis.** 1-6 hrs. (PR: Consent of advisor)
- 685-688 **Independent Study.** 1-4; 1-4; 1-4; 1-4 hrs.  
(PR: Permission of chairman)

#### LATIN (LAT)

The Department of Classical Studies offers minor fields of study in Latin and in Classics. These minors are appropriate for graduate programs in English and in history.

- 501 **Roman Life: Pliny, Martial, Juvenal.** 3 hrs.  
(PR: 6 hours of literature numbered 304 or above or equivalent)
- 503 **The Roman Stage: Comedies of Plautus and Terence.** 3 hrs.  
(PR: 6 hours of literature numbered 304 or above or equivalent)
- 510 **Tacitus (Selections From): Annals, Agricola.** 3 hrs.  
(PR: 6 hours of literature numbered 304 or above or equivalent)
- 580-583 **Special Topics in Latin.** 1-4; 1-4; 1-4; 1-4 hrs. I, II.  
(PR: 6 hours of literature numbered 304 or above or equivalent and consent of instructor)
- 585-588 **Independent Study.** 1-4; 1-4; 1-4; 1-4 hrs.

#### MATHEMATICS (MTH)

Course offerings in mathematics may be used to satisfy major requirements in three programs of the Graduate School, or to satisfy minor requirements in all programs.

The Master of Arts degree with a major in mathematics is offered by the Department of Mathematics. The Master of Science (Physical Science) degree is offered through a cooperative arrangement among the Departments of Chemistry, Geology, Mathematics, and Physical Science and Physics. The Master of Arts (Secondary Education) degree is offered by the Department of Curriculum and Foundations.

#### Master of Arts Degree (Mathematics)

The Mathematics Department offers an M.A. in Mathematics with either a General Concentration or a Statistics Concentration. The following general requirements and policies pertain to both areas of emphasis.

A minimum of 36 hours is required; if the student decides to write a thesis, the minimum is 32 hours, including not more than 6 hours for the thesis. A minor of 6 hours in any related area is required, but may be

waived on recommendation of the student's advisor and concurrence of the Math Department Chairperson and the Graduate Dean. A final (oral) comprehensive exam is administered by a committee of 3-5 graduate faculty chosen by the student and his/her advisor, and approved by the Graduate Dean.

The following are specific requirements for the areas of emphasis:

**General Concentration:** (1) at least 18 hours of 600 level courses offered by the Math Department; (2) at least 12 more hours of 500 or higher level courses offered by the Math Department; (3) at least 6 more hours of 500 or higher level courses selected from another department at Marshall offering a graduate program or from the Math Department.

**Statistics Concentration:** To be admitted into this program the student must have had the regular calculus sequence, at least 3 hours in computer programming in some scientific language, linear algebra, and one course in advanced calculus. Any deficiencies can be made up during the program. Also (1) Math 661, 662; (2) at least 9 more hours in probability and/or statistics offered by the Math Department; (3) at least 6 hours in analysis offered by the Math Department; (4) at least 18 hours (excluding thesis) in courses offered by the Math Department (including those in items 1-3) must be at the 600 level with at least 9 hours (combined) in probability/statistics and analysis.

### **Master of Science Degree (Physical Science)**

This degree program, offered in cooperation with the Departments of Chemistry, Geology, Mathematics, and Physics and Physical Science, is intended to provide a broadly based advanced science program for individuals whose undergraduate program in science lacks depth or breadth. Programs will be designed to meet individual needs. The writing of a thesis is optional except where specialization is in Geology where it is required. Specific degree requirements are listed in the section: Physics and Physical Science.

### **Master of Arts Degree (Secondary Education)**

This degree program offered by the Department of Curriculum and Foundations, is intended to meet the needs of public school teachers (1-12). Programs will be designed to meet individual needs. Specific degree requirements are listed in the section: Education - Curriculum and Instruction, Secondary Education.

## **MATHEMATICS (MTH)**

### **500 Structure of Algebra. 3 hrs.**

Informal development of modern elementary algebra. Recommended for pre-service middle school teachers and for elementary and secondary in-service teachers. May not be used for either a 5-12 mathematics specialization or for any degree offered by the Mathematics Department. (PR: MTH 130 or equivalent)

### **501 Structure of Modern Geometry. 3 hrs.**

Informal development of geometry with an exploration of probability and statistics. Recommended for pre-service middle school teachers and for elementary and secondary in-service teachers. May not be used for either a 5-12 mathematics specialization or for a degree offered by the Mathematics Department. (PR: MTH 130 or equivalent)

### **511 Mathematical Modeling. 3 hrs.**

Students will work in teams to construct mathematical models of various real-world situations. Problems to be modeled will be drawn from diverse areas of application and will use a wide range of undergraduate mathematics. (PR: MTH 231 or 230 and permission of instructor)

### **512 Statistical Models for Regression and Correlation Analysis. 3 hrs.**

Determining regression models; deriving parameter estimates using calculus; detailed coverage of tests of assumptions and remedial procedures (transformations and weighted least-squares); multiple and polynomial regression; tests and corrections for autocorrelation. (PR: One previous course in statistics and a knowledge of elementary calculus, or permission of instructor.)

### **513 Statistical Models for Analysis of Variance and Covariance. 3 hrs.**

Analysis of variance and covariance models with derivations using calculus; detailed testing of model assumptions and remedial measures (as transformations) to yield adequate models; use of various statistical designs. (PR: One previous statistics course and a knowledge of elementary calculus, or permission of instructor)

### **520 Nonparametric Statistical Methods and Theory. 3 hrs.**

Coverage of a variety of nonparametric or distribution-free methods for practical statistical inference problems in hypothesis testing and estimation, including rank procedures and randomization procedures. (PR: One previous course in statistics and a knowledge of elementary calculus, or permission of the instructor)

### **522 Applied Time Series Analysis. 3 hrs.**

Alternate years. Finding statistical models to represent various time dependent phenomena and processes; coverage of a variety of forecasting techniques, with an emphasis on adaptive, regression, and Box-Jenkins procedures. (PR: a previous course in statistics and a knowledge of elementary calculus, or permission of instructor)

- 527 Advanced Calculus I. 3 hrs. I.**  
A rigorous study of the real number system, continuity and differentiability of functions of a single variable, integration of functions of a single variable, infinite series. (PR: MTH 231 and 300, REC: MTH 330)
- 528 Advanced Calculus II. 3 hrs. II.**  
A rigorous development of algebra and topology of Euclidean spaces, differentiability and integrability of functions of several variables. (PR: MTH 527)
- 542 Numerical Linear Algebra. 3 hrs.**  
Direct and iterative methods for numerical solution of linear systems of equations. Eigenvalues and eigenvectors. Error analysis and norms. Related Topics. (PR: MTH 230, 330)
- 543 Numerical Analysis. 3 hrs.**  
The theory and technique of numerical computation involving the difference calculus, the summation calculus, interpolation methods, solutions of equations, and numerical differentiation and integration. (PR: MTH 230)
- 545-546 Introduction to Theory of Statistics I, II. 3; 3 hrs. I (545), II (546)**  
Probability spaces, conditional probability, and applications. Random variables, distributions, expectation, and moments. Statistical inference: estimation of parameters, tests of hypotheses. Regression, analysis of variance. (PR: MTH 230 for 545; MTH 545 for 546)
- 548 Fundamental Concepts of Modern Geometry. 3 hrs. I.**  
Finite geometries, basic background material for the modern development of Euclidean Geometry, other geometries. (PR: Elementary Calculus)
- 549 Projective Geometry. 3 hrs.**  
Projective geometry using both synthetic and algebraic methods. (PR: Elementary calculus)
- 550 Fundamental Concepts of Modern Algebra. 3 hrs.**  
Structure of the abstract mathematical systems; fields, rings, groups, with illustrations and applications from number theory. (PR: MTH 230)
- 580-583 Special Topics in Mathematics. 1-4; 1-4; 1-4; 1-4 hrs.**  
Courses on special topics not listed among the current course offerings. (PR: Permission of instructor)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
(PR: Consent of instructor and department chairman)
- 589 Seminar for Teaching Assistants. 1 hr.**  
An introduction to techniques of teaching mathematics with emphasis on intermediate algebra. (PR: Assignment to teach mathematics as a teaching assistant.) (CR/NC)
- 610 & 611 Modern Algebra. 3; 3 hrs. I (610), II (611).**  
The structure of semigroups, groups, rings, fields, modules, vector spaces, lattices and related topics. (PR: MTH 550 or equivalent)
- 620 Non-Euclidean Geometry. 3 hrs.**  
A study of the historical development of Non-Euclidean Geometries, followed by a detailed study of these geometries. (PR: Permission or graduate standing)
- 621 Projective Spaces. 3 hrs.**  
An introduction to current work on projective planes through a study of the real projective plane. A study of synthetic and analytic projective spaces through theorems concerning the connections between their structures. Some finite geometries. (PR: Undergraduate linear algebra and elementary calculus)
- 630 & 631 Topology. 3; 3 hrs. I (630), II (631).**  
General topology including separation axioms, connectedness, compactness, convergence, continuity, metric spaces, product and quotient spaces. (PR: MTH 337 or 528)
- 640 & 641 Theory of Functions of Complex Variables. 3; 3 hrs. I (640), II (641).**  
A study of algebra, topology, and geometry of the complex plane; holomorphic functions; conformal mapping; analytic functions and analytic continuation; complex integration; representation theorems; convergence theorems and related topics. (PR: MTH 528 or 561 or equivalent)
- 650 & 651 Theory of Functions of Real Variables. 3; 3 hrs. I (650), II (651).**  
A study of measure and integration and related topics. (PR: MTH 528 or equivalent)
- 660 Stochastic Processes. 3 hrs.**  
Theory and applications of Markov chains. (PR: Undergraduate probability and statistics)
- 661 Advanced Mathematical Statistics. 3 hrs.**  
Topics in mathematical statistics including distribution theory for functions of random variables, convergence concepts, sufficient statistics, finding optimal estimates for parameters, optimal tests of hypotheses. (PR: MTH 446-546 or equivalent or permission of instructor)
- 662 Multivariate Mathematical Statistics. 3 hrs.**  
Multivariate distribution theory and statistical inference including estimation and tests concerning mean vectors and covariance matrices (maximum-likelihood and likelihood-ratio techniques emphasized). (PR: MTH 446-546 or equivalent or permission of instructor)

**665 Optimization Mathematics. 3 hrs.**

Classical optimization of functions of several variables. Theory and methods of linear and nonlinear programming. (PR: MTH 231 and consent of department; MTH 427 recommended)

**670 Independent Study. 1-4 hrs.**

An independent program of study of advanced topics not normally covered in other courses. The topics are chosen upon mutual agreement between the student and the instructor. (PR: Consent of instructor and Department Chairman)

**681 Thesis. 1-6 hrs.**

**690-693 Special Topics. 1-4 hrs.**

**MODERN LANGUAGES**

At present the Department of Modern Languages does not offer a graduate major. Courses in Modern Languages are taken as minors by students in other departments, such as History, Journalism and English. Courses in Modern Languages are also taken by teachers in service who wish to enhance their competence in language and literature and to qualify for a higher salary.

In cooperation with the Division of Teacher Education, the Department of Modern Languages offers a program leading to the Master's degree in secondary education and Spanish. For further details consult the section: Education-Curriculum and Instruction, Secondary Education, in this catalog.

For courses see French or Spanish.

**MUSIC (MUS)**

To be admitted to the graduate program in music, students must have received a bachelor's degree from an accredited institution with a major in music or the equivalent. A conference and audition with the Chairman of the Department of Music and with members of the department's graduate faculty are required as a part of the admission procedure. At the conference the conditions of admission are defined. The applicant may submit an audition tape if it is inconvenient to appear on campus.

Majors in all music programs are given an examination in basic skills and capacities in music not later than the time of completion of twelve semester hours of graduate work and before being admitted to candidacy. As part of these requirements the basic departmental piano proficiency examination must be passed, the content of which will vary according to the student's departmental area major. In addition, a placement examination in Music History (including Styles) and Music Theory must be taken to determine if deficiencies in these areas exist. Applicants must take these examinations prior to registering for graduate courses in music.

Requirements for performance levels in applied music as well as more detailed information on requisites in the individual options will be found in the Music Department Applied Music and Ensemble Handbook.

In addition to the Master of Arts option in Music Education (see section Education-Curriculum and Instruction, Music Education of this catalog), the Music Department offers graduate degrees with emphasis in 1) Applied Music Performance, 2) Music History and Literature and, 3) Music Theory and Composition. The program for a major in these areas is 32 hours and must include at least 26 hours in major, cognate and elective areas of music. Normally not more than 3-4 hours may be earned by a thesis which may be a written report, graduate recital or musical composition of merit.

All full-time graduate students are required to participate in a music ensemble during the regular academic year as recommended by their major advisor. No graduate credit is given for this participation.

**APPLIED MUSIC PERFORMANCE**

	Hours
Minimum requirements.....	32
1. Major Area .....	32
Applied music in Voice or Instrument, Music 681	
2. Cognate Studies in Music .....	11-12
Music 621, 640A, One period course in Music	
History (chosen from one of the following): Music 650, 651, 652, 653, 654, 655, one Music Literature	
course in major area.	
3. Music Electives .....	2-4
Pedagogy, Literature, Applied, Music Education, Theory, Problem Report or Special Topics.	
4. Minor Field .....	6
(Voice applied majors should select the study of foreign language. Instrumental applied should select from	
Literature, Physics [Acoustics], Mathematics, History or other allied areas.)	

## MUSIC HISTORY AND LITERATURE

	Hours
Minimum requirements .....	32
1. Major Area .....	12
Four period courses in Music History (chosen from the following): Music 650, 651, 652, 653, 654, 655, Music 681 .....	3
2. Cognate Studies in Music .....	9
Music 621, 640A, Music Theory Elective .....	2
3. Music Electives .....	2
(To be determined in consultation between the student and his advisor)	
4. Minor Field .....	6
(Recommend study of French or German for reading knowledge)	

## MUSIC THEORY AND COMPOSITION

	Hours
Minimum requirements .....	32-36
1. Major Area .....	18
Music 640A, 640B, Music 641, Music 645A, 645B, Music 646 or 648, Music 681 .....	
2. Cognate Studies in Music .....	6
Music 621, 655 .....	
3. Music Electives .....	2
(To be determined in consultation between the student and his advisor)	
4. Minor Field .....	6
(Departmental recommendations include areas of Literature, Mathematics, Physics or Philosophy)	

## MUSIC (MUS)

580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.

585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.

591-594 Workshop. 1-4; 1-4; 1-4; 1-4 hrs.

601 Symphonic Literature. 3 hrs.

A survey of orchestra literature beginning with the 16th century; the Mannheim composers, Viennese classics, the Romantists, the national schools, and late European, South American and American developments.

604a Keyboard Literature. 2 hrs.

A survey of keyboard literature from the 14th to the 20th century. Emphasis is on stylistic developments and formal procedures.

604b Chamber Music Literature. 2 hrs.

A survey of chamber music literature from the Baroque Era to the 20th century. Analysis of form emphasized in the study of string quartet trio, quintet, and various other combinations.

604c Song Literature. 2 hrs.

The song literature of Western Europe and America, also including contemporary material from other countries; interpretation, song study, program building, languages, and interpretation of accompaniments. For singers and accompanists.

604d Choral Literature. 2 hrs.

A comprehensive study of the forms and styles of Choral Composition from Renaissance to present day.

610 Philosophy of Music Education. 3 hrs.

Basic concepts of music education and their application to problems of music teaching, supervision and administration.

611 Psychology of Music. 3 hrs.

Vibrational stimuli, resultant reactions, and factors involved in development of musical skills, as well as measures of aptitude and achievement.

612 Projects and Problems in Music. 3 hrs.

Special problems and projects chosen by the student for investigation. Extensive study of a single problem or project in detail.

614 The Teaching of Music Appreciation. 2 hrs.

Advanced methods and materials for teaching appreciation of music in grades 1-12.

615 Band Maneuvers and Pageantry. 2 hrs.

The marching band. The marching and musical problems which are encountered in training and operating a band for football games and other events involving marching and playing.

- 616 Curriculum Construction and Revision. 3 hrs.**  
Survey of recent developments in public school curricula and their effect on music offerings. Preparation of course and curricular content.
- 617 Seminar in Music Education. 3 hrs.**  
An advanced study of basic concepts of current problems in music education.
- 618a Administration of Instrumental Music. 3 hrs.**  
The planning and operation of the instrumental program and the details of programming the work in a school system.
- 618b Administration of Choral Music. 3 hrs.**  
A study of the organization of choral music programs including; recruitment, auditions, scheduling, rehearsal arrangement, programming, touring, and budget.
- 619a Seminar in Vocal Pedagogy. 2 hrs.**
- 619b Seminar in Piano Pedagogy. 2 hrs.**  
An analytical survey of developments in piano techniques and pedagogical procedures with open discussions on various facets of piano teaching.
- 620a Instrumental Workshop. 2 hrs.**  
Problems of the instrumental teacher at all levels; practical work in the techniques of handling beginning classes and ensembles of all types.
- 620b Choral Workshop. 2 hrs.**  
A practicum approach to problems of choral techniques and materials with special emphasis placed upon high school and junior high school levels.
- 621 Introduction to Graduate Studies in Music: Research and Writing. 3 hrs.**  
Introduction to music research with emphasis on investigative methods and applications, procedures, and bibliography. Concentration on expository writing style and format.
- 629a Choral Conducting and Interpretation. 2 hrs.** Performance analysis of choral music from the Renaissance, Baroque and Classical periods as a basis for the expansion of ability in conducting. Students will conduct university ensembles in rehearsal and performance.
- 629b Choral Conducting and Interpretation. 2 hrs.** Continuation of Music 629a with emphasis upon Romantic and Contemporary music. Some opportunity given to work with operatic conducting. Does not require Music 629a as a prerequisite.
- 630a Instrumental Conducting and Interpretation. 2 hrs.** The special problems involved in conducting and training instrumental groups at all levels.
- 630b Instrumental Conducting and Interpretation. 2 hrs.** A continuation of 630a.
- 640a Music Theory. 3 hrs.**  
Analytical and writing techniques of 19th and 20th Century music.
- 640b Music Theory. 3 hrs.**  
Continuation of Music 640a.
- 641 Advanced Counterpoint. 3 hrs.**  
An intensive study of contrapuntal techniques, styles, and forms through composition and analysis.
- 642 Procedures and Techniques for Elementary Music (Grades K-6). 3 hrs.**  
Fundamentals of Music; experience in keyboard, guitar, recorder and autoharp. Survey of materials and methodology to aid in establishing program in school music. Non-majors only.
- 645a Original Composition. 2 hrs.**
- 645b Original Composition. 2 hrs.**
- 646 Advanced Choral Arranging. 2 hrs.**  
Techniques of choral composition and arranging with emphasis on the mixed choir. Arrangements and original works sung by choral groups and conducted by students.
- 647 Advanced Band Arranging. 2 hrs.**  
A study of the scoring for modern concert and marching bands, the transcription of works for other media as well as original works; analysis of band literature, harmonic and formal.
- 648 Advanced Orchestration. 2 hrs.**  
Scoring compositions from other media for modern orchestras of various sizes.
- 649 Stage Band Arranging. 2 hrs.**  
A study of the special techniques involved in scoring for the contemporary stage band, including harmony used, voicing of the various instruments, and a study of current practices.
- 650 Ancient and Medieval Music. 3 hrs.**  
Ancient Greek musical theory, Gregorian chant and its outgrowths, secular monophony, sacred and secular polyphony and its development through the fourteenth century.
- 651 Music of the Renaissance. 3 hrs.**  
The English, Burgundian and Netherland schools; secular forms; chanson, madrigal, and lied; instrumental music; mannerism and the end of an age.
- 652 Music of the Baroque Era. 3 hrs.**  
The monodic revolution: madrigal to cantata, opera, oratorio; Italian leaders; Vivaldi, Bach, and Handel.

- 653 **Music of the Classical Era. 3 hrs.**  
Pre-Classic styles and the formation of a classical style in music in symphony, concerto, opera, the sonata, and choral music through Beethoven.
- 654 **Music of the Romantic Era. 3 hrs.**  
A study and evaluation of Beethoven's principal works and the life and works of Schubert, Mendelssohn, Chopin, Schumann, Brahms, and their contemporaries.
- 655 **Contemporary Music. 3 hrs.**  
Musical developments since Wagner: Debussy, Stravinsky, Mahler, Strauss, Schoenberg, Bartok and their contemporaries. Developments in electronic and aleatoric music, and new notations.
- 656 **Seminar in Performance Practice. 2 hrs.**  
Students will prepare and perform music from a selected style period, making their own editions with correct realization and ornamentation. May be repeated for credit.
- 670 **Advanced Materials and Methods (Grades 1-6). 3 hrs.**  
A comprehensive survey of available materials in singing, reading, listening, rhythm, and creating program of school music for the elementary grades; use of such materials in the methodology of teaching. (PR: Graduate music majors only)
- 675 **Creative Activity for Children. 3 hrs.**  
Ways of using creative activity in the music program, methods of presenting creative song writing, rhythms, instrument construction, instrumental expressing, dramatization, program building.
- 679 **Problem Report. 1-3 hrs.**
- 681 **Thesis. 1-6 hrs.**

#### Applied Music

- 680 a,b,c,d. Saxophone. 1-2 hrs.
- 682 a,b,c,d. Flute. 1-2 hrs.
- 683 a,b,c,d. Oboe. 1-2 hrs.
- 684 a,b,c,d. Clarinet. 1-2 hrs.
- 685 a,b,c,d. Bassoon. 1-2 hrs.
- 686 a,b,c,d. French Horn. 1-2 hrs.
- 687 a,b,c,d. Trumpet. 1-2 hrs.
- 688 a,b,c,d. Trombone. 1-2 hrs.
- 689 a,b,c,d. Baritone. 1-2 hrs.
- 690 a,b,c,d. Tuba. 1-2 hrs.
- 691 a,b,c,d. Violin. 1-2 hrs.
- 692 a,b,c,d. Viola. 1-2 hrs.
- 693 a,b,c,d. Cello. 1-2 hrs.
- 694 a,b,c,d. String Bass. 1-2 hrs.
- 695 a,b,c,d. Piano. 1-2 hrs.
- 696 a,b,c,d. Voice. 1-2 hrs.
- 697 a,b,c,d. Organ. 1-2 hrs.
- 698 a,b,c,d. Percussion. 1-2 hrs.

#### MUSIC EDUCATION

The degree Master of Arts in Music with an area of emphasis in Music Education requires a minimum of 36 hours of course work. The program for the degree must include 14 hours of music education, 11 hours of cognate studies in music, 5 hours from other fields of music and 6 hours in professional education. For certification, state requirements must be met. Discuss with your advisor.

Majors in all music and music education programs are given an examination in basic skills not later than the time of completion of twelve semester hours of graduate work and before being admitted to candidacy. As part of these requirements the basic departmental piano proficiency examination must be passed, the content of which will vary according to the student's departmental area major. In addition, a placement examination in Music History (including Styles) and Music Theory must be taken to determine if deficiencies in these areas exist. Applicants must take this examination prior to registering for graduate courses in music.

All full-time graduate students in music are required to participate in a music ensemble during the regular academic year as recommended by their major advisor. No graduate credit is given for this participation.

Requirements for performance levels in applied music as well as more detailed information on requisites in the individual options will be found in the Music Department Applied Music and Ensemble Handbook.



## INSTRUMENTAL

	Hours
Minimum requirements .....	36
1. Education .....	6
Two courses in Curriculum and Instruction selected in consultation with the student's advisor	
2. Cognate Studies in Music .....	11
Music 621, 630A, 640A, Music History Elective	
3. Major Area ?Music Education .....	14
Music 610, 615, 616, 617, 618A	
4. Music Electives .....	5

## VOCAL

	Hours
Minimum requirements .....	36
1. Education .....	6
Two courses in Curriculum and Instruction selected in consultation with the student's advisor.	
2. Cognate Studies in Music .....	11
Music 621, 629A, 640A, Music History Elective	
3. Major Area ?Music Education .....	14
Music 610, 616, 617, 618B, 619A	
4. Music Electives .....	5

## NURSING (NUR)

The School of Nursing currently offers the Master of Science in Nursing degree with the area of emphasis in: Family Nurse Practitioner or Family Nurse Practitioner with School Nurse Practitioner Specialization, or Nursing Administration. The School of Nursing also offers a Post Master's Certificate in Family Nurse Practitioner Program.

### MASTER OF SCIENCE IN NURSING

The purpose of the Master of Science in Nursing program is to prepare graduates for advanced practice nursing in a variety of practice settings, particularly in rural and/or underserved communities. The program also prepares nurses for leadership roles in the administration of clinical services in a variety of community based or acute care provider agencies.

Course work in the Master of Science in Nursing program incorporates the classroom, laboratory, and clinical modes of instruction. All nursing students have experiences with rural and/or underserved populations as part of the State initiatives for primary health care. The Master of Science in Nursing program requires the completion of a minimum of 42 credit hours for the family nurse practitioner area of emphasis, and 36 credit hours for the nursing administration area of emphasis. Upon successful completion of the Master of Science in Nursing Program, the graduates will be eligible to take one or more of the American Nurses' Credentialing Center Certification Examinations depending on the area of emphasis: Family Nurse Practitioner; School Nurse Practitioner; Nursing Administration or Nursing Administration Advanced depending on their experience and stage of professional development. The Master of Science in Nursing program is accredited by the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, NY 10014. Phone (212) 989-9393, FAX (212) 989-8264.

The program purpose is achieved through three program components. The core component (12 credits) focuses on knowledge and skills related to nursing theory, advanced nursing research, leadership, and health care issues. The family nurse practitioner area of emphasis component (24 credits) provides students with the opportunity to develop competency as a family nurse practitioner. Students in this area of emphasis may also opt to specialize as school nurse practitioners. The nursing administration component (18 credits) provides students with the opportunity to acquire knowledge and skills necessary to administer/manage rural/underserved primary care agencies, home health care, and other health care agencies or units. The elective component (6 credits) allows students to choose one of three options: 1) thesis, 2) role development courses in teaching or administration, 3) school nurse practitioner courses, or 4) elective courses related to the student's area of interest.

The program can be completed in two academic years of full-time study or over a period not to exceed 5 calendar years from date of first class enrollment. Graduate nursing courses are open only to those students admitted to the nursing program.

### Course Requirements: Family Nurse Practitioner

	Hours
Core Component Courses (12 credits) .....	Hours
NUR 602 Theoretical Foundations in Nursing .....	3
NUR 604 Leadership in Nursing .....	3
NUR 606 Advanced Nursing Research .....	3
NUR 608 Issues in Health Care .....	3
 Area of Emphasis Component Courses (24 credits) .....	 Hours
NUR 622 Advanced Family Nursing I .....	6
NUR 624 Advanced Family Nursing II .....	6
NUR 626 Advanced Family Nursing III .....	6
NUR 695 Internship: Advanced Family Nursing .....	6
 Elective Component Courses (Select 6 credits from the following offerings) .....	 Hours
NUR 681 Thesis .....	6
NUR 612 Nursing Administration .....	2
NUR 614 Seminar and Practicum in Nursing Administration .....	4
NUR 616 Curriculum Development in Nursing .....	3
NUR 618 Teaching in Nursing .....	3
NUR 662 Pharmacology for Nurses in Advanced Practice .....	3
or Other Electives .....	6
 TOTAL .....	 42

### Course Requirements: Family Nurse Practitioner with School Nurse Practitioner Specialization

Core Component Courses (12 credits) .....	Hours
NUR 602 Theoretical Foundations in Nursing .....	3
NUR 604 Leadership in Nursing .....	3
NUR 606 Advanced Nursing Research .....	3
NUR 608 Issues in Health Care .....	3
 Area of Emphasis Component Courses (24 credits)	
NUR 622 Advanced Family Nursing I .....	6
NUR 624 Advanced Family Nursing II .....	6
NUR 626 Advanced Family Nursing III .....	6
NUR 695 Internship: Advanced Family Nursing .....	6
 Elective Component Courses (6 credits)	
NUR 632 School Nurse Practitioner Role in School Health I .....	3
NUR 634 School Nurse Practitioner Role in School Health II .....	3
 TOTAL .....	 42

### Course Requirements: Nursing Administration

Core Component Courses (12 credits) .....	Hours
NUR 602 Theoretical Foundations in Nursing .....	3
NUR 604 Leadership in Nursing .....	3
NUR 606 Advanced Nursing Research .....	3
NUR 608 Issues in Health Care .....	3
 Area of Emphasis Component Courses (18 credits)	
NUR 642 Organizational Dynamics in Nursing .....	3
NUR 644 Financial Strategies in Nursing Administration .....	3
NUR 646 Nursing Management in Health Care Settings I .....	6
NUR 648 Nursing Management in Health Care Settings II .....	6
 Elective Component Courses (Select 6 credits from the following offerings)	
NUR 681 Thesis .....	6

NUR 616 Curriculum Development in Nursing .....	3
NUR 618 Teaching in Nursing .....	3
NUR 632 School Nurse Practitioner Role in School Health I .....	3
NUR 634 School Nurse Practitioner Role in School Health II .....	3
or Other Electives .....	6
<b>TOTAL</b>	<b>36</b>

### Admission Requirements for MSN Applicants

All applicants must meet the admission requirements of the Marshall University Graduate School. The nursing program is available to a limited number of qualified applicants. Admission is determined on a competitive basis. To be eligible for regular admission to the program, applicants must meet the following admission requirements:

1. Baccalaureate degree with a major in nursing from an NLN accredited program.
2. Undergraduate course credit for basic statistics and basic research.
3. Scholastic achievement as evidenced by an overall undergraduate/graduate grade point average and aptitude for graduate study as indicated by the Graduate Record Examination as follows:  
 GPA 2.5 (4.0=A) and GRE 1500 (total of 3 subtests) or  
 GPA 3.0 (4.0=A) and GRE 1200 (total of 3 subtests)
4. Evidence of a current unincumbered license as a registered nurse in a U.S. jurisdiction.
5. Two years of professional nursing experience required for full-time students in MSN-NA program. Students with less than two years experience may opt to study part-time and work in nursing full-time throughout their tenure as a nursing administration student.

An applicant who has a baccalaureate degree in nursing and a master's degree in any field is eligible for regular admission.

Registered nurse applicants with a Master of Science in Nursing degree from an NLN accredited program are eligible for regular admission to the MSN program to take any portion of the MSN program provided space is available.

An applicant may be considered for provisional admission if the:

1. Baccalaureate degree does not meet the criteria for regular admission.
2. Undergraduate/graduate grade point average and Graduate Record Examination falls within the following range:  
 GPA 2.5 (4.0=A) and GRE 1400 (total of 3 subtests) or  
 GPA 2.75 (4.0=A) and GRE 1300 (total of 3 subtests) or  
 GPA 3.5 (4.0=A) and GRE 1100 (total of 3 subtests)
3. Prerequisite course work or records are incomplete. If a student is accepted for provisional admission, the terms for reclassification as a regular student will be stated in the letter of admission. The provision(s) and the time frame will be stated in the letter of admission. Under no circumstances will the provisional terms be extended beyond the 12th credit hour. The student must maintain a minimum grade point average of 3.0 in all graduate course work taken during the provisional period. The student who does not meet the provision(s) as stated will be dropped from the program.

### Admission Process for MSN Applicants

To apply for admission to the program, the applicant must submit a complete application to the Marshall University Admissions Office by March 1 for the FNP area of emphasis and July 1 for the nursing administration area of emphasis. Application must include:

1. Graduate application.
2. Official transcripts of all undergraduate and graduate course work. These must be sent directly from the college/university to the Admissions Office.
3. Graduate Record Examination scores. Information regarding this examination may be obtained from the Graduate School or the Admissions Office.
4. Verification of a current unincumbered license as a registered nurse in a U.S. jurisdiction. Verification form may be obtained from the School of Nursing.

### POST MASTER'S CERTIFICATE IN FAMILY NURSE PRACTITIONER PROGRAM

The purpose of the Post Master's Certificate in Family Nurse Practitioner program is to prepare nurses, who have a Master of Science in Nursing degree, as family nurse practitioners. The graduates of this program are eligible to take the American Nurses' Credentialing Center Certification Examination for Family Nurse Practitioners.

### Course Requirements: Post Master's Certificate in Family Nurse Practitioner Program

NUR 622 Advanced Family Nursing I .....	6
NUR 624 Advanced Family Nursing II .....	6
NUR 626 Advanced Family Nursing III .....	6
NUR 695 Internship: Advanced Family Nursing .....	6
<b>TOTAL</b>	<b>24</b>

Additional courses may be taken after consultation with the associate dean for graduate studies.

### Admission Requirements for Post Master's Certificate in Family Nurse Practitioner Program Applicants

All applicants must meet the admission requirements of the Marshall University Graduate School. The Post Master's Certificate in Family Nurse Practitioner program is available to a limited number of qualified applicants. Admission is determined on a competitive basis. Applicants must meet the following minimum requirements.

1. Master of Science in Nursing from an NLN accredited program. Applicants who are graduates of programs outside the NLN jurisdiction will be evaluated on an individual basis.
2. Course credit for basic statistics and basic research.
3. Evidence of a current unincumbered license as a registered nurse in a U.S. jurisdiction.

### Admission Process for Post Master's Certificate in Family Nurse Practitioner Program Applicants

To apply for admission to the Post Master's Certificate in Family Nurse Practitioner program, the applicant must submit the following to the Marshall University Admissions Office.

1. Graduate application.
2. Official transcript(s) of graduate course work. Transcript(s) must be sent directly from the college/university to the Admissions Office.
3. Verification of a current unincumbered license as a registered nurse in a U.S. jurisdiction. Verification form may be obtained from the School of Nursing.

## POLICIES

Students in both the MSN and Post Master's Certificate programs are governed by policies stated in the Marshall University Graduate Catalog. Policies specific to the nursing programs are as follows:

### Academic Policies

1. The School of Nursing reserves the right to require withdrawal from nursing of any student whose health, academic record, clinical performance, or behavior in nursing is judged unsatisfactory.
2. Students who earn more than 6 hours of C may be subject to dismissal from the program.
3. Students may repeat one required course in which they have earned less than a C.
4. Students whose grade point average falls below 3.0 may not progress in nursing courses with a clinical component until a grade point average of 3.0 is attained, and only when space is available.
5. No more than 12 course hours may be accepted as transfer credit.
6. Only 1 re-examination of the comprehensive examination may be taken.
7. Students enrolled in the Post Master's Certificate program in Family Nurse Practitioner Program must complete the program with a 3.0 grade point average or better on a 4.0 scale.

### Other Policies

1. Each student must submit a satisfactory health record prior to registering for his/her first nursing course with a clinical component.
2. Each student must show evidence of the following prior to registering for any nursing course with a clinical component: Current unincumbered professional nurse licensure in a U.S. jurisdiction. Current certification in cardiopulmonary resuscitation.
3. Students are responsible for own transportation to and from all clinical assignments.
4. Students are required to be in professional attire for all clinical practicums and to wear a name pin. In addition, selected clinical agencies require a white lab coat.
5. Students enrolled in the Nursing Administration area of emphasis must have two full years of work experience in nursing to undertake full-time study or students may opt to study part-time and work in nursing full-time throughout their tenure as a nursing administration student.

## NURSING (NUR)

### 550 Nursing and the Elderly Client. 3 hrs.

Provides a knowledge base in physiological, intellectual, emotional and sociological changes and related problems of the elderly as it relates to nursing practice.

- 580-584 Special Topics in Nursing. 1-4 hrs.**  
Program of study not normally covered in other courses. Topics vary from semester to semester. (PR: Permission of instructor)
- 585-588 Independent Study in Nursing. 1-4 hrs.**  
Courses taught by tutorials; directed independent readings or research; problem reports, and other activities designed to fill needs of individual students.
- 591-594 Nursing Workshop. 1-4 hrs.**  
Practical, participatory courses for advanced students. Experience in new techniques and application of new knowledge.
- 602 Theoretical Foundations in Nursing. 3 hrs.**  
Provides students with opportunity to relate a philosophical and theoretical base to concepts and processes inherent in nursing. Emphasis is on analysis of nursing theories and their relationship and application to research and practice.
- 604 Leadership in Nursing. 3 hrs.**  
Explores the theoretical basis for effective leadership in nursing. Emphasis is placed on analysis of leadership, characteristics and behaviors of leaders, and the role of the nurse leader.
- 606 Advanced Nursing Research. 3 hrs.**  
Provides the opportunity to develop a research approach to nursing situations. Focus is upon the development of a research proposal. (PR: or concurrent NUR 602 or Perm)
- 608 Issues in Health Care. 3 hrs.**  
Explores and evaluates concerns germane to contemporary nursing. Focus is upon the role of nursing in addressing health issues affected by social, economic, political, and technological forces.
- 612 Nursing Administration. 2 hrs.**  
Identification and analysis of significant theories and factors influencing the administrative process in a variety of health care delivery settings. Focus is upon the role and functions of the nurse administrator in mid-level management. (For non-nursing administration only).
- 614 Seminar and Practicum in Nursing Administration. 4 hrs.**  
Focus is on analysis and application of selected administration and leadership concepts, selected management processes and strategies for effecting change by the nurse administrator in mid-level management. Practicum included. (For non-nursing administration only). (PR: NUR 612)
- 616 Curriculum Development in Nursing. 3 hrs.**  
Introduces the various component in the curriculum development process. Emphasis is on philosophy, objectives, curriculum designs, and program evaluation. Factors influencing curriculum development, implementation, evaluation, and nursing curriculum patterns are examined.
- 618 Teaching in Nursing. 3 hrs.**  
Investigates the responsibilities of the educator in contemporary nursing. Emphasis is upon the instructional process. Practicum allows student to practice the role of the teacher in a variety of educational experiences.
- 622 Advanced Family Nursing I. 6 hrs.**  
Introduction to knowledge and skills essential for comprehensive health assessments, analysis of data, formulation of diagnoses, development of the therapeutic plans, and implementation of health promotion and maintenance activities. Practicum included. (PR or concurrent: NUR 602, NUR 604)
- 624 Advanced Family Nursing II. 6 hrs.**  
Provides advanced knowledge and nursing management of common and acute self-limiting health problems of individuals and families of various age groups. Includes pathology and therapeutic modalities related to specific health problems. Practicum included. (PR: NUR 622, PR or concurrent: NUR 606)
- 626 Advanced Family Nursing III. 6 hrs.**  
Provides advanced knowledge of chronic illness and the long-term nursing management of health care problems. Includes pathology and therapeutic modalities related to management of chronic health problems. Practicum included. (PR: NUR 624)
- 632 School Nurse Practitioner Role in School Health I. 3 hrs.**  
Focus is upon the role of the school nurse practitioner in the school system. (PR: NUR 602, NUR 604 or permission)
- 634 School Nurse Practitioner Role in School Health II. 3 hrs.**  
Focus is upon the role of school nurse practitioner in providing health care to school age children. (PR: NUR 632 or concurrent or Perm)
- 642 Organizational Dynamics in Nursing. 3 hrs.**  
Focus is upon the organizational dynamics as they apply to the nurse manager role in health care delivery systems.
- 644 Financial Strategies in Nursing Administration. 3 hrs.**  
Examines the financial management role of the nurse administrator in relation to economic, political, and societal trends.

- 646 Nursing Management in Health Care Settings I. 6 hrs.**  
Focuses on the application of theories and principles related to nursing management. Practicum included. (PR or concurrent: NUR 604, NUR 606; PR: NUR 642, NUR 644)
- 648 Nursing Management in Health Care Settings II. 6 hrs.**  
Practicum focuses upon the application of the role components of the nurse manager in selected health care settings. Seminars included. (PR: NUR 646)
- 662 Pharmacology for Nurses in Advanced Practice. 3 hrs.**  
Focus is upon a review of the knowledge base in the basic science of drugs and on how this knowledge base can be applied to client care and education by nurses in advanced practice. (PR: Evidence of current RN license and perm)
- 679 Problem Report in Nursing. 1-3 hrs.**  
The preparation of a written report on a research problem or field of study in nursing.
- 681 Thesis. 1-6 hrs.**  
Individual research in a selected area of nursing under direction of a faculty member. (PR: NUR 606)
- 690-693 Seminar in Nursing. 1-3 hrs.**  
Topics in nursing not covered in other courses; topics will vary.
- 695 Internship: Advanced Family Nursing. 6 hrs.**  
Focus is upon the role of the family nurse practitioner using the case management approach in a supervised contractual work study arrangement with a health care agency. (450 hrs. minimum) (PR: NUR 626)
- 697-698 Instructional TV. 1-4 hrs.**  
A course based upon Instructional Television series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements.

**PATHOLOGY (PTH)**  
(See Biomedical Sciences)

**PHARMACOLOGY (PMC)**  
(See Biomedical Sciences)

**PHILOSOPHY (PHL)**

The Philosophy Department offers only a minor at the graduate level. Any set of courses is permissible, although it is advisable to take them in relative sequence.

**PHILOSOPHY (PHL)**

- 551 Philosophy of History and Culture. 3 hrs.**  
Ancient and modern theories of the meaning and consequence of history and culture.
- 553 Philosophy of Science. 3 hrs.**  
Crucial concepts in modern science relevant to contemporary philosophical issues concerning man and the universe; special attention to epistemological and ethical implications of natural law, induction, mathematical theory and the new physics.
- 555 Philosophy of Religion. 3 hrs.**  
Theories of the nature and functions of religion, including the meaning of religious language and problems of belief.
- 563 Philosophy of Feminism. 3 hrs.**  
An introduction to contemporary feminist theory including discussion of current gender-related issues.
- 565 Existential Philosophy. 3 hrs.**  
A survey of the contributions of leading existentialist philosophers of the past and present from Kierkegaard and Nietzsche to Sartre and Tillich; course is conducted much like a seminar.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 598 Directed Readings in Philosophy. 3 hrs. I, or II.**  
Advanced research adaptable to the needs of students. Regular consultations with the chairman and staff.
- 599 Humanities Seminar. 3 hrs.**

**PHYSICAL EDUCATION**  
(See Health and Physical Education)

**PHYSICAL SCIENCE (PS)**  
(Physics and Physical Science Department)

The Master of Science in Physical Science, offered in cooperation with the Departments of Chemistry, Geology and Mathematics, is intended to provide a broadly based advanced science program for individuals

whose undergraduate program in science lacks depth or breadth. Programs will be designed to meet individual needs. The writing of a thesis is required with certain concentrations. Students must consult with their advisor. If the thesis option is chosen, a minimum of 32 hours are required, including not more than 6 hours for the thesis; without the thesis, 36 hours are required.

NOTE: These are general guidelines; individual departments may have their own requirements.

	Hours
Minimum requirements .....	32-36
Major area (Chemistry, Geology, Mathematics, Physics and Physical Science) .....	12-18
Minor area (Chemistry, Geology, Mathematics, Physics and Physical Science) .....	6
Electives .....	12-18

The Department of Physics and Physical Science also offers minor fields in physical science and in physics.

### PHYSICAL SCIENCE (PS)

- 500 Astronomy. 3 hrs.**  
A study of the stars and planets and galaxies, planetary motion, cosmology and cosmography. Designed to assist teachers and others to develop an interest in astronomy. (REC: PHY 200 or 203 or PS 109 or equivalent)
- 500L Astronomy Laboratory. 1 hr.**  
Fundamental observations in astronomy and their interpretation through physical laws. Quantitative discussion of orbital motion, time, telescopes, solar system, stars, galaxies, and limited opportunity for astronomical observation. (CR: PS 500)
- 525 Development of Scientific Thought. 3 hrs.**  
A study of the people and ideas which have influenced science; the philosophy of their periods; the economic conditions leading to scientific advancement and the works of the foremost scientists.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 646 Seminar on Recent Developments in the Physical Sciences. 3 hrs. Offered on demand.**
- 648 Modern Physics for Teachers. 3-5 hrs. Offered on demand.**  
A course designed to provide additional background material in atomic and nuclear physics for teachers. Lecture and laboratory.
- 649 Electronics for Teachers. 3-5 hrs. Offered on demand.**  
A course in basic theory of electronics for teachers. Lecture and laboratory.

### PHYSICS (PHY)

- 505 Optics Laboratory. 2 hrs.**  
A course in optical experiments encompassing geometrical and physical optics. This course is to be taken with Physics 304.
- 510 Physics of Remote Sensing with Applications. 3 hrs.**  
A study of the physical systems for collecting remotely sensed data. Statistical/spatial analysis and modeling using image processing/geographic information/spatial analysis computer software systems with earth resource applications. (PR: PHY 203 and 204, MTH 225 and 230, or permission)
- 511 Digital Image Processing and Computer Simulation Modeling.**  
A study of image processing/geographic information and spatial analysis hardware/software systems, concurrent and parallel image processing modeling scenarios utilizing geobiophysical data for computer simulation modeling and practicum. (PR: PHY 410/510 or permission)
- 512 Atmospheric Physics with Computer Simulation Modeling. 3 hrs.**  
A general introduction to the earth's atmosphere. The physical and chemical dynamic behavior of the earth's atmosphere will be analyzed by comparing computer simulated profiles with in situ measurements.
- 515 Electronics Laboratory. 2 hrs.**  
A course in laboratory measurements encompassing transistors, integrated circuits, and their associated circuits. This course is to be taken with Physics 314.
- 521 Modern Physics Laboratory. 2 hrs.**  
Laboratory exercises on modern physics topics encompassing both experiments of historic significance and current applications. To be taken with Physics 320, or equivalent.
- 542 Quantum Mechanics. 3 hrs.**  
Alternate years. Mathematical formalism of quantum mechanics, particles in potential fields, perturbation theory and other approximation methods, scattering, applications to simple systems. 3 lec. (REC: PHY 331 and MTH 335 or equivalent)

- 545 Mathematical Methods of Physics. 3 hrs.**  
Offered on demand. An introduction to the theory of orthogonal functions, curvilinear coordinate systems, vector and tensor fields and their applications in Physics. Problems are drawn from different areas of physics. 3 lec. (PR: PHY 203.)
- 547 Mechanics for Teachers. 4 hrs.**  
An in-depth study of mechanics for education majors specializing in physics with emphasis on problem solving techniques, demonstrations, experiments and computer applications. (PR: PHY 203, MTH 122, MTH 140)
- 550 Radiation Physics in the Life Sciences. 4 hrs. II.**  
Alternate years. A course in radiation physics with emphasis on applications in the medical sciences. Designed for students interested in the life sciences. A field trip to the University of Michigan nuclear reactor is an integral part of the course. 3 lec-2 lab/demonstration. (PR: PHY 203 and 204, or consent of instructor)
- 562 Nuclear Chemistry and Physics. 3 hrs. II.**  
Alternate years. An introduction or the description of nucleons, electric and magnetic properties of a nucleus, nuclear energy levels, nuclear reactions including neutron activation, interaction of particles with matter, and nuclear forces. 3 lec. (PR: PHY 320 and MTH 231 or consent of instructor). See 424d.
- 563 Nuclear Physics Laboratory. 2 hrs.**  
Laboratory techniques for the measurement of nuclear properties, theory and characteristics of various detectors, statistics of counting, and energy determination of nuclear particles and radiation. This course is to be taken with Physics 462/562. A field trip to the University of Michigan Nuclear Reactor is an integral part of the course.
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 616 X-Ray Diffraction. 3 hrs.**  
Offered on demand. A study of the properties of X-rays, X-ray diffraction, and crystal structure. 2 lec-3 lab. (REC: CHM 358 or equivalent)
- 631-632 Seminar. 1; 1 hr. I, II.**
- 640 Fundamentals of Physics. 4 hrs. S.**  
Offered on demand. A course in fundamental concepts of physics. Subject content varies. Designed primarily to strengthen conceptual understanding of teachers.
- 644 Atomic Physics. 3 hrs.**  
A historical development of the modern theories concerning the structure of matter, electricity, and light, including applications of optical spectra and X-rays.
- 661-662 Special Topics. 1-3; 1-3 hrs.**
- 682 Thesis Research. 1-6 hrs. I, II, S.**  
(PR: Graduate status and approval of advisor)

**PHYSIOLOGY (PHS)**  
(See Biomedical Sciences)

**POLITICAL SCIENCE (PSC)**

The Master of Arts in political science provides a wide range of opportunities for students of various interests or goals. The M.A. program affords both concentration and flexibility so that majors may acquire in-depth knowledge in selected aspects of politics as well as appropriate skills in political analysis. Majors may arrange a program to prepare themselves for such endeavors as law school, further graduate work, teaching, or government service. The curriculum also serves interested students in other majors, such as business, education, economics, English, geography, history, journalism, psychology, social studies or sociology, who wish to enhance their backgrounds by taking a minor or specific course work.

Completion of the master's degree in political science entails fulfillment of both the general Graduate School requirements, and the specific departmental requirements listed below. A major may select either the thesis, essay or coursework only option. Once an option has been selected, any change in the option must be approved by the department.

The graduate curriculum in political science is divided into six fields of specialization. The student who elects to write a thesis must take at least nine course hours in one of these, and the topic must be within the field. Under the non-thesis options, at least twelve course hours must be taken within a single field.

Under the non-thesis options the candidate must take a comprehensive written examination. All candidates must take a general oral examination.

	Hours
Minimum requirements	32-36
1. Political Science 600 and 604 (required of all majors) .....	6
2. Field of Concentration (minimum) .....	9-12
3. Second field .....	6
4. Minor or cognate .....	6



5. Thesis .....	6
6. Electives .....	6

## GRADUATE FIELD CONCENTRATIONS

- American State, Local and Urban Politics: 536, 540, 561, 606, 611, 612, 621, 648, 675.  
 American National Politics: 523, 533, 536, 540, 560, 584, 606, 611, 612, 652.  
 Comparative Politics: 507, 508, 509, 510, 511, 522, 524, 529, 614, 652.  
 International Politics: 505, 506, 515, 520, 523, 524, 529, 609.  
 Political Theory: 521, 528, 529, 531, 556, 629.  
 Public Administration and Public Policy: 531, 533, 550, 522, 553, 618, 660.  
 Courses numbered Political Science 580 through 583, 601, 650, and 651 may be counted in an appropriate area of specialization upon the approval of the advisor.

### THE PUBLIC ADMINISTRATION AND PUBLIC POLICY CONCENTRATION

The Political Science Department is offering a concentration for students interested in public administration and public policy. This concentration is designed to prepare graduates for positions of policy making and administration in federal, state, and local governmental agencies and select business and public service organizations. The concentration places equal emphasis on both the need for improved management skills (from the "street level" to top management) and the sound understanding of public policy. As a part of this concentration, students may enroll in policy workshops that mix classroom learning with the organizational realities of knowledge utilization and analysis.

#### THE CORE COURSES

(Required of all students who select this concentration)

	Hours
533 Theory of Policy and Administration .....	3
550 Administrative Law .....	3
553 Governmental Budgetary Administration .....	3
600 Research Design .....	3
604 Data Analysis .....	3
Total Hours	15
<b>Emphasis I: Administration</b>	
552 Public Personnel Administration .....	3
618 Seminar in Public Administration .....	3
Total Hours	6
<b>Emphasis II: Policy Analysis</b>	
531 Political Theory and Public Problems .....	3
660 Seminar in Applied Policy Analysis .....	3
Total Hours	6

### POLITICAL SCIENCE (PSC)

- 505 International Organization. 3 hrs.**  
 Study of world and regional organizations as reflections of world politics, as instruments of foreign policies, and as forces for change and order, with emphasis on their role as channels for management of cooperation and conflict.
- 506 International Politics. 3 hrs.**  
 Study of major issues in world politics, with emphasis on theoretical approaches, problems of war and peace, and contemporary trends.
- 507 Asian Politics. 3 hrs.**  
 Study of such nations as India, China, Japan, and Korea in the contemporary setting.
- 508 Middle Eastern Politics. 3 hrs.**  
 Study of the Arab States and such nations as Israel, Iran and Turkey in the contemporary setting.
- 509 Western Democratic Politics. 3 hrs.**  
 Study of such nations as Canada and those of Western Europe, particularly Great Britain and France.
- 510 European Communist Politics. 3 hrs.**  
 Study of the Soviet Union and Eastern Europe.
- 511 Latin American Politics. 3 hrs.**  
 This course studies Latin American politics by sectors, such as landed elites, the military, the church, etc. Various styles of governance are considered. Case examples illustrate concepts discussed.

- 515 **International Law. 3 hrs.**  
Study of theories, origins, sources, development, present state, and trends of international law as a factor in various aspects of international politics.
- 520 **Current World or Regional Issues. 3 hrs.**  
An intensive study of specific world or regional problems, such as the politics of world hunger. The role of multinational corporations, imperialism, third world communist movements, etc.
- 521 **American Political Thought. 3 hrs.**  
Study of the development and influence of American Political Thought with an emphasis on the linkage of ideas to political and economic forces.
- 522 **African Political Systems. 3 hrs.**  
The study of political systems of selected countries, blocs or regions.
- 523 **American Foreign Policy. 3 hrs.**  
The study of descriptive, analytical, and normative aspects of American foreign policy with emphasis on contemporary problems and issues.
- 524 **Comparative Foreign Policy. 3 hrs.**  
Application of the comparative method to foreign policy decision-making and outputs. Comparisons within or between geographic regions.
- 528 **Islamic Political Ideas and Institutions. 3 hrs.**  
A study of Islamic political ideas, practices and institutions and their impact on the rise and development of contemporary Islamic movements, organizations and states.
- 529 **The Politics of Conflict and Revolution. 3 hrs.**  
Study of major theories of conflict and revolution with emphasis on cross-national explanations and outcomes.
- 531 **Political Theory and Public Problems. 3 hrs.**  
Draws upon both classic and contemporary sources of political theory to address basic political issues inherent in public problems.
- 533 **Public Administration and Policy Development. 3 hrs.**  
An examination of alternative theoretical approaches to the study of policy and administration and their implications for the use of policy to shape administrative practice.
- 536 **The American Judiciary. 3 hrs.**  
Structure and behavior in American national and state judicial systems, including analysis of their decision making and policy making functions, their procedures and administration, and problems and trends.
- 540 **Power in American Society. 3 hrs.**  
An examination of some of the major theoretical approaches-pluralist, elitist, etc.-to the study of power. A major concern is on the relationship between the distribution of political resources and the performance of political systems. Efforts to transform political systems are examined on the basis of cross-national research.
- 550 **Administrative Law. 3 hrs.**  
A study of the basic legal framework of administrative organization, including the problems of administrative discretion, rule making and adjudication, regulatory agencies, and administrative responsibility in the democratic state. (PR: PSC 333)
- 552 **Public Personnel Administration. 3 hrs.**  
Survey of Public Personnel Administration with particular attention on various facets of the merit system concept. Psychological and human relations aspects of the work situation and supervisor-subordinate interaction emphasized. (PR: PSC 333 or permission)
- 553 **Governmental Budgetary Administration. 3 hrs.**  
Study of organization, administration, and accountability in the management of public funds, with emphasis on the political decision-making processes of budget formulation, presentation, and execution. (PR: PSC 333 or permission)
- 554 **Administrative Organization and Behavior. 3 hrs.**  
A study of the contributions of the behavioral sciences to the study of organizations with stress on such concepts as leadership, motivation, power conflict, organizational design and decision making.
- 560 **Civil Rights and Liberties. 3 hrs.**  
The basic substantive and procedural elements of American constitutional liberties and civil rights with emphasis on historical development as influenced by social and political forces.
- 561 **Urban Problems and Public Policy. 3 hrs.**  
Study of policy problems of metropolitan areas in terms of structures, alternatives, and outcomes.
- 580-583 **Selected Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
To offer a course on some special topic which is not adequately treated in the regular course offerings.
- 584 **Constitutional Law. 3 hrs. I.**  
Introduction to the principles of American constitutional law and analysis of constitutional issues, emphasizing leading Supreme Court cases.
- 585-588 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
These numbers are reserved for tutorials, directed and independent research, problem reports, etc.

- 600 **Research Design. 3 hrs.**  
Philosophy of Science as applied to empirical political inquiry; elements of good research design, measurement theory, writing and critiquing research reports. (PR: PSC 211 or permission)
- 601 **Readings in Political Science. 2-3 hrs.**  
Readings to meet the needs and interests of individual students.
- 604 **Data Analysis. 3 hrs.**  
A study of quantitative methods used in empirical research with an emphasis upon applied statistical analysis; writing and critiquing research reports.
- 606 **Seminar in Judicial Politics. 3 hrs.**
- 609 **Seminar in International Relations Theory. 3 hrs.**
- 611 **Seminar in the American Legislative Process. 3 hrs.**
- 612 **Seminar in the American Executive Process.**
- 614 **Seminar in Comparative Politics. 3 hrs.**
- 618 **Seminar in Public Administration. 3 hrs.**
- 621 **Urban Administration. 3 hrs.**  
Principles and methods of urban administration in the U.S.
- 629 **Seminar in Political Thought. 3 hrs.**
- 648 **Seminar in State Government and Politics. 3 hrs.**  
West Virginia government and political problems will receive special attention although other states may be considered.
- 650-651 **Seminar. 3-6 hrs.**
- 652 **Seminar in Political Behavior. 3 hrs.**
- 660 **Seminar in Policy Analysis. 3 hrs.**  
Development of theoretical and methodological skills in the analysis of public problems and the use of policy in problem solving.
- 675 **Legislative Internship. 6 hrs.**  
Intensive work experience in the West Virginia legislative processes coupled with a seminar involving directed reading Legislative Services with only selected students participating. (PR: One semester of graduate work and recommendation of department chairman.)
- 680 **Masters Essay. 3 hrs.**
- 681 **Thesis. 1-6 hrs.**

## PSYCHOLOGY (PSY)

The Department of Psychology offers a Master of Arts degree with areas of emphasis in either Clinical Psychology or General/Experimental Psychology. The two programs differ markedly in their course sequence and orientation. Prospective students should request copies of current program curricula from the department.

### Clinical (Professional) Psychology

Students intending to qualify for employment as a master's level clinical psychologist complete a minimum of 46 hours, including 22 credit hours of core courses, as well as at least 6 hours of practicum and a 10 week, full-time clinical internship in an approved setting. In addition to core courses in assessment, psychotherapy, ethics, psychopharmacology, practica and internship, the following classes must be completed prior to completion of the M.A. program: psychometrics, learning, social psychology, developmental psychology, physiological psychology, history and systems of psychology, and industrial/organizational psychology (Note: Any of these classes which were completed at the undergraduate level, with a grade of B or above, within 7 years prior to the masters degree graduation, need not be repeated.) The curriculum of the clinical program is highly structured and follows a sequence that provides maximum professional content. For graduation, students are required to take a written comprehensive exam in accordance with University requirements and guidelines.

### General/Experimental Psychology

The General/Experimental Psychology program has two tracks. The first focus is designed for students intending to apply for a Ph.D. program and is highly individualized, mentor based and includes a thesis. Students earning a master's degree in preparation for doctoral study in an experimental field of psychology must complete a minimum of 33 hours of graduate credit, including 3-6 hours of graduate credit on a research-based thesis. The second track focuses on applied Industrial/Organizational Psychology and requires completion of 36 hours of course work including three hours of internship with a problem report or 33 hours of course work and a thesis. Students in both tracks plan their course work in conjunction with their advisors and in accordance with their background and their career goals.

### Admission to the Programs

Requirements for admission to both programs include the aptitude and subject tests sections of the GRE, three letters of reference, and undergraduate transcripts.

Admission to the Clinical Psychology program requires that undergraduate preparation include a course in

behavioral statistics, experimental psychology, abnormal psychology, personality, and at least 6 additional upper division psychology credits. The clinical program admits students once per year. Completed applications must be received by March 1, after which personal interviews may be requested of applicants. Accepted students are expected to begin their enrollment as full-time students in the fall semester. Generally, many more students apply than can be accepted, and thus the selection process is competitive.

Admission to the General/Experimental program requires a minimum of 15 undergraduate credits in psychology including courses in introductory psychology, behavioral statistics, experimental psychology, and two additional psychology courses. Admission to the General/Experimental Psychology program is competitive with applications to be received by April 30 for Fall admission and November 1 for Spring admission. Applicants must meet the graduate school's minimum grade point and GRE standards listed elsewhere in this catalog to be considered for admission to the program.

All application materials, including the Graduate School Application Form, should be sent to the Admissions office. When all materials are received, the application packet will be forwarded to the department for review. Applicants who are accepted into one of the department's graduate programs will simultaneously be admitted as students in the Graduate School.

#### **Additional Requirements in Psychology Program**

The following requirements must be met for a student to be admitted to Candidacy:

1. The candidates must have completed at least twelve (12) hours of the courses required in their programs with a grade point average of 3.0 or better.
2. The candidates cannot have more than one C in any graduate course work. Psychology students who earn a second "C" will not be permitted to continue taking course work or working on a thesis.
3. The candidates must be recommended for admission to candidacy by a majority of their three-member guidance committee, composed of faculty members chosen by the student and the faculty advisor.
4. Clinical psychology students will apply for candidacy after completing one three-hour practicum of supervised clinical experience in their second year plus previous course work.
5. All General/Experimental Psychology students and those Clinical students choosing to do a thesis must pass an oral examination in defense of their thesis.
6. Enrollment in PSY 681 (Thesis) is not permitted until PSY 517 (Intermediate Behavioral Statistics) is completed.

### **PSYCHOLOGY (PSY)**

- 502 **Advanced Social Psychology. 3 hrs.**  
Advanced study of selected topics in social psychology. (PR: PSY 302 or equivalent)
- 503 **Applied Social Psychology. 3 hrs.**  
Examination of the applications of social psychological methods, theories, principles and research findings to the understanding of social problems. (PR: PSY 302)
- 506 **Psychometrics. 3 hrs.**  
Mental test theory and applications. (REC: PSY 223 or equivalent)
- 508 **Abnormal Psychology. 3 hrs.**  
Study of the nature, causes and treatment of maladaptive human behavior. (REC: PSY 201 or equivalent)
- 516 **Psychology of Learning. 3 hrs.**  
Critical study of the major theories of learning and related research. (PR: At least 3 hours in Experimental Psychology)
- 517 **Intermediate Behavioral Statistics. 3 hrs.**  
An intermediate level presentation of descriptive and inferential statistics as applied in behavioral research. (PR: PSY 223 or equivalent)
- 518 **Psychology of Personnel. 3 hrs.**  
Psychological principles and methods applied to functions in personnel administration. (REC: PSY 201 or equivalent)
- 520 **Introduction to Industrial-Organizational Psychology. 3 hrs.**  
A systematic study of the application of psychological methods and principles in business and industry. Emphasis is on research methods, motivation, training, leadership, personnel selection, employee safety, and job satisfaction. (PR: Graduate standing in Psychology; or Perm)
- 526 **Cross Cultural Psychology. 3 hrs.**  
Emic and etic cultural concepts are considered from an American (subcultural) and international perspective. Cultural influences on healing, health and service are covered.
- 527 **Computer Applications in Psychology. 3 hrs.**  
An introduction to computer applications in psychology, emphasizing data collection, management, organization, analysis and reporting.
- 533 **Current Models of Psychotherapy. 3 hrs.**  
Introduction to theoretical models and related therapeutic strategies which influence the practice of modern psychotherapy. (PR: Graduate student in psychology or consent of instructor)

- 540 Physiological Psychology. 3 hrs.**  
The relationships between physiological functions and biochemical processes and behavior. (PR: PSY 201)
- 556-557 Research in Psychology. 1-3; 1-3 hrs.**  
A laboratory course designed to give advanced students experience in all aspects of conducting psychological research. (PR: Permission of instructor)
- 560 History and Systems of Psychology. 3 hrs.**  
Overview of Psychology from historical perspective. (REC: 12 hours of psychology or equivalent)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 601 Teaching of Psychology. 3 hrs.**  
A course designed to train psychology graduate students to teach a course in introductory psychology. (PR: Graduate status in Psychology and a minimum of 9 hours Psychology Graduate credit)
- 610 Assessment I. 3 hrs.**  
Principles and methods of assessment, key issues in test construction, and training in assessment of intelligence, special abilities, and neuropsychological functioning. (PR: Admission to Clinical Psychology Program)
- 611 Assessment II. 3 hrs.**  
Principles and methods of assessment, key issues in test construction, and training in assessment of behavior, child and adult disorders, and personality. (PR: PSY 610)
- 616 Human Memory and Information Processing. 3 hrs.**  
Theory and research relating to human learning, memory and decision processes. (PR: PSY 323 or equivalent)
- 617 Applied Developmental Psychology. 3 hrs.**  
Application of Research in Developmental Psychology to issues of causes of clinical problems, issues of parenting, and factors to be taken into account in interventions. (PR: Graduate status)
- 618 Psychopharmacology. 1 hrs.**  
Survey of psychotropic drug substances with emphasis on neuropharmacological bases of drug action, current research methods and therapeutic implications. (PR: PSY 540 or equivalent)
- 623 Experimental Design. 3 hrs.**  
An introduction to the design and interpretation of behavioral research. Emphasis is upon tests of significance and assumptions governing their application. (PR: PSY 517 or equivalent)
- 624 Multivariate Analysis. 3 hrs.**  
Multivariate analysis in behavioral research including multiple regression, analysis of variance, canonical correlation, and principal components and factor analysis. (PR: PSY 517 or equivalent)
- 630 Adult Diagnosis and Therapy. 3 hrs.**  
Current diagnostic criteria for adult psychopathology, including prevalence, epidemiology and socio-cultural milieu; in-depth presentation of psychotherapy with adults, including psychodynamic, gestalt, crisis and other modalities.
- 633 Individual Psychotherapy and Interviewing. 3 hrs.**  
A survey of the basic skills and techniques used in treating various forms of psychopathology. (PR: PSY 533 and consent of instructor)
- 634 Group Therapy. 3 hrs.**  
Different types of group psychotherapy as appropriate for various problems and populations; intensive experience in at least two methods. (PR: Consent of instructor)
- 635 Child and Family Diagnosis and Therapy.**  
This course covers psychopathology, diagnosis and treatment of the major child and family disorders including childhood anxiety, depression, delinquency, parent-adolescent conflict, eating disorders, and others. .
- 637 Ethics in Professional Psychology. 1 hr.**  
Introduction of ethical issues and decision making in professional psychology. Emphasis is given to APA ethical standards. (PR: Graduate standing in Psychology or permission)
- 650 Seminar in Performance Appraisal. 3 hrs.**  
The course will offer students a research-based investigation of the performance evaluation process within work organizations. Emphasis is given to human rater x ratee x appraisal system features interactions. (PR: Graduate standing in Psychology; or permission of the instructor)
- 670-671 Clinical Practicum. 1-3; 1-3 hrs.**  
Supervised application of principles of therapy and evaluation in a clinical setting. CR/NC grading. (PR: Consent of departmental chairperson)
- 680 Clinical Internship. 1-6 hrs. CR/NC**  
Placement in an approved mental health setting for minimum of 400 hours. Supervised by on-site personnel in addition to psychology faculty. CR/NC grading. (PR: Admission to candidacy and consent of department chairperson)

681 Thesis. 1-6 hrs.

683 Internship in Industrial-Organizational Psychology. 3 hrs.

This course will offer students applied observational/research experience in Personnel/Human Resource Departments under the supervision of professionals within the fields of Industrial-Organizational Psychology and Human Resources. (PR: Either PSY 518 or 520; Graduate standing in Psychology; Permission of Instructor)

690-695 Seminar. 1-3; 1-3; 1-3; 1-3; 1-3; 1-3 hrs.

Reports on current problems and literature in psychology and related fields; professional ethics. (PR: Consent of department chairperson)

### RELIGIOUS STUDIES (RST)

The Department of Religious Studies offers a minor field of study which is open to all majors in all fields.

519 Religious Thought in the Western World. 3 hrs.

An analysis of the major schools of religious thought as they have developed in the West.

550 Sociology of Religion. 3 hrs.

An investigation into the nature of religion as a social phenomenon.

580-583 Special Topics. 1-4; 1-4 hrs.

585-588 Independent Study. 1-4 hrs.

599 Humanities Seminar. 3 hrs.

### SAFETY (SED)

Safety Technology offers one option and three areas of specialization. Admission to the graduate program in Safety is dependent upon the student satisfying the minimum admission requirements established by the Graduate School. The Master of Science Degree in Safety requires 32 semester hours of graduate work, of which not more than 6 hours may be earned by a thesis. If a thesis is not submitted, a minimum of 36 hours of course work must be completed.

A final (written) comprehensive examination is administered to all candidates by a committee of three members of the graduate faculty in the School of Education, including the student's advisor. The student who fails to pass the comprehensive examination on a given attempt may be asked to enroll in courses as determined by his committee before taking the examination again. In the non-thesis safety option students must also take a comprehensive written examination.

Before a student can be accepted into the Safety Technology Master's degree program, the student must have completed Chemistry 211; Physics 100 and Math 130 with a grade of C or better. This requirement may be waived by passing a department entrance examination on the above subjects with a minimum score of 75%.

The graduate curriculum in Safety is divided into three areas of specialization namely Traffic Safety, Occupational Safety and Health, and Safety Management. These programs are offered in cooperation with other schools as may be designated.

Minimum requirements ..... 36 hours  
with thesis 32 hours

### MASTER OF SCIENCE DEGREE - SAFETY (SED) Emphasis: Traffic Safety

Required Courses .....	Hours
SED 500 Traffic Law Enforcement or	
SED 606 Field Experience for the Safety Specialist .....	3
SED 510 Problems and Practices in Driver and Traffic Safety Education .....	3
SED 550 Traffic Engineering .....	3
SED 599 Organization, Administration and Supervision of Safety Programs .....	3
SED 601 Safety in Transportation .....	3
SED 610 Philosophy and Psychological Concepts of Occupational Safety and Health .....	3
SED 630 Current Literature and Research in Occupational Safety and Health .....	3
SED 660 Human Factors in Accident Prevention .....	3
SED 669 Traffic Safety Management .....	3
Electives: Permission of Advisor or Chairman .....	9
Total	36

### MASTER OF SCIENCE DEGREE - SAFETY (SED) Emphasis: Occupational Safety and Health

Required Courses .....	Hours
SED 551 Occupational Safety and Health Management .....	3

SED 589 Occupational Hazard Control .....	3
SED 597 Occupational Safety and Health Programs .....	3
SED 598 Occupational Safety and Health Legislation .....	3
SED 599 Organization, Administration and Supervision of Safety Programs .....	3
SED 610 Philosophical and Psychological Concepts of Occupational Safety and Health .....	3
SED 630 Current Literature and Research in Occupational Safety and Health .....	3
SED 647 Industrial Hygiene .....	3
SED 660 Human Factors in Accident Prevention .....	3
Electives: Permission of Advisor or Chairman .....	9
Total .....	36

**MASTER OF SCIENCE DEGREE - SAFETY (SED)**  
**Emphasis: Safety Management**

Required Courses .....	Hours
SPH 508 Discussion and Conference Leadership .....	3
SOC 533 Industrial Sociology .....	3
SED 551 Occupational Safety and Health Management .....	3
SED 597 Occupational Safety and Health Programs .....	3
SED 599 Organization, Administration and Supervision of Safety Programs .....	3
SED 610 Philosophical and Psychological Concepts of Occupational Safety and Health .....	3
SED 630 Current Literature and Research in Occupational Safety and Health .....	3
SED 660 Human Factors in Accident Prevention .....	3
Electives: Permission of Advisor or Chairman .....	12
Total .....	36

**SAFETY TECHNOLOGY (SED)**

- 500 Traffic Law Enforcement. 3 hrs.**  
A course designed to study and evaluate the varied and complex system of laws governing the control of all forms of human traffic law and enforcement on present and future societies.
- 510 Problems and Practices in Traffic Safety and Driver Education. 3 hrs.**  
A survey course for supervisors of traffic accident prevention programs. Examines and evaluates problems, attitudes, activities, and administrative practices in school, city, and state traffic safety programs. Supplements basic teacher training courses in driver education. (PR: SED 235 and 385)
- 520 Teaching Driver Education to the Handicapped. 3 hrs.**  
A survey of Driver Education for the handicapped including physical, mental, and social aspects. The course is recommended for students preparing to teach Driver Education or other related safety subject.
- 536 Safety Education for Elementary Teachers. 1 hr.**  
Survey of accident prevention methods in the elementary school environment, with emphasis on elementary school safety curriculum, laws, personal protection and resources for elementary school teachers.
- 550 Traffic Engineering. 3 hrs.**  
Concerned with traffic and pedestrian flow, channelization, light coordination, intersection control, and devices as related to safe, convenient, and economical transportation of persons and goods.
- 551 Occupational Safety and Health Management. 3 hrs.**  
Concerned with instruction of industrial management personnel interested in accident prevention and safety administration. Emphasis will be on principles, facts and methodology involving safety management.
- 554 Industrial Environmental Protection. 3 hrs.**  
Environmental protection as related to industrial settings. Air/water quality, noise and chemical pollution and hazardous material control.
- 555 Industrial Environmental Auditing/Programming. 3 hrs.**  
Concerns development of an industrial environmental protection program for a small plant, including workplace experience in sampling/measurement of contaminants. (PR: SEI 454, or 554 or 647)
- 565 Accident Investigation/Reconstruction. 3 hrs.**  
An introductory course in traffic accident investigation designed to give insight into the recognition and collection of evidence, collection and recording data and reconstructing the accident based on the facts.
- 575 System Safety Engineering. 3 hrs.**  
A study of the analytical tools used in the recognition, evaluation and control of exposure to hazards in industry. (PR: MTH 120 or higher)
- 580-581 Special Topics. 1-4 hrs.**
- 582 Special Topics. 1-4 hrs.**
- 583 Special Topics. 1-4 hrs.**
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. (Permission)**

- 589 **Occupational Hazard Control.** 3 hrs.  
A study of the latest industrial safety information which will assist the student in designing a program to reduce or eliminate all incidents which downgrade the system.
- 591-594 **Workshop.** 1-4; 1-4; 1-4; 1-4 hrs.
- 597 **Occupational Safety and Health Programs.** 3 hrs.  
Safety functions in industry. Principles of organization and application of safety programs. Prevention, correction and control methods are outlined and evaluated.
- 598 **Occupational Safety and Health Legislation.** 3 hrs.  
A survey of the legislation that has affected the safety movement with special emphasis on the 1969 Coal Mine Health and Safety Act and the 1970 Occupational Safety and Health Act.
- 599 **Organization, Administration and Supervision Safety Programs.** 3 hrs.  
A study of safety programs at the state and local levels including the administrative, instructional, and protective aspects of a comprehensive safety program in schools, occupations, home and public.
- 601 **Safety in Transportation.** 3 hrs.  
Concerned with safe, efficient movement of people and goods. Involves highway, air, water, pipeline, and rails.
- 606 **Field Experience for the Safety Specialist.** 3 hrs.  
Concerned with the visitation and evaluation of the safety program of various agencies in the region.
- 610 **Philosophical and Psychological Concepts of Occupational Safety and Health.** 3 hrs. An analysis of the educational philosophies and the application of these philosophies to occupational safety. A study of the effect of occupational safety on modern living.
- 630 **Current Literature and Research in Occupational Safety and Health.** 3 hrs. An analysis and study of selected works of national and international authors concerning significant works in Occupational Safety.
- 645 **Safety Engineering and Equipment Design.** 3 hrs.  
The design and engineering of facilities and equipment to meet the physical needs of the human as well as enhancing production.
- 647 **Industrial Hygiene.** 3 hrs.  
Concerned with environmental health and safety hazards that arise out of or occur during work of employees.
- 650 **Internship for the Safety Specialist.** 3 hrs.  
Supervised experience on the job site. Involves the student working under safety personnel and analyzing and writing of experiences.
- 660 **Human Factors in Accident Prevention.** 3 hrs.  
A study of the psychological principles and their applications to accident causation and prevention.
- 669 **Traffic Safety Management.** 3 hrs.  
Concerned with the total Traffic Safety Management Program, including vehicle registration, driver licensing, motorcycle driver education, and motor vehicle registration.
- 679 **Problem Report.** 1-3 hrs. (Permission)
- 681 **Thesis.** 1-6 hrs.
- 690-692 **Seminar.** 1-4 hrs.

### MINE SAFETY (MSF)

The Master of Science Degree in Safety with an option in Mine Safety is based on the competencies needed by mine safety and management personnel and mine safety compliance personnel. The program is designed for underground, auger and surface mining as applicable to all components of the mining industry, including metallic and non-metallic products. Special emphasis is provided for the type of mining in which students, are engaged.

Admission to the graduate program with the Mine Safety option is dependent upon the student satisfying the minimum admission requirements established by the Graduate School. The Master of Science Degree requires 32 semester hours of graduate work, of which not more than 6 hours may be earned by a thesis. If a thesis is not submitted, a minimum of 36 hours of course work must be completed.

A final (written) comprehensive examination is administered to all candidates by a committee of three members of the graduate faculty, including the student's advisor. The student who fails to pass the comprehensive examination on a given attempt may be asked to enroll in courses as determined by his committee before taking the examination again. In the thesis safety option students must also take a comprehensive written examination.

Prior to admission to candidacy all students must have completed courses or equivalent courses in general safety education, first aid, and personal health with the consent of the department.

The Mine Safety graduate program is sponsored jointly with the National Mine Safety and Health Academy, Beckley, W.V.

Required Courses .....	Hours
MSF 510 Survey of Mining .....	3
MSF 511 Mine Safety Program Analysis .....	3
MSF 512 Mine Safety and Health Legislation .....	3
MSF 514 Hazard Control in Mining .....	3



EDF 621 Educational Research and Writing .....	3
or equivalent course in research methodology such as VTE 670 Mine Safety Electives .....	15
Electives .....	6
Total .....	36

### MINE SAFETY (MSF)

- 510 Survey of Mining. 3 hrs.**  
An overview of mining to provide the participant with a general understanding of mining history, development systems terminology, procedures, methods and safety and health activities.
- 511 Mine Safety Program Analysis. 3 hrs.**  
This course prepares the participant for the effective analysis of safety programs and provides some specific applications in the mining environment.
- 512 Mine Safety and Health Legislation. 3 hrs.**  
A survey of the legislation that has affected safety and health in mining with special emphasis of the Federal Mine Safety and Health Act of 1977.
- 513 Mine Safety and Health Management. 3 hrs.**  
This course covers the principles, functions and philosophies of mine management.
- 514 Hazard Control in Mining. 3 hrs.**  
A study of how to recognize accident potential through-out the mining industry.
- 525 Statistics/Biostatistics, Epidemiology and Industrial Hygiene. 3 hrs.**  
Statistics/Biostatistics, Epidemiology and Industrial Hygiene as these subjects relate to health hazards in the mining environment. (PR: Module #1 of the Advanced Industrial Hygiene Program)
- 526 Industrial Toxicology and Airborne Contamination in Mining Environments. 3 hrs.**  
Principles of Toxicology: biochemistry, biological monitoring, biological transformation and chemical hazards. Properties, behavior and measurement of airborne particles. Special topics: sampling and evaluating airborne asbestos dust. (PR: Module #1 of the Advanced Industrial Hygiene Program)
- 527 Physical and Biological Health Hazards in Mining and Milling Operations. 3 hrs.**  
Physical hazards: heat, noise and radiation. Biological hazards: atmospheric transport of microorganisms that caused disease. (PR: Module #1 of the Advanced Industrial Hygiene Program)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
A study of special topics not offered in regularly scheduled courses.
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
- 591-594 Workshop (Selected Topics). 1-4; 1-4; 1-4; hrs.**
- 621 System Safety Engineering in the Mining Industry. 3 hrs.**  
A study of the analytical tools used in the recognition, evaluation and control of exposure to hazards in the Mining Industry.
- 622 Accident Prevention in the Mining Industry. 3 hrs.**  
A survey course which discusses why and how mining accidents occur, factors in successful safety programs and the recognition, evaluation, and control of accident causes.
- 624 Mine Haulage and Transportation. 3 hrs.**  
A study of the operation of hoisting haulage equipment used in the mining industry.
- 625 Philosophical Concepts of Mine Safety and Health. 3 hrs.**  
An analysis of the philosophies of mine safety and health; application of these philosophies to actual mining situations.
- 626 Safety and Health Research in the Mining Industry. 3 hrs.**  
An analysis and study of selected works of national and international authors concerning mine safety and health.
- 627 Health Hazards in Mining. 3 hrs.**  
A broad spectrum approach to the mine health field which includes: the principles for recognition, evaluation and control of health hazards in mining.
- 628 Man, Machines and the Environment in the Mining Industry. 3 hrs.**  
A study of the interactions of man, machines and the environment. The role of these interactions in causing or in preventing accidents.
- 629 Problem Analysis and Consultation in Mine Safety and Health. 3 hrs.**  
A study of the rational process of problem solving decision making consultation with emphasis on realistic case studies.
- 631 Mine Accident Investigation and Reporting. 3 hrs.**  
A study of the principles, techniques and procedures of investigations of mine accidents including attendance in court and report writing.
- 635 Sampling, Industrial Ventilation, and Respiratory Protective Equipment for Mining and Milling Operations. 3 hrs.**  
Gas, vapor and particulate sampling - industrial ventilation for control of health hazards. Use of respiratory protective equipment to control health hazards. (PR: Module #1 of the Advanced Industrial Hygiene Program)

- 636 Threshold Limit Values: Sampling and Analytical Techniques. 3 hrs.**  
 Threshold limit values and material safety data sheets. Hands-on experience in collecting industrial hygiene samples and subsequent laboratory analysis of the samples. (PR: Module ?1 of the Advanced Industrial Hygiene Program)
- 637 Stress and its Impact on Safety and Health in Mining. 3 hrs.**  
 A study on stress and its impact of safety and health in mining. Activities will be scheduled to enable the student to apply, in a work setting, some of the basic stress concepts.
- 679 Problem Report. 3 hrs.**
- 681 Thesis. 1-6 hrs.**  
 Individual research on a specific problem of concern to the student and of significance to mine safety.
- 690-692 Seminar. 1-4 hrs.**

## SOCIOLOGY (SOC)

The Department of Sociology focuses on applied sociology and anthropology, especially the analysis of social and cultural issues, policies and trends in Appalachia. We also offer courses in social theory, with an emphasis on inequality.

Applicants for admission to the graduate program are expected to present a minimum of twelve hours of undergraduate sociology courses. After satisfactorily completing twelve hours of resident graduate sociology courses, including Sociology 503 and 545, students may apply for admission to candidacy.

To complete the requirements for the master's degree, graduate students must select either the thesis or the non-thesis option. The thesis option requires completion of 32 hours of work, including 1-6 hours of thesis in Sociology 681 and a minor of 6 hours. The non-thesis option requires completion of 36 hours, including Sociology 679 and a minor of 6 hours. Sociology 503, 521, 545, and 601 are required for either option.

## SOCIOLOGY (SOC) (See Anthropology)

- 501 Population and Human Ecology. 3 hrs.**  
 The course focuses on population and its relation to characteristics of environment. Specifically, it is designed to discuss the interaction of population processes and resources.
- 503 Social Research II. 3 hrs.**  
 Intermediate social research methodology with emphasis on research design. 2 lec-2lab. (Required of all M.A. candidates). (PR: SOC 344, 345 or equivalent)
- 508 The Family. 3 hrs.**  
 Theoretical analysis of the family as a primary social institution. (PR: SOC 200 or permission)
- 513 Social Movements and Social Change. 3 hrs.**  
 Analysis of large-scale social change, including intentional social movements and revolutions. (PR: SOC 200)
- 520 Criminology. 3 hrs.**  
 An overview of sociological criminology, including an examination of explanations of criminal behavior, types of criminal activity, and an analysis of the criminal justice system. (PR: SOC 200 and SOC 311 or permission)
- 521 Sociological Theory. 3 hrs.**  
 Examination of the emergence and development of theoretical orientations in Sociology. (PR: SOC 200)
- 523 Social Class, Power and Conflict. 3 hrs.**  
 Theoretical analysis of economic and political inequality and the role of social conflict in the process of large-scale social organization. (PR: SOC 200)
- 525 Race and Ethnicity. 3 hrs.**  
 Diverse theoretical approaches to the meaning of race and ethnicity and the character of racial/ethnic relations, with substantive focus primarily on the U.S. (PR: SOC 200)
- 528 Medical Sociology. 3 hrs.**  
 Social organization of modern medicine and allied health delivery systems. (PR: SOC 200 or departmental permission)
- 532 Sociology of Appalachia. 3 hrs.**  
 Study of the economics, politics, and social relations of Appalachia, including contemporary debates. (PR: SOC 200)
- 533 Industrial Sociology. 3 hrs.**  
 Study of the organization and structure of the workplant as a social system; the meaning and organization of work; managerial functions; management-labor relations; and human relations in industry. (PR: SOC 200 or permission)
- 535 Juvenile Delinquency. 3 hrs.**  
 A sociological analysis of juvenile crime, including a review of the origins of juvenile delinquency, an evaluation of causal theories, and an overview of the juvenile justice system. (PR: SOC 200 and SOC 311 or permission)

- 540 Introduction to the Sociology of Aging. 3 hrs.**  
An introduction to the social processes and consequences of growing older for both the individual and society. (PR: SOC 200 )
- 542 Urban Sociology. 3 hrs.**  
The sociology of urban and metropolitan communities. (PR: SOC 200 or permission)
- 543 Evaluation Research. 3 hrs.**  
Analysis and application of theories and methods for assessing the outcomes of applied organizational services and programs to affect change in people and for social conditions. (PR: SOC 200)
- 545 Social Statistics II. 3 hrs.**  
Intermediate level statistical analysis, including analysis of variance and covariance. 2 lec-2 lab. (Required of all M.A. candidates). (PR: SOC 345 or equivalent)
- 550 Sociology of Religion. 3 hrs.**  
An investigation into the nature of religion as a social phenomenon. (PR: SOC 200 or permission)
- 552 Sociology of Death & Dying. 3 hrs.**  
The study of death and dying as a societal and cultural phenomenon. Explores how institutions within our society deal with death. (PR: SOC 200 or permission)
- 555 Sociology of Sex and Gender. 3 hrs.**  
Analysis of social differentiation and inequality by gender, with a focus on the contemporary U.S. (PR: SOC 200)
- 564 Complex Organizations. 3 hrs.**  
Analysis of complex organizations with special attention given to bureaucratic organization. (PR: SOC 200)
- 570-571 Sociological Field Experience. 3; 3 hrs.**  
Supervised field work in a social organization or community working on practical problems. (PR: SOC 406 or 506 or permission)
- 580-583 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**  
Study of topics not covered in regularly scheduled courses. (PR: Graduate majors, SOC 200 or permission)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
Individual study of topics not offered in regularly scheduled courses. (PR: For majors only; advance departmental permission is required)
- 597-598 Instructional Television Course. 1-4 hrs.**  
A course based upon Instructional Television Series broadcast by public television. The student is responsible for viewing the series on the air and satisfying all course requirements announced by the department.
- 601 Advanced Sociological Theory. 3 hrs.**  
Examination of current issues and controversies in Sociological theory. (PR: SOC 421 or SOC 521)
- 602 Contemporary Social Change. 3 hrs.**  
Theories of social change and their uses in analyzing social change of today. (PR: SOC 200 or permission)
- 603-604 Behavioral Science I and II. 3; 3 hrs.**  
Seminar in behavioral science theory. (PR: SOC 200 or permission)
- 615 Applied Demography. 3 hrs.**  
The focus of this course is to study the application of the principles and methods of demography to decision making and planning problems in both public and private setting. (PR: SOC 200 or permission)
- 620 Criminology. 3 hrs.**  
Seminar in crime and delinquency. (PR: SOC 200 or permission)
- 640 Problems and Prospects for an Aging Society. 3 hrs.**  
Seminar in current and anticipated social consequences of aging for individuals and society and societal responses to this process. (PR: SOC 200 or permission)
- 655 Feminist Social Theory. 3 hrs.**  
Diverse theoretical perspectives on the origins and nature of gender, inequality. Emphasis on contemporary debates and their political implications. (PR: SOC 200 or permission)
- 668 Seminar. 1-3 hrs.**  
Topics vary from semester to semester. (PR: SOC 200 or permission)
- 679 Problem Report. 1-3 hrs.**  
The preparation of a written report on a research problem or field study in sociology under direction of member of graduate faculty. (PR: Departmental permission)
- 681 Thesis. 1-6 hrs. I, II, S.**  
Individual research in a selected field of sociology under the direction of a graduate faculty member of the department. (PR: Admission to candidacy and staff approval of thesis proposal.)

#### SPANISH (SPN)

The Department of Modern Languages offers a minor field of study in Spanish. These courses can also be used in conjunction with a major in Secondary Education.

- 510 **Spanish Literature from the Cid Through the 17th Century. 3 hrs.**  
On demand. Readings, lectures, reports and discussions of significant literary works from the Cid through the 17th century. (PR: 6 hours of literature numbered 318 or above or equivalent)
- 560 **The Modernist Movement. 3 hrs. S.**  
The precursors of the Modernist Movement, its chief exponents, and its influence on the literature of Spanish America and Spain. Readings, lectures, discussions, and reports in Spanish. (PR: 6 hours of literature numbered 318 or above or equivalent)
- 561 **Advanced Syntax and Stylistics. 3 hrs. S.**  
A detailed analysis of Spanish syntax and shades of meaning with the writing of original compositions in Spanish to perfect the student's own style. (PR: SPN 204 or equivalent)
- 580-583 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
- 585-588 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
Independent research in selected areas of Spanish and Spanish American literature that are not available in other courses in the catalog. The student has the opportunity to become familiar with leading authorities and bibliographies. Conferences and reports in Spanish. (PR: 6 hours of literature numbered 318 or above or equivalent and permission of instructor)
- 610 **Readings in Spanish or Spanish American Literature. 1-3 hrs.**  
Readings designed for the graduate student who has the interest and the ability to study in depth a certain author, genre, or literary movement. (PR: 6 hours of literature numbered 318 or above or equivalent and permission of instructor)
- 612 **Spanish-American Romanticism. 3 hrs.**  
Leading writers and trends in thought and versification of the romantic period. (PR: 6 hours of literature numbered 318 or above or equivalent)
- 620 **Spanish Romanticism. 3 hrs.**  
The trends and characteristics of the romantic period in the writings of its leading exponents in lyric poetry, non-dramatic prose, and the theatre. (PR: 6 hours of literature numbered 318 or above or equivalent)
- 625 **Spanish Literature of the Twentieth Century. 3 hrs.**  
Emphasis on prose, poetry and the theatre since 1936, including writers in exile. (PR: 6 hours of literature numbered 318 or above or equivalent)
- 679 **Problem Report. 1-3 hrs. (PR: Permission)**
- 681 **Thesis. 1-6 hrs. (PR: Permission)**

**SPECIAL EDUCATION**  
(See Curriculum and Instruction)

**SPEECH**  
(See Communication Studies)

**SPEECH PATHOLOGY**  
(See Communication Disorders)

**TECHNOLOGY MANAGEMENT (TM)**

The M.S. in Technology Management is a joint degree program between Marshall and Marshall University Graduate College (effective July 1, 1997, West Virginia Graduate College became Marshall University Graduate College). It is coordinated at MU by the Center for Environmental, Geotechnical, and Applied Sciences, with course offerings at both institutions. The program is designed primarily for working professionals with both technical and non-technical backgrounds who want a better understanding of technological change and its relevance to competitiveness and business strategy. Program course work has a practical emphasis, with real-world projects designed to develop skills that can be put to use on the job immediately.

Program benefits:

- Learn how to evaluate and use technology to meet changing customer needs and markets.
- Learn how to weigh the costs/benefits of technology decisions
- Understand the effects of technological change on organizations and how to help people adapt to change.
- Learn about technology life cycles and how to evaluate emerging technologies
- Explore common problems of management and organizations--and their relationships to technology.
- Understand the interrelationships of quality, productivity, and technology
- Network with other professionals.

**DEGREES AWARDED**

Marshall University -- M.S. in Technology Management with emphasis in Manufacturing Systems Management; M.S. in Technology Management with emphasis in Information Technology Management (available Fall 154/Courses of Instruction

1997); M.S. in Technology Management with emphasis in Biotechnology Management (in planning). Marshall University Graduate College -- M.S. in Technology Management with emphasis in Environmental Management.

All courses necessary to complete the M.S. in Technology Management in any of the available emphases will be offered on-site at both institutions.

## DEGREE REQUIREMENTS

Degree requirements consist of eight core courses (22 semester hours), four area-of-emphasis courses (12 semester hours), and a capstone project (3 semester hours), for a total of 37 semester hours. Due to the joint nature of the degree program, you must have the Technology Management advisor's approval to enroll in Technology Management degree program courses.

### Core Courses

Program Introduction Seminar  
Introduction to Technology Management  
Technology Planning  
Human Relations in Technology Management  
Project Management  
Economic and Financial Analysis  
Quality and Productivity Management  
Information Technology Management

Completion of these eight core courses will qualify a participant for a certificate in technology management, if he/she elects not to complete the degree.

Each student pursuing the degree selects an area of emphasis--currently either manufacturing systems management or environmental management. As indicated in the preceding section, choice of emphasis will determine which institution awards the degree.

### Manufacturing Systems Management Courses:

Quantitative Methods for Business and Technology  
Operations Management for Business and Technology  
Applied Computer Integrated Manufacturing  
Modern Manufacturing Concepts

### Environmental Management Courses

Environmental Regulations  
Environmental Risk Assessment  
Environmental Management Systems  
One course selected from among:  
Hazardous Waste Management, Environmental Site Assessment, or Geographic Information Systems

The capstone technology management project will be work-related, oriented toward the area of emphasis, and jointly directed by a workplace supervisor and an academic advisor.

## ADMISSION PROCEDURES

Please contact the Center for Environmental, Geotechnical, and Applied Sciences to discuss program admission procedures. A brief summary follows:

1. To be accepted into the program, an applicant must hold a bachelor's degree from an accredited college or university. There is no stipulation concerning the undergraduate major.
2. For regular admission an applicant must have an undergraduate GPA of 2.5 or greater, and achieve a program specific minimum score on the GRE or the GMAT.
3. A graduate application form must be submitted requesting admittance to the program.
4. The applicant must submit a written summary (two typewritten pages maximum) of educational and professional experiences, and career goals related to the TM program, including the Area of Emphasis the applicant is interested in pursuing.
5. The applicant will be interviewed by the TM program director or designee, with part of the interview consisting of discussion of the written summary.

## TECHNOLOGY MANAGEMENT (TM)

### 600 Program Introduction Seminar. 1 hr.

This course reviews fundamental mathematical and statistical methods, presentations, report writing, group project skills, and use of case studies. An orientation and overview to the degree program are also provided. (PR: Full Admission to TM program, or permission of TM Program Director)

- 610 Introduction to Technology Management. 3 hrs.**  
Provides an introduction to challenges and approaches of technology management. Considers issues relating to international markets, innovation, and rapidly changing technology. Also covers effective organizational and managerial approaches to technology. (PR: Full Admission to TM program, or permission of TM Program Director)
- 650-653 Special Topics. 1-4 hrs.**  
Occasional offerings of current topics in technology management, providing important supplementary material for participating students. (PR: Full Admission to TM program or permission of TM Program Director)
- 685-688 Independent Study. 1-4 hrs.**  
An approved study of special interest concerning technology management, under the supervision of a faculty member. (PR: Full Admission to TM program, or permission of TM Program Director)
- 699 TM Capstone Project. 3 hrs.**  
An individualized technology management capstone project, which will be planned and carried out under the supervision of a faculty member and a work-site supervisor. (PR: Full Admission to TM program, and completion of 28 hrs. min. toward TM degree)

## THEATRE (THE)

At present the Department of Theatre does not offer a graduate major. Courses in theatre are taken as minors by students in other departments, such as Music, Communication Studies, History, and English. Courses in theatre are also taken by teachers in service who wish to enhance their competence in theatre and to qualify for a higher salary.

- 510 Playwriting. 3 hrs.**  
Study of dramatic structure, characterization, dialogue, themes, sounds, and spectacle, including the writing of one-act plays. (PR: THE 101 or permission of instructor.)
- 520 Acting for the Musical Theatre. 3 hrs.**  
Analysis of musical scripts; study of spoken and musical scenes; staging musical numbers; and preparation of audition material. (PR: THE 222)
- 521 Acting for the Camera. 3 hrs.**  
Projects in acting for the camera. Video taping of selected acting exercises. (PR: THE 222)
- 523 Stanislavsky System of Acting. 3 hrs.**  
Study of the Stanislavsky System of Acting and using it in preparing and performing excerpts from plays.
- 536 Children's Theatre. 3 hrs.**  
Theory, direction, and staging of plays for children.
- 537 Directing I. 3 hrs.**  
Introduction to theories, principles, techniques, and history of directing. (PR: THE 150, 151, 152, and 222)
- 538 Directing II. 3 hrs.**  
In-depth study of directorial approaches. Analysis of contemporary movements and leaders in the field. Students must stage productions as part of class requirement. (PR: THE 537 or permission of instructor)
- 539 Directing for the Camera. 3 hrs.**  
Projects in directing for the camera. Video taping of selected directing exercises. (PR: THE 437/537 or permission of instructor)
- 540 Theatre History to 1660. 3 hrs.**  
Survey of man's activities in the theatre from primitive times to 1660. (PR: THE 101 or permission of instructor)
- 541 Theatre History since 1660. 3 hrs.**  
Survey of man's activities in the theatre from 1660 to the present. (PR: THE 101 or permission of instructor)
- 550 Stage Lighting III. 3 hrs.**  
Advanced study in the aesthetic principles of lighting design. Emphasis on design principles in non-proscenium theatres. (PR: THE 350)
- 560 Scene Design II. 3 hrs.**  
Advanced work in the process and styles of design for the stage. Emphasis on abstraction, different materials, and designing for various theatre forms. (PR: THE 261, 360)
- 580-583 Special Topics in Theatre. 1-4; 1-4; 1-4; 1-4 hrs.**  
Program of study not normally covered in other courses. Topics vary from semester to semester. (PR: Permission of department chairman)
- 585-588 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**  
Courses taught by tutorials; directed independent readings or research; problem reports, and other activities designed to fill the needs of individual students. (PR: Permission of chairman)

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Faculty

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# The Faculty

\* Signifies Associate Status

## DIVISION OF ACCOUNTANCY AND LEGAL ENVIRONMENT

### Professor

WILLIAM J. RADIG, B.S.B.A. 1960, Buffalo; M.B.A. 1971, Scranton; D.B.A 1988 Mississippi State (C.P.A.)

### Associate Professor

\*PATRICIA A. BROCE, B.B.A. 1984, Marshall; M.B.A. 1986, Marshall; D.B.A. 1991, Kentucky (C.P.A.)

ANNA LEE MEADOR, B.S. 1960, M.S. 1983, Marshall; D.B.A 1989, Memphis State (C.P.A.)

## ADULT AND TECHNICAL EDUCATION

### Professor

HOWARD R. GORDON, B.S. 1979, M.S. 1981, Tuskegee Institute; Ed.D. 1984, Virginia Polytechnic Institute

LeVENE A. OLSON (div. chair), B.S. 1966, Ed.D. 1971, Georgia

CLARA C. REESE, B.A. 1969, Lenoir Rhyne; M.S. 1972, Ed.D. 1980, North Carolina State.

### Associate Professor

\*LAURA WYANT, B.A. 1982, M.S. 1988, Marshall; Ph.D. 1995, Ohio State

## ANATOMY, CELL and NEUROBIOLOGY

### Professor

WILLIAM RHOTEN (chair), B.S. 1965, Colorado State; M.S. 1968, Illinois; Ph.D. 1971, Pennsylvania State

### Associate Professor

STEPHEN E. FISH, B.A. 1965, Sonoma State; Ph.D. 1979, California-Davis

\*IGOR SERGEEV, Ph.D. 1984, D.Sc. 1991, Moscow, USSR

## ART

### Professor

EARLINE ALLEN, B.A. 1965, M.A. 1966, Marshall; M.F.A. 1978, Ohio

MICHAEL I. CORNFELD (chair), B.A. 1964, Indiana; M.F.A. 1967, Carnegie Institute

ROBERT P. HUTTON, B.F.A. 1968, Carnegie-Mellon; M.F.A. 1970, Penn State

ROBERT E. ROWE, B.A. 1978, U. Fla.; M.A. 1978, Indiana U.

### Associate Professor

STANLEY SPORNY, B.F.A. 1968, Philadelphia College of Art; M.F.A. 1972, Pennsylvania

### Assistant Professor

BEVERLY MARCHANT, B.A. 1968, Randolph-Macon Woman's College; M.A. 1973, Virginia Commonwealth University; Ph.D. 1983, State U. of NY-Binghamton

PETER A. MASSING, B.F.A. 1985, NY at Buffalo; M.F.A. 1989, Ohio State

SUSAN POWER, B.F.A. 1973, M.A. 1975, Ed.D. 1982, University of Georgia

## BIOCHEMISTRY and MOLECULAR BIOLOGY

### Professor

MICHAEL MOORE, B.S. 1966, St. Joseph's; M.S. 1969, Ph.D. 1975, Georgia

RICHARD NILES, B.A. 1968, Rhode Island College; M.S. 1970, U. of New Hampshire; Ph.D. 1972, U. of Massachusetts, Amherst

### Assistant Professor

BEVERLY DELIDOW, B.S. 1980, M.S. 1981, U. of Michigan; Ph.D. 1988, U. of California, Berkeley.



## BIOLOGICAL SCIENCES

### Professor

WAYNE ELMORE, B.A. 1969, Western Kentucky; Ph.D. 1973, Vanderbilt  
MICHAEL SEIDEL (chair), B.S. 1967, Miami; M.S. 1969, New Mexico Highlands; Ph.D. 1973, New Mexico  
THOMAS STORCH, B.A. 1966, Ohio Wesleyan; M.S. 1971, Ph.D. 1971, U. of Michigan

### Associate Professor

FRANK GILLIAM, B.S. 1976, Vanderbilt; M.F. 1978, Duke; Ph.D. 1983, Duke  
MARCIA HARRISON, B.S. 1977, Vermont; M.S. 1978, Ph.D. 1983, U. of Michigan  
DAVID MALLORY, B.S. 1980, Cornell; M.S., 1983, Maine; Ph.D., 1987, West Virginia  
JEFFREY MAY, B.A. 1976, Ph.D. 1990, U. of Rhode Island  
SUZANNE STRAIT, B.A. 1984, Hampshire College; Ph.D. 1991, State University of NY at Stonybrook  
JAGAN VALLURI, B.S. 1981, Osmania; M.S., 1984, Baylor; Ph.D., 1988, Texas A & M

### Assistant Professor

VICTOR FET, B.S., M.S. 1976, U. of Novosibirsk, Russia; Ph.D. 1984, Academy of Sciences, St. Petersburg, Russia

### Adjunct Professor

\*MARY BETH ADAMS, B.S.F. 1980, M.S.F. 1982, Purdue; Ph.D. 1986, North Carolina State University  
\*ROBERT DEAL, B.A. 1960, Capitol University; M.A. 1965, Miami (OH); Ph.D. 1969, Cornell  
\*PAUL J. HARMON, B.S. 1978, Marshall; M.S. 1981, Southern Illinois University

## CHEMISTRY

### Professor

JAMES E. DOUGLAS, B.A. 1952, Rice; Ph.D., 1959, Texas  
JOHN L. HUBBARD, B.S. 1969, North Carolina; Ph.D., 1976, Purdue  
JOHN W. LARSON, B.A. 1965, Mankato; M.S., 1966; Ph.D. 1968, Carnegie-Mellon  
MICHAEL NORTON, B.S. 1977, Louisiana State University of Shreveport; Ph.D., 1982, Arizona State University

### Associate Professor

MICHAEL P. CASTELLANI, B.S. 1982, Furman; M.S., 1983, Northwestern; Ph.D., 1986, UC-San Diego

### Assistant Professor

GRAHAM RANKIN, B.S. 1968, Southern Methodist; Ph.D. Oceanography, 1974, Texas A & M; Ph.D., Chemistry, 1993, University of Houston

## CLASSICAL STUDIES

### Professor

CHARLES O. LLOYD, II (chair), B.A. 1966, Marshall; M.A. 1973, Ph.D. 1976, Indiana

### Associate Professor

CAROLINE A. PERKINS, B.S. 1973, McGill; M.A. 1975, SUNY-Buffalo; Ph.D. 1984, Ohio State

## COMMUNICATION DISORDERS

### Associate Professor

JANET HARRISON, B.A. 1976, M.A. 1977, Marshall; Ph.D., 1988, U. of Florida  
\*MARGARET ROTTER, B.A., 1971, M.S. 1972, U. of Michigan; Ph.D., 1981, U. of Virginia

## COMMUNICATION STUDIES

### Professor

WILLIAM DENMAN, B.A. 1962, La. State College; M.A., 1965, California State; Ph.D., 1974, Ohio University

BERTRAM W. GROSS, B.A. 1994, Lehigh; M.A., 1966, Ph.D., 1975, Temple

**Associate Professor**

ROBERT BOOKWALTER, B.A. 1979, California State; M.A., 1982, Montana; Ph.D., 1989, Kansas

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## THEATRE

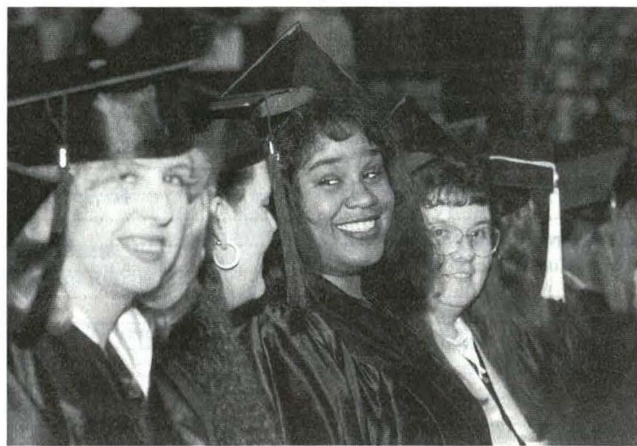
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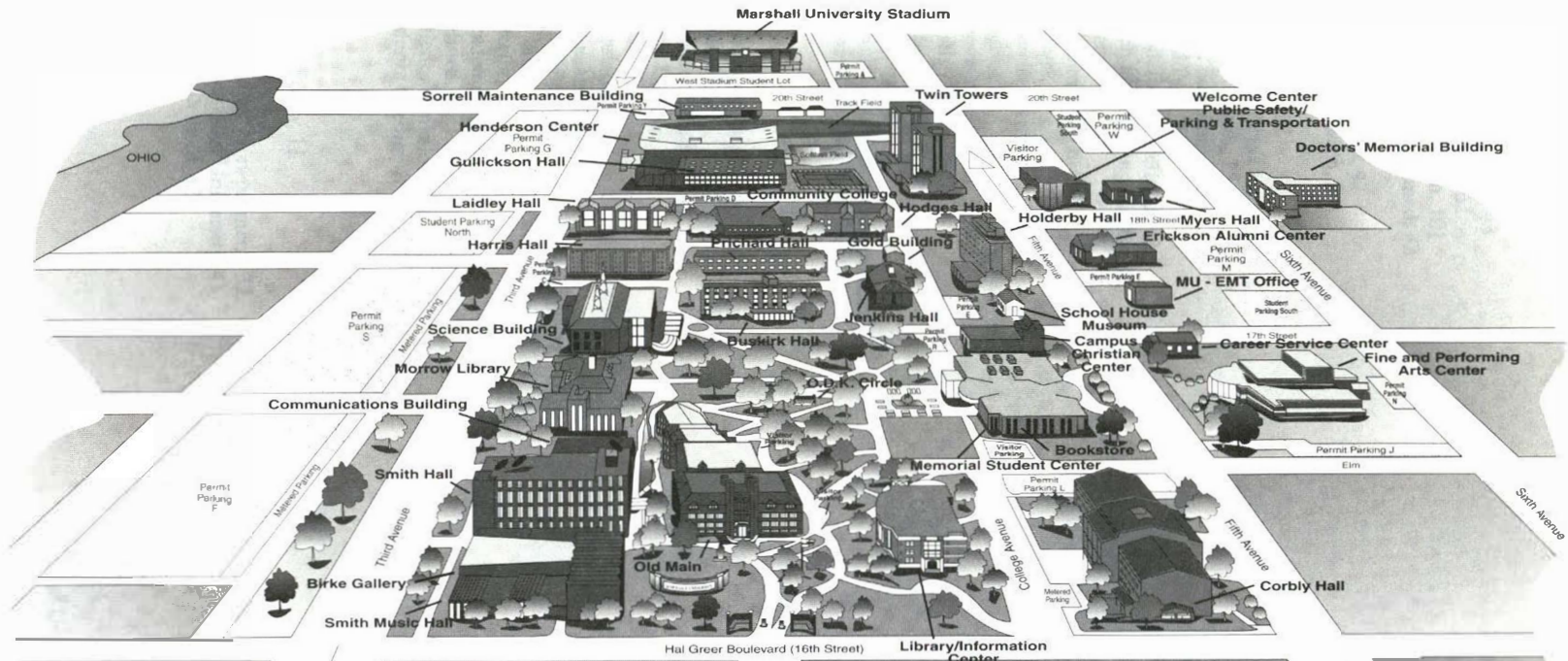
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