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# Graduate Catalog, 2010-2011

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# MARSHALL UNIVERSITY GRADUATE CATALOG

# 2010-2011 (Fall 2010)

This catalog will next be issued in printed form for the fall semester of 2011. However, revisions in catalog content will be made in intervening semesters and will be published each semester on the university's World Wide Web site (www. marshall.edu). Each semester's catalog, as found on the web site, will be the catalog of record for students admitted to degree programs for that semester.

> Susan Tams, M.B.A., Ed.S. *Editor*

# Huntington and South Charleston, West Virginia

Marshall University is accredited as an institution of higher learning by:

The Higher Learning Commission of the North Central Association of Colleges and Schools 30 North LaSalle Street, Suite 2400 Chicago, IL 60602 Toll-free 1-800-621-7440



# **Table of Contents**

Contact Directory	4
About This Catalog	6
About Marshall University	7
The Graduate College	
Admission Information	
Financial Information: Tuition, Fees, and Financial Assistan	ce22
University Policies and Procedures	
Graduate Student Resources	
Academic Information and Resources	
Academic Requirements and Regulations	
Degree Programs	76
Program Requirements	79
Elizabeth McDowell Lewis College of Business College of Education and Human Services College of Fine Arts	
College of Health Professions College of Information Technology and Engineering	110 121
College of Liberal Arts College of Science Graduate School of Education and Professional Development School of Medicine	155 160
W. Page Pitt School of Journalism and Mass Communications.	192
Courses of Instruction	194
The Faculty	
University Calendar	
Index	281



# **Contact Directory**

Academic Affairs	
Admissions	
Graduate	

## **Colleges and Schools**

Lewis College of Business	696-2314
College of Education & Human Services	696-3130
College of Fine Arts	696-6433
College of Information Technology and Engineer	ring
Huntington	696-5453
South Charleston	746-2041
College of Liberal Arts	696-2350
College of Health Professions	696-6750
College of Science	696-2372
Graduate College	696-6606
Graduate School of Education and	
Professional Development	746-2030
W. Page Pitt School of Journalism	
& Mass Communications	696-2360
Joan C. Edwards School of Medicine	691-1700

## **Departments and Divisions**

Accounting	
Adult and Technical Education	
Anatomy and Cell Biology	
Anthropology	
Art and Design	
Biochemistry and Molecular Biology	
Biological Sciences	696-3148/5413
Biomedical Sciences	696-7326/7394
Chemistry	
Classics	
Communication Disorders	
Communication Studies	
Counseling	
Huntington	
South Charleston	
Criminal Justice	
Dietetics	
Early Childhood Education	
Huntington	
South Charleston	
Economics/Finance	
Education, School of	
Educational Foundations	696-3630

Elementary Education	
Huntington	
South Charleston	
Engineering	
Huntington	
South Charleston	
English	. 696-6600/6601
Environmental Science	
Exercise Science, Sport and Recreation	
Family and Consumer Science	
Finance/Economics	
Geography	
Geology	
History	
Human Dev. & Allied Technology	
Humanities	
Information Systems	
Journalism and Mass Communications	
Kinesiology, School of	
Latin	
Leadership Studies	
Management, Marketing	
and Management Information Systems	
Mathematics	
Medicine	
Modern Languages	
Music	
Nursing	
Obstetrics/Gynecology	
Pathology	
Pediatrics	
Pharmacology	
Philosophy	
Physics & Physical Science	
Physiology	
Political Science	
Psychiatry	
Psychology	
Huntington	
South Charleston	
Radiology	
Reading Education	
Huntington	
South Charleston	
Religious Studies	
Safety Technology	
School Psychology	

Secondary Education	
Huntington	
South Charleston	
Spanish	
Special Education	
Huntington	
South Charleston	
Surgery	
Technology Management	

## **Resources and Centers**

African American Students'	
Programs, Center for	
Alumni Affairs	
Artists Series	
Athletics	
Ticket Office	
Attorney for Students	
Bookstore	
Huntington	696-3622
South Charleston	746-2501
Bursar	
Toll-free	800-438-5384
Campus Christian Center	
Career Services	
Center for Teaching and Learning	
Center for Environmental, Geotechnical	
and Applied Sciences	
Center for International Programs	
Community Clinical Services Center	
Dunbar	
Counseling Services	
Dining Services (Sodexo)	
Disability Services, Office of	
H.E.L.P. Program/Learning Disabilities	
ID Card Office	
Information Technology Service Desk	
Huntington	

South Charleston Toll-Free	1-877-689-8638
International Students and Scholars	
L.E.A.P. Intensive English Program	
Libraries	
Drinko	696-2320
Government Documents	696-2342
Health Sciences	
Morrow Stacks	
Music	696-6647
South Charleston	
Special Collections	696-2343
MUOnline Design Center	
Huntington	
South Charleston	746-1948
Multicultural Affairs	
Office of Outreach	
and Continuing Studies	
Prevention Resource Center	
Psychology Clinic	
Registrar	
Residence Services	
Student Activities	
Student Center	
Student Financial Assistance	
Student Government	
Study Abroad	
Telecommunication	
Theatre	
Tutoring Office	
Women's Center	
Writing Center	

## **Campuses and Other Locations**

Beckley Center	256-0266
Mid-Ohio Valley Center	674-7200
South Charleston Campus	746-2500
Teays Valley Regional Center	757-7223

# **Toll-Free Numbers and World Wide Web Sites**

The Graduate Admissions Office has a toll-free telephone number for use by students anywhere in West Virginia. Complete information about Admissions and the Graduate College is available below:

Toll-free telephone number: 1-800-642-9842 (Graduate Admissions Office, South Charleston) World Wide Web site: http://www.marshall.edu/graduate



# About This Catalog

## The Marshall University Graduate 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 period 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 normally in effect for a period of ten consecutive years for undergraduate degrees and certificates and seven 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.

## CATALOG OF RECORD AND DEGREE REQUIREMENTS

The online version is the official Graduate Catalog of Marshall University. It is updated semi-annually. The online catalog that is current for the semester or term during which you are admitted to your graduate degree program is the catalog that applies to you as your "catalog of record." To ensure that you are meeting the requirements that apply to you, please consult the online Graduate Catalog in effect for the semester or term you are admitted to your degree program.

When Graduate College or degree program requirements are changed after you begin a course of study, with the approval of your advisor, you shall have the option of fulfilling either the old or the new requirements. If you elect to fulfill the old requirement but find that necessary resources (e.g., courses, instruction in particular skills) are no longer available, you may make reasonable substitutes with the approval of your advisor and the appropriate graduate dean. In the event you have not completed the requirements for a graduate degree seven years after the effective date of a change in degree requirements, the new requirements shall apply unless determined otherwise by the advisor and the appropriate academic dean.

## STUDENT RESPONSIBILITY

Graduate students accept responsibility to remain current and informed on all regulations, policies, and procedures of their academic program and of the University.

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.



# About Marshall University

## Dr. Stephen J. Kopp, President

## www.marshall.edu

Marshall University 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, off-campus, and Internet classes, lectures, musical programs, conferences, forums, and other campus and field activities.

# **MISSION OF THE UNIVERSITY**

Marshall University is a multi-campus public university providing innovative undergraduate and graduate education that contributes to the development of society and the individual. The University actively facilitates learning through the preservation, discovery, synthesis, and dissemination of knowledge

Marshall University will

- provide affordable, high quality undergraduate and graduate education appropriate for the state and the region
- provide services and resources to promote student learning, retention, and academic success;
- foster faculty, staff, and student outreach through service activities; provide a safe and secure employee work environment; make instruction available throughout Marshall's service area using all appropriate modes of delivery;
- enhance the quality of health care in the region;
- promote economic development through research, collaboration, and technological innovations;
- educate a citizenry capable of living and working effectively in a global environment;
- support and strengthen the faculty, staff, student, and administrative governance structures in order to promote shared governance of the institution;
- further the intellectual, artistic, and cultural life of the community and region; and
- adhere to the Marshall University Creed and to the Statement of Ethics.

## Marshall University faculty will

- remain current in their fields of expertise and incorporate that expertise in the educational process as appropriate;
- improve instruction through the use of innovative teaching methods that require students to become actively involved in the learning process and develop the critical thinking skills necessary for lifelong learning;
- contribute to the body of knowledge through completion of scholarly and creative activities;
- actively engage and mentor students in scholarly, artistic, and creative endeavors;
- help students develop the ability to navigate through a rapidly changing society; and
- regularly review the curriculum, degree, and programs offered, and recommend necessary additions and deletions to meet changing needs of the state and region.

## Marshall University staff will

- support the mission of the University in their transactions with students, staff, faculty, administrators, and the public;
- develop a positive, just, and equitable workplace; and
- be a quality workforce equipped with appropriate skills and knowledge.

Marshall University students will have the opportunity to

- use their knowledge, creativity, and critical thinking skills to make their communities better places in which to live;
- examine critically the many issues facing society and, through the process of civil discourse, prepare themselves to become socially responsible individuals who contribute to the betterment of society;
- appreciate and to cultivate diversity, and to value differences;
- participate in activities such as artistic and cultural programs, social and residential life activities, and intercollegiate/intramural athletic teams; and
- undertake intensive graduate-level education in their chosen fields upon admission to graduate school, giving them solid foundations for becoming competent professionals.

Marshall University administration will

- actively seek resources to support the mission and goals of the institution as stated in this document;
- secure funding to support scholarship, artistic, and creative endeavors, faculty and staff development, and state-of-the-art classrooms;
- provide leadership to facilitate the institution's achievement of its mission and vision;
- administer the policies of the university in a fair, ethical, and equitable manner;
- communicate the vision, mission, goals, achievements, and difficulties of the institution in a clear, effective, and forthright manner to both internal and external constituencies; and
- actively support shared governance of the institution.

# VISION STATEMENT

Marshall University, an exemplar of excellence in teaching and learning, will continue to place its highest priority on providing outstanding undergraduate and graduate education, resulting in national recognition in academics and in scholarly, artistic, and creative achievement. Marshall's students will graduate well prepared for the responsibilities of life within a culturally diverse and globally interdependent society. Marshall will address the changing needs of the state and region and will return to the community and state an outstanding value for the resources invested in the university.

# ACCREDITATIONS

- **Higher Learning Commission of the North Central Association of Colleges and Schools** (30 North LaSalle Street, Suite 2400, Chicago, IL 60602; toll-free 1-800-621-7440, www.ncahigherlearningcommission.org) accredits Marshall University as an institution of higher learning.
- Accreditation Board for Engineering Technology accredits the Engineering Technology program.
- Accreditation Council for Continuing Medical Education accredits the School of Medicine's Continuing Medical Education program.
- Accreditation Council for Graduate Medical Education accredits the School of Medicine's Residency Programs in Internal Medicine, Pathology, Transitional Year, Surgery, Pediatrics, Family Practice and Obstetrics/Gynecology.
- AACSB International The Association to Advance Collegiate Schools of Business accredits the Elizabeth McDowell Lewis College of Business.
- AACSB International The Association to Advance Collegiate Schools of Business accredits accounting degree programs of the Elizabeth McDowell Lewis College of Business
- American Chemical Society accredits the Department of Chemistry.
- American Psychological Association accredits Doctor of Psychology degree program.
- Accrediting Council on Education in Journalism and Mass Communication (University of Kansas School of Journalism, Stauffer-Flint Hall, Lawrence, KS 66045; telephone 913-8643986) accredits the W. Page Pitt School of Journalism & Mass Communications.
- **Commission on Accreditation of Allied Health Education Programs** (35 East Wacker Drive, Suite 1970, Chicago, IL 60610; telephone 312-553-9355) accredits the Athletic Trainer program.
- **Council on Academic Accreditation of the American Speech-Language-Hearing Association** (10801 Rockville Pike, Rockville, MD; telephone 301-897-5700) accredits the Communication Disorders graduate program.
- Forensic Science Education Program Accreditation Commission (FEPAC)/ American Academy of Forensic Sciences (AAFS) accredits the Forensic Science program.
- Liaison Committee on Medical Education of the American Medical Association and the Association of American Medical Colleges (515 North State Street, Chicago, IL 60610; telephone 312-464-4657) accredit the School of Medicine.
- National Association of Schools of Music (11250 Roger Bacon Drive, Reston, VA 22090; 703-437-0700) accredits the Department of Music.
- National Council for Accreditation of Teacher Education and the West Virginia State Department of Education accredit the teacher education program.
- National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 500 Atlanta, GA 30326; phone 404-975-5000; fax 404-975-5020) accredits programs for the Associate in Science in Nursing, the Bachelor of Science in Nursing and the Master of Science in Nursing.

- National Recreation and Park Association and the American Alliance of Leisure and Recreation accredit the Recreation and Park Resources program.
- World Safety Organization accredits undergraduate and graduate programs in Safety Technology.

# **APPROVALS**

- · American Association of University Women approves Marshall University
- Federal Immigration and Nationality Act approves Marshall University for attendance of nonimmigrant international students

# **MEMBERSHIP IN MAJOR ORGANIZATIONS**

- AACSB/The International Association for Management Education
- American Association for Affirmative Action
- American Association of Colleges for Teacher Education
- American Association of Colleges of Nursing
- American Association of Family & Consumer Sciences
- American Association of State Colleges and Universities
- American Council on Education
- American Dietetic Association
- American Library Association
- American Speech Language Hearing Association
- Association of American Medical Colleges
- Association of Departments of English, MLA
- Association of Schools of Journalism and Mass Communications
- Council of Colleges of Arts and Sciences
- Council of Graduate Schools in the United States
- International Council of Fine Arts Deans
- NACUBO-SACUBO
- National Collegiate Athletic Association
- National League for Nursing
- Southern Council on Collegiate Education for Nursing
- Southern Regional Education Board
- Teacher Education Council of State Colleges & Universities

# HISTORY

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 during 1896-1915 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 Education was expanded in 1997 to include Professional Development; its name then changed to the College of Education and Human Services. The College of Arts and Sciences was formed in 1924, 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. The School of Medicine and Associated Health Professions was established in 1974, which became the Joan C. Edwards School of Medicine in 2000. The Community College was organized in 1975 and became the Community and Technical College in 1991. In 2003, the Marshall Community and Technical College became a separate institution.

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 which became the Elizabeth McDowell Lewis College of Business in 1996. In 1978, the School of Nursing was established as a separate entity and in 1998 was renamed the College of Nursing and Health Professions and again in 2004 became the College of Health Professions. The W. Page Pitt School of Journalism and Mass Communications

was recognized as an independent school in 1998. The College of Fine Arts was established in 1984. In 1999, the College of Information Technology and Engineering was established. Marshall was granted university status in 1961.

A significant number of non-credit courses are offered through the Robert C. Byrd Institute and Professional Development programs. Marshall has taken the lead in delivering courses to off-campus sites throughout the state, nation, and world via distance learning with online courses. Since the formation of the West Virginia Board of Regents in 1969, then under the University of West Virginia Board of Trustees in 1988, and now the Higher Education Policy Commission, Marshall has progressed as an urban-oriented university with regional centers and a statewide mission. As a result of state system 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.

# **Graduate Education**

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, and the first master's degrees were conferred at the commencement of 1940. The Graduate School on the Huntington campus was organized in 1948. The first Ph.D. degree was conferred in 1992 in Biomedical Sciences.

Graduate education on the South Charleston Campus was born in 1958 when West Virginia University was authorized by the Legislature to establish the Kanawha Valley Graduate Center, which began offering courses in chemistry and chemical, mechanical and civil engineering in 1958-59. In July 1972, the Legislature established the college as a separate entity, the West Virginia College of Graduate Studies (COGS). Two years later, the Board of Regents further defined its mission by specifying geographical areas of responsibility, designating COGS to serve 16 counties of central and southern West Virginia with graduate programs—an area containing about 39 percent of the state's population. On July 1, 1989, a restructured University System of West Virginia was implemented and COGS became the University of West Virginia College of Graduate Studies. With the advent of a new statewide mission approved by the Board of Trustees in 1991, the name was modified in March 1992 to West Virginia Graduate College.

On July 1, 1997, the West Virginia State Legislature authorized a merger of Marshall University and the West Virginia Graduate College, providing a new campus for Marshall University in South Charleston. Since 1997, MUGC was headquartered in two buildings on the South Charleston campus, providing an array of degree and professional development programs, continuing education opportunities and services designed to address the needs of the adult learner. Today the South Charleston campus is the location for the Graduate School of Education and Professional Development, the graduate Humanities and Psychology M.A. program of the College of Liberal Arts, graduate programs of the Lewis College of Business and of the College of Information Technology and Engineering.



# The Graduate College

## Donna J. Spindel, Dean

### www.marshall.edu/graduate

Over the past seven decades the Marshall University Graduate College has provided graduate education to tens of thousands of students and has contributed to the economic and cultural life of the state, region, and nation. The Graduate College is ranked 17th among public universities in the South by U.S. News & World Report, 2009.

At Marshall University, the 270 faculty who hold graduate faculty status offer a broad range of courses in many different disciplines. Students may choose from forty-six master's programs, four doctoral programs, two Education Specialist degrees, and thirty certificate programs plus an array of professional and professional development courses.

Graduate education is offered on the Huntington campus, the South Charleston campus, throughout the state and region, in Bangalore, India, and online world-wide. Some programs offer courses on either the Huntington or South Charleston campus. Some programs offer courses on both campuses and students may complete those programs, start to finish, at the campus location of their choice. Graduate courses may also be offered through Marshall University's regional center locations in Teays Valley, Point Pleasant, or Beckley.

The Huntington campus encompasses 90 acres in its urban setting. The Medical School is located several blocks to the south. This campus is 126 miles east of Lexington, Kentucky, and 50 miles west of Charleston, West Virginia.

The South Charleston campus is located 50 miles to the east of the campus in Huntington, and covers about 29 acres in South Charleston, West Virginia. There are two buildings at the South Charleston campus. The Administration Building houses the Graduate Admissions Office, the Graduate School of Education and Professional Development, a bookstore, classrooms, computer labs, and faculty and staff offices. The Robert C. Byrd Academic and Technology Center houses the Library as well as classrooms.

# **MISSION OF THE GRADUATE COLLEGE**

The graduate mission of Marshall University is to provide quality educational opportunities at times and places convenient to students, employing alternative delivery systems and rich learning resources. The institution promotes excellence in instruction, research and public service in the interest of enhancing the intellectual, professional, and personal growth of students, faculty, and staff. Throughout the state Marshall University offers masters' degrees, post-masters' programs, doctoral degrees and professional development options according to needs and with a minimum of duplication.

In support of its graduate mission, Marshall University values

- excellence in teaching and advising;
- support services for students;
- the expansion of knowledge through research and inquiry;
- an interactive and collaborative relationship with the community;
- open access to quality educational opportunities;
- lifelong learning;
- cultural diversity;
- the continuous review of our programs and administrative processes;
- · innovation and efficiency in the use of resources; and
- personal and institutional accountability.

To fulfill its graduate mission, Marshall University supports the commitment of institutional resources to ensure

- quality in existing graduate programs;
- adequate library resources for meeting accreditation requirements, electronic library needs and program initiatives;
- access to graduate programs within the state, region and nation;
- promotion of technological delivery of courses and programs;
- development of new graduate programs at the master's, post-master's, and doctoral levels according to need;

- recruitment and retention of a strong and diverse graduate faculty;
- · recruitment and retention of a strong and diverse graduate student population; and
- development of student life initiatives appropriate for graduate students.

# THE GRADUATE COUNCIL

The primary responsibility of the Graduate Council is to make policy recommendations with respect to the graduate education mission of the university to the university President. Specific functions include the facilitation of long range planning for graduate education at Marshall University, the recommendation of new programs and courses, the evaluation of existing programs and courses, the facilitation of graduate accreditation, the recommendation of promotion and tenure policies related to graduate education, and the recommendation of approval of graduate faculty to the university president.

# THE GRADUATE FACULTY

There are currently 270 faculty who hold graduate faculty status and offer a broad range of courses in many different disciplines.

# **RESEARCH CENTERS**

The Graduate College 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 Dean's office in Huntington.

Training in the Marshall University Graduate College 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 College encourages all students, regardless of receipt of financial assistance or its ultimate source, to participate in the departmental programs (teaching, research, etc.) as an integral part of their advanced training

## **Cell Differentiation and Development Center**

The Cell Differentiation and Development Center (CDDC) is an inter-disciplinary group aimed at increasing institutional research capacity at Marshall University. The products and outcomes of this venture will be applied to further technology-based economic development in Huntington, Cabell county, and the surrounding tri-state area. The multidisciplinary research groups within the CDDC mainly focus on the mechanisms that govern cellular differentiation and development.

## **Center for Business and Economic Research**

Standing as a research arm of Marshall University, the CBER's mission is to conduct business and economic research pertinent to the West Virginia and tri-state regional economies; provide related research and service support to College faculty; support University economic development and service efforts; integrate with the business community through direct faculty involvement in research related to the West Virginia and tri-state economies; provide business and economic development support to private and public sector constituencies; disseminate information, research findings, and data; and encourage and support faculty in their intellectual pursuits and contributions.

## Center for Environmental, Geotechnical and Applied Sciences

CEGAS was established in May 1993 through the cooperative efforts of the presidents of Marshall University and West Virginia Graduate College. On July 1, 1998, CEGAS became an affiliated organization of the College of Information Technology and Engineering (CITE). 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. CEGAS has been involved since its inception with educational offerings, research, service, and long-term planning for regional development.

The center has secured more than \$10 million in external contracts and grants for research, development, and service projects in multiple fields of study, including Environmental Management, Engineering, Information Technology, Geographic Information Systems, Safety and Health Technology Innovation, Specialized Training, and business assistance through its Environmental Management Incubator. WV Senate Bill 603 was passed in spring 2005, authorizing the development of regional brownfield assistance centers at Marshall University and West Virginia University. Under CEGAS, the Southern West Virginia Brownfields Assistance Center assists eligible entities in 22 West Virginia counties to convert derelict land into useful and productive property through economic development, workforce development, and site revitalization.

For more information, please visit *www.marshall.edu/cegas* or contact CEGAS at (304) 696-5453 or *cegas@marshall.edu/cegas* or contact cegas@marshall.edu/cegas or contact cegas@marshall.edu/

## Center for the Study of Ethnicity and Gender in Appalachia

CSEGA was made possible by a grant from the Rockefeller Foundation in 1996. The program was established to research and promote research on the various aspects of the people, cultures, and lives within the Appalachian region. The program's accomplishments have included sponsoring 10 scholars in residence, 7 scholar affiliates, and hosting 2 conferences. CSEGA has a unique research mission – it is the only Appalachian Center in the country dedicated to studying and understanding the incredible diversity of the region.

## **Environmental Management Incubator**

The incubator works to enhance the sustainability of regional businesses by providing access to environmental information and management strategies, and encouraging business development based on environmentally-related opportunities.

## John Deaver Drinko Academy

The Drinko Academy is devoted to enhancing public understanding of American institutions and the responsibilities of citizens to their society, particularly a sense of shared values and common purpose.

## Marshall Institute for Interdisciplinary Research

The goal of this institute, created through the state's "Bucks for Brains" research trust fund, is to develop a focused program of pioneering research dedicated to producing patentable scientific breakthroughs and creating new high-tech businesses based on those discoveries. Focusing on entrepreneurial research through increased educational and career opportunities, it is anticipated that MIIR will have a tremendous effect on the state economy over the next 10-20 years. In its first ten years, MIIR is expected to create more than 1,000 jobs, as well as to generate \$25 million in tax revenue. During its second decade of existence, MIIR is slated to enhance the overall state economy by more than \$280 million.

## Marshall University Nutrition and Cancer Center

Investigators at this NCRR/NIH-funded Center of Biomedical Research Excellence are studying a wide variety of dietary components, including omega-3 fatty acids, capsaicin (responsible for the "hotness" of chili peppers) and alcohol. Cancers of interest include small cell lung cancer, breast cancer, skin cancer and leukemia/lymphoma.

## Nick J. Rahall II Appalachian Transportation Institute

The institute helps influence a more diverse and equitable economy for rural Appalachia and other mountain areas by providing insights into how to create and maintain the most cost-effective enhancement to the national transportation system in rural Appalachia and rural America.

## **Robert C. Byrd Center for Rural Health Resources**

This center serves as the base for Marshall's rural medicine outreach programs, which directly affect more than half of West Virginia's population.

## Robert C. Byrd Institute for Advanced Flexible Manufacturing

RCBI is the only statewide manufacturing technology production and teaching resource in the state. The institute provides manufacturers with access to advanced equipment; affordable, customized workforce development and technical training programs; quality certification and implementation assistance, and an array of technical support programs.

## West Virginia Autism Training Center

This center provides training, information and support to West Virginians with autism, their families, educators and others.

## West Virginia IDeA Network of Biomedical Research Excellence

The primary goal of this institute is to develop competitive NIH research at primarily undergraduate institutions in the state. The program also provides students at these institutions with enhanced research experiences. The principal areas of research are cardiovascular disease and cancer.

## West Virginia Prevention Resource Center

This center supports West Virginia's Substance Abuse Prevention System through information dissemination, networking and collaboration, facilitated learning and training, and evaluation activities.

# 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 Office of Research Integrity through its website at *www.marshall.edu/research/ori*.

Graduate students who conduct research involving the use of human subjects must have the approval of the applicable Institutional Review Board (IRB), either Medical or Behavioral and Social Sciences, before starting the research and must work under the supervision of faculty advisors. Information about procedures and approval forms may be obtained at the

Office of Research Integrity website at http://www.marshall.edu/research/ori.

## **Hazardous Substances**

Graduate students who will be using, or who will be generating, hazardous substances in their research must work under the supervision of faculty advisors who obtain permission for such research through the appropriate college safety committee. The college will arrange for proper disposal of these materials. Proposals must be submitted to the appropriate safety committee for approval.

# Policy Statement on Integrity in Scientific Research

Research and scholarship are essential parts of Marshall University. The virtues of scholarship are forged from a combination of patience with eagerness, inspiration with meticulous care, and a reverence for integrity with a willingness to challenge cherished assumptions. It is within the research process that these virtues must be held in the highest esteem and measured against a strict set of standards. In this light, it is incumbent upon the institution to insure accurate, objective, valid and reliable research in the finest tradition of scholarship.

It shall be the policy of Marshall University that no faculty member shall knowingly plagiarize, fabricate, or present incorrect data in research or creative activities conducted under the auspices of the institution. Further, in the case of alleged scientific misconduct, all pertinent rules and regulations of the Public Health Service (PHS), such as 42 CFR Part 50 and allied documents, will prevail in providing definitions, procedures, and deadlines.

The complete policy statement may be found on the Web at www.marshall.edu/murc/law/misconduct.htm.



# Admission Information

# ADMISSION TO THE GRADUATE COLLEGE

Prospective graduate students should apply for admission as early as possible. The first step for a student interested in a degree program is to obtain admission information from the department offering the program desired or from the Graduate Admissions office. Instructions for applying are available at the Graduate College website at *www.marshall.edu/graduate*.

Admission deadlines are as follows:

Fall Semester: August 1 Spring Semester: December 1 Summer Terms: May 1

Please note that some academic majors have a program-specific deadline. Program-specific deadlines are indicated on the Graduate Application for Admission and in the departmental listing under Degree Program Requirements in this catalog.

Admission to the Graduate College is based on receipt of a baccalaureate degree from an accepted, regionally accredited college or university, the Grade Point Average, the scores on required Admissions examinations and the information provided on the "Application for Graduate Admissions" form.\* The receipt of a bachelor's degree from an accepted, regionally accredited college or university is the basic requirement for admission as a graduate student to Marshall University and cannot be waived. The only exception to the baccalaureate degree requirement pertains to students in the 3+2 joint Bachelor's/MBA degree program in the Lewis College of Business. Students who have previously taken graduate coursework at another institution must submit all transcripts and also meet 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 College, at the discretion of the faculty.

The application for admission form accompanied by payment of a non-refundable application fee must be filed in the Graduate Admissions Office 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 registrar's office of the student's undergraduate college or university to the Graduate Admissions Office when the application is filed. An official transcript from each college or university previously attended must be mailed directly from the registrar's office to the Graduate Admissions Office before the applicant can be considered for admission to a degree program. All materials submitted in support of an application for admission become the property of Marshall University. Materials will not be returned or released to the student or to third parties. Any student admitted on the basis of false and/or incomplete information is subject to immediate dismissal or other disciplinary action.

In some academic programs, applicants may enroll for one semester with conditional status based upon submission of the application form, an official undergraduate transcript that certifies the receipt of a bachelor's degree, official copies of all other transcripts (if applicable), and the application fee. However, students with conditional status will not be eligible for subsequent registration (even if they do not attend the classes) unless they have completed all requirements for admission and have been admitted to their requested program. A student cannot be conditionally admitted to multiple programs within one calendar year and cannot be conditionally admitted to the same program, at any time, more than once. Credit for coursework taken will not be applied toward a degree unless the admission process is completed. Certain programs, including, but not limited to, those in the Graduate School of Management, Nursing, Biomedical Sciences, Communication Disorders, Technology Management, and others require that all admissions requirements be completed and that the applicant be admitted to the program before being permitted to enroll for courses in those fields.

## **ADMISSIONS EXAMINATIONS**

The Graduate Record Examinations (GRE) General Test is required of applicants to some programs. M.B.A. students are required to take the Graduate Management Admission Test (GMAT) prior to admission to that program. Other programs may accept the Miller Analogies Test (MAT) in lieu of the GRE. Specific test requirements are indicated in the program or departmental description in later sections of this catalog. Test scores must be sent by the appropriate testing agency directly

\*For international students, a baccalaureate degree from the equivalent of an appropriately accredited institution is required. See International Students, point number 5. to the Graduate Admissions Office, Marshall University Graduate College, 100 Angus E. Peyton Drive, South Charleston, WV 25303-1600.

For complete information regarding admission examinations and the services provided by the Marshall University Testing Center, please see *www.marshall.edu/graduate/testinformation.asp*.

## Waiver of Admissions Examination

If a student has a master's or higher degree from an accepted, regionally accredited institution of higher education, the admissions examination requirement may be waived for any future master's program at Marshall University. Ultimate responsibility for this decision rests with the faculty of the program in which the student proposes to enroll.

# **GRADUATE ADMISSION CHECKLIST**

• Complete, sign, date and submit by the deadline the Graduate Application for Admission and the required, non-refundable fee to:

Marshall University Graduate Records and Admissions Office 100 Angus E. Peyton Drive South Charleston, WV 25303-1600

- Request the registrars at all colleges and universities previously attended (except Marshall University) to send official transcripts of your academic record directly to the Graduate Admissions Office. Transcripts bearing the stamp "Issued to Student," hand-delivered transcripts, transcripts mailed or handled by the student, faxed transcripts, or transcripts issued to third parties cannot be accepted.
- Have the appropriate testing agency submit your official test scores (GRE, GMAT, or MAT) directly to the Graduate Admissions Office.
- Send or have sent all other items required by your academic major to the Graduate Admissions Office.

Applications are reviewed only after the application fee and all required credentials are received. Prior university holds or obligations on a student's record may cause a delay in application processing or may cause the application not to be processed.

## Deadlines

The Application for Graduate Admission must be filed in the Graduate Admissions office by the semester deadline for the desired term of enrollment or by the specific departmental deadline. Semester deadlines are as follows:

Fall Semester: August 1 Spring Semester: December 1 Summer Terms: May 1

Program-specific deadlines are included in the departmental listing under Degree Program Requirements in this catalog or on the Graduate Application for Admission form. Once the application is received in Graduate Admissions, in order for an application to be reviewed for admission, the non-refundable application fee and all required credentials must be filed in the Graduate Admissions office no later than two weeks prior to the opening of the desired term of enrollment or by the specific departmental deadline. Applicants should submit the non-refundable application fee at the time the application is submitted.

# ADMISSION CLASSIFICATION OF GRADUATE STUDENTS

DEGREE-SEEKING - A student who desires admission as a degree-seeking graduate student must have an overall undergraduate Grade Point Average (GPA) of 2.5 on a 4.0 scale. Individual schools and programs may require higher Grade Point Averages. A degree-seeking student must also meet all criteria for full admission to the program of his/her choice.

*Dual Degrees* - Students who wish to seek admission to more than one degree program at a time (Dual Degree Status), must complete a separate application, pay an additional non-refundable application fee, submit all required credentials, and meet all admission requirements for each academic program for which admission is sought. A student must be admitted to the first program before being considered for admission to a dual degree program. Conditional status is not an admission option for dual degree students. Not all departments may accept a student who is already admitted to another graduate level program. Prior to submitting a Graduate Application for Admission, please check with the academic department(s) of the program(s) in which you are interested.

CERTIFICATE/PROFESSIONAL DEVELOPMENT - Students who do not want to be enrolled in degree programs but who wish to enroll in certificate/licensure programs or other programs that require the completion of specified sequences of courses should apply as certificate/professional development students.

In most cases, requirements for admission to certificate or professional development programs are the same as for admission to degree programs, including at least a 2.5 overall undergraduate GPA. However, requirements for admission to these programs can vary and are explained in the Degree Program Requirements section of this catalog.

PROVISIONAL ENROLLMENT - A student may be admitted as provisional in a degree program after submission of all required application materials when he or she possesses a baccalaureate degree and shows academic promise but does not meet the criteria for regular admission. An academically provisional student must be reclassified as a regular student no later than the completion of the 12th graduate credit hour. This is accomplished by meeting the conditions established by the academic program and by maintaining at least a 3.0 GPA in courses identified by the program faculty and approved by the appropriate dean.

CONDITIONAL ENROLLMENT - In some programs, applicants who are not fully admitted may register for courses with conditional enrollment status in the semester for which they have applied for entry based upon submission of (1) a properly completed Graduate Application for Admission form, (2) official undergraduate and graduate transcripts from all institutions attended, including one which certifies the receipt of a bachelor's degree from an accepted, regionally accredited institution, (3) an overall undergraduate GPA of 2.5 on a 4.0 scale, and (4) the appropriate application fee. Applicants who are permitted to enroll for one semester (enrolled is defined as registered when a term begins or any time thereafter) as conditional students (even if they do not attend the classes) are not eligible to register for subsequent terms until they complete all admission requirements and are fully admitted to the requested program. Many programs do not accept conditional enrollments and require applicants to be fully admitted before enrolling for courses. A student cannot be conditionally admitted to multiple programs within one calendar year and cannot be conditionally admitted to the same program, at any time, more than once.

Students enrolled in the last semester of an undergraduate program *may* be admitted to some programs conditionally for one term subject to completion of the bachelor's degree program and subject to departmental approval. All required credentials, including official transcripts, are necessary for consideration, including an official letter of good standing/proof of pending graduation.

NON-DEGREE ADMISSION - Persons who desire university instruction without becoming graduate degree candidates may attend as non-degree students, provided they have received a bachelor's degree from an accepted, regionally accredited undergraduate college or university. Before enrolling in a class, non-degree graduate students must obtain permission from the instructor. Students wishing to take courses offered by the Lewis College of Business must secure approval of the academic advisor. The fees for attendance as a non-degree student are the same as those set for other graduate students. Nondegree enrollment for graduate courses is not available to persons under suspension by the university.

A non-degree student who does not hold a master's or higher degree may take a maximum of 15 semester hours. Permission for non-degree students to register for additional hours beyond 15 can be granted by the Dean of the Graduate College or the appropriate school dean. Applicants for non-degree status will complete a Graduate Application for Admission, pay the application fee, and have the registrar send an official transcript showing proof of a bachelor's degree from an accepted, regionally accredited undergraduate college or university 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, provided both a transcript showing the undergraduate degree and a transcript showing a master's degree or higher (both from an accepted, regionally accredited college or university) are submitted. All transcripts must be offical and sent to Graduate Admissions directly from the registrar.

Non-degree graduate students may apply later for admission to degree programs 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 appropriate dean will be counted toward a degree awarded by the university.

TRANSIENT - A graduate student who is duly enrolled at another accepted, regionally accredited graduate institution may, upon submission of an admission application and a letter of good standing from the home university, enroll for Marshall University graduate coursework. 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, by the student, 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.

STAFF DEVELOPMENT - School personnel approved by their county school systems may use a departmental form to be admitted in the Staff Development category. Students admitted in this category are restricted to registering for Staff Development classes (560 series) in the College of Education or the Graduate School of Education and Professional Development, for which they will receive credit/non-credit or satisfactory/unsatisfactory grades. Such classes cannot be used in degree, professional development or licensure programs. Students who wish to mix regular and Staff Development classes must seek regular admission to the Graduate College.

SENIORS - Seniors at accepted, regionally accredited baccalaureate institutions with a cumulative GPA of at least 2.75 may register for graduate classes (500 and 600 series) after they have received approval from their undergraduate dean, the chair of the department offering the course, and the appropriate graduate college/school dean. Complete applications must be on file in the appropriate graduate dean's 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. No more than 12 graduate hours may be taken as an undergraduate.

The university reserves the right, even after the arrival and enrollment of students, to make individual curricular adjustments whenever particular deficiencies or needs are identified. These deficiencies will be determined by the student's advisor or the program director/department chair. 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 program statements in this catalog.

Any appeals of admissions decisions should be directed to the program director, dean, or chair of the academic program to which the individual applied.

# **RESIDENCY CLASSIFICATION FOR ADMISSION AND FEE PURPOSES**

Requests for changes in residency status for new students will be evaluated by the Admissions Office provided a completed residency application with all required supporting documentation is submitted **by the end of the first week of classes of each new term.** Thereafter, all requests for changes in residency status for currently enrolled students will be evaluated by the Registrar.

## Title 133 Procedural Rule West Virginia Higher Education Policy Commission, Series 25

### **SECTION 1. General**

1.1. Scope - Rule regarding residency classification of students for admission and fee purposes.

1.2. Authority - W. Va. Code 18B-1-6, 18B-1-7, and 18B-10.

1.3. Filing Date - July 2, 2002

1.4. Effective Date - August 1, 2002

1.5. Repeal of Former Rule - Repeals and replaces Title 128, Series 34 and Title 131, Series 34

## **SECTION 2. Classification for Admission and Fee Purposes**

2.1. 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.

2.2. If there is a question as to domicile, the matter must be brought to the attention of the designated officer at least two (2) 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.

2.3. 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 3. Residence Determined by Domicile**

3.1. 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 (12) months of continued presence within the state prior to the date

of registration: Provided, That such twelve (12) 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 (12) 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 on 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 4. Dependency Status**

4.1. A dependent student is one (1) 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.

4.2. 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 5. Change of Residence**

5.1. 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 3 of these rules. 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 6. Military**

6.1. 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.

6.2. Persons assigned to full-time active military service in West Virginia and residing in the state shall be classified as instate 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 7.** Aliens

7.1. 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 3 of these rules, 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 3 of these rules. Any person holding a student or other temporary visa cannot be classified as an in-state student.

#### **SECTION 8. Former Domicile**

8.1. 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 (1) year period of time and satisfies the conditions of Section 3 of these rules, regarding proof of domicile and intent to remain permanently in West Virginia.

#### **SECTION 9. Appeal Process**

9.1. Each institution shall establish procedures which provide opportunities for students to appeal residency classification decisions with which they disagree. The decisions of the designated institutional official charged with the determination

of residency classification may be appealed in accordance with appropriate procedures established by the president of the institution. At a minimum, such procedures shall provide that:

9.1.1. An institutional committee on residency appeals will be established to receive and act on appeals of residency decisions made by the designated institutional official charged with making residency determinations.

9.1.1.1. The institutional committee on residency shall be comprised of members of the institutional community, including faculty and at least three, in any event, an odd number. The student representative(s) shall be appointed by the president of the institutional student government association while the faculty representative(s) shall be selected by the campus-wide representative faculty organization.

9.1.1.2. The student contesting a residency decision shall be given the opportunity to appear before the institutional committee on residency appeals. If the appellant cannot appear when the committee convenes a meeting, the appellant has the option of allowing committee members to make a decision on the basis of the written materials pertaining to the appeal or waiting until the next committee meeting.

9.1.2. The residency appeal procedures will include provisions for appeal of the decision of the institutional committee on residency appeals to the president of the institution.

9.1.3. Residency appeals shall end at the institutional level.

# ADMISSION OF INTERNATIONAL STUDENTS

Marshall University is authorized by the U.S. Department of Homeland Security, Bureau of Citizenship and Immigration Services to enroll non-immigrant visa students with F-1 or J-1 status.

## **Deadlines:**

If a student is applying for:

Spring semester: October 15 Summer semester: March 15 Fall semester: June 15

Please note that certain departments or programs may have application deadlines that are earlier than the ones provided above. In such cases you will need to meet the department's deadline.

## **Application Procedures**

International applicants must submit ALL of the following documents to be considered for admission. First, complete the Online Application (www.marshall.edu/cip/apply) and send the following by mail or fax:

1. **\$100.00 Application Fee (non-refundable).** Check or money order made payable to Marshall University. Please note that this is a non-refundable fee and cannot be refunded in the event the student is not accepted or does not get a student visa. To be accepted, all checks must have a 9-digit routing number. DO NOT SEND CASH.

You can also pay the \$100 fee with a Visa/Mastercard using our Online Secure Payment Form (*https://www.marshall. edu/cip/apply*).

- 2. **Graduate Information Sheet.** Print, complete and submit the Graduate Information Sheet (*www.marshall.edu/cip/apply*).
- 3. **Official Transcripts.** Transcripts must be submitted in English and the original language and contain ALL college or university academic credits and grades. The transcripts must be sent directly to the Center for International Programs by the institution that you attended. Photocopies will be accepted as a basis for preliminary evaluation of eligibility for admission; however, the official transcripts must be received prior to admission.

Additional or alternate admission credentials may be accepted at the discretion of the Center for International Programs depending on the applicant's country of origin. Please contact CIP for details regarding specific admission requirements for applicants from your country. For International applicants, Marshall University reserves the right to accept official credentials directly from a limited number of third party agencies that have been approved by the University. In some cases, a credential evaluation may be required from a certified academic credential evaluation service.

4. Evidence of English Language Proficiency. It is possible for students to be admitted conditionally without English proficiency if the student applies for admission to the L.E.A.P. Intensive English Program at the same time he or she applies for admission. Visit the L.E.A.P. website for more information and an online application for this program (*www.marshall.edu/leap*).

Proof of your proficiency in English may be certified by submitting one of the following (results of tests taken more than two years prior to the date submitted cannot be accepted):

a. The Test of English as a Foreign Language (TOEFL). Students taking the paper version of the test must have a minimum score of 525. Computer-based TOEFL ceased in September 2006, therefore scores are no longer acceptable. Internet-based TOEFL requires a minimum score of 70. If a program mandates a score higher than 525

(paper) or 70 (Internet), that requirement will be found in the degree requirements section of this catalog. (ETS code for Marshall University is #5396.)

- b. Michigan English Language Assessment Battery (MELAB) The minimum acceptable score is 82% for graduate study.
- c. A minimum score of 6.5 on the International English Language Testing System (IELTS) for graduate study. (More information about the IELTS is available on their website at *www.ielts.org.* IELTS is jointly managed by the British Council, IDP:IELTS Australia, and the University of Cambridge ESOL Examinations.)
- d. Advanced ESL. Completion of the advanced level of Marshall University's L.E.A.P. Intensive English Program or the completion of an intensive English program comparable to Level 112 of the English Language School (ELS).
- e. Diploma or degree from an English-speaking school A degree or a diploma from an accredited secondary school, college or university in which the primary language of instruction is English.
- 5. Affidavit of Support Form (if you need to obtain an F-1 visa). Complete the Affidavit of Support Form (if you need to obtain an F-1 visa) showing that you or your sponsor have finances to support your study and living costs for one academic year (9 months). Print, complete, and submit the the Affadavit of Support Form (*http://www.marshall.edu/cip/apply*) for the estimated cost of attendance. We currently estimate this amount to be \$27,600 USD. (In some cases, a 50% deposit will be required in order to issue the I-20 form.) Proof of financial support may be demonstrated in several ways:
  - a. An affidavit of financial support from a personal sponsor (parent, relative, friend) that has been certified by a U.S. bank or financial institution.
  - b. A scholarship agency (government, corporation, etc.) stating the availability of funds and the intention to support your educational and living expenses for the entire duration of study at Marshall University.
  - c. Personal funds, provided you submit documentary evidence of a bank statement from a U.S. bank or financial institution or it affiliate in U.S. dollars (USD). A statement from your employer certifying that you have been granted study leave and salary support arrangements may also be acceptable.
- 6. Completed application materials for the L.E.A.P. program. If you are planning to enroll in the L.E.A.P. Intensive English Program before pursuing a graduate program of study, please also send us the completed application materials for the L.E.A.P. program. Students can be conditionally admitted to a graduate program of study at Marshall University without English proficiency if they enroll in Marshall University's L.E.A.P. Intensive English Program and they satisfy all other criteria for admission.

The Graduate Record Exam (GRE) or Graduate Management Admission Test (GMAT) may be required for some degree programs. Please check the graduate catalog for information about admission to specific programs.

Send all of your application materials and fees to the address below:

Marshall University Center for International Programs Old Main 320 One John Marshall Drive Huntington, West Virginia, USA 25755-1054

After we receive all of your application materials, your credentials will be evaluated and, if admissible, you will be sent a letter of admission and an I-20 form. The I-20 form is used to apply for a student visa (F-1) at an American embassy or consulate. We will also send a housing application and a form you can complete to notify us of your arrival.

For international applicants, Marshall University reserves the right to accept official credentials directly from a limited number of third party agencies by have been approved by the university. Additional or alternate admission credentials may be accepted at the discretion of the Center for International Programs depending on the applicant's country of origin. Please contact CIP for details regarding specific admission requirements for applicants from your country.

If you are not able to attend the semester for which you applied, contact the Center for International Programs and we will fill out a new application for the semester that you will be able to attend. All of your other application materials will be acceptable for a period of one year. After that time period, new documentation will have to be submitted.



# Financial Information: Tuition, Fees, and Financial Assistance

# FEES

Tuition and fee costs are based on a variety of circumstances. Among those are your major, which specific classes you are taking, and where the classes are held. For a complete schedule of tuition and related fees for the current year, please visit *www.marshall.edu/bursar*.

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 fall semester of the 2010-2011 academic year.

## TUITION AND ENROLLMENT FEES FOR GRADUATE STUDENTS

## **Regular Semester-Huntington Campus**

	Resident Rate	Metro Fee <sup>1</sup> Rate	Nonresident Rates
Total Regular Student Fees	\$2,782.50	\$4,862.00	\$7,145.00
College of Business Fee <sup>2</sup>	245.00	421.00	421.00
Nursing Fee <sup>2</sup>	275.00	650.00	650.00
Health Professions Fee <sup>2</sup>	150.00	300.00	300.00
CITE <sup>2</sup>	250.00	410.00	410.00
Psychology Doctorate Fee <sup>2</sup>	1,068.00	1,068.00	1,446.00
Fine Arts Program <sup>2</sup>	125.00	200.00	200.00
Ed.S./Ed.D. Programs Fee <sup>2</sup>	90.00	90.00	90.00

(continued)

<sup>1</sup> Fee is applicable to students with residency classifications in the counties of Gallia, Jackson, Lawrence, Meigs, Pike, and Scioto, State of Ohio, and the counties of Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin, and Pike, Commonwealth of Kentucky.

<sup>2</sup> Program Specific Fees. College of Business Fee is assessed to all Business majors. Nursing Fee is assessed to Nursing majors. Health Professions Fee is assessed to all in Clinical Lab Science, Communication Disorders and Dietetics majors. CITE Fee is assessed to all College of Information Technology and Engineering majors. Psychology Doctorate Fee is assessed to all students pursuing a doctorate in psychology. Fine Arts Program Fee is assessed to all Fine Arts majors including Music Education and Art Education. Executive M.B.A. Fee is assessed to those enrolled in the Executive M.B.A. program. Ed.S./Ed.D. Programs Fee is assessed to education students in degree programs leading to Ed.S. or Ed.D. degrees.

## **Regular Semester-South Charleston Campus**

	Resident Rate	Metro Fee <sup>1</sup> Rate	Nonresident Rates
Total Regular Student Fees	\$2,315.00	\$4,379.00	\$ 6,662.00
Auxiliary Fee (for Hunt. courses)	289.00	289.00	289.00
College of Business Fee <sup>2</sup>	245.00	421.00	421.00
CITE <sup>2</sup>	250.00	410.00	410.00
Ed.S./Ed.D. Programs Fee <sup>2</sup>	90.00	90.00	90.00
Executive M.B.A. Fee <sup>2</sup>	4,050.00	4,350.00	4,650.00

## **Regular Semester-Biomedical Sciences Program**

	Resident	Metro Fee <sup>1</sup>	Non-Resident
	Rates	Rates	Rates
Total Regular Fees	\$4,238.00	\$ 6,263.00	\$ 9,073.00

## **Regular Semester-Forensic Science Program**

	Resident	Metro Fee <sup>1</sup>	Non-Resident
	Rates	Rates	Rates
Total Regular Fees	\$3,958.00	\$ 5,963.00	\$ 8,738.00

## **PROGRAM-SPECIFIC FEES**

Regular	Semester
---------	----------

	Resident Rates	Metro Fee Rates <sup>1</sup> Rates	Non-Resident Rates
Lewis College of Business Fee <sup>2</sup>	245.00	421.00	421.00
Fine Arts Fee <sup>2</sup>	125.00	200.00	200.00
Nursing Fee <sup>2</sup>	275.00	650.00	650.00
Health Professions Fee <sup>2</sup>	150.00	300.00	300.00
CITE <sup>2</sup>	250.00	410.00	410.00

## SPECIAL STUDENT FEES

Application Fees*		
Undergraduate	30.00	
Undergraduate Transfer	50.00	
College of Health Professions	30.00	
Dietetic Internship Program	25.00	
		*Non-refundable.

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<sup>1</sup> Fee is applicable to students with residency classifications in the counties of Gallia, Jackson, Lawrence, Meigs, Pike, and Scioto, State of Ohio, and the counties of Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin, and Pike, Commonwealth of Kentucky.

<sup>2</sup> Program Specific Fees. College of Business Fee is assessed to all Business majors. Nursing Fee is assessed to Nursing majors. Health Professions Fee is assessed to all in Clinical Lab Science, Communication Disorders and Dietetics majors. CITE Fee is assessed to all College of Information Technology and Engineering majors. Psychology Doctorate Fee is assessed to all students pursuing a doctorate in psychology. Fine Arts Program Fee is assessed to all Fine Arts majors including Music Education and Art Education. Executive M.B.A. Fee is assessed to those enrolled in the Executive M.B.A. program. Ed.S./Ed.D. Programs Fee is assessed to education students in degree programs leading to Ed.S. or Ed.D. degrees.

CLEP/DANTES Testing Course Specific/Laboratory Fees:	15.00
COEHS – Activity Course Fee	40.00
COEHS – Clinical Lab Fee	25.00
COEHS – Scuba Fee	200.00
COEHS – Student Teaching Fee	200.00
COFA – Applied Music Fee	35.00
COFA – Art Fee	<b>75.00</b>
COFA – English-Rendering Landscape	75.00
COFA – Theatre Fee	40.00
COHP – Health Science Lab Fee	40.00 50.00
COHP – Matriculation Fee	150.00
COHP – Nursing Lab Fee	100.00
COLA – Computer Lab Fee	30.00
COS – Science Lab Fee	60.00
SOJMC – Journalism Lab Fee	50.00
Electronic Course Fee-High School (per credit hour)	122.00
Electronic Course Fee-Undergraduate (per credit hour)	202.00
Enrollment Deposit	100.00
Graduation Fees*:	100.00
Baccalaureate Degree	50.00
Certificate Fee	15.00
Diploma Replacement	50.00
International Student Services Fee	25.00
Late Registration/Payment Fee*	25.00 25.00
Meal Card/ID Card Replacement	20.00
Off-Campus Course Fee (per credit hour)	35.00
Regents' BA Degree Evaluation	300.00
Regents' BA Posting Fee (per credit hour awarded)	10.00
Reinstatement Fee – Course Schedule*	25.00
Residence Services Fees:	20.00
Improper Check-out Fee*	50.00
Mail Box Re-Key (per lock)	30.00
Reservation Deposit	200.00
Room Re-Key (per lock)	40.00
Returned Check Fee	25.00
Revalidation of Credit Fee (per hour)	25.00
Senior Citizens Course Fee-Series 67	50.00
Student Success Fee	50.00
Study Abroad Fee	100.00
Transcript	8.00
	5.00

\*Non-refundable.

# **ROOM AND BOARD**

## **Residence Halls and Food Service Plans**

The Department of Housing and Residence Life provides on-campus living space for approximately 2,600 students. Individual halls will accommodate from 100 to 500 residents in double and single occupancy rooms. All halls are located within easy walking distance of academic buildings. There is 24-hour security in every building. Every student has a food service plan, computer connections, and cable television. Each hall is managed by a Resident Director with a Resident Advisor on every floor to provide the students with the best possible living and learning conditions.

Marshall requires all full-time freshman and sophomore students to live on campus. Exceptions are granted to those living within a 50-mile radius who live at home with a parent or legal guardian; individuals 21 years of age; those who are

married; or those who have been high school graduates for more than two years. In order to be considered for release from this requirement, a release request and supporting documentation must be submitted to the Department of Housing and Residence Life by July 1 (Fall) or November 15 (Spring).

## SEMESTER FEES\* (16 weeks):

## **Residence Halls**

Double Occupancy	
First-Year Residence Halls	\$2,625.00
Buskirk	\$2,326.00
Twin Towers	\$2,326.00
Deluxe Single Occupancy	
Buskirk (if available)	\$3,242.00
Holderby Hall	\$3,242.00 \$2,975.00
Twin Towers	\$2,973.00 \$3,242.00
Twill Towers	\$3,242.00
Single Room Suite	
Gibson, Haymaker,	
Wellman, Willis	\$3,639.00
Double Room Suite	
Gibson, Haymaker,	
Wellman, Willis	\$2,726.00
Board Rates	
Unlimited Meal Plan	
w/ \$50 Flex Dollars	\$1,603.00
w/ \$150 Flex Dollars	\$1,703.00
w/ \$250 Flex Dollars	\$1,803.00
	<i>q</i> 1,000100
15 Meal Plan	\$1,522.00
w/ \$100 Flex Dollars	\$1,622.00
w/ \$200 Flex Dollars	\$1,722.00
10 Maal Dian	¢1 000 00
10 Meal Plan	\$1,223.00

#### SUMMER TERM FEES (5 weeks): Residence Halls ( unlimited meal plan)\*

Double Occupancy - To Be Announced Single Occupancy - To Be Announced

#### **COMMUTER MEAL PLANS\***

Fifty Meals w/\$50 Flex Dollars	359.00
Thirty Meals w/\$50 Flex Dollars	239.00
Twenty Meals w/\$50 Flex Dollars	185.00

## **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 on the Marshall University website at *www.marshall.edu/* bursar. If you do not pay your enrollment fees on or before the due date, your registration will be cancelled and you will be subject to withdrawal from the university (see Withdrawal/Reinstatement Policy below). Do not depend on receiving a bill

from the university in the mail. It is always your responsibility to know when enrollment fees are due and to pay them by that time. If you have not paid your enrollment fees by the official due date you must obtain permission from the appropriate academic dean and the Office of the Registrar to register.

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 Department of Housing and Residence Life.

You can pay fees by American Express or MasterCard or Discover by using myMU (*www.marshall.edu/myMU*). Credit card payments are also accepted at the Office of the Bursar, 101 Old Main.

If you are a recipient 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, you must complete arrangements for payment through the Director of Student Financial Aid in 116 Old Main, and the University Bursar in 101 Old Main. (See **Student Financial Assistance** below.)

Your registration is not complete until all fees are paid.

Your registration will be cancelled if the bank does not honor your check for payment of registration fees. A charge of \$25.00 will be made for each check returned unpaid by the bank.

A student who has a financial obligation to the university cannot engage in any registration activity until the obligation is satisfied. Should the obligation remain unpaid and require assignment to a state-authorized collection agency, the student additionally will be responsible for all collection costs incurred by the institution.

A student who withdraws from the institution by following proper withdrawal procedures will receive refunds of fees paid in accordance with the refunding policy.

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

# WITHDRAWAL/REINSTATEMENT POLICY FOR NONPAYMENT OF ENROLLMENT AND RESIDENCE HALL FEES

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 May 15 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 \$100.00 of the deposit back. Voluntary withdrawal following these dates and prior to the opening of residence halls will result in a full refund less the two-hundred dollars (\$200.00) 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.

- 1. Through late registration each semester, a schedule of withdrawal for nonpayment will be included on the bursar's office website at *www.marshall.edu/bursar*. 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 a student not paying fees. The withdrawal will be for "Administrative-Nonpayment of Enrollment or Residence Hall Fees."
- 3. The Registrar will notify the instructor 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. If the dean approves, 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. A student who does not meet the financial obligation for enrollment and residence hall fees will have all entries of that registration erased on the Registrar's permanent record.
- 7. A student who owes a financial obligation to the university will not be permitted to enroll in subsequent semesters or terms 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.

# WITHDRAWAL/REINSTATEMENT FOR OTHER FINANCIAL OBLIGATIONS

- 1. Failure to fulfill other types of financial obligations with proper procedure 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, procedures will be followed as outlined above, items 3, 4, & 5, under "Withdrawal/ Reinstatement Policy for Nonpayment of Enrollment and Residence Hall Fees."

- 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.

# **REFUND PROCEDURES**

Enrollment fees (tuition fees) will be refunded 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 on the bursar's office website at *www.marshall.edu/bursar*. 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 fewer 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 enrollment dropping of 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 of 12 or more hours to 0 hours, 11 hours to 0 hours, 10 hours to 0 hours, etc.
- 4. Title IV Financial Aid recipients who officially withdraw before or during their period of enrollment shall have their refund calculated in accordance with the provisions contained in the 1998 amendments to the federal Higher Education Act. See the following section.

## **Return of Title IV Funds Policy**

See section under "Student Financial Assistance."

## **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**

## **Cancellation and Refund Policy for Residence Services**

Cancellations of the Housing Contract by those not planning to enroll in the University or reside on campus must be received in writing by the Department of Housing and Residence Life on or before May 15<sup>th</sup>. Such cancellations will result in a refund of \$100.00 of the reservation deposit. Cancellation postmarked after the 15<sup>th</sup> from individuals who do not enroll in the University or reside on campus will result in a forfeiture of the entire \$200.00 reservation deposit. Individuals who complete a contract and who enroll in the University (academic classes) will be expected to fulfill their obligations for the period specified. For contracts commencing for the Spring or Summer terms, cancellations postmarked 30 days before the opening of housing will result in a \$100.00 refund. Cancellations postmarked after that date will result in a forfeiture of the entire \$200.00 reservation deposit.

Voluntary withdrawal from the University and , in turn, housing and food service prior to the opening of the residence halls will result in a full refund less the \$200.00 reservation deposit. Complete withdrawal from the University and housing and food service between opening day 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 all monies paid for a room. A prorated refund will be processed for any unused portion of the board plan.

Students whose residency is terminated automatically (due to violations of Code of Conduct or Residence Hall policies) forfeit all monies paid for that semester and remain liable for and unpaid room and meal plan balances at the time of termination. Students will be responsible for any interest, collection and reasonable attorney's fees associated with the collection of delinquent accounts.

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 of the enrollment fee only will be processed in accordance with policy established by the Office of the Registrar.

Late fees are nonrefundable.

# **Student Financial Assistance**

## **Financial Aid Application Process**

To apply for financial aid, students must file the Free Application for Federal Student Aid (FAFSA) by visiting *www.fafsa. ed.gov.* 

By filing the FAFSA, students are considered for federal grants, scholarships, loans and work-study. In addition, when WV students file the FAFSA, they are also being considered for state and institutional financial aid. Students must enter Marshall University's Federal School Code: **003815** in Section 5 – of the FAFSA for consideration of all financial aid programs to attend Marshall University.

The **priority filing date for the FAFSA is March 1** prior to the academic year the student is attending for full consideration of all federal, state and institutional financial aid programs. Students may file the FAFSA after this date; however, certain financial aid opportunities may be missed.

In addition to the FAFSA, there is an additional application for students who wish to apply for financial aid for the summer. Marshall University Summer Financial Aid Applications are available by April 1. Summer is a non-standard term. This requires the Office of Student Financial Assistance to collect additional information, which is not provided on the FAFSA. Summer is also considered a trailer for financial aid awarding purposes, meaning that the summer follows the completed academic year. For example, to apply for financial aid for the 2011 summer terms, the student must have a 2010-2011 FAFSA on file and complete a 2011 Summer Financial Aid Application. To obtain a Summer Financial Aid Application, go to *www. marshall.edu/sfa*; click on the Forms & Applications tab, and then on the General Forms & Applications tab.

## **Eligibility Determination**

#### **1. Student Aid Report**

As a result of filing the FAFSA, the student receives a Student Aid Report (SAR) by email if an email address was provided on the FAFSA. Otherwise, the student will be sent a SAR through regular mail. Students have the ability to access their SAR by going to *www.fafsa.ed.gov*. Students will need their USDE PIN to access their SAR.

When students receive their SAR, Marshall University receives the results of the students' FAFSA. The needs analysis results provide an Expected Family Contribution (EFC), which is used to determine a student's financial aid eligibility.

#### 2. Cost of Attendance

The Office of Student Financial Assistance determines a student's financial aid eligibility by subtracting the student's Expected Family Contribution (EFC) from the Cost of Attendance (COA). The information the student reported on the FAFSA is used in a formula established by the U.S. Congress, which determines the student's EFC.

The COA that a financial aid package is based upon reflects average costs. Tuition and Fees are fixed costs for any given academic year. The chart below provides average tuition and fee costs for undergraduate students for the 2009-10 academic year. For actual *tuition and fee costs* visit the Bursar website at *www.marshall.edu/bursar*.

Books and Supplies are variable costs and depend upon your particular program of study. Room and board costs are variable also. Students who live on campus will be billed directly for housing and meal plan.

Transportation and Miscellaneous expenses are variable costs.

The COA table that follows is provided for planning purposes and represents estimated average costs for undergraduate students for the 2009-2010 academic year.

Living	WV Resident, Living with Parents	WV Resident, Living on Campus	Metro, <sup>2</sup> Living with Parents	Metro,² Living on Campus	Non-resident Living with Parents	Non-resident on Campus
Tuition and Fees <sup>1</sup>	\$5,236	\$5,236	\$8,668	\$8,668	\$12,482	\$12,482
Room and Board <sup>3</sup>						
(Living Expenses)	\$2,950	\$8,102	\$2,950	\$8,102	\$2,950	\$8,102
Books & Supplies	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100
Transportation	\$1,800	\$1,200	\$1,800	\$1,200	\$1,800	\$1,200
Miscellaneous	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Average Loan Fees	\$30	\$30	\$30	\$30	\$30	\$30
Total	\$12,116	\$16,668	\$15,548	\$20,188	\$19,362	\$24,002

<sup>1</sup>This figure is a basic tuition/fee charge. Some students are charged additional fees based upon their academic program. In addition, some classes require additional lab/course fees.

<sup>2</sup>Metro tuition/fees apply to students who reside in Gallia, Jackson, Lawrence, Meigs, Pike or Scioto Counties in Ohio and Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin, and Pike Counties in Kentucky.

<sup>3</sup>Room and Board charges vary based upon residence hall assignment and meal plan. Marshall University policy requires all full-time freshmen and sophomores to live on campus. Students may request an exemption from this policy if the student's parent/legal guardian(s) live within 50 miles of campus by completing a Housing Release Request form. Students may obtain the Housing Release Request form by visiting *www.marshall.edu/residence-services/newsite/forms.asp*.

#### 3. Eligibility Confirmation and Verification

#### Eligibility Confirmation

Information on students' FAFSAs are checked with federal agencies to confirm that they meet basic eligibility requirements. The following student eligibility criteria are checked:

- · Social Security number and citizenship status with the Social Security Administration
- · Selective Service registration with the Selective Service System, if required
- · Eligible non-citizenship status with the U.S. Department of Homeland Security
- · Veteran Status with the U.S. Department of Veteran Affairs
- Default, disability discharge, bankruptcy, aggregate loan history statuses for federal student loans and overpayment status for federal student grants.

The Office of Student Financial Assistance must also review other eligibility requirements, which include, but are not limited to:

- · Admission Status
- · Satisfactory Academic Progress
- · Enrollment Status
- · Academic Level
- · Dependency Status
- · Marital Status

If any of these items come up as discrepant, the Office of Student Financial Assistance is required to resolve the issue. This may require the Office of Student Financial Assistance to follow up with the student to request documentation to resolve any of the eligibility issues referenced above.

#### Verification

Verification is the process in which Student Financial Assistance (SFA) – as dictated by federal and state regulations – compares the information you reported on the FAFSA with your prior-year federal income tax returns, W-2 forms, and other financial documentation. Students who are selected for verification are sent either a post card or an email notification instructing them to access their financial aid records through your Marshall Information Liaison Online (MILO) account. To access Marshall University financial aid records, the student must go to: mymu.marshall.edu. Students need their Marshall University ID and their Marshall University (PIN) to access their records.

SFA must receive all requested documentation before financial aid can be disbursed (or credited) to the student's Bursar account. If there are differences between the data the student supplied on the FAFSA and the verification documentation submitted, corrections to the SAR may be needed, and as a result the student's application will be reprocessed.

Student responsibilities are to:

- · Submit all documents requested promptly
- · Ensure that all documents are signed and complete and include the student's name and Marshall University ID
- · Maintain copies of all information used to file the FAFSA and of documents submitted to the Office of Student Financial Assistance

It is extremely important that students respond to requests for information promptly because finalized **financial aid awards are processed in the order of file completion date**. To ensure that financial aid funds disburse as scheduled at the start of the fall semester, students must be registered for classes and submit all required documentation by **May 15**. Students may submit documents after the May 15 deadline; however, they should be prepared to make payment arrangements with the Bursar's Office in the event the financial aid is not finalized by the billing due date. The absolute deadline for submittal of all documents is **30 days prior to the end of the academic year** the student is enrolled. The designated deadlines allow SFA to process and authorize disbursements within the timeframe permitted under regulations set forth for administering the federal and state financial aid programs.

The deadline for students to submit documentation may be extended up to 60 days after the student's last day of enrollment during the academic year on a case-by-case basis and will be processed to the extent that is administratively possible.

If you have already received an award notice from Marshall University and corrections are made to your SAR (or your processed FAFSA) after verification, you will receive a revised award notice if your eligibility has changed.

## 4. Financial Aid Satisfactory Academic Progress

Satisfactory academic progress (SAP) is the term used to define successful completion of coursework to maintain eligibility for financial aid. Marshall University is required by federal and state regulations and university policy to determine whether a student is meeting SAP requirements. Marshall University Office of Student Financial Assistance monitors SAP once a year after the spring semester. The review at that time determines the student's continued financial aid eligibility for the forthcoming academic year, fall semester, spring semester and summer terms.

The student's entire academic history must be considered when determining SAP status. This includes Advanced Placement (AP) and International Baccalaureate (IB) credits as well as transfer credits that reflect on the student's Marshall University transcript as earned. Students enrolling at Marshall University for the first time (including transfers) will be considered initially to be meeting satisfactory academic progress.

The following three components are measured to determine whether the student is meeting SAP standards: Qualitative, Quantitative and Maximum Time Frame.

## Qualitative

The qualitative component is measuring the quality of the student's SAP by conducting an annual review of the student's cumulative grade point average (GPA). The charts below provide the minimum cumulative GPA requirements.

## Undergraduate (Associate Degree)

Completed Credits (Hours)	Qualitative (GPA) Requirement
0 - 29	1.7
30	+2.0

Undergraduate (Baccalaureate Degree)

Completed Credits (Hours)	Qualitative (GPA) Requirement
0 - 25	1.6
26 - 57	1.8
58 +	2.0

Graduate (Certificate, Master's, Ed.S. and Doctoral) Degree

Completed Credits (Hours)	Qualitative (GPA) Requirement
0 17	0 F

0 - 17	2.5
18 +	3.0

(Specific federal, state and institutional scholarships and grants may require a higher GPA for continued eligibility. This is a separate and distinct factor in renewing or continuing eligibility for these specific funds. The grade point requirement for specific scholarships supersedes the grade point average requirements referenced above. Information on the terms and conditions of specific financial aid programs that have GPA requirements are provided to the student at the time the award is offered).

## \_Quantitative

The quantitative component is measuring the student's credit completion rate by percentage. This is calculated by dividing number of Marshall University credits the student attempted against the number of credits earned. If the student has

transfer credit, those credits that are applicable to the student's Marshall University degree are added to his/her attempted credits to measure the quantitative component.

Undergraduate (Associate Degree)

Attempted Credits (Hours)	Quantitative Requirement
0 - 29	67%
30 +	75%

Undergraduate (Baccalaureate Degree)

Attempted Credits (Hours)	Quantitative Requirement
0 - 25	50%
26 - 57	60%
58 - 89	70%
90+	75%

Graduate (Certificate, Master's, Ed. S. and Doctoral) Degree

Attempted Credits (Hours)	Quantitative Requirement
0 - 17	50%
18 +	75%

#### Maximum Time Frame

The maximum time frame during which an undergraduate student may receive financial aid may not exceed 150% of the published length of the student's academic program measured in attempted credits. For example, a student pursuing an associate degree would be limited to 102 attempted credits (68 credits X 150%) and a student pursuing a baccalaureate degree would be limited to 192 attempted credits (128 credits X 150%).

Students pursuing a Post-Baccalaureate Teaching Certificate are limited to 36 attempted credits (24 credits X 150%).

If the student has transfer credit, those credits that are applicable to the student's Marshall University degree are added to his/her attempted credits to measure the maximum time frame component.

(Although students have a 150% maximum time frame to remain eligible for financial aid, there are limits on the number of years a student may receive certain financial aid programs. The time limit on certain financial aid programs supersedes the quantitative measure requirements referenced above. Information on the terms and conditions of specific financial aid programs that have time limits is provided to the student at the time the award is offered).

The maximum time frame for completing a Master's Degree, an Ed. S. Degree and Doctoral Degree is 7 years from the date of completion of the earliest course applied toward the degree, including transferred credits.

#### Effects of Developmental and Repeated Courses

Developmental courses do not count toward the student's degree requirements; however, they are counted as earned hours and are used to determine a student's academic grade level or classification. Thus, developmental courses are calculated in the quantitative and maximum time frame measures.

(It is important to note that financial aid may be awarded to cover up to 30 developmental course credits. Developmental course credits in excess of 30 cannot be calculated as enrolled hours for financial aid purposes. This rule is not related to Satisfactory Academic Progress, but is a general financial aid eligibility requirement).

If the student repeats a course, those credits are counted again when calculating attempted credits. However, if the student repeats a course in which he/she has earned a D or F grade taken no later than the semester or summer term during which the student attempts the 60<sup>th</sup> semester hour, and before he/she earns a baccalaureate degree, the original grade shall be disregarded and the new grade (excluding a W) shall be used in determining the student's Grade Point Average. Students must apply for the D/F Repeat rule by filling out a form in his/her college office early in the semester in which the course is repeated.

#### Effects of Withdrawal and Incomplete Grades

If the student withdraws from a course after the first week of classes during any given semester (i.e. student receives a grade of W for the course), the course credits are included in the count of attempted credit hours. Thus, withdrawn courses are calculated in the quantitative and maximum time frame measures.

Credits for an incomplete course (i.e. student receives a grade of I for the course) are always counted as credits attempted but are not included in the GPA or the credits earned count until the incomplete grade changes to a passing or a failing grade. Thus, incomplete courses are calculated in the quantitative and maximum time frame measures.

### Change Majors/Second or Subsequent Degree

If a student changes majors, the credits the student earns at Marshall under all majors will be included in the calculation of qualitative, quantitative and maximum time frame measures.

If a student continues to take classes towards a second major or second degree after having completed all required coursework for a first degree, the student may continue to remain eligible for financial aid as long as the qualitative, quantitative and maximum time frame measures of SAP are met.

#### Procedures/Deadlines for Appealing

If a student fails one or more of the three measures (qualitative, quantitative and maximum time frame), the student is not eligible for federal, state, or institutional financial aid, which includes grants, scholarships, work-study and loans. However, students failing SAP standards, who have had mitigating circumstances (i.e., death in the family, illness) may request reinstatement of their financial aid eligibility by completing the SAP Appeal for Financial Aid Reinstatement form and submitting it to the Financial Aid SAP Appeals Committee, c/o Office of Student Financial Assistance. Students may download and print the form from the Office of Student Financial Assistance "Downloadable Forms" web page at *www. marshall.edu/sfa*.

Appeal requests must provide an explanation of mitigating circumstances that contributed to the student's inability to meet the minimum SAP standards, including documentation when applicable, and a realistic plan for academic improvement.

The deadlines to appeal are as follows:

August 16 - for fall and spring semesters and summer terms

January 3 – for spring semester and summer terms

July 1 – for summer terms

If the Financial Aid SAP Appeals Committee approves the appeal, the student's financial aid eligibility is reinstated for the applicable terms/semesters. For example, if the student appeals by August 16 and the appeal is approved, the student's financial aid eligibility would be reinstated for an entire year, fall, spring and summer terms.

This means that a student may not receive financial aid retroactively for a payment period if a deadline is missed.

Students will receive a decision of the Appeals Committee by letter, email and as a personal announcement through their myMU account. **The decision of Financial Aid SAP Appeals Committee is final.** A decision on the appeal is rendered within 3 days of the appeal committee meeting.

#### 5. Enrollment Status

Each type of financial aid (program) has specific requirements regarding enrollment status. In general, SFA uses the following undergraduate enrollment criteria to determine eligibility for financial aid programs it administers:

Credits Per Term/Semester	Enrollment Status Classification
12 +	Full time
9 - 11	Three-quarter time
6 - 8	Half time
1 - 5	Less than half time

As a rule your financial aid package is based on full-time enrollment and the Office of SFA uses your enrollment status on the first day after drop/add period (usually the  $8^{th}$  day of the semester) to determine your financial aid eligibility.

Graduate students enrolled in 9 or more credits are considered full-time students, graduate students enrolled between 5 and 8 credits are considered half-time student for financial aid eligibility purposes.

#### Developmental Courses

Developmental courses do not count toward the student's degree requirements; however, students may receive financial aid up to 30 developmental or remedial credits. Developmental course credits in excess of 30 cannot be calculated as enrolled hours for financial aid purposes.

#### Professional Staff Development Courses

Professional staff development courses (560 – 564 S/U or CR/NC series) do not count toward the student's degree requirements; therefore, they cannot be calculated as enrolled hours for financial aid eligibility purposes.

#### 6. Academic Level Classification

Some financial aid programs have specific criteria based on the student's academic (grade) level. According to University Academic Policy, the following criteria are used to define the student's academic level:

Total Credits Earned	Academic Level
0 - 25	1 <sup>st</sup> Year or Freshman

26 - 57	2 <sup>nd</sup> Year or Sophomore
58 - 89	3 <sup>rd</sup> Year or Junior
90 +	4 <sup>th</sup> Year or Senior

## 7. Dual Enrollment & Study Abroad

Marshall University students who plan to enroll at another college or university simultaneously may have their other enrollment elsewhere considered for financial aid eligibility at Marshall University.

Students may not receive federal financial aid at more than one institution of higher education for the same courses or at the same time. Students must declare which institution is to be considered the "home school" or the institution where they will receive their degree for financial aid eligibility purposes. To be considered for financial aid as a dually enrolled student or a student taking courses elsewhere during a given semester, a consortium agreement form must be completed and approved by both Marshall University and the other school. Students may download and print a Consortium Agreement Form by visiting *www.marshall.edu/sfa* and clicking on the "Downloadable Applications & Forms link. It is located within the General Forms tab.

## **Types of Aid Available**

Financial aid is funding for college education that comes from sources outside of the student's family. Gift aid and selfhelp aid are the two categories of financial aid. Gift aid comes in the form of grants and scholarships and usually do not have to be repaid. Self-help aid comes in the form of loans and work-study. Financial aid at Marshall University is awarded based on financial need, merit, or both. Students may receive a combination of grants, scholarships, loans, and work-study in their Financial Aid Package. Sources of funding come from Marshall University, the federal government, the state and other entities.

The types of financial aid programs listed below are available at Marshall University

Merit-Based Scholarships and Grants Need-based Grants Loan Programs Student Employment Medical School Financial Aid Programs Veteran Educational Benefits

For current and more detailed information on types of financial aid available, please visit *www.marshall.edu/sfa* and click on the Types of Aid tab.

## Notification and Disbursement of Awards

#### 1. Checking Financial Aid Records

Students may access their financial aid records by logging on to their myMU account. myMU is the student's campus web portal used to provide students with easy online access to their Marshall University records.

In order to log into myMU, students must have both their unique Marshall University ID (901 number) and password. Any student that has problems accessing their myMU records should email *helpdesk@marshall.edu* or call 1-877-689-8638.

#### 2. Understanding Financial Aid Awards & Requirements

Online financial aid notification via the student's myMU account is the official method by which students receive information regarding their financial aid application and awards.

Email is the primary means of communication between students and the Marshall University Office of Student Financial Assistance. Emails are sent to the student's Marshall University email account. It is the student's responsibility to monitor email notifications from the Office of Student Financial Assistance as well as from other university offices. Failure to read and respond to email communications from the Office of Student Financial Assistance may result in delay or cancellation of financial aid awards.

Viewing students' personal financial aid documentation online is quick and easy. The financial aid related information available is within the Academic Services (MILO) tab. Students are also be able to view Personal Announcements through their myMU account. Typically when the Office of Student Financial Assistance sends a student an email, the student will also receive the same message in their Personal Announcement tab.

Once you access your financial aid records within the Financial Aid Main Menu tab, you will be able to view the following topics:

- · Financial Aid Status
- Eligibility
- · Awards

#### 3. Disbursement of Financial Aid (or Financial Aid Crediting to your Billing Account)

The earliest financial aid may credit to students' billing accounts is 10 days before the semester begins. However, financial aid will not credit to the student's account unless all eligibility requirements have been met and verification has been completed. In addition, if the student is taking out a student loan, the student must have completed entrance loan counseling and completed a master promissory note for the respective loan program.

Pending financial aid is a temporary status and is used for financial planning purposes only. Pending financial aid allows the Bursar Office to defer payment of student's tuition, fees, residential and board payments until the financial aid is finalized and credited to the student's Bursar account. Students are responsible for making payment for the difference between bursar charges and financial aid awards by the designated due dates established by the University.

Financial aid awards are not final until they have credited to the student's account. In the Overall Status tab of a student's MILO account, students may view their Account Summary, which includes all of the Bursar Office fees and financial aid if it has credited to your account.

## 4. Payment Plan Option

Under the Marshall University OASIS Payment Plan, students may select to make three equal payments of their outstanding charges for the fall or spring semester after any applicable financial aid has been applied. For more information, visit *www. marshall.edu/bursar/tution/OASIS.HTML*.

### **5. Refunds Due to a Financial Aid Credit Balance**

When financial aid for the semester/term exceeds a student's direct charges (tuition, fees, etc.) on the student bill, the student is entitled to a refund for the difference for use toward other educational expenses. The Bursar's Office issues refunds to students beginning the first day of classes. Only those students whose financial aid was credited 10 days prior to the semester/term with a credit balance will receive a refund on the first day of the semester/term. Following the first day of the semester/term, it takes approximately one week after financial aid is disbursed for the Bursar Office to issue a financial aid refund to a student.

A student may choose one of three financial aid refund options:

- 1. Depositing the financial aid funds directly to his/her Higher One card account;
- 2. Direct deposit to a current bank account; or,
- 3. Receiving a paper check by mail.

For more information about financial aid refunds visit the Bursar Website at *www.marshall.edu/bursar*.

### 6. Impact on Financial Aid Due to Withdrawal or Failure to Enroll

Students could jeopardize receipt of some types of aid if they are not properly enrolled at the time that financial aid funds disburse. Students may have originally been packaged as a full-time student, but at the time the funds are ready to disburse, students' enrollment status may differ. Students change in enrollment may impact the eligibility for certain funds.

If a student does not attend for a period of enrollment that he/she has been awarded financial aid, the Office of Student Financial Assistance must cancel all financial aid awards offered. Upon re-enrollment, the student may request assistance again, but, because awards are based on the availability of funds, funding may be limited.

Students who plan to withdraw from any courses during an academic term should consult with a Financial Aid Counselor. Withdrawing from courses may prevent students from making Financial Aid Satisfactory Academic Progress and affect eligibility for future financial aid assistance. Students who cease attending all courses must follow the official withdrawal procedure as defined by the Registrar Office to obtain an official withdrawal date.

When students withdraw from all courses on or before the 60% point in time of an academic term, the Office of Student Financial Assistance is required to review your financial aid awards to determine whether financial aid funds must be adjusted in accordance with federal and state regulations. The policies on treatment of financial aid for total withdrawal are specific to each designated financial aid program and are applicable only if the student has received those particular kinds of funds. If a student received various types of financial aid, more than one policy may apply when determining revised financial aid eligibility.

## Treatment of Marshall University, State & External Aid for Total Withdrawal

Adjustments to institutional, state and external financial aid follow the Marshall University Refund Policy. The chart below describes how institutional, state and external financial aid is treated whenever a student withdraws:

Period of Withdrawal	Percentage of Aid
During a Semester	Returned to Program
Weeks 1 & 2	90%
Weeks 3 & 4	70%
Weeks 5 & 6	50%

For example, if a student withdraws during the 5<sup>th</sup> week of the semester, the student would have 50% of his/her tuition charge reversed. Simultaneously, if a student received an institutional scholarship for the semester in the amount of \$2,000, 50% or \$1,000 of this scholarship would be returned to the respective financial aid program.

## Treatment of Title IV (Federal) Aid for Total Withdrawal

The federal policy for return of Title IV funds maintains that a student retains only that portion of federal aid that the student has earned based on time in attendance before withdrawal. The percentage of time that the student attended an academic term determines the amount of federal aid that must be returned to the federal government. This federally mandated policy is independent of Marshall University's institutional refund policy due to withdrawal.Marshall University is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60% of the semester or the financial aid payment period. Should the student cease to be enrolled prior to completing 60% of the semester or financial aid payment period, the Office of Student Financial Assistance applies the Federal Return of Title IV funds formula to determine whether any federal financial aid must be returned.

The Federal Return of Title IV formula is calculated as follows:

## Total # of Days Student Completes Until Withdrawal/Total # of Days in the Semester or Payment Period

This formula determines the percentage of the semester completed, which is the same percentage of earned financial aid. Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

### (100% of the Aid That Could be Disbursed minus the % of Earned Aid) X Total Amount of Aid That Could Have Been Disbursed

Federal student aid refunds are returned to the following Title IV sources in the following order:

- 1. Unsubsidized Federal Direct Stafford Loan
- 2. Subsidized Federal Direct Stafford Loan
- 3. Federal Perkins Loan
- 4. Graduate Federal Direct PLUS Loan
- 5. Parent Federal Direct PLUS Loan
- 6. Federal Pell Grant
- 7. Federal ACG Grant
- 8. Federal National SMART Grant
- 9. Federal SEOG Grant
- 10. Federal TEACH Grant

If a student earned less financial aid than was disbursed, Marshall University is required to return the unearned portion of the financial aid to the respective federal student aid programs. In some cases, if the student was issued a federal financial aid refund, he/she may be required to return all or a portion of the federal funds.

If the student (or Parent in the case of PLUS Loan) is required to return a portion or all of the loan proceeds, the calculated amount would not have to be returned through this calculation, but be repaid according to the loan's terms.

If a student qualifies for federal aid that has not yet disbursed and less aid is disbursed than earned, the student may receive a late disbursement for the difference.

When a student that has begun attendance fails to earn a passing grade (has a zero GPA) at the end of the semester, Marshall University, for federal student aid purposes, must assume that the student has unofficially withdrawn or dropped out.

If the student has unofficially withdrawn (shows zero earned hours at the end of the semester), 50% of the student's federal student aid for the term is considered unearned and may result in a reduction of federal aid. However, when Marshall University can document attendance or participation beyond the 60% point in the semester, the student may be able to retain 100% of his/her federal student aid under these circumstances.

Should it become necessary for a student to cease attendance in all courses, it is in the student's best interest to follow the official University Withdrawal Procedure.

# **VOTER REGISTRATION FORMS**

Marshall University, as a participant in Federal Title IV Student Aid programs, is required to advise you that voter registration forms are available in the Office of Student Financial Assistance. You must be registered 30 days prior to any election.

For additional information about any of the programs in this section, please contact the Office of Student Financial Assistance, Old Main Room 116. Telephone 304-696-3162 or 1-800-438-5390; Fax: (304)696-3242; E-Mail Address: *sfa@ marshall.edu*.



# University Policies and Procedures

# 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, disability, 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.

# **COPYRIGHT COMPLIANCE**

Marshall University complies with U.S. copyright law, which prohibits unauthorized duplication and use of copyrighted materials, including written, audio-visual, and computer software materials. Further information is available on Marshall's website at *www.marshall.edu/library/copyright*.

# **EDUCATION RECORDS**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

- 1. The right to inspect and review the student's education records within forty five days of the day the University receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- 2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- 3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.
- 4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Marshall University to comply with the requirements of FERPA. The name and address of the office that administers FERPA are:

Family Policy Compliance Office U.S. Department of Education 600 Independence Avenue, SW Washington, DC 20202-4605

# 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.

# SEXUAL HARASSMENT POLICY STATEMENT

Sexual Harassment, a form of sex discrimination, is illegal and against the policies of the university. Sexual Harassment involves:

- (a) making unwelcome sexual advances or requests for sexual favors or other verbal or physical conduct of a sexual nature a condition of employment or education, or
- (b) making submission to or rejection of such conduct the basis for employment or educational decisions, or
- (c) creating an intimidating, offensive or hostile environment by such conduct.

Anyone who believes he or she has been the subject of Sexual Harassment should report the alleged conduct immediately to an appropriate university representative or directly to the Office of Equity Programs, located in 206 Old Main.

### WEATHER-RELATED AND/OR EMERGENCY CLOSINGS AND DELAYS (from Executive Policy Bulletin No. 7, updated February 1, 2005)

### **Huntington Campus**

Generally it is Marshall University's policy to maintain its normal schedule, even when conditions are inclement. However, that 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:

- Television stations in Huntington and Charleston will be notified.
- · Radio stations in Huntington and Charleston will be asked to announce the delay or closing.
- Time permitting, newspapers in Huntington and Charleston will be notified. Often, however, decisions must be made after deadlines of newspapers.
- The Office of University Communications will communicate the specific details of the delay or closing to the Office of Public Safety at 304-696-HELP.
- The Office of University Communications will place the delay or closing message on the Huntington campus AUDIX system (304-696-6245) as well as the university response number (304-696-3170).

NOTE: This section applies only to the Huntington campus and all releases should make it clear that it relates only to the Huntington campus. The Marshall University Graduate College (South Charleston campus) weather-related policy will be managed by the Vice President for Regional Operations, and all releases from that office should make clear that it applies only to the South Charleston campus. The South Charleston phone number is 304-746-2500. See below for information on MUGC (South Charleston) procedures.

#### Definitions

University Closed: All classes suspended and offices closed.

Classes Cancelled: All classes suspended; offices open.

Delay Code A: Means a delay in the opening of classes BUT no delay in the opening of offices. Delays will usually be in the range of one to two hours. Employees are expected to report to work at their normal starting times unless they feel that travel is unsafe. If an employee feels that he/she cannot travel safely to work, they may charge accrued annual leave for the portion of the workday from 8:00 a.m. (or their normal start time) until their arrival at work.

Delay Code B: Means a delay in the opening of classes AND a delay in the opening of offices. Delays will usually be in the range of one to two hours. Employees do not have to report to their offices until the stated delay time. If they believe they cannot travel to work safely by the stated delay time, they may charge accrued annual leave for the work hours from the stated delay time until they can next report to work.

(continued)

Class operation under delays: Under both categories of delay, students should go to the class that would begin at the stated delay time or the class that would have convened within 30 minutes of the stated delay time. A two-hour delay means that classes that begin at 10:00 a.m. begin on time. Classes that begin at 9:30 a.m. meet at 10:00 a.m. and continue for the remaining period of that class.

Exceptions with regard to employees: Certain critical and emergency employees may be required to report to work on time or earlier than normally scheduled despite the particular delay code published.

#### Clarification

Information about closing, cancellations, or delays will ordinarily be disseminated to area radio and television stations. These outlets may, however, publish the University's notification incorrectly. Therefore, the authoritatively correct statement of the University's condition (Huntington) is stipulated to be the message on the AUDIX system (304-696-6245) or the message available at the University response number (304-696-3170).

#### Faculty

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

#### **Decision Making**

Decisions on closings and/or delays will be made jointly by the Senior Vice President for Academic Affairs and the Senior Vice President for Finance and Administration following the 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 decisions to allow time for adequate notification to the news media, and in turn those affected.

#### South Charleston campus and Other Education Centers:

#### **General Policy**

Because weather conditions can vary substantially, it is possible that classes will be delayed or cancelled at some locations and not at others. The Vice President for Regional Operations, in consultation with staff at other learning centers, will decide on class cancellations.

#### **South Charleston Campus**

Since South Charleston classes do not generally meet until late afternoon, an effort will be made to decide about classes by noon. Notification of delays or cancellations at the South Charleston Campus will be announced by (a) local media, (b) MUGC telephone system, and (c) University website. Any delay will be placed on the MUGC automated switchboard. Students may check the status of their classes by calling the MUGC telephone system (304-746-2500) or checking the Marshall website.

#### Point Pleasant, Beckley, Teays Valley and Other Educational Centers

Procedures for delayed openings and class cancellations are similar to those for the MUGC. At Point Pleasant, Beckley, and Teays Valley local media will provide information regarding cancellations. In addition, each site has a weather hot line: (a) Point Pleasant, 304-674-7239; (b) Beckley, 304-252-0719; (c) Teays Valley, 304-757-7223.

#### **Remote Locations and Other Education Centers**

Because the university may have several classes meeting on an irregular schedule in a geographically dispersed area throughout the semester, decisions about whether to meet during inclement weather will be made by the instructor. Those decisions will be transmitted to students by e-mail or other methods as agreed by students and the instructor.

#### Definitions

*MUGC Closed:* All classes cancelled and offices closed. *MUGC Classes Cancelled:* All classes cancelled. Details provided by site.

### **MU ALERT**

Information on Marshall University's Emergency Messaging System (MU Alert) can be found on the website at *www. marshall.edu/emergency/mualert/moreInformation.asp* 



# Graduate Student Resources

#### BOOKSTORES www.marshall.bkstr.com

Textbooks for Marshall University graduate courses are available from the Marshall University Bookstore in Huntington and on the South Charleston campus. Students should contact the store at the campus location where they are enrolled, or in the case of off-campus locations, they may order books by mail, phone, or online at http://marshall.bkstr.com.

The Marshall University Bookstore in Huntington (telephone 304-696-3622 or toll free at 1-800¬-547-1262) is located at Fifth Avenue and John Marshall Drive on the Huntington campus. The store is open from 8:00 a.m. to 6:30 p.m. Monday-Thursday, 8:00 a.m. to 5:00 p.m. on Friday, and 10:00 a.m.¬5:00 p.m. on Saturday. Summer hours are 8:00 a.m.-5:00 p.m. Monday-Friday.

The Marshall University Bookstore in South Charleston is located on the first floor of the Administration Building. Hours are 10:00 a.m.-6:00 p.m. Monday-Thursday and 9:00 a.m.-5:00 p.m. Friday.

Textbooks also may be ordered by mail or phone, with the addition of a shipping and handling charge. To order by mail, fill out the requested information on the book order form and return with the cost of the book and the required shipping and handling charge. To order by phone, call and use a credit card.

Both bookstores accept checks, MasterCard, VISA, Discover, and American Express. Point Card is accepted at the Huntington store. Third-party direct billing is accepted with a purchase order or written authorization from the funding agency. Textbooks may be returned for refund or credit within 2-7 days of the date of purchase. Students should ask for a copy of the returns policy at the time of purchase. Used books are purchased at any time.

The Graduate College has established a textbook policy with the objective of minimizing textbook costs to students. This will be accomplished by repurchasing and reselling used textbooks, and using certain basic textbooks for a reasonable number of years, ordinarily not less than two years.

### **CAREER SERVICES CENTER**

Denise Hogsett, Director www.marshall.edu/career-services

The Career Services Center assists students in all phases of professional development. The career professionals at the center can assist students in the areas of selecting a major, developing a focused resume, acquiring effective interviewing skills, or searching for part-time, internship or entry level employment.

The services include:

**Online Career Management (Marshall JobTrax)** – This employer/student database allows students to build an online credential file of resumes and other documents as well as search for jobs. Employers post jobs, giving students direct contact with local and national companies. They may apply for these positions directly with the company, often by submitting their resumes right from their JobTrax account.

**Career Advising and Testing** - The center offers career planning assistance that spans all aspects of student professional development, including both online and individual assessment to help the undecided or wavering student with career exploration and major selection.

**Workshops/Seminars** – The center provides informational workshops each semester on resume development, interview skills, networking and job search. Dates and times can be found on the center's website each semester.

**Resume Development -** Experienced staff will guide students in preparing effective and professional resumes.

**Job Search Assistance –** Career advisors will advise students on the job search process. From part-time employment while attending the university to entry level employment upon graduation, students can obtain the skills necessary to make an effective job search.

**Internships** - The center works with undergraduate and graduate academic programs to assist students in procuring internships. All students are encouraged to gain work experience with at least one internship before graduation.

**Career Expos** – Students can network with employers through three major career expos each year.

**On-Campus Recruiting** – The center hosts visiting local, regional and national employers interested in recruiting Marshall University students and graduates.

**Website** – *www.marshall.edu/career-services* provides information concerning all career-related services and activities available to students/alumni, faculty, parents and employers.

### **CHILD DEVELOPMENT ACADEMY**

www.marshall.edu/cda

The Child Development Academy at Marshall University provides child care services to children of Marshall University students, faculty, staff and the greater community. It serves as a location for Marshall University undergraduate and graduate students participating in various clinical experiences as part of their academic program. The programs currently placing university students at the Child Development Academy are Early Education, Psychology, and Communication Disorders. The facility was opened in August of 1999 and the construction was a joint venture of Marshall University and the City of Huntington.

### **COUNSELING CENTER**

#### www.marshall.edu/counseling/

The Counseling Center is located on the first floor of Prichard Hall and provides free confidential mental health counseling and crisis intervention for students. Students may call 304-696-3111 to schedule an appointment with one of the full time counselors.

### **DISABILITY SERVICES**

Sandra Clements, Coordinator www.marshall.edu/disabled/

A student with a disability may be eligible to receive academic accommodations. It is incumbent upon the student to follow the policy detailed on the university website and to request any academic accommodations through the Office of Disability Services at the beginning of each semester. Students must follow this procedure to ensure they will receive appropriate and reasonable academic accommodations.

### **GRADUATE STUDENT COUNCIL**

www.marshall.edu/graduate/gsc/

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 a number of Faculty Senate standing committees and to the Graduate Council. 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. The council can be reached through the Graduate College office on the Huntington Campus.

### HIGHER EDUCATION FOR LEARNING PROBLEMS (H.E.L.P.) Lynne Weston, Director www.marshall.edu/help

H.E.L.P. is an individualized tutorial program for undergraduate students who have learning disabilities and/or Attention Deficit Disorder. Assistance is also available for all graduate students and medical students who have been diagnosed by a qualified professional person as having one or both of the above handicapping conditions. Assistance with coursework, study skills, note-taking skills, and appropriate accommodations in testing are available. Graduate assistants and master's-level tutors conduct tutorial sessions. Remediation in reading, spelling, written language, and math is available from LD specialists. Application to H.E.L.P. must be made separately from application to the university and should be completed 6 months in advance. For information, including fees, call the H.E.L.P. program at (304) 696-6252.

### HOUSING AND RESIDENCE LIFE

John Yaun, Director

housing@marshall.edu

The Department of Housing and Residence Life is committed to the academic and personal development and success of our students. We provide housing for all Marshall students. For more information about housing and residence halls available to all graduate students, please contact the Department of Housing and Residence Life at (304)696-6765 or 1-800-438-5391, e-mail housing@marshall.edu or visit the web at www.marshall.edu/housing.

#### JUDICIAL AFFAIRS Lisa Martin, Director

### www.marshall.edu/judicial-affairs

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 admission to the university constitutes acceptance of these responsibilities and standards. Failure to adhere to the policies and conduct regulations of the university places the student in violation of the Marshall University Code of Student Rights and Responsibilities and may, therefore, subject the student to disciplinary action. All admitted students are subject to the code at all times while on or about university-owned property, or at universitysponsored events. Anyone may refer a student or student organization suspected of violating the Code of Student Rights and Responsibilities to the Office of Judicial Affairs.

### **MULTICULTURAL AFFAIRS**

# Shari Williams-Clarke, Vice President *www.marshall.edu/mcip*

Marshall University Multicultural Affairs comprises the Office of the Vice President for Multicultural Affairs, the Center for African American Students' Programs, the Lesbian Gay Bisexual Transgender Office and the Women's Center. Each department is further broken down into individual units responsible for a host of programs and initiatives that contribute to Marshall University Multicultural Affairs' primary objectives. Marshall University established the Division of Multicultural Affairs in 1989. Multicultural Affairs affirms Marshall's commitment to an environment of teaching and learning which recognizes and welcomes diversity of race, disability, color, sex, sexual orientation, age, religion, national origin, marital status, political and ethnic backgrounds. Consistent with its awareness of different people, backgrounds and cultures, the Division of Multicultural Affairs is committed to developing the potential of all students by creating and maintaining an environment that promotes and fosters a multicultural, international, global community. Multicultural Affairs is organized to provide underrepresented populations with programs that enhance knowledge, skills and awareness to function in a complex global society.

### MU ONLINE Monica G. Brooks, Ass't VP for OTL and Libraries www.marshall.edu/muonline

Marshall University's electronic course delivery software and program are referred to as MUOnline to aid in consistency and branding when referring to Blackboard Learning System – Vista Enterprise 8, the software that powers the online course system and its peripheral programs. Housing approximately 600 online courses, with up to 200 sections per term, and serving over 16,000 students annually, this program grows steadily each year to meet student needs by providing quality, affordable, and convenient online courses.

### **OUTREACH AND CONTINUING STUDIES**

# Rudy Pauley, Associate Vice President for Outreach and Continuing Studies *www.marshall.edu/ocs*

The mission of the Office of Outreach and Continuing Studies (OCS) is to provide a coordinated approach to sustaining and expanding undergraduate, graduate, and professional development educational opportunities for both traditional and non-traditional students in Marshall University's service region. OCS works closely with all academic departments to ensure that courses meet each department's academic standards. In addition to serving traditional college students in its off-campus locations, the office also serves adult students who have previously completed a portion of a degree, but did not graduate, via Marshall's Regents Bachelor of Arts program. West Virginia National Guard personnel and their families may take classes on military bases in pursuit of a Regents BA through OCS.

The Office of Outreach coordinates a program where high school students take college courses while still in high school.

Working professionals and traditional students seeking both undergraduate and advanced degrees are supported by class offerings at the following locations: Teays Valley Regional Center, Mid-Ohio Valley Center in Point Pleasant, Beckley Higher Education Center, Southern Mountain Center in Williamson and at Marshall University's South Charleston campus. Classes are offered via interactive video links, online (Internet-based), hybrid classes using a combination of live meetings and the Internet, weekend/accelerated formats and traditional 15-week live class sessions. To learn more about Marshall University's outreach programs visit the website at *www.marshall.edu/ocs* or contact one of the OCS offices listed below.

Regents B.A. Program Marshall University One John Marshall Drive Laidley Hall Huntington, WV 25755-2050 Tel: 304-696-6400

Mid-Ohio Valley Center Marshall University 1 John Marshall Way Pt. Pleasant, WV 25550 Tel: 304-674-7200 Email: *movc@marshall.edu* Teays Valley Regional Center Marshall University Carriage Point, Suite 101 Hurricane, WV 25526 Tel: 304-757-7223 Email: *prisk@marshall.edu* 

South Charleston Campus Marshall University 100 Angus E. Peyton Drive South Charleston, WV 25303-1600 Tel: 304-746-2030 Email: <u>isharrah@marshall.edu</u>

### **PSYCHOLOGY CLINIC**

Keith Beard, Director www.marshall.edu/psych/clinic.htm

The Marshall University Psychology Clinic has been established by the Department of Psychology to serve as a training facility for advanced graduate students enrolled in the clinical psychology program at the university and to provide high quality, low cost, confidential psychological services to individuals on the campus and from the local community.

The student clinicians are doctoral students in the Marshall University Clinical Psy.D. program. Student clinicians provide services under the supervision of qualified clinical faculty selected by the Department of Psychology to fulfill supervisory and teaching functions. A variety of services are offered by the clinic. These include individual psychotherapy, psychological assessment, and group psychotherapy, as well as educational workshops and other events. Some faculty also provide services. Although the clinic is not a for-profit venture, nominal fees are charged for some services; psychological counseling services are provided at no charge to students.

### RECREATION

#### www.marshallcampusrec.com

The Marshall Recreation Center, a 123,000-square-foot facility, contains 4 wood gym courts for basketball, volleyball, badminton, pickle ball and dodge ball; a 37' climbing wall with bouldering area; outdoor pursuits center with rental equipment area; aquatics center with 3 lap swim lanes, leisure pool, vortex pool and 20 person spa; men's and women's locker rooms; family changing areas with lockers; 17,000 square feet of fitness space on the second and third floor with free weights, selectorized machines with LCD televisions; 4 group exercise rooms; a 3 lane 1/7th mile walking/jogging/running track; massage area; fitness assessment room; juice bar; lounge areas and staff offices. Immediately east of the pool is an outdoor, fenced area for sunning and relaxing. The entire facility is accessible for persons with disabilities. The Rec Center is also the largest student employer on campus.

### SPEECH AND HEARING CENTER

Pamela J. Holland, Director

www.marshall.edu/commdis/mushc 304-696-2985

The Department of Communication Disorders in the College of Health Professions operates the Marshall University Speech and Hearing Center, (MUSHC) which provides quality evaluation and treatment services for people of all ages with speech, language, and hearing problems. The Center provides services for a variety of communication disorders including, but not limited to, articulation, fluency, voice and resonance, cognitive communication, augmentative and alternative communication, aural rehabilitation, swallowing, and receptive and expressive language. Individual and group therapy sessions are also provided for dialect, pragmatics, and aphasia. Additional programs within the department include the Luke Lee Listening, Language, and Learning Lab which was the first oral preschool for deaf and hard of hearing children in West Virginia and the Scottish Rite Childhood Speech and Language Disorders Program. Services are available for Marshall students, faculty, and staff, as well as the general public. Costs for services may be handled through insurance or private pay, with a sliding-fee scale available. MUSHC is located in Smith Hall 143. For scheduling call 304-696-3641.

# STUDENT HEALTH SERVICE

Student Health Service is provided by University Physicians and Surgeons Incorporated, an affiliate of the university's School of Medicine. The clinic is located at 1600 Medical Center Drive, Suite 1500, next to Cabell Huntington Hospital, and is open from 8:00 a.m. to 4:00 p.m. Monday through Friday. Summer hours vary. The clinic is closed on Saturday, Sunday, and days that class is not in session.

Student Health Service will be provided from the first day to the last day of each fall, spring, and summer class session to enrolled students, and to Marshall University students who present current validated identification cards. Part-time students may be required to pay fees for service. Students enrolled for 5 hours or fewer (regular term) are assessed a charge of \$20.00 per office visit,\* with no provision for Lab, X-Ray, or medication.

Services provided include: diagnosis and treatment by a physician, licensed practitioner or physician's assistant; limited routine laboratory procedures; and injections for allergies (if vaccines and dosage directions are provided by the physician of the patient and approved by the staff physicians). Prescription medication is provided from a specified formulary at Medical Arts Pharmacy; a \$5 co-payment is required.

Marshall University recommends that all students carry medical insurance. For information on health insurance call Student Health Education at 304-696-4800.

# STUDENTS WITH DISABILITIES

### See also Disability Services.

A student with a disability may be eligible to receive academic accommodations. It is incumbent upon the student to follow the policy detailed on the university website at *www.marshall.edu/disabled* and to request any academic accommodations through the Office of Disability Services at the beginning of each semester. Students must follow this procedure to ensure they will receive appropriate and reasonable academic accommodations.

#### **TESTING CENTER** Vickie Seguin, Director *www.marshall.edu/cbtc*

The Marshall University Testing Center administers the, GRE, Praxis I, TOEFL, and various other tests in contract with the Educational Testing Service. For information, call 304-696-2604.

### WRITING CENTER

Kelly Prejean, Director *www.marshall.edu/writing* 

The Writing Center, staffed by English graduate students and undergraduate peer tutors of various majors, provides free writing consultation to all Marshall University students. Tutors help students through the entire writing process, from discussing initial ideas to revising and editing their work. The center is located on the second floor of Drinko Library. Students are encouraged, but not required, to make appointments ahead of time, and may find more information about making appointments on the Writing Center's website or by calling the Writing Center at 304-696-6254.

<sup>\*</sup>Policies and fees are subject to change.



# Academic Information and Resources

### Academic Affairs Gayle L. Ormiston, Provost and Senior Vice President for Academic Affairs

The Office of Academic Affairs has primary responsibility for supporting and pursuing the academic mission of the university.

### SCHOOLS AND COLLEGES

The university functions through these academic units: the Lewis College of Business, the College of Education and Human Services, the College of Fine Arts, the College of Liberal Arts, the College of Science, the W. Page Pitt School of Journalism and Mass Communications, the Joan C. Edwards School of Medicine, the College of Health Professions, the College of Information Technology and Engineering, the Honors College, the Graduate School of Education and Professional Development, and the Graduate College.

### **BECKLEY CENTER**

Marshall University also operates a center in the Beckley area that is part of the Erma Byrd Higher Education Center in Beaver. It serves primarily graduate students in Beckley, Bluefield, and other nearby areas.

Marshall University Beckley Regional Center c/o Erma Byrd Higher Education Center 300 University Dr. Beaver, WV 25813 (304) 256-0266

#### LIBRARIES Monica Brooks, Assistant Vice President for OTL and Libraries www.marshall.edu/libraries

The Marshall University Library System consists of the John Deaver Drinko Library, the James E. Morrow Library, the Health Science Library at the Cabell-Huntington Hospital location, the Hoback Chemistry Library in the Science Building, and the Marshall University Library on the South Charleston campus. Together, the University Libraries' holdings support graduate level research needs with 400,000 books, over a million government publications and microforms, 100 online indexes and full text databases, 20,000 electronic books, and over 22,000 periodical titles.

The John Deaver Drinko Library located on the western side of campus beside Old Main, opened in 1998 and is named for John Deaver Drinko, a Marshall graduate, philanthropist and strong supporter of higher education. The facility melds a full range of traditional library services with state-of-the-art computer and advanced technological education facilities that include multimedia training and presentation rooms, workstations, distance education and computer carrels. A variety of user services such as online Ask a Librarian research services, an extensive information literacy program, and curriculum-specific collections are provided to aid students and faculty with research and technology support needs.

The first floor of Drinko consists of a learning commons that provides 24-hour access to group and individual study areas, library materials, computers, wireless, access to snacks and assistive technology. The general collection includes books, bound periodicals, and a wide variety of media and Internet accessible electronic materials. The Writing Center, a free tutoring service for all Marshall University students, is located on the second floor. It is staffed by graduate and upper-level undergraduate students who are trained to help at all stages of the writing process and in any discipline. Effective summer 2010 Drinko will also include the Music Library collection formerly housed in Smith Music Hall.

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*The James E. Morrow Library*, located on Third Avenue on the north side of campus, first opened to the public in 1930. In 1967 an addition was added to the original structure which doubled its size to over 100,000 square feet. Recently, many areas of the interior of the building have been remodeled. Morrow Library houses three significant collections for the university: Government Documents and Morrow Stacks on the 1st floor and Special Collections on the 2nd floor. In addition, the university's Testing Center is located on the Ground floor.

*The Health Science Library* is located in the Robert C. Byrd Center for Rural Health next to the Cabell-Huntington Hospital, on Hal Greer Boulevard. The Library's primary mission is serving the informational needs of the students, faculty, and staff at Marshall University and the Cabell-Huntington Hospital. The Library also plays an important role in providing information services to hospitals and healthcare professionals in the Huntington and the Tri-State area.

*The Hoback Chemistry Library* is located in the Science building on the Huntington campus. Due to the specialization of the materials in this library, the facility is only open by appointment and accessible to users during regular business hours. Contact the Chemistry Main Office for assistance: 304/696-2430.

*The Graduate College Library* on the South Charleston campus is located in the Robert C. Byrd Academic and Technology Center. Distance students are eligible for library services that are unique to their needs. For details, go to the Graduate College library's home page (*www.marshall.edu/library/mugc*) Items held in the libraries on the Huntington campus can be retrieved through a daily courier service and by the electronic transmission of journal articles between the sites.

### **CENTER FOR TEACHING AND LEARNING**

Sherri Smith, Executive Director *www.marshall.edu/catl* 

The Center for Teaching and Learning helps faculty enhance the nature and quality of the educational experience of all Marshall students through instructional and career development opportunities. University faculty must be experts in the processes of teaching and learning as well as experts in their disciplines. The activities of the center are designed to encourage innovative and effective teaching methods that will stimulate student learning. The center is composed of the Faculty Development Program, the Writing Across the Curriculum program, the Office of Assessment and Program Review, and the Service Learning Program.

## **CENTER FOR INTERNATIONAL PROGRAMS**

Clark Egnor, Executive Director *www.marshall.edu/cip* 

The Center for International Programs was established in 1993. Its mission is to assist in globalizing Marshall University and the surrounding community through a coordinated effort. The following programs are coordinated by the Center for International Programs: International Students and Scholars Program, International Admissions, Study Abroad Programs, L.E.A.P. Intensive English Program, China Projects.

# **COMPUTING SERVICES**

# Arnold R. Miller Executive Director, Computing Services *www.marshall.edu/ucs*

On the Huntington campus the Marshall University Computing Services (UCS) administrative offices are located on the fourth floor of the Drinko Library and the Information Technology Services Desk is located on the first floor. On the South Charleston campus, all computing services are located on the second floor of the Administration Building. The mission of Computing Services is to "provide and facilitate quality computing, networking, and information services for the students, faculty, and staff of Marshall University in support of instruction, research, administration, and economic development, and community service needs."

### **Computing Facilities**

Information Technology manages a number of computing facilities that provide access to MUnet-connected workstations for the campus community. Information Technology managed public computers, including those in the Drinko 24-Hour Study Center, will always have the latest versions of software available. University Computing Facilities are currently available in Corbly Hall, Harris Hall, Smith Hall, the Drinko Library and Information Technology Center in Huntington; and in the administration and academic buildings in South Charleston. All University Computing Facilities provide printing and scanning facilities. Other specialized facilities are available at selected sites.

### **Computing Policies**

Policies regarding computer use are available online at *www.marshall.edu/ucs/CS/accptuse.asp*.

46

### **Computer Purchases**

Recommendations on student computer purchases are available online at www.marshall.edu/personalpurchase.

### **Computer Security**

Recommendations on student computer security are available online at www.marshall.edu/ucs/systems/infosec.asp.

### Connecting to the Marshall University Network (MUnet)

MUnet is Marshall University's computing network. MUnet provides access to a variety of software (word processors, web browsers, etc.) and services (electronic mail, personal web pages, etc.).

New students are automatically assigned a computer account. All accounts consist of a username (up to 12 characters long) based on your last name and a randomly generated password.

You can obtain this account by presenting your ID card to the service desk, study center, or fourth floor front desk in the Drinko Library on the Huntington campus, or to computer support on the second floor of the GC building on the South Charleston campus.

Wireless access is also available at most locations on the Huntington and South Charleston campuses.

### Email (also see myMU)

New students are automatically assigned a Marshall University email account. NOTE: All official university email will be sent to your Marshall University email address.

To obtain your email address, log in to myMU, and click the "MU LiveMail" button to access your email. For more information, visit *www.marshall.edu/ucs/systems/live*.

#### **Information Technology Service Desk**

The IT Service Desk is located on the first floor of the Drinko Library on the Huntington Campus and the second floor of the Administration Building on the South Charleston campus.

Additional sites on the Huntington campus include Drinko Library, Corbly Hall, Harris Hall, Smith Hall, Gullickson Hall, and residence halls. Additional sites on the South Charleston campus include the Byrd Academic Center.

Help for MUnet account holders is available by calling one of the numbers below:

304-696-3200 in the Huntington calling area

304-746-1969 in the Charleston calling area

877-689-8638 toll-free outside the Huntington/Charleston calling areas

#### MUnet

MUnet is a fiber optic 10 GigE and 1 GigE backbone connecting all campus buildings throughout the campus. The network provides 10/100/1000M connectivity for voice, video and data across a copper infrastructure. MUnet is linked to the Internet via redundant high-speed digital MPLS service. MUnet can also be accessed from off campus through free virtual private networking (VPN) software available on the UCS website at *www.marshall.edu/ucs*. The same VPN software allows users to connect to the MUWireless network when on campus in the vicinity of a wireless network access point. Wireless 802.11a/b/g/n connectivity is available throughout campus and current coverage levels are available on the UCS website at *www.marshall.edu/ucs/networking/wireless/mapsindex.asp*.

### **Online Support**

The UCS website is where students and staff can find the most up-to-date information and exists to provide information, facilitate communications with our customers, and provide a secure source for downloading software such as the free antivirus software which the university licenses for all users, and other software. Please go to <u>www.marshall.edu/ucs.</u>

#### **myMU**

MyMU is the Marshall University portal to the Internet. This is where students can register for classes, check their email, view their grades and financial aid status, and make secure payments. To log in, you will need your ID no. (beginning with "901") and your PIN (Personal Identification Number) If you do not know your 901 number, check here: *https://mudbapps03.marshall.edu/muidlookup/muidlookup\_default.asp*. Until you change it, your PIN is your birthday in this format: mmddyy. To log in to MyMU, visit *www.marshall.edu/mymu*.

#### Servers and Systems

Central timeshare and server facilities include more than 250 servers and systems, running Microsoft Windows Server and Red Hat Enterprise Linux. These systems provide timeshare, file, print, database, email, Library, and web-based services

to the MUnet community. A wide variety of software products are available to MUnet users including administrative software based on Sungard Higher Education's BANNER products, office automation products (word processors, spreadsheets, electronic mail, document production, electronic filing, calendar/ time management, and other groupware functions), computer instruction, programming languages, query/data base packages, electronic reference databases, presentation products, and courseware delivery, and electronic publishing packages.



# Academic Requirements and Regulations

# ACADEMIC APPEALS

See Academic Rights and Responsibilities of Students.

## ACADEMIC COMMON MARKET

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

West Virginia residents can pursue academic programs not available within the state through the Academic Common Market (ACM) and through contract programs. Both programs enable 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. ACM provides access to both baccalaureate and graduate programs not otherwise available in West Virginia. The programs are restricted to West Virginia residents who have been accepted for admission to one of the specific programs at designated out of state institutions. For information please contact the Office of Academic Affairs, Old Main 110, (304-696-6690) or the Higher Education Policy Commission. Out-of-state students who have been granted Academic Common Market access to Marshall University should follow the Academic Common Market Procedures available at *www.marshall.edu/academic-affairs/studentresources.htm.* 

## ACADEMIC DISHONESTY

#### Introduction:

As described in the Marshall University Creed, Marshall University is an "Ethical Community reflecting honesty, integrity and fairness in both academic and extracurricular activities."

Academic Dishonesty is something that will not be tolerated as these actions are fundamentally opposed to "assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance" as described in Marshall University's Statement of Philosophy.

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 be aware of policies regulating academic conduct, including the definitions of academic dishonesty, the possible sanctions and the appeal process.

For the purposes of this policy, an academic exercise is defined as any assignment, whether graded or ungraded, that is given in an academic course or must be completed toward the completion of degree or certification requirements. This includes, but is not limited to: Exams, quizzes, papers, oral presentations, data gathering and analysis, practica and creative work of any kind.

### **Definitions of Academic Dishonesty**

Below are definitions of some common types of academic dishonesty. Each instructor may modify the general definition of academic dishonesty to fit the immediate academic needs within that particular course of study, provided the instructor defines, in writing and preferably in the course syllabus, the details of any departure from the general definition.

- Cheating: Any action which if known to the instructor in the course of study would be prohibited. This includes:
  - The unauthorized use of any materials, notes, sources of information, study aids or tools during an academic exercise.
  - The unauthorized assistance of a person other than the course instructor during an academic exercise.
  - The unauthorized viewing of another person's work during an academic exercise.
  - The unauthorized securing of all or any part of assignments or examinations, in advance of submission by the instructor.
- Fabrication/Falsification: The unauthorized invention or alteration of any information, citation, data or means of verification in an academic exercise, official correspondence or a university record.

#### (continued)

Academic Requirements and Regulations

- Plagiarism: Submitting as one's own work or creation any material or an idea wholly or in part created by another. This includes:
  - Oral, written and graphical material.
  - Both published and unpublished work

It is the student's responsibility to clearly distinguish his/her own work from that created by others. This includes the proper use of quotation marks, paraphrase and the citation of the original source. Students are responsible for both intentional and unintentional acts of plagiarism.

- Bribes/Favors/Threats: Attempting to unfairly influence a course grade or the satisfaction of degree requirements through any of these actions.
- Complicity: Helping or attempting to help someone commit an act of academic dishonesty.

#### Sanctions

Sanctions for academic dishonesty may be imposed by the instructor of the course, the department chairperson, or the Academic Dean. Sanctions for academic dishonesty may be imposed even if a student withdraws from an individual course or from the university entirely.

The instructor may impose the following sanctions:

- A lower or failing project/paper/test grade,
- A lower final grade,
- Failure of the course
- Exclusion from further participation in the class (including laboratories or clinical experiences)

The following sanctions may be recommended by the instructor but will need to be imposed by the department chair, academic dean or the Office of Academic Affairs:

- Exclusion from an academic program
- Academic probation for up to 1 year
- Academic suspension for up to 1 year
- Dismissal from the university.

In those cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic, sanctions may be pursued through the Office of Judicial Affairs.

A student will be informed in writing by the instructor or person making the charge of any charges and subsequent sanctions imposed for academic dishonesty (See "Reporting" below). Written notification of academic dishonesty charges (and the inclusion of confirmed charges/sanctions in a student's records) is designed to inform a student of the potential repercussions of repeat offenses and his/her rights of appeal.

If a student believes that charges of academic dishonesty have been erroneously levied, he/she should appeal such charges in accordance with the process outlined below. (See *Appeals Process*.)

Sanctions for repeated academic dishonesty offenses will be imposed by the Office of Academic Affairs after consultation with the appropriate department chairs and deans.

- A student's record of academic dishonesty offenses will be maintained throughout his/her enrollment at Marshall University, and the period of time between offenses will have no impact on sanctions for repeated offenses.
- A student with a second academic dishonesty offense during his/her enrollment at Marshall University will be academically suspended for a period of time not to exceed one academic year (to include summer terms).
- A student with a third academic dishonesty offense during his/her enrollment at Marshall University will be dismissed from the university.

#### **Reporting:**

When an accusation of academic dishonesty is reported to the Office of Academic Affairs, and a sanction imposed (or a sanction will be imposed with the submission of final grades), a notice should be sent to the Office of Academic Affairs within ten (10) days of the accusation or submission of a final grade with imposed sanction, whichever comes first.

Notice of an act of academic dishonesty will be reported to the Office of Academic Affairs through the completion of an "Academic Dishonesty Report Form." The "Academic Dishonesty Report Form" will include:

- Instructor's Name
- Course Information (Term, Number, Section)
- Student's Name

- Student's University Identification Number
- Brief Description of the Charge
- Date of Accusation
- Brief Description of the Sanction

Within ten (10) days of receipt of the "Academic Dishonesty Report Form" the Office of Academic Affairs will inform the student and the student's dean of the accusations made, the sanctions prescribed, the repercussions of repeat offenses, and his/her rights of appeal.

A copy of the report will go into the student's college file.

Any subsequent actions taken (additional sanctions imposed, the lessening of sanctions, the withdrawal of accusations, the results of appeals, etc.) should be reported to the Office of Academic Affairs within ten (10) days of the action.

#### **Recording:**

The Office of Academic Affairs will maintain a file of academic dishonesty incidents. These will be reported in summary form (no student or faculty names will be included) to the Academic Deans and the Faculty Senate at the end of each academic year.

#### **Appeals Process:**

In cases where the instructor imposes sanctions 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 for grade appeal (see listing under "Academic Appeals," A). This includes lowered grades, exclusion from class activities and failure of the course.

If allegations of academic dishonesty are referred to the department chairperson for additional sanctions, it must be within thirty (30) days from the date of the alleged offense. This process starts with the dean if there is no department chairperson.

- 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.
- 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 are insufficient for the act complained of, the case shall beforwarded in writing by the chairperson to the student's Academic Dean within ten (10) days from the date of the meeting. The Academic 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 Academic Dean may impose any sanction permitted by this policy.
- c. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Academic Dean, the case may be appealed in writing within ten (10) days of the Dean's written decision to the Budget and Academic Policy Committee, who shall refer the case to the University Academic Appeals Board for resolution.
- d. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Academic Appeals Board, then he/she may file an appeal with the Provost and Senior Vice President for Academic Affairs within thirty (30) days from the receipt of the written decision of the Board. The decision of the Provost and Senior Vice President for Academic Affairs shall be final.

Only individual allegations of academic dishonesty may be appealed. If a previous offense was not appealed within the time limit, or was appealed unsuccessfully then subsequent offenses will be counted as repeat offenses and additional sanctions will be levied by the Office of Academic Affairs as described under the section on "Sanctions."

# 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 of the constituent colleges and schools of Marshall University. Academic dismissal from a program or from the University may also be imposed for violation of the University policy on academic dishonesty. For additional details, see "Academic Rights and Responsibilities."

# ACADEMIC PROBATION

A student whose grade point average falls below 3.0 will be placed on academic probation by the Graduate College. Following notification of probation and prior to subsequent registration, students will be counseled by their advisor or the department chair. During this initial counseling session, the student will be advised of his/her deficiencies and the

requirements for removing the deficiencies within the next nine semester hours of enrollment. The student will not be permitted to register without the written approval of the Dean of the Graduate College in Huntington or the Dean of the Graduate School of Education and Professional Development in South Charleston. A second counseling session will follow the first grading of subsequent enrollment and will be designed to check the student's progress. If probationary status is not removed within a satisfactory time period, the Dean in consultation with the graduate department will determine (1) if the student is to be retained or recommended for dismissal, (2) what counseling or remediation steps will be required of the student as a condition of retention.

### **Graduate Students**

Any student who has less than a 3.0 GPA either overall or in his/her current major 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.

### **Medical Students**

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

# ACADEMIC RIGHTS AND RESPONSIBILITIES OF STUDENTS

Marshall University's policies in regard to the academic rights and responsibilities of students reflect Board of Governors Policy Number 60.

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 University Policy Number 60. 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 coursework and degree, or certification requirements, and to know and meet criteria for satisfactory academic progress and completion of the program.

#### II. Definitions

- A. Academic Dean: the chief academic officer of a college or school. The dean also serves in an advisory capacity to the student. The student is encouraged to contact his/her academic dean for guidance on appeal procedures.
- 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. Grade Point Average, special program requirements, professional standards, etc.
- C. **Academic Dishonesty:** Academic dishonesty is conduct on an academic exercise that falls into one or more of the following categories: cheating, fabrication/falsification, plagiarism, bribes/favors/threats, and complicity. These categories and "academic exercise" are defined in detail in the section on Academic Dishonesty in this catalog. Each instructor may modify the general definition of academic dishonesty to fit the immediate academic needs within that particular course of study, provided the instructor defines, in writing and preferably in the course syllabus, the details of any departure from the general definition.
- 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 undergraduate student 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. Students enrolled in the undergraduate Nursing Program will follow these procedures.
- G. University Community: faculty, staff, or students at Marshall University.
- H. **President's Designee:** Chief Academic Officer.
- I. Provost and Senior Vice President for Academic Affairs: refers to the Chief Academic Officer.
- J. **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 coursework 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 Higher Education Policy Commission 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: Undergraduate Students (Graduate and Medical Students Should Consult the Graduate Catalog.)

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:
  - Any student who has less than a 2.0 Grade Point Average on coursework attempted at Marshall University and/or any approved coursework transferred from another institution shall be placed on academic probation. All probation students are subject to the following restrictions:
    - Meet with the Associate/Assistant Dean of their college before registering for classes to develop an Academic Improvement Plan to achieve good academic standing. This plan will be binding on the student.
    - $\cdot$  Take a maximum of 14 hours and should repeat courses under the D/F Repeat Rule to reduce deficiencies.
    - Earn a 2.0 GPA or higher during every semester they are on probation. Failure to achieve a 2.0 semester GPA or higher while on probation will result in suspension.
    - May not register by myMU.
    - Must participate in their College's retention program.
    - Other requirements may be imposed in the Academic Improvement Plan
- 2. For Academic Dishonesty

Sanctions for academic dishonesty may be imposed by the instructor of the course, the department chairperson, or the Academic Dean. Sanctions for academic dishonesty may be imposed even if a student withdraws from an individual course or from the university entirely.

#### (continued)

Academic Requirements and Regulations

- a. The instructor may impose the following sanctions:
  - A lower or failing project/paper/test grade.
  - A lower final grade.
  - Failure of the course.
  - Exclusion from further participation in the class (including laboratories or clinical experiences.)
- b. The instructor may also refer the matter to his/her department chairperson for additional sanctions. If allegations are referred to the department chairperson, it must be within thirty (30) days from the date of the alleged offense. This process starts with the dean if there is no department chairperson. The following sanctions may be recommended by the instructor but will need to be imposed by the department chair, academic dean or the Office of Academic Affairs:
  - Exclusion from an academic program.
  - Academic probation for up to one (1) year.
  - Academic suspension for up to one (1) year.
  - Dismissal from the university.
- c. In those cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic sanctions may be pursued through the Office of Judicial Affairs.
- d. A student will be informed in writing by the instructor or responsible office of any charges and subsequent sanctions imposed for academic dishonesty. Written notification of academic dishonesty charges (and the inclusion of confirmed charges/sanctions in the student's records) is designed to inform a student of the potential repercussions of repeat offenses and his/her rights of appeal.
- e. Any time an accusation of academic dishonesty is made, and a sanction imposed (or a sanction will be imposed with the submission of final grades), a notice should be sent to the Office of Academic Affairs within ten (10) days of the accusation. The notice of an act of academic dishonesty will be reported to the Office of Academic Affairs through the completion of an "Academic Dishonesty Report Form." Instructors are encouraged to give a copy of the "Academic Dishonesty Form" to a student accused of an offense. However, the Office of Academic Affairs will inform the student and the student's dean of the accusations made, the sanctions prescribed, the repercussions of repeat offenses, and his/her right of appeal. A copy of the report will go into the student's college file. Any subsequent actions taken (additional sanctions imposed, the lessening of sanctions, the withdrawal of accusations, the results of appeals, etc.) should be reported to the Office of Academic Affairs within ten (10) days.

The Office of Academic Affairs will maintain a file of academic dishonesty incidents. These will be reported in summary form (no student or faculty names will be included) to the Academic Deans and the Faculty Senate at the end of each academic year.

- f. Sanctions for repeated academic dishonesty offenses will be imposed by the Office of Academic Affairs after consultation with the appropriate department chairs and deans.
  - A student's record of academic dishonesty offenses will be maintained throughout his/her enrollment at Marshall University, and the period of time between offenses may have no impact on sanctions for repeated offenses.
  - A student with a second academic dishonesty offense during his/her enrollment at Marshall University will be academically suspended for a period of time not to exceed one academic year (to include summer terms.)
  - A student with a third academic dishonesty offense during his/her enrollment at Marshall University will be dismissed from the university.
- C. Academic Suspension: Undergraduate Students (Graduate and Medical Students Should Consult the Graduate Catalog.)
  - 1. For Academic Deficiency

Students who earn less than a 2.0 semester GPA while on Academic Probation or who accumulate or exceed the Quality Point Deficit for their GPA hours will be suspended for one regular semester (the summer terms do not count as a term of suspension). Students with 0-25 GPA hours will be suspended if they have 20 or more quality point deficiencies; with 26-57 hours, they will be suspended with 15 or more quality point deficiencies; with 58-89 hours, they will be suspended with 12 or more deficiencies; and with 90 or more hours, they will be suspended with 9 or more deficiencies.

When a student returns to Marshall after any suspension, the student will be placed on probation and must follow all of the requirements of his/her Academic Improvement Plan. Failure to meet all of the requirements of the Academic Improvement Plan or exceeding the Quality Point Deficits described above will result in suspension. A second suspension will be for a period of one calendar year. Third and subsequent suspensions will be for a period of two calendar years each.

#### 2. For Academic Dishonesty

In those cases in which a student has been found guilty of a second academic dishonesty offense, he/she will be academically suspended for a period of time not to exceed one academic year (to include summer terms). 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.

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 of the constituent colleges and schools of Marshall University. Academic dismissal from a program or from the University will also be imposed for violation of the University policy on academic dishonesty.

V. Academic Appeals

The intent of the appeals process is to treat all parties fairly, and to make all parties aware of the appeals procedure. *Please Note:* Notwithstanding any other provision in Marshall University catalogs or policy documents, only students who are or will be dismissed from a program or from the University as a direct and immediate consequence of any academic sanction administered by the University may, at their own discretion and expense, retain legal counsel for representation during all relevant administrative appeal proceedings.

A. Student Appeals for Instructor Imposed Sanctions:

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.

In those cases in which a student has received an instructor-imposed sanction, including a lower final grade in or failure of the course or exclusion from further participation in the class, the student shall follow the procedures outlined below:

- 1. 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. The course instructor is to respond to the student in writing within ten (10) days after the student has submitted the appeal documentation. If the course instructor does not respond to the student in the given time frame, the appeal process continues to the next level. If the instructor is unavailable for any reason, the process starts with the department chairperson or division head.
- 2. If the procedure in Step 1 does not have a mutually satisfactory result, the student may appeal in writing to the department chairperson or division head within ten (10) days after the action taken in Step 1, who will attempt to resolve the issue at the departmental level. The department chairperson or division head is to respond to the student in writing within ten (10) days after the student has submitted the appeal documentation. If the department chairperson or division head (or representative) does not respond to the student in the given time frame, the appeal process continues to the next level. When a student appeals a final grade, the faculty member must provide all criteria used for determining grades.
- 3. Should the issue not be resolved at the departmental level, either the student or instructor may appeal in writing to the Dean of the college in which the course is offered within ten (10) days of the action taken in Step 2. This person is to respond to the student or instructor in writing within ten (10) days after the student has submitted the appeal documentation and will attempt to achieve a mutually satisfactory resolution. If the person named above does not respond to the student in the given time frame, the appeal process continues to the next level. The Dean of the college in which the student is enrolled will be notified.
- 4. Should the issue not be resolved by the Dean of the college within which the course is offered, either the student or instructor may appeal in writing within ten (10) days of the action taken in Step 3 to the Budget and Academic Policy Committee which shall refer the matter to the University Academic Appeals Board which determines if an appeal hearing is justified. If the University Academic Appeals Board determines a hearing is justified, the Board will schedule the hearing. The University Academic Appeals Board has the right to seek additional documentation if necessary. The University Academic Appeals Board has thirty (30) days to convene the members of the Hearing Panel to hear the appeal (once the requested documentation is provided by the appellant student) and ten (10) days after the hearing to make notification of the determination to the student and instructor. It may not always be possible to meet the above conditions because many of these appeals occur at times when school is not in session. However every effort will be made to schedule appeal hearings in a timely and reasonable manner

(continued)

5. Should the student or the instructor be dissatisfied with the determination of the Academic Appeals Board then either party may file an appeal with the Provost and Senior Vice President for Academic Affairs within thirty (30) days from receipt of the decision of the Board. This person has ten (10) days to respond in writing to the student or instructor. The decision of the Provost and Senior Vice President for Academic Affairs shall be final.

#### B. Appeals for Academic Dishonesty:

Only individual allegations of academic dishonesty may be appealed. If a previous offense was not appealed within the time limit, or was appealed unsuccessfully, then subsequent offenses will be counted as repeat offenses and additional sanctions will be levied by the Office of Academic Affairs as described in the section on "Sanctions" in this policy.

- 1. In those cases where the instructor imposes a sanction pursuant to part IV, A, only, and does not refer the matter to the department chairperson or division head for additional sanctions, the student may appeal the sanction in accordance with the procedures described in part V. Academic Appeals (A).
- 2. In those cases where the matter is referred to the department chairperson or division head for additional sanctions, this action must occur within thirty (30) days of the alleged offense. The chairperson or division head shall bring together the student involved, and the faculty member, and/or other complainant within ten (10) days from the date of referral.
- 3. If the student denies guilt or disagrees with the sanction imposed, or if the faculty member, other complainant, or chairperson or division head thinks that the penalties are insufficient for the act complained of, the case shall be forwarded in writing by the chairperson or division head to the student's Academic Dean within ten (10) days from the date of the meeting. This person shall bring together the student, faculty member or other complainant, and the department chairperson or division head to review the charges within ten (10) days from the date of referral. The student's Academic Dean may impose any sanction permitted by this policy.
- 4. Should the student, faculty member, or other complainant be dissatisfied with the determination of the student's Academic Dean, the case may be appealed in writing within ten (10) days of the written decision to the Budget and Academic Policy Committee, who shall refer the case to the University Academic Appeals Board which determines if an appeal hearing is justified. If the University Academic Appeals Board determines a hearing is justified, the Board will schedule the hearing. The University Academic Appeals Board has the right to seek additional documentation if necessary. The University Academic Appeals Board has thirty (30) days to convene the members of the Hearing Panel to hear the appeal (once the requested documentation is provided by the appellant student) and ten (10) days after the hearing to make notification of the determination to the student and instructor. It may not always be possible to meet the above conditions because many of these appeals occur at times when school is not in session. However every effort will be made to schedule appeal hearings in a timely and reasonable manner.
- 5. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Academic Appeals Board or the Hearing Panel, then he/she may file an appeal with the Provost and Senior Vice President for Academic Affairs within thirty (30) days from the receipt of the written decision of the Board or Panel.
- 6. The decision of the Provost and Senior Vice President for Academic Affairs shall be final.
- C. Appeals for Academic Deficiencies:
  - 1. In those cases in which an undergraduate 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(s) who has judged his/her performance to be deficient, to discuss with this person(s) 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 meeting in writing 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 Provost and Senior Vice President for Academic Affairs within thirty (30) days after receipt of written notice of the judgment.
    - d. The decision of the Provost and Senior Vice President for Academic Affairs is final.

- 2. In those cases in which a student has been or may be dismissed from an undergraduate 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(s) who 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(s) 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 his/her 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.
  - If the student is dissatisfied with the outcome of the meeting outlined in (b) above, the student may C. file an appeal in writing with the Chairperson of the Budget and Academic Policy Committee. The Chairperson of the Budget and Academic Policy Committee will refer the matter to the University Academic Appeals Board which determines if an appeal hearing is justified. If the University Academic Appeals Board determines a hearing is justified, the Board will schedule the hearing. The University Academic Appeals Board has the right to seek additional documentation if necessary. The University Academic Appeals Board has thirty (30) days to convene the members of the Hearing Panel to hear the appeal (once the requested documentation is provided by the appellant student) and ten (10) days after the hearing to make notification of the determination to the student and instructor. If the student is denied an appeal, he/she may appeal this decision to the Provost and Senior Vice President for Academic Affairs. If the student is granted an appeal, the Chairperson of the Academic Appeals Board will appoint a Hearing Panel. At least two (2) of the faculty and student members of the Hearing Panel will, if possible, be chosen from the members of the Hearing Panel Pool appointed from the constituent college or school involved. It may not always be possible to meet the above conditions because many of these appeals occur at times when school is not in session. However every effort will be made to schedule appeal hearings in a timely and reasonable manner. The student's appeal must be filed within ten (10) days after receipt of written notice of the decision outlined in (b) above.
  - d. If the student, faculty member or other complainant is dissatisfied with the decision of the Hearing Panel, he or she may appeal the decision to the Provost and Senior Vice President for Academic Affairs within thirty (30) days after receipt of written notice of the decision.
  - e. The decision of the Provost/Senior Vice President for Academic Affairs is final.

#### VI. Academic Appeals Board

A. Description and Jurisdiction:

The Academic Appeals Board is a permanent subcommittee of the Budget and Academic Policy Committee. It is composed of experienced Hearing Officers and is established to determine whether appeals arising from the following should result in a hearing:

- 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.

#### B. Function:

The University Academic Appeals Board collectively decides whether:

- a) The prior steps of the appeal process have been completed.
- b) The claim (if substantiated) would result in the overturning of the academic sanction. This means that some policy may have been violated in the application of the sanction, arbitrariness or capriciousness may been a factor in the sanction, different standards may have been applied to the student or there may have been bad faith or ill will on the part of the instructor's applying of the sanction.
- c) Appropriate documentation of the claim needs to be provided in order to justify a hearing. It is the student's job to provide documentation for his/her claims. The Board may ask for additional documentation from either students or faculty in order to determine whether a hearing is justified.

#### (continued)

Academic Requirements and Regulations

### VII. Hearing Panel

The purpose of the Hearing Panel is to hear arguments, evaluate evidence, and reach a decision by voting in an Academic Hearing.

- A. The Hearing Panel shall be composed of faculty and student members chosen in the following manner:
  - 1. Faculty Members:

The Dean of each of the constituent colleges and schools of the University shall appoint five (5) faculty members from his/her unit to serve on the Hearing Panel Pool. Such appointments will be made annually in the spring semester with the understanding that some of these faculty members will be available to hear appeals during the summer terms and the week before the beginning of Spring semester. Terms will run from May 15 to the following May 15.

- Student Members: The Student Government Association President shall appoint three (3) students from each of the constituent colleges and schools of the University to serve on the Hearing Panel Pool.
- 3. Hearing Officers: The Budget and Academic Policy Committee will appoint two Hearing Officers each spring. It is desirable but not required that the Hearing Officers have served on a Hearing Panel.
- B. Selection of Members for an Individual Hearing Panel

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 randomly from the Hearing Panel Pool by the Chairperson of the Academic Appeals Board or his/her designee. In appeals arising from dismissal from an academic program, if possible, at least two (2) of the faculty and student members of the Hearing <del>p</del>Panel should be chosen from the Hearing Panel Pool members appointed from the constituent college or school involved.

### VIII. Hearing Procedures

It is the intent of these procedures to ensure 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 is 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.-
- D. The appellant student has the right, at his or her own discretion and expense, to retain legal counsel for representation only when he/she is or will be dismissed from a program or from the University as a direct and immediate consequence of any academic sanction administered by the University. In these cases an attorney is allowed to fully represent and speak on behalf of the appellant student. Rules of evidence and other formal rules of courtroom procedure do not apply. The Hearing Officer is authorized to decide what is relevant and what is not relevant.
- E. 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.
- F. 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.
- G. 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 may be prohibited from appearing as a witness at the discretion of the Hearing Officer.
- H. 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's order to leave the hearing room may

be subject to appropriate disciplinary action pursuant to Marshall University policy. When a student appellant is excluded for disruptive behavior and does not have a recognized representative, the Hearing Officer will appoint one.

- I. Except as provided in H and M herein, all evidence must be presented in the presence of the student.
- J. The student or other parties involved may petition the Hearing Officer for a subpoena or a request for appropriate written information or documents.
- K. 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. Written evidence to be considered by the panelists should be received by the Hearing Officer at least five (5) business days prior to the hearing to be distributed to the panelists prior to the hearing. Exceptions to this five (5) day rule are at the discretion of the Hearing Officer, who may disallow long written documents or large numbers of documents from being introduced if the panelists will not have time to consider them fully.
- L. 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.
- M. 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.
- N. 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 Budget and Academic Policy Committee and the Provost and Senior 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 Budget and Academic Policy Committee and the Provost and Senior Vice President for Academic Affairs by any Hearing Officer.
- O. The findings of the Hearing Panel, and any sanction, shall be announced at the conclusion of the hearing. The student, faculty member, and the appropriate Academic 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 by the Hearing Officer in the form of summary minutes and relevant attachments and will be provided to the student upon request.
- P. No one may tape the proceedings.
- Q. In an appeal related to a final grade the Hearing Officer will complete any necessary change of grade forms and submit that information to the Registrar, the faculty member, and the appropriate Academic Dean.
- R. Within thirty (30) days following receipt of the Hearing Panel's decision, the student, faculty member or other complainant may file an appeal with the Provost and Senior Vice President for Academic Affairs. A written brief stating grounds for the appeal should be presented by the student, faculty member or other complainant to the Provost and Senior Vice President of Academic Affairs. 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 or of the Academic Appeals Board.
  - 4. Misinterpretation of University policies and regulations by the Hearing Panel or by the Academic Appeals Board.
  - 5. A sanction disproportionate to the offense.
  - 6. Lack of jurisdiction.

The Provost and Senior Vice President of Academic Affairs may affirm or modify the panel's findings and sanctions, if any, or remand the case to the Academic Appeals Board for further action.

S. The decision of the Provost and Senior Vice President for Academic Affairs is final. He/she will give written notification of the final decision to the student, the faculty member, the appropriate Academic Dean and as appropriate, the Registrar.

Approved by the Academic Standards and Curricular Review Committee: October 28, 1988 Approved by the Budget and Academic Policy Committee, October 21, 2004, March 4, 2005, April 17, 2009 Revised by Faculty Senate: March 19, 2002, February 27, 2003, November 18, 2004, March 31, 2005, May 7, 2009

## ADVISING

An advising system allows students to effectively interact with faculty to ensure that course work follows a coherent, balanced, sequential, and unified plan of academic study. The advising system provides not only academic guidance but also professional identification and educational enrichment.

At the time of admission, students are assigned an academic program advisor . The student and advisor prepare a Plan of Study during the semester the student is admitted. The program outlined in the Plan of Study should be chosen on the basis of the student's interests and needs and should meet program requirements.

- Any unapproved deviations from the Plan of Study may result in delayed program completion and/or graduation. To amend the Plan of Study the student must consult with his or her academic program advisor. When a student applies for graduation or for certification there must be agreement between the Plan of Study and the record of courses taken by the student.
- 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 chair of the committee to conduct the student's comprehensive assessment, assembles questions for any written and oral examination, and reports the result of the examination to the Graduate College.

# **APPLICATION FOR GRADUATION**

The application for graduation must be completed and submitted BEFORE or at the beginning of the student's final semester/term, but NOT LATER than the date printed in the University Calendar. For Huntington students, the application must be submitted to the Graduate College Office along with documentation that the diploma fee has been paid (a receipt from the Bursar or a Bursar stamp on the application form). For South Charleston students, the application must be submitted to the Graduate Records Office with a check attached for the appropriate fee or students may call the office to pay with a credit card.

For diploma fee information, see "Special Student Fees" at *www.marshall.edu/bursar/tuition.html*. Forms for applying for graduation can be obtained from the above offices and online at *http://www.marshall.edu/graduate/forms/applicationforgraduation.pdf*.

Students planning to graduate in a particular semester or term must provide all data to be applied toward the graduation to the Graduate Dean's office in Huntington or the Graduate Records office in South Charleston 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 College Office by the 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.

#### **NOTE on Transfer Credit**

All transfer credit (and official transcripts) must be sent directly to the Graduate College 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.

#### NOTE on Incomplete Grades and PR Grades

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 College 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.

# AREA OF EMPHASIS (see also Changing Area of Emphasis)

An area of emphasis is a specific subject area of study which has defined course offerings within an approved degree program and major.

Although a student might take continuing education and/or development courses after receiving a graduate degree, Areas of Emphasis for any given degree cannot be added after that degree has been obtained.

### ATTENDANCE

See Class Attendance Policy.

# AUDITING

Students who wish to register for a course without earning credit may register as an audit. The cost incurred is the same as if the course were taken for credit. Students who complete audit requirements for a course receive a grade of AUD which carries no earned credit hours. Students who wish to audit a class should secure instructor approval before registration.

Attendance and other requirements for auditors shall be determined by the instructor of the course being audited. It is the responsibility of the instructor to discuss the requirements of the course with the auditor. 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.

Staff Development courses may not be taken under the audit option.

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.

### **CERTIFICATE PROGRAMS**

Certificate programs are professional continuing education programs of typically 12 to 21 credit hours as designated by the program faculty and available to students admitted under the Professional Development and Degree-seeking categories. The main purpose of certificate programs is to provide opportunities to students to complete a cohesive program of coursework that is less than a graduate degree, but which provides advanced training in a specific area. Please consult the department offering the certificate program for complete information.

### **CHANGING AREAS OF EMPHASIS**

If a student decides to change his/her area of emphasis within his/her current degree, the student will need to submit a Change of Area of Emphasis form for approval. There is no fee for this change. The form is available in the Graduate College office (OM 113) or online at the Graduate College website.

### **CHANGING DEGREE PROGRAMS**

If a student decides to change his/her degree program, the student will need to apply for admission to that program through the regular admission process, and pay the appropriate admission fee. Note that admission to another degree program is not automatic. Students are reviewed as applicants to the new program and may be refused admission to the second program.

### **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 in the syllabus 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) and professional, work-related absences are to be excused when a student reports and verifies them to the instructor. For such excused absences, the student should be reasonably accommodated.

### **COMMENCEMENT AND GRADUATION**

Marshall University observes two Commencement Exercises and four Graduation dates during an academic year. The official graduation dates are:

- · last day of final examinations in July;
- · last day of final examinations in August;
- · last day of final examinations in December;
- day of Commencement for the spring semester.

Commencement Exercises are held twice a year to honor candidates for associate, baccalaureate and advanced degrees (master's, specialist and doctoral). The Spring ceremony honors students who complete their degree requirements between December and May and is held in May; the Fall ceremony honors students who complete their degree requirements between May and December and is held in December.

Please see the Academic Calendar for official dates.

### **COMPREHENSIVE ASSESSMENT**

In addition to all general requirements for graduate degrees, a comprehensive assessment must be completed. The comprehensive assessment is not solely based upon the specific courses completed, but affords the student an opportunity to demonstrate broad comprehension and synthesis of the major subject. Depending upon the specific requirements of a

particular program, the assessment might include such activities as the report and defense of a final project, comprehensive project, portfolio, or capstone project; thesis or dissertation and its defense; or a written comprehensive exam or oral comprehensive exam.

In this policy, the term "Comprehensive Assessment Committee" will be understood to mean any committee executing the student's final assessment for the degree. For example, a doctoral research project committee would be understood to serve as the final Comprehensive Assessment Committee, if that doctoral research project is considered to be the final comprehensive assessment. For additional information, see specific requirements in the appropriate program section. Responsibility for development, scheduling and administration of the comprehensive assessment rests with the faculty of the student's program and the appropriate dean.

A student's performance on the comprehensive assessment is reported to the Office of the Graduate Dean or school dean as follows:

- *E* Pass with distinction, indicating superior performance.
- *P* Pass, indicating satisfactory performance.
- *PC* Pass with contingency, which may mean additional requirements for the student as determined by the faculty.
- U Unsatisfactory, indicating that performance has not met the minimum standards of Marshall University Graduate College.

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 College Office. All graduate students must pass a final comprehensive assessment to be eligible for graduation.

Unless more restrictive guidelines are specified in the individual program description in this catalog, no more than two reassessments are permitted. In the event students fail to pass an assessment, they will be placed on probation and, prior to reassessment, must meet with their examining committee to discuss deficiencies and steps to correct them. Students may be assessed only one time a term or semester. When students fail the second reassessment, the department will recommend their dismissal by the Graduate College.

#### **Comprehensive Assessment Committee: Master's Degrees and Education Specialist Degrees**

A Comprehensive Assessment Committee must evaluate each student's performance on the comprehensive assessment. The student's graduate advisor or graduate program director selects the chair and other member(s) of the Comprehensive Assessment Committee. The committee chair must have at least "Graduate" level membership in the Marshall University graduate faculty. There must be a minimum of two voting members on every Comprehensive Assessment Committee, including the committee chair, except in the case where a national standardized exam is used as the only assessment, in which case only the person serving as chair is needed. Other than the chair, all other assessment committee voting members must have at least "Associate" level membership in the Marshall University graduate faculty. A majority of the student's Comprehensive Assessment Committee voting members must have appointments within the college of the student's major.

With the approval of the department or division chair or head and the student's Comprehensive Assessment Committee chair, other professionally or educationally qualified people may be invited to act as non-voting members of the committee.

In the event of a tie-vote when determining the outcome of the student's comprehensive assessment, the college or school dean is to select one additional faculty member to break the tie. This additional member must be from the college of the student's major and must have at least "Graduate" level membership in the Marshall University graduate faculty. This also might require the assessment to be executed a second time with the new committee member's personal direct involvement.

In the case of written or oral examinations, the chair of the student's Comprehensive Assessment Committee prepares the questions for the written examination in consultation with other faculty members on the committee, and conducts the oral assessment with the other committee members present. The student may check with the program or department for availability of past assessments or study guides for review.

For any specific student, any exceptions to the above policies must be approved by the dean of the Graduate College on an individual basis. The dean of the Graduate College will notify the chair of Marshall University's Graduate Council of any exceptions which were approved and give the reasons for each exception.

### **Comprehensive Assessment Committee: Doctoral Degrees (other than Doctor of Medicine degrees)**

A final Comprehensive Assessment Committee must evaluate each student's performance on the doctoral degree final comprehensive assessment. Other preliminary or intermediate assessments vary by program and department policy. The student selects the chair and other members of the final Comprehensive Assessment Committee, subject to the approval of the student's graduate advisor or program director, and dean. The committee chair must have "Doctoral" level membership in the Marshall University graduate faculty. There must be a minimum of three voting members on every doctoral Comprehensive Assessment Committee, including the committee chair. Other than the chair, all other assessment committee voting members must have at least "Graduate" level membership in the Marshall University graduate faculty. Professional programs may alternatively choose to include a maximum of one external, professionally qualified voting members. A majority of the

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student's Comprehensive Assessment Committee members must have faculty appointments within the college of the student's major.

In the event that more than one member of the final Comprehensive Assessment Committee votes not to approve the student's performance as a result of the assessment, the doctoral degree cannot be recommended. At the discretion of a majority of the committee, the student may be given one additional chance to satisfy the committee to the point that no more than one committee member refuses to approve the student's performance on the comprehensive assessment.

For any student, exceptions to the above policies must be approved by the dean of the Graduate College on an individual basis. The dean of the Graduate College will notify the chair of Marshall University's Graduate Council of any exceptions which were approved and give the reasons for each exception.

### **COURSE LOAD**

A normal course load for graduate students is nine to twelve semester hours in the Fall and Spring semesters, and four to six semester hours in each of the summer terms. Any student seeking registration beyond this limit must request a course overload approval in the Graduate College office.

### **COURSE NUMBERING**

Graduate courses numbered 500-599 may be similar to certain undergraduate 400-499 series courses and may meet jointly. A Marshall University course taken at the 500 level will not meet degree requirements if it was already taken at the 400 level. Courses numbered 600-699 and 700-899 are open only to graduate students. Exceptions to this policy sometimes are granted to seniors with excellent academic records. See *Undergraduate Enrollment in Graduate Courses*.

## **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 (See also Changing Degree Program)**

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

### DEGREES

Marshall University offers programs of study leading to the degrees of: Master of Arts, M.A.
Master of Arts in Teaching, M.A.T.
Master of Arts in Journalism, M.A.J.
Master of Business Administration, M.B.A.
Master of Science, M.S.
Master of Science in Engineering, M.S.E.
Master of Science in Nursing, M.S.N.
Education Specialist, Ed.S.
Doctor of Education, Ed.D.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.
Doctor of Philosophy, Ph.D.
Doctor of Psychology, Psy.D.

### DISMISSAL FROM PROGRAM

Only grades of A B, C, CR, or S are acceptable in fulfilling graduate degree requirements on any Plan of Study. Particular programs may require higher performance than C in certain courses.

Exclusively, all courses completed after submission to the current degree program, along with any previous Marshall University coursework to be counted toward the current degree (should be in the student's Plan of Study), will be used to calculate the student's GPA–no other courses will be included in the GPA.

A graduate student is required to maintain a minimum cumulative GPA of 3.0 for this coursework. If, upon the completion of 12 hours or thereafter, a degree student's GPA is less than 3.0, the student may be subject to dismissal from the program. See *Grade Point Average and Other Requirements for Graduation* for more information.

# **DOCTORAL DEGREES**

Since 1992 Marshall University has offered the Ph.D. in Biomedical Sciences. The doctorate in clinical psychology (the Psy.D.) admitted its first class in the Fall of 2002. The Ed.D. features majors in Curriculum and Instruction and Educational Leadership. The Doctor of Management Practice in Nurse Anesthesia is offered by the Lewis College of Business.

# DROPPING COURSES AND COMPLETELY WITHDRAWING FROM THE UNIVERSITY (See also *Medical Withdrawal*)

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 the 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

### **DUAL DEGREES**

Students who wish to seek admission to more than one degree program at a time (Dual Degree Status), must complete a separate application, pay an additional non-refundable application fee, and meet all admission requirements for each *(continued)* 

academic program for which admission is sought. Not all departments may accept a student who is already admitted to another graduate level program. Prior to submitting a Graduate Application for Admission, please check with the academic department(s) of the program(s) in which you are interested.

### **EDUCATION SPECIALIST**

Marshall University also offers the Education Specialist (Ed.S.) degree in Education and in School Psychology. Under the Ed.S. in Education, students may select areas of emphasis in Adult and Technical Education, Counseling, Curriculum and Instruction, Leadership Studies, Community and Technical College Studies, and Reading Education. For more information, check the appropriate program description in this catalog, or contact the department offering the degree.

### FINAL GRADES

Marshall University mails final grades only upon student request. Grades will be available online using myMU. Requests to have grades mailed to the permanent address in the student information system may be submitted online using myMU or by submitting a written request to the Office of the Registrar, One John Marshall Drive, Huntington, WV 25755. Written requests must contain name, student number, and signature of the student.

### FULL-TIME GRADUATE STUDENT

The West Virginia Higher Education Policy Commission 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 *Financial Information*.)

# FOUR-PLUS-ONE DEGREE PROGRAMS

See Integrated Bachelor's and Master's Degree (IBAM) Programs.

# **GRADE INFORMATION AND REGULATIONS**

### **Grade Point Average Defined**

Anywhere in this catalog where GPA is discussed, unless otherwise noted, GPA means degree GPA. However, the final transcript GPA includes all graduate-level grades taken at Marshall University at any time, regardless of whether or not they count toward the student's degree. The GPA is calculated only on graduate coursework taken at Marshall University, and only includes coursework taken within the past seven years, or older for coursework that has been revalidated (see Time Limitations for coursework older than seven years). Exclusively, all courses completed after admission to the current degree program, along with any previous Marshall University coursework to be counted toward the current degree (should be in the student's Plan of Study), will be used to calculate the student's GPA–no other courses will be included in the GPA.

Courses with grades of W, PR, NC, CR, S, or  $\underline{U}$  are not computed in the GPA. The grade of I is computed as an F in determining qualifications for graduation.

### Grade Point Average Requirements - Good Standing

Grades on coursework may not average lower than 3.0 at any time in the program. All grades of C or less are counted in computing the GPA, but no more than six hours of C and no grades below C may be applied toward a graduate degree. Individual degree programs may have more stringent requirements, so refer to your degree program for information.

A graduate student is required to maintain a minimum cumulative GPA of 3.0 for this coursework. If, upon the completion of 12 hours or thereafter, a degree student's GPA is less than 3.0, the student may be subject to dismissal from the program.

### **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 hour 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 graduate 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 graduate degree.)
- *F* Failure, given for unsatisfactory work. No quality points.

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- *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 Grade 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 or division for credit/no credit grading. *CR* and *NC* are not considered in determining the Grade Point Average.
- S/U For certain courses, which are so designated in the catalog, every student is given a grade of S, which denotes satisfactory completion of the course, or U, which denotes unsatisfactory work. S and U are not considered in determining the Grade Point Average.
- *PR* Indicates progress on a thesis, dissertation or in select research courses. It is replaced by the final grade upon completion up to established credit limits.

## **GRADUATE ASSISTANTSHIPS**

Many departments offering graduate degrees as well as non-academic units have graduate assistantships available. The amount of the award may vary, but the award generally includes a stipend and a waiver of a portion of tuition and fees.

Graduate Assistantships are available each semester in teaching, research, or administrative work. Reappointment depends on job performance and academic progress. Please note that a student cannot hold more than one Graduate Assistantship at a time.

### **Eligibility**:

- Full or Conditional admission to a graduate degree-granting program at Marshall University;
- First-time graduate students must have a minimum undergraduate GPA of 2.75 on a 4.0 scale for all previously completed undergraduate coursework; returning GA's must have a minimum graduate GPA of 3.0;
- During Fall or Spring semester must be enrolled for at least 9 hours of graduate coursework for a full-time assistantship or at least 3 hours of graduate coursework for a half-time assistantship; during summer terms must be enrolled for at least 4 hours of graduate coursework for a full-time assistantship or at least 2 hours of graduate coursework for a half-time assistantship or at least 2 hours of graduate coursework for a half-time assistantship or at least 2 hours of graduate coursework for a half-time assistantship. NOTE: undergraduate hours are eligible for a tuition benefit when required in a student's graduate program.

Apply for an assistantship by contacting the department in which you intend to be enrolled.

For information on the availability of other assistantship options see *www.marshall.edu/graduate/forms/gainformation. pdf.* 

*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 Human Resources Office.

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

# **GRADUATE STUDENT EMPLOYMENT**

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.

# **GRADUATION REQUIREMENTS FOR MASTER'S DEGREE**

The requirements for graduation include completion of the program requirements, successful completion of required comprehensive assessments, a GPA of at least 3.0 (see *Grade Information and Regulations*), and satisfactory fulfillment of other academic requirements as may be established by the various programs. Additionally, the student must have at least a 3.0 GPA in the major, or in CORE courses of an interdisciplinary program. Only grades of *A*, *B*, *C*, *CR*, or *S* are acceptable in fulfilling graduate degree requirements on any Plan of Study. Particular programs may require higher performance than C in certain courses. Grades of *W*, *PR*, *CR*, *NC*, *S*, *U*, and *I*, are not counted in the GPA calculation, except that an I grade will be calculated as an *F* (for courses where a letter grade is normally given), *NC*, or *U*, depending on the type of course, for determining qualifications for graduation.

### **Additional Requirements**

- 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 a graduate degree. Individual degree programs may have more stringent requirements, so refer to your degree program for information.
- Up to six hours of CR or S may be included within a degree program but they will not affect the GPA.
- Master's degree students must complete a minimum of 30 hours of graduate coursework. For programs requiring a thesis, a minimum of 3 and a maximum credit of 6 hours may be granted for the thesis toward the total degree credits, except in chemistry and biological sciences, where up to 12 thesis hours may be applied toward the MS degree. Individual programs may require more than the 30-hour minimum requirement, so students must consult individual program degree requirements.
- 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 curricula, 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 may have 500 series numbers for graduate credit. 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.
- 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.
- At least one-half of the minimum required hours for the student's master's degree must be earned in classes numbered 600 or above.

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. Students may be required to take appropriate national exams in order to graduate.

During the seven-year time limit, Marshall University reserves the right to advise students of their status on academic performance related to the probability of receiving a degree within the prescribed time limit.

# **INCOMPLETE GRADE**

An I grade (Incomplete) is given to students who have completed at least three quarters of the work for the course, as determined by the instructor, but who do not complete course requirements for reasons deemed acceptable to the course instructor. The I grade is not considered in determining the Grade Point Average, except for graduation. Students must be in good standing in the class prior to requesting an incomplete. The course instructor decides whether or not an incomplete will be granted and specifies in writing what work the student must complete to fulfill the course requirements; this remainingrequirements description is to be submitted with the University's Incomplete Grade Form, with copies to the student and the instructor. To complete the course, the student has until the end of the next fall or spring semester, whichever comes earlier, after the semester in which the incomplete grade was assigned, or the instructor may establish an earlier deadline. If extenuating circumstances exist, which prevent the student from completing the course in the prescribed time, the incomplete grade may be extended with written approval of the instructor, the instructor's chair or division head, and the appropriate dean. If the student satisfactorily completes the course in the prescribed time he/she will receive either a letter grade, a CR grade, or an S grade, depending upon what type of grade is appropriate for the course. If the student fails to complete the course requirements during the stipulated time, the grade of I changes to a grade of F, NC, or U, depending on the type of *grade appropriate for the course.* All grades remain on the student's permanent record as originally submitted by the course instructor, except for I grades that have been completed and changed by the instructor. Any grade change is added to the permanent record.

# **INDEPENDENT STUDY**

Independent Studies are tutorials, directed and independent readings, directed and independent research, problem reports, and other individualized activities which allow students to explore in depth a specific aspect of a discipline or professional field not covered by the established curriculum. The independent study topic is not covered (or not covered in sufficient depth) by courses inside or outside of the student's degree program. Written objectives of each independent study course, approved by the chair and dean, must be maintained in departmental files.

### **INELIGIBLITY FOR SCHOLASTIC DEFICIENCIES**

See Academic Rights and Responsibilities of Students.

# **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 certification specialist, College of Education and Human Services, (304) 696-2857 in Huntington and (304) 746-1909 in South Charleston. The teacher must have approval of his/her renewal advisor prior to enrolling in any course which is to be used for certificate renewal, salary classification, or additional endorsements.

# **INTEGRATED BACHELOR'S AND MASTER'S (IBAM) DEGREE PROGRAMS**

Some master's degree programs at Marshall University allow undergraduate students who excel academically to begin working simultaneously on coursework toward a master's degree while completing a bachelor's degree. These are *Integrated Bachelor's and Master's* (IBAM) degree programs, and are somewhat like what previously have been called *three-plus-two* or *four-plus-one* programs. See IBAM entry in this catalog for more information.

# **INTERNSHIPS**

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

## MAJOR

A major is a field of study within an approved degree program, having its own prescribed curriculum. A degree program may have more than one major.

# **MASTER'S DEGREES**

Marshall University offers a wide array of master's degrees. The master's may serve one or more of the following purposes: to provide greater specialization within one's area of interest; to facilitate licensure in certain fields; to provide access to Education Specialist or doctoral degrees; to support professional advancement, and to promote intellectual growth and personal fulfillment.

### MEDICAL WITHDRAWAL (See also Dropping Courses and Completely Withdrawing from the University)

### Mandatory Withdrawal for Medical Reasons (initiated by the university)

- 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 him/herself 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's 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.

### **Request for Medical Withdrawal (initiated by the student)**

In cases when students withdraw from the university for medical reasons, their request for withdrawal must be supported by certification from the attending physician. (The Office of Student Affairs provides a form for the physician to use for this purpose.) In order to be admitted after this withdrawal, the student must provide a letter and supporting documentation from the attending physician that indicates that the student is able to return. Confidentiality will be maintained at all times except on a need-to-know basis. Requests for medical withdrawals from the university or from an individual class will be handled on a case-by-case basis through the Associate Dean/Director of Counseling located in Prichard Hall in Huntington. Students in South Charleston may submit documentation to their school deans.

Students who receive a medical withdrawal shall receive a grade of W.

### MINOR

Minors approved by the Graduate Council to which code numbers have been assigned may appear on a graduate student's transcript if the following conditions are met:

- · the student's advisor approves the minor courses as part of the student's Plan of Study; and
- the program offering the minor allows it to be designated as the student's minor. Such permission must be obtained in writing. The department or division chair in the minor program signs the student's Plan of Study to signify approval.

As of the date of this catalog, the following graduate minors are available: (please see department information for requirements):

Adult and Technical Education Anthropology Classics Criminal Justice Exercise Science Environmental Science Geobiophysical Science Geography History Mathematics Philosophy Sport Studies Sociology

### **MULTIPLE DEGREES**

A student who wishes to earn additional master's degrees at Marshall University must make formal application to the department in which the subsequent master's degree is sought. A maximum of 12 semester hours from a prior degree may be applied toward a subsequent master's degree, with the approval of the department from which the subsequent degree is sought. Such approval must be obtained in writing and put on file in the Graduate College Office at the time the student begins the subsequent master's degree program. All applicable coursework must meet time limitations.

### **NON-DEGREE STUDENTS**

- Persons who desire university instruction without becoming graduate degree candidates may attend as non-degree students, provided they have received a bachelor's degree from an accepted, regionally accredited undergraduate college or university.
- Before enrolling in a class, non-degree graduate students must obtain permission from the instructor. Students wishing to take courses offered by the Lewis College of Business must secure approval of the academic 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 who does not hold a master's or higher degree may take a maximum of 15 semester hours. Permission for non-degree students to register for additional hours beyond 15 can be granted by the Dean of the Graduate College or the Dean of the Graduate School of Education and Professional Development.
- Applicants for non-degree status will complete a Graduate Application for Admission, pay the application fee, and have the registrar send an official transcript showing proof of a bachelor's degree from an accepted, regionally accredited undergraduate college or university 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, provided both a transcript showing the undergraduate degree and a transcript showing a master's degree or higher (both from an accepted, regionally accredited college or university) are submitted. All transcripts must be official and sent to Graduate Admissions directly from the registrar.

#### (continued)

• Non-degree graduate students may apply later for admission to degree programs 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 appropriate dean will be counted toward a degree awarded by the university.

# **ONLINE COURSES (See also Technology-Enhanced Courses)**

Online courses are online versions of classes offered on the Marshall campus. They are offered completely over the Internet. Courses are delivered with Blackboard Learning System, Vista Enterprise 8, a set of course tools. Communication between students and instructors can occur by e-mail, discussion forums or chat sessions, and there are no required on-campus or real-time meetings. Online courses generally follow the University calendar for the term in which they are offered, but individual exceptions may apply. Students should check the syllabus for each individual class for a beginning and ending date. Students may register for online courses using myMU during the designated registration periods each term, in person at the Registrar's Office, or by mail. Hours of enrollment are reflected in the actual term in which the student is registered. For all verification purposes, hours of enrollment are counted only in the term in which the student is registered. Note that the withdrawal period for online courses parallels that of regular courses. A student may withdraw from an individual online course through 2/3 of the official course length. After that time, only a complete withdrawal from the university is allowed. The refund policy for online courses also parallels that of regular courses.

Online courses are currently assessed a fee per credit hour for graduate courses, regardless of residency or number of credit hours the student may be registered for in addition to the online courses.

Students may visit *www.marshall.edu/muonline* for complete information on online courses, including technical requirements, student readiness, and course listing.

NOTE: Tuition waivers are not applicable to online courses.

## PLAGIARISM

Plagiarism (submitting as one's own work or creation any oral, graphic, or written material wholly or in part created by another) is a form of academic dishonesty. Sanctions for academic dishonesty may range from an instructor-imposed sanction such as a failing grade in the course in which plagiarism has been documented to dismissal from the university. Refer to the section on Academic Dishonesty for the complete university policy on academic dishonesty.

### PLAN OF STUDY

Each degree-seeking student at the master's or Ed.S. level is required to develop a "Plan of Study" with his or her graduate advisor. The Plan of Study is a student's "blueprint" for completing degree requirements. A student's certification for graduation depends on completion of the Plan of Study.

A Plan of Study approved by the department/program must be submitted for approval to the appropriate dean before the student registers for his or her 12th semester hour. Students who fail to do so will have a hold placed on subsequent enrollment. If changes are made to the Plan of Study, the student's advisor must report those changes to the appropriate dean or to his or her designee. Consult the degree programs section of the catalog for specific information about each program's Plan of Study.

### 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.

# PREREQUISITES

The purpose of prerequisites for certain courses is to assure adequate preparation of the student for the information to be presented in any particular course as well as to insure a coherent, balanced, sequential, and unified set of learning experiences. Course prerequisites may be either previous undergraduate or graduate preparation. In general, course prerequisites will not be waived except by written approval of the instructor and program director or dean.

# PROBATION

See Academic Probation.

### PROGRAM

See Degree Program.

### READMISSION

See Time Limitation

# **REVALIDATION OF COURSEWORK**

See Time Limitation.

### 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 Academic Calendar 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 *Dropping Courses*.

## **SCHOLARSHIPS**

For information on available graduate scholarships see www.marshall.edu/graduate/scholarships.asp.

## SECOND MASTER'S DEGREE

See Dual Degrees, Multiple Degrees.

### SEMESTER HOUR

See Credit Hour.

### 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.

### SENIORS IN GRADUATE COURSES

See Undergraduate Enrollment in Graduate Courses.

### STAFF DEVELOPMENT COURSES

School personnel approved by their county school systems may use a departmental form to be admitted in the Staff Development category. Students admitted in this category are restricted to registering for Staff Development classes (560 series) in the College of Education for which they will receive credit/non-credit or satisfactory/unsatisfactory grades. Such classes cannot be used in degree, professional development or licensure programs. Students who wish to mix regular and Staff Development classes must seek regular admission to the Graduate College.

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

## SYLLABUS POLICY

During the first two weeks of semester classes (or the first 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, internship, and medical clerkship.

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

In many cases, syllabi will be available on the World Wide Web. In the case of an Independent Study, the student must complete the necessary form, obtain the required signatures, and submit it or a permission to enroll form to the Registrar before enrolling.

## **TECHNOLOGY ENHANCED COURSES (T-COURSES)**

T-courses are "technology-enhanced" courses. In these courses at least 80 percent of the course content is delivered by remote electronic means but students will be required to attend face-to-face classes or participate in synchronous class activities for the remaining content. T-courses are identified in the schedule of courses as WebCT courses. Most, but not all, of the T-courses use the Internet as the remote electronic means. T-courses start and end on the same dates as the regular semester courses.

Students may visit *www.marshall.edu/muonline* for complete information on technology enhanced courses, including technical requirements, student readiness, and course listing.

## THESIS

Degree program graduate students may elect the thesis option for the number of credits allowed by each program. 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 who will profit more by doing additional coursework in lieu of a thesis must earn at least 36 course hours of credit in most programs.

When a student decides to prepare a thesis, written notice and approval must be obtained. Notification of approval will come from the appropriate program director, program coordinator, or dean after review and acceptance of a prospectus by the advisor and a thesis committee. The committee should have the same composition as the examining committee for the comprehensive assessment.

- Students graduating with a thesis must register for a cumulative minimum of 3 credit hours of thesis. The maximum amount of credit that may be earned for the thesis is 6 hours for all departments except biology and chemistry. Research and thesis in those two fields are permitted to a maximum of 12 hours. Students in departments other than chemistry register for thesis 681. Chemistry majors register for research 682. The student continues to register for thesis 681 or research 682, as appropriate, 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.
- The thesis must be prepared according to the instructions provided at the Graduate College website, *www.marshall.edu/graduate/etd*, or according to the guidelines (available in the department), which have been approved by the Graduate Dean.
- When the thesis is completed, it is submitted to the advisor and thesis committee for tentative approval. 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 to indicates progress on a thesis, dissertation , or in select research courses.
- A thesis or dissertation approved by a student's committee must be submitted electronically. Full instructions for electronic theses and dissertations (ETD's) are located at: *www.marshall.edu/graduate/etd*.
- Submission of the thesis must occur by the dates printed in the academic calendar of the term in which the student intends to graduate. If the student fails to meet these dates, the Graduate Dean may postpone the student's graduation until the end of the following term.

• The Graduate Dean will review the submitted thesis for style and format; students may be required to make modifications prior to final approval by the Graduate Dean.

#### 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 objectives of a graduate thesis at the master's level include development of the ability to plan and execute a scholarly and/or analytical study and the development of expertise in a specific subject area. The thesis should illustrate that a graduate student has:

- · Comprehended the essentials of a selected subject area;
- Demonstrated understanding of the problem selected;
- Obtained working knowledge of research techniques appropriate to the Master's or Ed.S. degree level;
- Demonstrated the ability to write in a professional and scholarly style;
- Produced a study which is of value to the subject field or professional education.

## **THREE-PLUS-TWO PROGRAMS**

See Integrated Bachelor's and Master's (IBAM) Degree Programs.

## TIME LIMITATION FOR MASTER'S AND ED.S. DEGREES

The time limit for the master's and Ed.S. degrees is *seven years f*rom the date of completion of the earliest course applied toward the degree, including transferred courses.

#### **Time Requirement on Readmission**

If a student has not completed his/her Master's or Ed.S. degree within *seven years* from the end of the first graduate course to be counted toward his/her degree, and if the student has not been enrolled in a course toward that degree for the most-recent one year when that seven-year limit is reached (meaning the seventh year), then the student will be dropped from the program. To continue to work on that degree, the student must reapply for admission to that degree program through the regular graduate admission process, and pay the appropriate admission fees.

#### **Time Extension**

To ensure that a student's knowledge base is current at the time the degree is awarded, all credit that exceeds the time limit must be revalidated.

When a student requests an extension of time, the advisor and program director or department chair should review the program of study, identify coursework which exceeds the time limit, and make a recommendation for revalidation of expired coursework through one or more of the following options: (NOTE: the current fee for course revalidation is \$25/credit hour)

- Option 1: Examination: A validation exam shall be the equivalent to a comprehensive final exam for the course. In most cases, validation must be done by a written exam.
- Option 2: Independent Study: The department or program may elect to design an independent study if no course currently exists by which the student may update course content.
- Option 3: The student may repeat expired coursework.
- Option 4: Additional Hours: The department or program may assign additional hours of course work to ensure currency of knowledge in rapidly changing content areas.
- Option 5: Portfolio that revalidates objectives of course(s) and degree objectives (may include work experiences, thesis or final project)

Decisions about revalidation of credit are forwarded to the graduate dean of the academic unit for approval. When the student has satisfied the conditions imposed for revalidation, the signed Plan of Study with a memorandum from the chair/ program director confirming that the conditions were completed satisfactorily will be forwarded to the graduate dean of the academic unit with the completed application for graduation. The memorandum will include a statement of evidence of completion (e.g., examination, grade report, portfolio).

Outdated courses which are not revalidated will not be used in computing Grade Point Averages for graduation, but they will 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.

## 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. Official transcripts cost \$8.00 per copy. The Office of the Registrar will process transcript requests within 24 to 48 hours of receipt. Processing time may be extended if current term grades and/or graduate posting are required. Students with outstanding financial, social or other obligations to the university forfeit rights to a transcript until the obligations are resolved. Requests for official transcripts must be sent directly to the Office of the Registrar. Students must sign the request to authorize release of the transcript. Students may be accessed using the university's online self-service portal, myMU.

## TRANSFER OF GRADUATE CREDITS

A student with an approved Plan of Study may transfer to Marshall University credit earned in graduate coursework completed at another regionally 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 the advisor and Graduate Dean.

On the master's and education specialist level, transfer credits may not exceed 12 hours.

Graduate credits transferred from other institutions will not become a part of the Grade Point Average recorded on the student's Marshall University transcript and will simply meet credit hour requirements toward graduation.

All transfer credits must have been earned within a seven-year time limit counted from the date of enrollment in the first graduate course to be applied toward meeting degree requirements of the student's program.

## TRANSIENT STUDENTS

A student who is enrolled at another regionally accredited graduate institution may, upon submission to the Graduate Admissions office an admission application and a letter of good standing from the home university, may enroll for Marshall University graduate coursework. 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, by the student, 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.

## **TUITION WAIVER SCHOLARSHIP**

A limited number of Graduate Scholarship Tuition Waivers is available through competitive application to Marshall University students full-time faculty and staff. Priority consideration is given to full-time faculty and staff MU employees.

Tuition waiver application deadlines for each upcoming semester will be posted to the Graduate College website. at *www.marshall.edu/graduate/tuitionwaivers.asp*.

Waivers cover all or a portion of System Capital fees and Educational & General fees. Waivers typically are available for one 3 credit graduate course (e- courses excluded).

Applications are available in the Graduate College office (Old Main 113) on the Huntington campus, through a student's academic department office on the South Charleston campus, or online at *www.marshall.edu/graduate/tuitionwaivers.asp*.

## UNDERGRADUATE STUDENTS IN GRADUATE COURSES

Seniors at accepted, regionally accredited baccalaureate institutions with a cumulative GPA of at least 2.75 may register for graduate classes (500 and 600 series) after they have received approval from their undergraduate dean, the chair of the department offering the course, and the appropriate graduate college/school dean. Complete applications (available at the Graduate College website, the Graduate College office, Old Main 113, or the Graduate Records office on the South Charleston campus), must be on file in the appropriate graduate dean's 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. No more than 12 graduate hours may be taken as an undergraduate.

## WITHDRAWAL FROM THE UNIVERSITY

See Dropping Courses and Completely Withdrawing from the University or Medical Withdrawal.

## WORKSHOPS

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.



# **Degree Programs**

## Elizabeth McDowell Lewis College of Business Dr. Chong W. Kim, Dean www.marshall.edu/lcob

Accountancy, M.S. Business Administration, M.B.A. (including Executive M.B.A. and M.B.A. in India) Health Care Administration, M.S. Human Resource Management, M.S. Doctor of Management Practice in Nurse Anesthesia

Other programs: Business Foundations, Graduate Certificate in Management Foundations

## College of Education and Human Services Dr. Robert Bookwalter, Interim Dean www.marshall.edu/coehs

Adult and Technical Education, M.A., Ed.S. Counseling, M.A. Education, Early Childhood, M.A. Education, Elementary, M.A. Education, Secondary, M.A. Family and Consumer Science, M.A. Reading Education. M.A. Special Education, M.A. Teaching, M.A.T.

Other programs: minor in Adult and Technical Education, graduate certificates, teacher endorsements

#### Graduate School of Education and Professional Development Dr. Teresa Eagle, Dean www.marshall.edu/gsepd

Counseling, MA., Ed.S. Doctor of Education, Ed.D. Education, Early Childhood, M.A. Education, Elementary, M.A. Education, Secondary, M.A. Leadership Studies, M.A., Ed.S. Reading Education, M.A., Ed.S. Special Education, M.A. Teaching, M.A.T.

Other programs: graduate certficates, teacher endorsements

Art, M.A. Music, M.A.

#### College of Health Professions Dr. Michael Prewitt, Dean www.marshall.edu/cohp

Communication Disorders, M.S. Dietetics, M.S. Exercise Science, M.S. Health Informatics, M.S. Nursing, M.S.N. Sport Management, M.S.

Other programs: minors in Exercise Science and Sport Studies, graduate certificates in Family Nurse Practitioner (post master's), Nursing Administration (post master's), Nursing Education (post master's), Dietetic Internship

#### College of Information Technology and Engineering Dr. Betsy Dulin, Dean www.marshall.edu/cite

Engineering, M.S.E. Environmental Science, M.S. Information Systems, M.S. Safety Technology, M.S. Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificate in Information Security and Technology Management

## College of Liberal Arts Dr. David Pittenger, Dean www.marshall.edu/cola

Communication Studies, M.A. Criminal Justice, M.A. English, M.A. Geography, M.A., M.S. History, M.A. Humanities, M.A. Latin, M.A. Political Science, M.A. Psychology, M.A. Doctor of Psychology, Psy.D. Sociology, M.A. Spanish, M.A.

Other programs: minors in Classics, Geography, History, Philosophy, and Sociology; graduate certificates in Appalachian Studies, Applied Linguistics, Behavioral Statistics, Creative Writing, Geospatial Information Science, Latin, Medieval and Renaissance Studies, Women's Studies

## College of Science Dr. Charles Somerville, Dean www.marshall.edu/cos

Biological Sciences, M.S. Chemistry, M.S. Mathematics, M.S. Physical and Applied Science, M.S.

#### W. Page Pitt School of Journalism and Mass Communication Dr. Corley Dennison, Dean www.marshall.edu/sojmc

Journalism, M.A.J.

#### Joan C. Edwards School of Medicine Dr. Charles H. McKown, Dean *musom.marshall.edu*

Biomedical Sciences, M.S., Ph.D. Forensic Science, M.S.



## Program Requirements

## Elizabeth McDowell Lewis College of Business Dr. Chong W. Kim, Dean www.marshall.edu/lcob

## ACCOUNTANCY, M.S.

#### **Program Description**

The Master of Science in Accountancy emphasizes skills necessary to succeed in the profession of public accounting. The program requires 30 semester hours of study.

#### **Admission Requirements**

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website: www.marshall.edu/graduate/admissionsrequirements.asp

Applicants must also:

 Have an undergraduate degree in business from an AACSB accredited institution with an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work; OR

All other applicants may be admitted if they score 500 or better on the Graduate Management Admission Test (GMAT) or if they have an index of at least 1,100 computed by multiplying the undergraduate grade point average by 200 and adding the GMAT score. The minimum acceptable GMAT score is 400.

• All applicants must have completed the following accounting foundations courses or equivalents, each with a grade of *C* or better:

ACC 311	Intermediate Accounting I
ACC 312	Intermediate Accounting II
ACC 318	Cost Accounting
ACC 341	Accounting Information Systems
ACC 348	Federal Taxation
ACC 429	Auditing

#### **Program Requirements**

The following courses must be completed:

#### **Functional Studies**

Course Number	Course Title	Hours
ACC 615	Audit Theory and Practice	3
ACC 617	Advanced Controllership	3
ACC 618	Accounting Research	3
ACC 698	Professional Development and Ethics in Accounting	3
LE 691	Government and Business Relationships	3
MKT 686	IMC for Professional Services	3
MGT 692	Ethics and Global Aspects of Business	3
Accounting elect	ives (any three courses)	9
ACC 544	Consulting for CPAs	
ACC 580-583	Special Topics	

#### (continued)

Degree Program Requirements

ACC 614	Theory of Accounting
ACC 616	Advanced Income Tax Procedure
ACC 650	Special Topics
ACC 660	Independent Study
One of the follow	ving courses may be substituted for one accounting elective:
MKT 682	Advanced Marketing Management
MGT 674	Production/Operations Management
MGT 680	Entrepreneurship

In addition, students with an undergraduate degree other than business must complete a program of study, approved by the Director of the M.S. program, of business subjects to qualify the student to sit for the Uniform CPA Examination and to become licensed as a CPA.

## **BUSINESS ADMINISTRATION, M.B.A.**

## Business Administration, M.B.A. (36-Hour Curriculum)

#### **Program Description**

Qualified candidates are given an 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 to developing 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 which enable the student to continue professional development. The foundation courses required will be determined by the M.B.A. Director and/or the Graduate School of Management Academic Advisor.
- 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.

The program can be completed in 15-18 months, attending on a full-time basis, depending on the candidate's previous training.

The M.B.A. program includes:

	Hours
Business Foundation courses, required as determined	
by the M.B.A. Director and/or the GSM Academic Advisor	0-15
M.B.A. Functional Studies courses	36
TOTAL	36-51

The university and the Lewis College of Business reserve the right, even after the enrollment of students, to make individual curricular adjustments whenever serious deficiencies or needs are found. This may involve additional coursework in speech and/or English whenever necessary. 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.

#### **Admission Requirements**

#### **Full Admission**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *http://www.marshall.edu/graduate/admissionsrequirements.asp.* 

Applicants must also have:

- A bachelor's degree from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 2.5 or higher on a 4.0 scale for all previously completed undergraduate university work;
- A minimum Graduate Management Admissions Test (GMAT) score of \*500 and
- An index of 1000\* computed by multiplying the undergraduate Grade Point Average (GPA) by 200 and adding the GMAT score;

- completion of all foundation coursework through undergraduate preparation with a grade of *B* or better in each undergraduate course or an overall 3.0 GPA in the Business Foundation program;
- required Business Foundations courses or their equivalents must have been completed within seven years of application;
- demonstrated computer literacy.

Applicants meeting all of the above criteria will be fully admitted into the M.B.A. program. This allows them to move immediately into the 36-hour M.B.A. curriculum.

#### **Provisional Admission**

Applicants who have GMAT scores of 500 or better and have met all of the Business Foundation course requirements but whose overall undergraduate GPA is sufficiently low that the index does not equal 1000 may enroll in the 36-hour M.B.A. curriculum as provisional students with the permission of the M.B.A. director.

Applicants who have completed all of the Business Foundation courses with GPA's of 3.00 or better and have GMAT scores between 450 and 500 may enroll in the 36-hour M.B.A. curriculum as provisional students with the permission of the M.B.A. director, if the index is at least 1050.

Applicants who have GMAT scores of 500 or better and who have indexes of 1000 or better, but have no more than two Business Foundation courses to complete, may take no more than two courses from the 36 hour M.B.A. curriculum as provisional students while completing the Business Foundation courses, with the permission of the M.B.A. director.

Students who drop the required Business Foundation courses also will be dropped from the M.B.A. courses. Students accepted into the 3+2 Program may take up to, and no more than, three courses from the 36-hour M.B.A. curriculum as provisional students. Students admitted provisionally for any of the above reasons must earn a grade of *B* or better in each of the first four M.B.A. courses taken and an overall G.P.A. of 3.25 in those four courses to be admitted fully into the 36-hour M.B.A. curriculum.

#### **Program Requirements**

#### Plan of Study

The student and his/her advisor shall prepare a Plan of Study which must be approved during the semester in which the student initially enrolls. A plan should be appropriate to meet the needs of the student in his/her chosen field. It shall include the specific courses the student is expected to complete; and shall also list all other requirements of the program or school. Courses listed on the Plan of Study shall be those judged appropriate by the faculty. Subsequent requests for changes in the plan must be formally approved by the M.B.A. Director or the Academic Advisor. Any deviation from the final Plan of Study and/or discrepancy between it and the student's official transcript will delay graduation. Any Plan of Study that was approved may become void if a student is inactive for one year (unless on an official leave of absence).

#### **Grade Point Average Requirement**

A student must have a 3.0 overall GPA in all program coursework, with no more than two *C*'s in his or her program, In addition the student must maintain a cumulative 3.0 GPA in all courses completed after admission to the degree program, along with any previous Marshall University coursework to be counted toward the current degree. This standard must be met for the student to graduate. If the student falls below these standards, then that student shall be placed on academic probation or will be subject to dismissal from the program.

#### **Comprehensive Assessment**

Degree candidates are required to complete a comprehensive assessment prior to receipt of the master's degree. The timing and form of a student's comprehensive assessment shall be approved in advance by the Director of the Graduate School of Management. The comprehensive assessment is usually a written term paper required within the final, integrated capstone course, MGT 699, "Business Policy and Strategy."

#### **Course Enrollment Policy**

In order to take any 600-level course in the Lewis College of Business, students must be enrolled in a graduate program in the college. On an exception basis, a student not enrolled in an LCOB graduate program may take only one 600- level course with the written approval of the Academic Advisor or the MBA Director. Cooperative programs with other departments must by approved by the MBA Director. It is the responsibility of the student to obtain this approval before attempting to register. Additionally, the student must meet the specific course prerequisites. Students who violate this policy will be administratively withdrawn.

\*For those applicants who elect to use only upper-level (latter half) undergraduate coursework to calculate the index, the index requirement shall be 1050 or greater. For those who already possess a master's degree and elect to use graduate coursework to calculate the index, the index requirement is 1100. *Waiver of Admissions Examination:* Applicants with an earned doctoral degree from a regionally accredited institution are not required to take the GMAT.

#### **Course Requirements**

#### The 36-Hour M.B.A. Curriculum

All students are required to complete 36 hours of M.B.A. Functional Studies courses. These courses must be completed with a GPA of 3.0 (*B* or better) with no more than 2 *C*'s. In addition, each candidate must pass a comprehensive assessment, which is normally a required written term paper within the final, integrated capstone course, MGT 699, "Business Policy and Strategy."

Courses in the M.B.A. Functional Studies

All students in the M.B.A. program must complete these courses:

Course Number	Course Title	Hours
MGT 601	Quantitative Methods for Business	3
ACC 613	Profit Planning and Controls	3
FIN 620	Financial Management	3
MGT 672	Organizational Behavior	3
MKT 682	Advanced Marketing Management	3
LE 691	Government and Business Relationships	3
MIS 678	Management Information Systems	3
ECN 630	Managerial Economics	3
MGT 674	Production/Operations Management	3
MGT 699	Business Policy and Strategy	3
	Business Electives	6
	TOTAL HOURS	36

## **Business Foundations Program**

*NOTE:* The Business Foundations Program is not a degree-granting program. Applicants who do not meet the standards for full admission into the 36-hour M.B.A. curriculum may still be admitted into the Business Foundations program. This program is open to those who have no undergraduate background in business. Participation in this program may be used to meet the requirements for admission into the 36-hour M.B.A. curriculum. There is no GMAT requirement or GPA requirement for admission into the Business Foundations program. Those wishing to complete the 36-hour M.B.A. curriculum, however, must meet the requirements for full admission to the M.B.A. Program. No grade below a *C* will be counted toward the requirements of the M.B.A. program.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *http://www.marshall.edu/graduate/admissionsrequirements.asp.* 

A student admitted to the Business Foundations program may not take a 600-level course without the approval of the GSM Academic Advisor.

All required Business Foundations courses or their equivalents must have been completed within seven years of application:

<i>Courses</i>	<i>Undergraduate Equivalents</i>
Survey of Accounting	Principles of Accounting
Accounting 510	6 Hours
Economic Analysis	Principles of Economics (Micro/Macro)
Economics 501	6 Hours
Finance	Principles of Finance
Finance 510	3 Hours
Statistics/Calculus	Business Statistics
Management 500	3 Hours
Introductory Calculus	3 Hours
Marketing & Management	Principles of Management
Marketing 511	3 Hours

Principles of Marketing	3 Hours
Computer literacy	Computer literacy

## Executive M.B.A.

The Executive M.B.A. is designed for the experienced professional. The Executive M.B.A. is a program which is undertaken as a cohort program where students move through the courses as a group in a set sequence. While admission standards are similar to the M.B.A., students in the Executive M.B.A. usually have a minimum of three years of managerial work experience. Course requirements for the Executive M.B.A. are similar to the M.B.A. except that Executive M.B.A. students are required to complete a foreign study experience. The GMAT could be waived if an applicant has at least five years of significant managerial experience.

The Executive M.B.A. offers an intensive format with courses offered on Saturdays in five/six week blocks. Those interested in the Executive M.B.A. should contact the Executive M.B.A. Director or the Assistant Director, GSM Programs, for further details.

## India M.B.A.

Indian students desiring to apply for the India M.B.A. program should consult the following website for entrance requirements and other program details: *www.bhavan-marshall.org* 

## 3 + 2 Program (B.B.A-M.B.A.)

The 3+2 Program offered by the Lewis College of Business allows students to earn both their Bachelor of Business Administration and Master of Business Administration degrees in a total of five years. Students are allowed to double-count up to nine hours of graduate-level courses from the master's degree toward their bachelor's degree requirements. Please contact the Graduate Academic Advisor for the specific entrance requirements.

## **Graduate Certificate in Management Foundations**

This certificate is designed for students with non-business undergraduate degrees. It is envisioned as a generalist overview of graduate business topics. Students desiring a fully developed master's degree in business should enroll in the MBA program. The Graduate Certificate in Management Foundations will help students to improve their depth of knowledge, remain competitive in the job market, learn new skills, advance their careers, or pursue personal enrichment.

#### Admission

Prospective certificate-only students should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate in Management Foundations.

#### Requirements

A student must have a 3.0 GPA in all coursework with no more than two *C*'s. If the student falls below these standards, the student will be placed on academic probation. A student who successfully completes the series of courses will earn a certificate. The Graduate Certificate in Management Foundations program consists of 15 credit hours.

A student pursuing a certificate must complete the following courses:

Accounting 510: Survey of Accounting Economics 501: Economic Analysis Marketing 511: Marketing and Management Management 500: Statistics/ Calculus Finance 510: Finance

All five courses must be taken; no courses may be waived.

Anyone desiring to enroll in the Management Foundations Certificate Program is encouraged to contact the Graduate Academic Advisor for further information.

## HEALTH CARE ADMINISTRATION, M.S.

#### **Program Description**

The Master of Science in Health Care Administration is designed to provide individuals with a comprehensive perspective of the health care environment. Emphasis is placed on a global view of health care rather than a targeted sector (such as hospitals, nursing homes, etc.) of the industry. Students completing the program frequently pursue employment opportunities in environments ranging from hospitals to medical practices to health insurers/buyers. While the program attracts individuals from all undergraduate disciplines, many of the students have strong clinical backgrounds and are interested in building their management skills with a focus toward their clinical expertise.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www. marshall.edu/graduate/admissionsrequirements.asp.* 

- A bachelor's degree from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 2.5 or higher on a 4.0 scale for all previously completed undergraduate university work
- A minimum Graduate Management Admissions Test (GMAT) score of at least 450 or a minimum on the Graduate Record Examination (GRE) of 860 for tests taken after September 2002\*
- An index of 950 computed by multiplying the undergraduate Grade Point Average (GPA) by 200 and adding the GMAT score or 53% of the total GRE score, and
- Demonstrated computer literacy

#### **Program Requirements**

#### Plan of Study

The student and his/her advisor shall prepare a Plan of Study which must be approved during the semester in which the student initially enrolls. A plan should be appropriate to meet the needs of the student in his/her chosen field. It shall include the specific courses the student is expected to complete; and shall also list all other requirements of the program or school. Courses listed on the Plan of Study shall be those judged appropriate by the faculty. Subsequent requests for changes in the plan must be formally approved by the Academic Advisor. Any deviation from the final Plan of Study and/or discrepancy between it and the student's official transcript will delay graduation. Any Plan of Study that was approved may become void if a student is inactive for one year (unless on an official leave of absence).

#### **Grade Point Average Requirement**

A student must have a 3.0 overall GPA in all program coursework, with no more than two C's in his or her program, In addition the student must maintain a cumulative 3.0 GPA in all courses completed after admission to the degree program, along with any previous Marshall University coursework to be counted toward the current degree. This standard must be met for the student to graduate. If the student falls below these standards, then that student shall be placed on academic probation or will be subject to dismissal from the program.

#### **Comprehensive Assessment**

Degree candidates are required to complete a comprehensive assessment prior to receipt of the master's degree. The timing and form of a student's comprehensive assessment shall be approved in advance by the Director of the Graduate School of Management. The comprehensive assessment is usually a written term paper required within the final, integrated capstone course, MGT 699, "Business Policy and Strategy."

#### **Course Enrollment Policy**

In order to take any 600-level course in the Lewis College of Business, students must be enrolled in a graduate program in the college. On an exception basis, a student not enrolled in an LCOB graduate program may take only one 600- level course with the written approval of the Academic Advisor or the MBA Director. Cooperative programs with other departments must by approved by the MBA Director. It is the responsibility of the student to obtain this approval before attempting to register. Additionally, the student must meet the specific course prerequisites. Students who violate this policy will be administratively withdrawn.

#### **Course Requirements**

Course Number	Course Title	Hours
MKT 511	Marketing and Management	3
HCA 600	The Health Care System	3
HCA 610	Health Care Financial Management	3

\* *Waiver of Admissions Examination:* Applicants with an earned doctoral degree from a regionally accredited institution are not required to take the GRE or GMAT.

HCA 615	Health Care Economics	3
HCA 653	Integrated Delivery Systems	3
HCA 630	Legal Issues in Health Care Management	3
HCA 656	Management of Health Care Technology	
	and Information Systems	3
MGT 620	Human Resource Management	3
HCA 655	Health Care Marketing	3
MGT 672	Organizational Behavior	3
HCA 695	Field Research in Health Care Management	3
MGT 699	Business Policy and Strategy	3
	TOTAL HOURS	36

## HUMAN RESOURCE MANAGEMENT, M.S.

#### **Program Description**

The Master of Science in Human Resource Management degree program is designed to prepare graduates for research and administrative positions in both public and private sector human resource management offices, labor unions, other employee associations, and agencies concerned with employer-employee relations. Graduate instruction is provided in human resource management; in trade unionism and collective bargaining; and in legal and public policy issues which may relate to any of the preceding. These matters are examined academically within the contexts of social, economic, and political considerations; and are analyzed via the theoretical and empirical contributions of the social/behavioral sciences. The study of human resource management is based upon the knowledge and methods developed in a number of traditional areas of study. The major disciplines represented in the program are economics, psychology, sociology, management, and law. Coursework in related fields is available and encouraged.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *http://www.marshall.edu/graduate/admissionsrequirements.asp.* 

- A bachelor's degree from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 2.5 or higher on a 4.0 scale for all previously completed undergraduate university work;
- A minimum Graduate Management Admissions Test (GMAT) score of at least 450 or a minimum on the Graduate Record Examination (GRE) of 860 for tests taken after September 2002;\*
- An index of 950 computed by multiplying the undergraduate Grade Point Average (GPA) by 200 and adding the GMAT score or 53% of the total GRE score; and
- Demonstrated computer literacy.

## **Program Requirements**

#### Plan of Study

The student and his/her advisor shall prepare a Plan of Study which must be approved during the semester in which the student initially enrolls. A plan should be appropriate to meet the needs of the student in his/her chosen field. It shall include the specific courses the student is expected to complete; and shall also list all other requirements of the program or school. Courses listed on the Plan of Study shall be those judged appropriate by the faculty. Subsequent requests for changes in the plan must be formally approved by the Academic Advisor. Any deviation from the final Plan of Study and/or discrepancy between it and the student's official transcript will delay graduation. Any Plan of Study that was approved may become void if a student is inactive for one year (unless on an official leave of absence).

#### **Grade Point Average Requirement**

A student must have a 3.0 overall GPA in all program coursework, with no more than two C's in his or her program, In addition the student must maintain a cumulative 3.0 GPA in all courses completed after admission to the degree program, along with any previous Marshall University coursework to be counted toward the current degree. This standard must be met for the student to graduate. If the student falls below these standards, then that student shall be placed on academic probation or will be subject to dismissal from the program.

#### **Comprehensive Assessment**

Degree candidates are required to complete a comprehensive assessment prior to receipt of the master's degree. The timing and form of a student's comprehensive assessment shall be approved in advance by the Director of the Graduate

\* *Waiver of Admissions Examination:* Applicants with an earned doctoral degree from a regionally accredited institution are not required to take the GRE or GMAT.

School of Management. The comprehensive assessment is usually a written term paper required within the final, integrated capstone course, MGT 696, "Administrative Policy and Strategy."

#### **Course Enrollment Policy**

In order to take any 600-level course in the Lewis College of Business, students must be enrolled in a graduate program in the college. On an exception basis, a student not enrolled in an LCOB graduate program may take only one 600- level course with the written approval of the Academic Advisor or the MBA Director. Cooperative programs with other departments must by approved by the MBA Director. It is the responsibility of the student to obtain this approval before attempting to register. Additionally, the student must meet the specific course prerequisites. Students who violate this policy will be administratively withdrawn.

#### **Course Requirements**

Foun

Core

Foundation courses, required as determined by the Academic Advisor M.S.H.R.M. Core Courses	· 0-6 27
Electives	-1
TOTAL	30-36
ndation Courses (as required)	
Course Number Course Title	Hours
ECN 501 Economic Analysis	3
MKT 511 Marketing and Management	3
Courses (required of all students)	
Course Number Course Title	Hours
HRM 600 Development of Labor Relations	3
HRM 605 Human Resource Economics	3
HRM 610 Negotiation and Dispute Resolution	3 3
MGT 620 Human Resource Management	3
HRM 630 Employment Law	3
HRM 660 Compensation and Benefits	3
MGT 672 Organizational Behavior	3 3 3 3 3
MGT 692 Ethics and Global Aspects of Business	3
MGT 696 Administrative Policy and Strategy	3
Total hours in required Core Courses	27
Elective (as approved by advisor)	3
TOTAL HOURS	30-36

# MANAGEMENT PRACTICE IN NURSE ANESTHESIA DOCTORAL PROGRAM (DMPNA)

The DMPNA is an innovative practice doctorate developed jointly by the Elizabeth McDowell Lewis College of Business and the Charleston Area Medical Center Health Education and Research Institute School of Nurse Anesthesia. The program offers a unique combination of advanced professional nurse anesthesia practice with entrepreneurial business management training.

The 36-month program is delivered in an integrated classroom and clinical format designed to prepare certified registered nurses for a career in the field of nurse anesthesia. At the end of the program, graduates will have completed 127 hours of study and clinical practice as well as a comprehensive doctoral research project. Students attend classes at the Marshall University South Charleston campus as well as CAMC's medical facilities in Charleston.

The program is nationally accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs.

For admission requirements, application, and program information, please see: *www.camcinstitute.org/anesthesia/admission.htm*.

## College of Education and Human Services Dr. Robert Bookwalter, Interim Dean

www.marshall.edu/coehs

## ADULT AND TECHNICAL EDUCATION, M.S.

Areas of Emphasis Adult Education Interdisciplinary Studies Training and Development Occupation Leadership (currently not accepting applications) Teaching English as a Foreign Language (currently not accepting applications)

Education Specialist with Area of Emphasis in Adult and Technical Education, Ed.S. Education Specialist with Area of Emphasis in Adult and Community and Technical College Studies, Ed.S.

#### **Program Description, M.S.**

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 provides the framework for the candidate's Plan of Study: In consultation with the advisor, the student will select an area of emphasis and plan the program. Areas of emphasis available in the Master of Science degree program are:

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

#### Admission Requirements, M.S.

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

Full admission to the program also requires an undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work.

#### Program Requirements, M.S.

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.

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

The required GPA to complete the master's degree is 3.0 (B). Students must pass a written comprehensive assessment during the final semester of their coursework.

#### **Adult Education Area of Emphasis**

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

Minimum Requirements	33-36 hours
Major Field	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 600 Aspects of Training and Development ATE 609 Developing Training in Business and Industry ATE 656 Instructional Planning for Adult Populations ATE 661 Practicum in Adult and Continuing Education ATE 671 Evaluation of Adult and Technical Education

Thesis (6 hours) or Electives (9 hours) ......6-9

Select any academic graduate courses for electives from Adult and Technical Education, 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.

#### **Interdisciplinary Studies Area of Emphasis**

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 adult education, technical education, training and development, and community college teaching. 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.

Elect 15 additional hours of ATE course credit

#### **Training and Development Area of Emphasis**

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, human resources, and safety whose responsibilities include instructional design and preparation of employees for current jobs, future assignments, and/or personal enhancement.

Major Field27
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 661 Practicum in Adult and Continuing Education
ATE 675 or equivalent
Elect 6 hours of additional ATE course credit
Thesis (6 hours) or Electives (9 hours)6-9

Select any academic graduate courses for a minor field from Adult and Technical Education, Communications Studies, Counseling, Instructional Technology, Management, Marketing, Psychology, Safety Technology, or other approved disciplines.

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

#### Ed.S. in Education with Area of Emphasis in Adult and Technical Education

#### **Program Description**

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

#### **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www.marshall.edu/graduate/admissionsrequirements.asp* 

#### **Program Requirements**

All programs must be completed in seven 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
	Core coursework
	(NOTE: credit will not be approved for courses used in a master's program)
	Minor field (approved area of specialization)
	Research Component (ATE 677 or equivalent course by approval)
	Applied Research (Thesis, 6 hours)6
	TOTAL HOURS

- 2. A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.
- 3. Completion of a comprehensive oral examination covering the coursework and thesis. The examination will be administered by three full-time ATE faculty members selected by the student.

#### Ed.S. in Education with Area of Emphasis in Community and Technical College Studies

#### **Program Description**

The Ed.S. Degree program with an area of emphasis in Community and Technical College Studies builds on learners' professional experience and the teaching and learning process. The program incorporates both theory and practical applications, helping learners become stronger, more effective classroom teachers in a community college setting. The program is intended to serve persons who are employed on a full-time basis as Community and Technical College teachers. It is also available to professionals who aspire to become teachers in community and technical colleges. Emphasis on classroom teaching and learning means community college faculty must not only have strong backgrounds in their fields of expertise, but also possess skills in effective instruction. Expectations and accountability in student learning are challenging community college faculty to strengthen their knowledge and skills in the teaching process. The focus of the Ed.S. degree is on the teaching-learning process.

#### **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

#### **Program Requirements**

The program is designed to permit specialization in the field of Community and Technical College Studies. 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, one other member of the program, and the Dean of the Graduate College. Completion of a minimum of 36 hours of planned, approved graduate courses with a 3.25 GPA is required. A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

All programs must be completed in seven years and conform to the following standards:

1.	Core Requirements	15	51	hı	rs	5
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ATE 701 The Community and Technical College

ATE 603 Introduction to Adult Education and Adult Learners

ATE 702 Analysis of Literature on Community and Technical Colleges

following:

	ATE 723 Perspectives and Strategies for Teaching Workforce Education	
	ATE 726 Funding, Planning, and Administrative Issues of Community and Technical Colleges	
2.	Applied Research Component	
	(Required before further advancement in program)	
	ATE 703 Interpretation and Utilization of Applied Research in Community and Technical Colleges	
3.	Professional Seminars in Community and Technical College Studies	
	ATE 707-709 Professional Seminars	
4.	Thesis	
	ATE 781 Thesis	
	(Students must have a written thesis proposal/prospectus approved by the thesis committee prior to enrolling for thesis credit. An oral defense of the completed thesis is required.)	
5.	Professional Support Courses	
	ATE 712 Classroom Assessment for Community and Technical College Students	
	ATE 714 Community and Technical College Curriculum Design	
	ATE 718 Education and Employment Preparation for Diverse Populations	
Tot	al hours for Ed.S. Degree	
Minor in Adult and Technical Education		
	For information on this minor, please contact the Department of Adult and Technical Education.	

#### COUNSELING, M.A.

Areas of Emphasis Correctional Counseling (South Charleston only; see Graduate School of Education and Professional Development [GSEPD]) Marriage, Couple, and Family Counseling (South Charleston only; see GSEPD) Mental Health Counseling (Huntington and South Charleston) School Counseling (Huntington and South Charleston)

Education Specialist with Area of Emphasis in Counseling, Ed.S. (South Charleston only, see GSEPD)

#### Graduate Certificates Domestic Violence Counseling (South Charleston only, see GSEPD) Marriage, Couple, and Family Therapy (South Charleston only, see GSEPD)

## **Program Description, M.A.**

The Master of Arts degree in Counseling is a 60-hour planned program of study designed to meet the necessary competencies of professional counselors, and satisfies the curricular requirements for counselor licensure. There are currently four distinct Areas of Emphasis offered within the Counseling program. Curricular elements consist of core courses required of all counseling majors and emphasis courses specific to: mental health counseling, correctional counseling, school counseling, and marriage, couple and family counseling.

- 1. All core courses are offered on the Huntington and South Charleston campuses.
- 2. Areas of Emphasis in School Counseling and Mental Health Counseling are offered on the Huntington and South Charleston campuses.
- 3. Areas of Emphasis in Correctional Counseling and Marriage, Couple and Family Counseling are offered on the South Charleston campus only.
- 4. The Certificate Programs in Domestic Violence Counseling and Marriage, Couple and Family Therapy are offered through the South Charleston campus only.
- 5. The Ed.S. with an Area of Emphasis in Counseling is offered on the South Charleston campus only.

The Master of Arts degree in Counseling at Marshall University is built upon the training standards and codes of ethics recognized by CACREP (Council for Accreditation of Counseling and Related Educational Programs), ACA (American Counseling Association), and ASCA (American School Counselors Association) and is consistent with the Marshall University School of Education conceptual framework theme of Preparing The Experienced Professional as Specialist. Within this

context it is the mission of the Counseling Program to prepare graduates with the knowledge and skills needed to meet the challenges associated with entry into the field of counseling and into their role as professional counselors. Program graduates are eligible to apply for WV licensure in counseling at the point they complete post-graduate supervision and pass a comprehensive licensure examination.

#### **Admission Requirements**

Admission to the Counseling Program is selective and competitive. Admission decisions for all program applicants are rooted in the specific standards of the Marshall University Graduate College and the minimum standards of the Counseling program. Students are admitted to an Area of Emphasis and must indicate their preferences during the admission application process.

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp* 

Multiple criteria are used in making decisions to admit students to the degree program. Each applicant is evaluated using the following criteria: (all material should be submitted directly to Graduate Admissions):

- GRE score of 800 (quantitative & verbal combined) or MAT scale score of 395 (Raw score 40).
- Undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work.
- Three written references (two from current or former professors)
- Writing sample expressing the applicant's interest in the counseling profession.

Flexibility is maintained in applying the criteria to individual cases. For example, an applicant who does not meet the minimum criteria may be granted provisional admission and be directed to complete a prescribed set of courses. A provisionally admitted student can be reclassified as a fully admitted student no later than completion of the 12<sup>th</sup> credit hour by maintaining a 3.50 GPA in these courses.

#### **Program Requirements**

It is the responsibility of all admitted students to meet with their advisors prior to the beginning of coursework. Each student must complete an advisor-approved Plan of Study prior to registering for the 12<sup>th</sup> credit hour. A minimum Grade Point Average of 3.0 in all degree courses is required prior to enrollment in the practicum, internship, and for graduation

#### **Core Curriculum**

The Master of Arts degree in Counseling is a 60 hour planned program of study designed to meet the necessary competencies of professional counselors. The curricular elements consist of core courses required of all counseling students and emphasis courses specific to: mental health counseling; correctional counseling; marriage, couple & family counseling; and school counseling emphases.

The following 39 semester hours of core courses are required of all students:

	Phase I	
COUN 574	Social & Cultural Foundations	3
COUN 600	Professional Orientation	3
COUN 602	Human Development & Psychopathology	3
EDF 621	Research Writing	3
	Phase II	
COUN 603	Counseling Theories	3
COUN 604	Group Counseling	3
COUN 605	Theory & Practice of Human Appraisal	3
COUN 607	Counseling Techniques & Human Appraisal	3
	Phase III	
COUN 606	Career & Lifestyle Development	3
COUN 608	Practicum	3
	Phase IV	
	Internship	

\*All emphases (60 hours) satisfy the curricular requirements for professional counselor licensure in the State of West Virginia.

## **AREAS OF EMPHASIS (HUNTINGTON)**

#### Mental Health Counseling

In addition to the core courses, students specializing in Mental Health Counseling must complete the following emphasis courses:

PSY 508 COUN 555 COUN 601 COUN 630 COUN 631 COUN 691	Abnormal Psychology Crisis Intervention and Conflict Resolution Counselors in Consulting and Community Roles Introduction to Mental Health Counseling Diagnosis and Treatment Planning Internship: Mental Health Counseling	3 3 3 3 9
00011001	Advisor-Approved Electives	6
	Emphasis total	30
	Total credit hours (including core)	60

#### **School Counseling**

The school counseling curriculum meets 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 school counselors. In addition to the core courses, students specializing in School Counseling must complete the following emphasis courses:

COUN 575	Prevention and Treatment of Addictions	3
COUN 631	Diagnosis and Treatment Planning	3
COUN 632	Introduction to Marriage, Couple,	
	and Family Counseling	3
COUN 670	Interventions: Current Issues in School Counseling	3
COUN 672	Organization and Administration	
	of School Counseling Programs	3
COUN 673	Counseling Children, Parents and Adolescents	3
COUN 675	Legal and Ethical Issues for School Counselors	3
COUN 698	Internship: School Counseling	9
	Emphasis total	30
	Total credit hours (including core)	60

#### **Certification Requirements for School Counselors**

Students in school counseling must meet certification requirements established by the West Virginia Department of Education. All students must pass the Praxis II: Specialty Area Test (formerly the National Teachers Examination) in School Counseling prior to applying for certification. Applications for certification are available in the central offices of the county school systems. An alternative school counseling program certification is available for students without a teacher education background to qualify for West Virginia certification as elementary or secondary school counselors.

Students who do not hold a valid West Virginia teaching certificate (non-education majors) must submit passing scores on the Pre-Professional Skills Tests (PPST) prior to enrollment in courses leading to certification.

Non-education majors must also complete 6 hours of additional coursework from the following:

#### **Alternative Certification Courses**

EDF 665	Sociology of American Schools OR	
LS 532	Human Relations Skills for Leaders	3
CISP 521	Children with Exceptionalities (check with advisor)	3

#### Total Credit Hours with Alternative Certification (including core)66

#### ADDITIONAL ELECTIVE COURSE OPTIONS

(Courses identified as TBA are new courses in the process of being developed.)

Course	Title	Cr. Hrs.
COUN 555	Crisis Intervention and Conflict Resolution	3
COUN 579	Pharmacology in Counseling	3
COUN 611	Foundations of Community Counseling	3

COUN 556	Death and Grief Counseling	3
COUN TBA	Health and Wellness Counseling	3
COUN 577	Stress Management Counseling	3
COUN TBA	Counseling the Blended Family	3
COUN 616	Domestic Violence	3
COUN 617	Seminar in Counseling	1-6
COUN 545	Beginning Manual Communication	3
COUN 554	Advanced Manual Communication	3
COUN 620	Workshop in Counseling	1-6
COUN 621	Introduction to Child Abuse and Neglect	1-3
COUN 622	Parent Education	3
COUN TBA	Issues in Counseling Women	3
COUN 580-583	Special Topics	1-4
COUN 585-588	Independent Study	1-4

## EDUCATION, M.A. Ed.S.

EARLY CHILDHOOD EDUCATION, M.A.

ELEMENTARY, M.A.

**SECONDARY, M.A.** 

EDUCATION, Ed.S.

Areas of Emphasis in Adult and Technical Education, Community and Technical College Studies, Curriculum and Instruction, Reading Education

**READING EDUCATION, M.A.** 

**SPECIAL EDUCATION, M.A.** 

TEACHING, M.A.T.

ELEMENTARY, M.A.

Areas of Emphasis Early Childhood Educational Computing (See Graduate School of Education and Professional Development [GSEPD]) Elementary Science (See GSEPD]) Individualized Plan of Study Instructional Processes and Strategies Literacy, Language and Learning (Dean's approval required) Math through Algebra I (See GSEPD) Middle Childhood Education School Library Media (See GSEPD) Teaching English as a Second Language (See GSEPD)

SECONDARY, M.A.

Areas of Emphasis Educational Computing (See Graduate School of Education and Professional Development [GSEPD] Individualized Plan of Study Instructional Processes and Strategies Math through Algebra I Middle Childhood Education

Teaching Endorsements and Graduate Certificates\* Math through Algebra I\* Educational Computing\* Elementary Science Education\* Instructional Processes and Strategies Middle Childhood Education\* Literacy, Language and Learning

(continued)

Degree Program Requirements

#### Family Literacy\* School Library Media Specialist\* Individualized Plan of Study Post-Baccalaureate Teacher Certificate\*

#### **Teacher Licensure in West Virginia**

With the exception of the Master of Arts in Teaching Program, the master's degree and professional development programs described herein *do not* result in *initial* licensure in West Virginia. Students seeking initial West Virginia licensure are advised to consult with their advisors regarding appropriate programs and courses.

## **Program Description**

The goal of the Elementary and Secondary Education programs is to provide coordinated, sequential programs of study in an identified area of education. These programs provide the educators and those in education-related fields four venues for graduate level professional development:

- 1. Graduate certificate programs,
- 2. Master's degree (M.A.),
- 3. Education Specialist degree (Ed.S.)
- 4. Doctor of Education degree (Ed.D.)

In addition, graduate courses are available outside planned programs to allow professionals to augment their knowledge on topics of current interest or meet individual needs.

The graduate certificate programs provide concentrated, graduate-level study of a specialty. Master's degrees offer a theoretical orientation with a focus on the application of theory to practice. The Education Specialist degree with an Area of Emphasis in Curriculum and Instruction is designed for post-master's professionals who are seeking a planned and structured program of study. Students may elect to be dually enrolled in the Education Specialist program and Doctor of Education in Curriculum and Instruction program. The Doctor of Education in Curriculum and Instruction serves the need of professionals who are seeking a terminal degree in the field. For more information on these post-master's degrees please see individual listings in this catalog.

## Admission Requirements to Master's Programs

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at <u>www.</u> *marshall.edu/graduate/admissionsrequirements.asp.* 

In addition:

- Submit directly to Graduate Admissions your Graduate Record Examinations (GRE) General Test or Miller Analogies Test (MAT) scores; applicants should score 800 or above on the verbal and quantitative sections of the GRE or at least 387 on the MAT.
- Multiple criteria are used in arriving at decisions to admit students to the master's degree programs in Early Childhood, Elementary and Secondary Education. Each applicant is evaluated with reference to the following criteria:
  - 1) undergraduate Grade Point Average;
  - 2) GRE or MAT scores;
  - 3) performance in any prior graduate courses.

## **Elementary Education, M.A.**

Flexibility is maintained in applying the criteria to individual cases. In practice, superior performance in one criterion may compensate for failing to meet the required standard on another. An applicant who does not meet minimum requirements for admission may be granted provisional admission. Provisionally admitted students may be directed to complete certain courses up to 12 credit hours. If a 3.0 GPA is maintained in those courses, then the applicant will be fully admitted to the degree program no later than completion of the 12<sup>th</sup> credit hour.

#### **Plan of Study**

A Plan of Study approved by the student's advisor must be on file before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

#### **Program Requirements**

The Master of Arts in Elementary Education consists of a set of core course requirements, Area of Emphasis requirements, and a capstone experience. All students must complete 15 hours of coursework in research, growth and development, technology, instructional methods and assessment. Each student must also select an Area of Emphasis consisting of 18 hours of required and elective coursework. The capstone experience is the program component through which students demonstrate their ability to synthesize and apply the problem solving, research and writing capabilities developed throughout the program. Students also will meet the comprehensive assessment requirement through the framework of the capstone experience

Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660;
EDF 612 or CI 609 or CI 501; CI 623 or 624 or approved methods course15
Area of Emphasis
Capstone Experience
TOTAL

Areas of Emphasis include (descriptions in separate section on page 90):

Early Childhood Education Instructional Processes and Strategies Literary, Language, and Learning Middle Childhood Education Individualized Plan of Study

#### **Capstone Experience:**

Students may meet the capstone experience requirement by either completing a research project (Final Symposium: CI 659 and CI 680) or satisfactorily completing a written comprehensive examination and six hours of coursework.

## Secondary Education, M.A

#### **Program Requirements**

The Master of Arts in Secondary Education consists of a set of core course requirements, Area of Emphasis requirements, and a capstone experience. All students must complete 15 hours of coursework in research, growth and development, technology, instructional methods and assessment. Each student must also select an Area of Emphasis consisting of 18 hours of required and elective coursework. The capstone experience is the program component through which students demonstrate their ability to synthesize and apply the problem solving, research and writing capabilities developed throughout the program. Students also will meet the comprehensive assessment requirement through the framework of the capstone experience.

Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660;
CI 623 or 624 or approved methods course; EDF 612 or CI 610 or CI 501 15
Area of Emphasis
Capstone Experience
TOTAL

Areas of Emphasis include (descriptions in separate section on page 90):

Instructional Processes and Strategies Middle Childhood Education Individualized Plan of Study

#### **Capstone Experience:**

Students may meet the capstone experience requirement by either completing a portfolio project (Final Symposium: CI 659 and CI 680) or satisfactorily completing a written comprehensive examination and six hours of coursework.

## ADDITIONAL CERTIFICATION FOR TEACHERS

Teachers who want to add another teaching endorsement may do so by completing the course requirements, a performance assessment at the appropriate grade level, and the appropriate Praxis II test.

(continued)

#### Plans of Study for Areas of Emphasis, Professional Development Programs

Plans of study marked with an asterisk (\*) may be used as endorsements for teaching certification. Endorsement programs are available only to teachers who hold a valid professional license in any area other than the one for which endorsement is desired.

Plans of study marked with a plus sign (+) may be used as graduate certificate programs. Certificate coursework may be taken as a stand-alone program.

#### **Certificate Program Admission Requirements**

Prospective certificate-only students should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the certificate they wish to pursue. Education certificate programs require:

- · A baccalaureate degree from a regionally accredited college or university; and
- An undergraduate Grade Point Average (GPA) of 2.50 or higher on a 4.0 scale for all previously completed undergraduate university work OR a Master's Degree.

\*+Early Childhood Education: This concentration combines theory, research, and practical applications to child development and early childhood education. It is designed for teachers who wish to pursue a master's degree with an emphasis in early childhood education, as well as teachers who wish to add a Pre K-K endorsement to their professional licensure. This concentration is available to teachers who hold a valid K-6 or K-8 professional license and wish to pursue a master's degree with an early childhood education emphasis.

CIEC 534, CI 632, CI 633, CI 634, FCS 535, EDF 513, CI 630.

#### **Instructional Processes and Strategies:**

EDF 610, CI 623, CI 624, CIEC 530 or 534, CI 539, CI 551, CI 657, and CI 671.

**Literacy, Language, and Learning:** This combines theory, research, and practical applications in the areas of speaking, listening, writing, and reading. It is designed to help teachers explore literacy within an interactive and student-centered framework. *Dean's approval required*.

CIRG 615, CI 551, CI 539, CI 636, one additional reading course with advisor approval, two electives with advisor approval.

\*+**Middle Childhood Education:** The concentration in middle childhood education provides a certificate endorsement program for elementary and secondary teachers who have met initial licensure requirements. The endorsement will allow teachers to provide instruction in grades 5-9 within their area(s) of specialization.

The coursework in this program may be used as an area of emphasis within the master's degree program in Elementary Education or Secondary Education or may be completed as a separate Professional Development program. Individuals who wish to take the endorsement program but not pursue a master's degree should apply to the Professional Development program in middle childhood education. Teachers selecting this option must have an initial content specialization or complete a new one. Elementary Education is not a content area for 5-9 or 5-12. Passing the Praxis II is required.

CIEC 534, CI 501, CI 503, EDF 502, CI 672

TOTAL ...... 15 hrs.

**Individualized Plan of Study:** Students selecting a planned program must complete the curriculum course CI 501, CI 609, or CI 610 appropriate for their certification.

## **READING EDUCATION, M.A.** Education Specialist with Area of Emphasis in Reading Education, Ed.S.

#### **Program Description**

The Master of Arts in Reading Education consists of six foundation courses, four advanced courses two of which are two practicum experiences, and two elective courses for a total of 36 credit hours.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must have:

- An undergraduate Grade Point Average (GPA) of 2.7 or higher on a 4.0 scale for all previously completed undergraduate university work;
- A valid WV teaching certificate;
- Graduate Record Examinations (GRE) General Test verbal score of 400 or above or a score of 389 on the MAT.
- A minimum of one year of teaching experience or equivalent as a long-term substitute by the time of program completion.

#### **Program Requirements**

Degree candidates follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0. The program of study includes several assessments that are completed as candidates move through the program.

#### **Program of Study**

A Plan of Study approved by the student's advisor must be on file with the Reading Education Program within 30 days of acceptance into the program. The Plan of Study is a student's "blueprint" for completing graduation requirements.

CIRG 636 Developmental Reading CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 653 Literacy Acquisition CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment CIRG 654 Aligning Assessment and Instruction CIRG 643 Teaching Struggling Readers: A Practicum CIRG 623 Reading Instruction for Literacy Facilitators: A Practicum Two electives, chosen in consultation with the program advisor.

This program requires six-hours of supervised practicum and a series of performance assessments completed as candidates move through the program

## Ed.S. with Area of Emphasis in Reading Education

The goal of the Education Specialist (Ed.S.) program is to provide a unified sequence of graduate studies for school and related personnel who wish to achieve proficiency beyond the master's level in Reading Education. Please contact the Reading Education program faculty for additional information.

#### **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

#### **Degree Requirements**

Education Specialist degree (Ed.S.) students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

## **Additional Literacy Endorsements and Certificates for Teachers**

Teachers who want to add another teaching endorsement may do so by completing the course requirements and performance assessments, and the appropriate PRAXIS II test.

The program offers several certificate programs that support Literacy education.

Programs marked with an asterisk (\*) may be used as endorsements for teaching reading. Programs marked with a plus sign (+) may be used as graduate certificates.

#### **Certificate Program Admission Requirements**

Prospective certificate-only students should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate they wish to pursue.

(continued)

## \*Reading Specialist (24 hours)

The Reading Specialist Endorsement is intended for candidates who already hold a master's degree in education and who desire additional training as a literacy specialist. It consists of eight courses, two of which are supervised practicum courses.

#### **Admission Requirements**

- 1. A relevant master's degree, as determined by the Reading Education program, from a regionally accredited college or university
- 2. A valid teaching license.

#### **Program Requirements**

CIRG 636 Developmental Reading CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment CIRG 654 Aligning Assessment and Instruction CIRG 643 Teaching Struggling Readers: A Practicum CIRG 623 Reading Instruction for Literacy Facilitators: A Practicum

This program requires six-hours of supervised practicum and a series of performance assessments completed as candidates move through the program.

## \*Reading Education (18 hours)

The Reading Education certificate is intended for educators who hold an initial teaching license and wish to become highly qualified teachers of reading. It consists of six courses.

#### **Admission Requirements**

- 1. An initial undergraduate degree in education from a regionally accredited college or university; and
- 2. A valid teaching license

#### **Program Requirements**

CIRG 636 Developmental Reading CIRG 653 Literacy Acquisition CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment A series of performance assessments completed as candidates move through the program.

#### +Family Literacy

#### **Admission Requirements**

A relevant undergraduate degree, as determined by the Reading Education program, from a regionally accredited college or university is needed for admission to the program.

#### **Program Requirements**

CIRG 653 Literacy Acquisition CIRG 651 Principles of Family Literacy CIRG 652 Implementing and Evaluating a Family Literacy Program CI 634 Language and Cognition in Early Childhood

#### **Professional Development Students**

A student who holds a master's degree in education and seeks a Reading Specialist endorsement to the teaching certification completes 24 credit hours within the Reading program. Students should contact the Reading Education program area for information.

## SPECIAL EDUCATION, M.A.

#### Areas of Emphasis Autism Deaf and Hard of Hearing (see Graduate School of Education and Professional Development [GSEPD]) Gifted Multi-Categorical Special Education Preschool Special Education Teaching Visually Impaired (see GSEPD)

#### **Admission Requirements**

All applicants (including those seeking admission as professional development (certification only), should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

Applicants must:

- Have an undergraduate Grade Point Average (GPA) of 2.50 or higher on a 4.0 scale for all previously completed undergraduate university work.
- Meet one of the following two requirements:
  - A total of 800 on the verbal and quantitative sections of the Graduate Record Examinations (GRE) or
  - A raw score of at least 30 or a scaled score of 378 on the Miller Analogies Test (MAT)

#### **Program Requirements**

A master's degree may be earned with a specialization in any of the Areas of Emphasis listed below. Students without a background in education must acquire certification in regular education prior to endorsement in Special Education, or they can enter the Alternative Certification Program (see Section 6). The Preschool Special Education endorsement is exempt from this requirement.

#### **Plan of Study**

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

## **Program Requirements**

1.	Master's Degree Requirements (Preschool Special Education, see #5)
	CISP 611 and CISP 615 6 hrs.
	CISP 627 or CISP 629
2.	Special Education Core:
	CIEC 534, CISP 606, CISP 607, CIRG 644, CISP 626 (CIEC 534, CIRG 644, CISP 606, and CISP 607 are not required for the degree in gifted)15 hrs.
3.	Certification Area (select one)
	Autism CISP 527, 662, 664
	Behavioral Disorders CISP 645, 649
	Deaf and Hard of Hearing (special education core not required) Two of three required: CIDH 501, 502, and 503 All required: CIDH 504, 505, 506, 601, 602, 607, CISP 607, CIEC 534
	Gifted CISP 526, 601, 602, 603
	Vision Impaired (special education core not required) CIVI 500, 501, 502, 503, 504, 600, 601, 602, 603
	Multicategorical CISP 553, 647, 645, 655
4.	Electives
	Total hours
	(continued)

5. Preschool Special Education

General Education: EDF 621 or 625 and CISP 627 or 629	. 6 hrs.
Early Childhood Education: CI 632 and 634	. 6 hrs.
Special Education: CISP 520, 529, 554, 661, 663, 665, 666, 674	27 hrs.
	1 1

Due to the nature of a student's undergraduate program the total required in Preschool Special Education may only be 36.

#### 

#### 6. Alternative Certification Program

The Alternative Certification Program is designed to allow candidates from non-education backgrounds to obtain West Virginia teacher licensure in Visual Impairments, Multicategorical, and Autism at the 5-Adult level. The alternative program does not include a general education teaching endorsement.

Students must meet all Special Education Program admission requirements. In addition to the general Special Education Admission requirements, applicants must pass the Praxis I (Pre-Professional Skills Test) in Reading, Mathematics, and Writing within their first twelve hours of coursework. The Praxis I requirement is waived for applicants with an enhanced ACT score of 26 or higher, a re-centered SAT score of 1125 or higher or if the applicant holds a master's degree.

Current West Virginia Department of Education initial certification requirements also require a minimum overall GPA of 2.5, as well as a 2.5 GPA in the content specialization area. Candidates in the Alternative Certification program must also meet the WVDE Praxis II testing requirements including the Principles of Learning and Teaching (PLT) test at the 5-9 or 7-12 levels.

In addition to the Special Education Core and Certification Area course requirements, students in the Alternative Certification program must complete EDF 619 and EDF 616 for certification. Additional master's degree requirements are the same as for all other Special Education master's degree programs.

7. Additional Certification Requirements

All Special Education majors must pass the Praxis II Test in the area(s) in which they seek endorsement. The Special Education Content Specialization Test is taken at or near the end of the certification coursework in Special Education. Students should contact the Special Education Program Area for additional information about these tests.

## **Special Note**

The reauthorization of the Individuals with Disabilities Education Act (IDEA) has strengthened the requirements in the definition of "highly qualified" for special education teachers if they provide direct instruction in core academic subject areas (English, mathematics, science, etc.). Applicants' transcripts and teacher licenses will be analyzed upon admission to determine what, if any, additional coursework may be required to meet the federal requirements.

## TEACHING, M.A.T. Post-Baccalaureate Teacher Certificate

## **Program Description: Master of Arts in Teaching**

The Master of Arts in Teaching (M.A.T.) degree program is an alternative means for college graduates with degrees in liberal arts, fine arts, business, and professional fields to attain teacher certification. The program provides the professional education courses and clinical experiences, including student teaching, necessary to prepare individuals for teaching a specific content area in grades PreK-Adult, 5-Adult or 9-Adult. Program completion results in the awarding of a Master of Arts in Teaching degree. Recommendation for certification typically takes place at the same time, unless there are West Virginia Department of Education requirements still pending. Please note that the M.A.T. program does not offer certification in Elementary Education.

## Admission and Program Requirements: Master of Arts in Teaching

Candidates must request a transcript analysis through a certification officer either in Huntington or South Charleston. An unofficial copy of the transcript may be used for the analysis. The analysis will identify the courses that can be used to meet content licensure requirements and the list of additional courses needed. Candidates must have at least 50% of the required content courses.

1. Candidates deciding to apply to the program after reviewing the transcript analysis should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp.* Please note that all admissions documents must be submitted to Graduate Admissions before an applicant will be considered for admission.

- 2. In addition to university admission requirements, applicants must have an undergraduate Grade Point Average (GPA) of 2.70 or higher on a 4.0 scale for all previously completed undergraduate coursework and a GPA of 2.70 in the content area, must meet the Praxis I, Pre-Professional Skills Test (PPST) requirement, must submit Graduate Record (GRE) or Miller Analogies Test (MAT) scores with a required minimum total score of 800 on the GRE (verbal and quantitative sections) or a minimum score of 387 on the MAT.
- 3. An applicant may qualify for an exemption of the Praxis I if he or she has an enhanced ACT score of 26 or higher, a recentered SAT score of 1125 or higher, or a master's degree or higher.
- 4. Applicants must take and pass all three subtests (reading, writing and math) of the Praxis I prior to being admitted to the PBC program. The required Praxis I scores are Reading = 174, Writing =172, and Math = 172.
- 5. Students may enroll in graduate courses only after they have been fully admitted to the university and the MAT program. All students must maintain a cumulative Grade Point Average of 3.0.
- 6. A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.
- 7. In the last semester of the program students will be enrolled in EDF 677, MAT Level III Clinical Experience, a 15 week, full-time student teaching experience under the direct supervision of a certified teacher(s). Prerequisites for student teaching include the following: 3.0 GPA in all graduate MAT courses; completion of at least 90% of content courses (100% recommended); completion of EDF 537 and EDF 637, Level I and II Clinical Experiences; completion of all MAT coursework and the Praxis II content test(s)
- 8. Candidates must apply to take and pass the comprehensive examination prior to the completion of student teaching and graduation.
- 9. Before a candidate may apply for certification/licensure, he or she must take and pass the PRAXIS II, Principles of Learning and Teaching (PLT) Grades 7-12. The PLT may be taken during or following the final semester in the MAT program.
- 10. Upon completion of the MAT program and all testing requirements, the student should apply for licensure. The teaching license is awarded by the West Virginia Department of Education; however, the candidate must be recommended for licensure by the institution.

#### Program Options and Degree Requirements: Master of Arts in Teaching

- 1. Master of Arts in Teaching Grades PreK-Adult
  - Art Education
  - Physical Education
  - Music Education

Foundations of Education and Technology...... 15 Hours

EDF 621 or 625, Research and Writing	
EDF 660, 665, or 615 - Social and Cultural Foundations	
EDF 616, Advanced Studies in Human Development	
OR EDF 619, Educational Psychology	
EDF 537, Clinical I - Lab to accompany EDF 616 or EDF 6190	
CIEC 530, 534, 600, or 660, Instructional Technology	
EDF 612 or 535, Educational Evaluation or Classroom Assessment3	

CI 503, Methods and Materials	
of Teaching in the Middle Childhood Grades	
CISP 510, Intro. to Instructional Practices/Exceptional Children3	
CISP 521, Children with Exceptionalities	
CI 515, Integrated Methods and Materials	
EDF 637, Clinical II - Lab to accompany CI 5150	
CI 624, Advanced Instructional Strategies	
CI 631, Current Influences on Early Childhood	
CIRG 644, Literacy in the Content Area	
*EDF 677, Clinical III - Student Teaching	

In addition to the above courses, students must also complete all courses in their teaching specialization.

\*Requires minimum of 90% completion of content courses.

#### 2. Master of Arts in Teaching - Grades 5-Adult

- Athletic Training (second certification area only)
- Business Education
- Family and Consumer Science
- French
- English
- Health Education (second certification area only)
- Latin (second certification area only)
- Mathematics
- Oral Communications (Speech) (second certification area only)
- Physical Education
- General Science
- Social Studies
- Spanish

Foundations of Education and Technology	15 Hours
EDF 621 or 625, Research and Writing3	
EDF 660, 665, or 615 - Social and Cultural Foundations	
EDF 616, Advanced Studies in Human Development	
OR EDF 619, Educational Psychology	
EDF 537, Clinical I - Lab to accompany EDF 616 or 6190	
CIEC 530, 534, 600, or 660, Instructional Technology	
EDF 612 or 535, Educational Evaluation or Classroom Assessment3	
urriculum and Instruction	24 Hours

Curriculum and Instruction	. 24 Hours
CI 501, Middle Childhood Curriculum3	
CI 503, Methods and Materials of Teaching	
in the Middle Childhood Grades3	
CISP 510, Intro. to Instructional Practices/Exceptional Children3	
CISP 521, Children with Exceptionalities	
CI 515, Integrated Methods and Materials3	
EDF 637, Clinical II - Lab to accompany CI 5150	
CI 624, Advanced Instructional Strategies3	
CIRG 644, Literacy in the Content Area3	
*EDF 677, Clinical III - Student Teaching	

In addition to the above courses, students must also complete all courses in their teaching specialization.

\*Requires minimum of 90% completion of content courses and passing score on Praxis II content exam.

- 3. Master of Arts in Teaching Grades 9-Adult
  - Biology
  - Chemistry
  - Journalism (second certification area only)
  - Marketing Education
  - Physics

Foundations of Education and Technology	15 Hours
EDF 621 or 625, Research and Writing3 EDF 660, 665, or 615 - Social and Cultural Foundations	
EDF 616, Advanced Studies in Human Development	
OR EDF 619, Educational Psychology EDF 537, Clinical I - Lab to accompany EDF 616 or 6190	
CIEC 530, 534, 600, or 660, Instructional Technology	
Curriculum and Instruction	24 Hours
CISP 510 Intro to Instructional Practices / Excentional Children 2	24 110u15

CISP 510, Intro. to Instructional Practices/Exceptional Children ..3

CISP 521, Children with Exceptionalities
CI 515, Integrated Methods and Materials: Secondary Education3
EDF 637, Clinical II, Lab to accompany CI 5150
CI 624, Advanced Instructional Strategies
CIRG 644, Literacy in the Content Area
CI 549, Instructional and Classroom Management
in Secondary Education
EDF or CI Elective
*EDF 677, Clinical III - Student Teaching

In addition to the above courses, students must also complete all courses in their teaching specialization.

#### 

\*Requires minimum of 90% completion of content courses and passing score on Praxis II content exam.

#### Post -Baccalaureate Teacher Certificate Program

In West Virginia the license to teach is granted by the West Virginia Department of Education and is typically issued upon the completion of a four-year undergraduate program of study that included content and professional education courses. The Post-Baccalaureate Teacher Certificate (PBC) program offers an accelerated route to teacher certification for persons who already have undergraduate degrees in content areas such as chemistry, music, French, and other liberal and fine arts, business or professional fields. Using the previously completed content courses as a foundation, this program provides the required professional education courses at the graduate level. Additional undergraduate classes may be needed in the content area.

Upon successful completion of the PBC program, all content courses, and testing requirements, the candidate earns a recommendation to the West Virginia Department of Education for a teaching certificate at the secondary level and is eligible to apply for a certificate from the university. The PBC does not include Elementary Education or Special Education certification.

#### Admission to PBC and Licensure Requirements

- 1. Candidates must request a transcript analysis through a certification officer either in Huntington or South Charleston. An unofficial copy of the transcript may be used for the analysis. The analysis will identify the courses that can be used to meet content licensure requirements and the list of additional courses needed. Candidates must have at least 90% of the required content courses.
- Candidates deciding to apply to the program after reviewing the transcript analysis should follow the admissions
  process described in this catalog or at the Graduate Admissions website at www.marshall.edu/graduate/
  admissionsrequirements.asp.
   Students should apply as a Certificate/Professional Development student and select the Post-Baccalaureate Teacher
  Certificate on the admissions form. Please note that all admissions documents must be submitted to Graduate Admissions
  before an applicant will be considered for admission.
- 3. In addition to university admissions requirements, applicants must have an overall undergraduate GPA of 2.70 and a GPA of 2.70 in the content area, and must meet meeting the Praxis I, Pre-Professional Skills Test (PPST) requirement.
- 4. An applicant may qualify for an exemption of the PPST if he or she has an enhanced ACT score of 26 or higher, a recentered SAT score of 1125 or higher, or a master's degree or higher.
- 5. Applicants must take and pass all three subtests (reading, writing and math) of the PPST prior to being admitted to the PBC program. The required PPST scores are Reading = 174, Writing = 172, and Math = 172.
- 6. Students may enroll in graduate courses only after they have been fully admitted to the PBC program. All students must maintain a cumulative Grade Point Average of 3.0.
- 7. In the last semester of the program students will be enrolled in EDF 677, MAT Level III Clinical Experience, a 15 week, full-time student teaching experience under the direct supervision of a certified teacher(s). Prerequisites for student teaching include the following: 3.0 GPA in all graduate PBC courses; completion of at least 90% of content courses (100% recommended); completion of EDF 537 and EDF 637, Level I and II Clinical Experiences; completion of all PBC coursework and the Praxis II content test(s).
- 8. Before a candidate may apply for certification/licensure, he or she must take and pass the PRAXIS II, Principles of Learning and Teaching (PLT) Grades 7-12. The PLT may be taken during or following the final semester in the PBC program.

(continued)

9. Upon completion of the PBC program and all testing requirements, the student should apply for licensure. The teaching license is awarded by the West Virginia Department of Education; however, the candidate must be recommended for licensure by the institution

#### **Program Requirements**

Foundations of Education	6 hours
EDF 619 or EDF 616	3 hours
EDF 537	0 hours
EDF 612 or EDF 535	3 hours
Curriculum and Instruction	
CISP 510	3 hours
CISP 521	
CIRG 644	3 hours
CI 515 or Specialized Methods Course	3 hours
EDF 637	0 hours
Technology	3 Hours
CIEC 530 or CIEC 534 or CIEC 600 or CIEC 660	
Supervised Student Teaching	3 Hours
EDF 677	
Total	24 Hours

*Eligibility for Student Teaching:* Students must successfully complete the courses listed above, the appropriate Praxis II content knowledge test(s), and have 90% of their content requirements completed prior to enrolling for supervised student teaching.

*Eligibility for Licensure:* Students must meet content requirements, professional education requirements, and testing requirements. Testing requirements include the appropriate Praxis II content knowledge test(s), and the Principles of Learning and Teaching. Students who apply for licensure from the West Virginia Department of Education are required to submit to the department a fingerprint card for federal and state background checks.

#### **Certification Options:**

Art Education, grades PreK-Adult Athletic Training, grades 5-Adult (must be taken with another certification area) Biological Science, grades 9-Adult Business Education, grades 5-Adult Chemistry, grades 9-Adult English, grades 5-Adult Family and Consumer Science, grades 5-Adult French, grades 5-Adult General Science, grades 5-Adult Health, grades 5-Adult (must be taken with another certification area) Journalism, grades 9-Adult (must be taken with another certification area) Latin, grades 5-Adult (must be taken with another certification area) Marketing Education, grades 9-Adult Mathematics, grades 5-Adult Music, grades PreK-Adult Oral Communications, grades 5-Adult (must be taken with another certification area) Physics, grades 9-Adult Physical Education, grades PreK-Adult Social Studies, grades 5-Adult Spanish, grades 5-Adult

## FAMILY AND CONSUMER SCIENCES

Interested persons should please call the College of Education and Human Services at 304-696-3131

## College of Fine Arts Mr. Donald Van Horn, Dean www.marshall.edu/cofa

## ART, M.A.

(The Art Education Area of Emphasis is currently not accepting applications).

The Department of Art and Design offers the M.A. in Art with a 36-hour concentration in studio art with options in the following areas of study: ceramics, sculpture, graphic design, painting, photography, printmaking, or fibers.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must submit to Graduate Admissions:

- 1. GRE scores.
- 2. A portfolio with twenty representative examples of the applicant's artwork that includes a digital archive with a numbered image sheet listing work title, medium, and size.
- 3. A writing sample consisting of an artist's statement of 500-700 words.
- 4. Letter of application addressed to the department chair.
- 5. Three letters of reference in sealed and signed envelopes.

Applicants whose transcripts, portfolio, or writing samples indicate lack of adequate preparation for graduate study in Art and Design are required to do preliminary coursework to address the deficiencies.

#### Applicant's portfolio and writing sample

Faculty members in the studio concentration will review the applicant's portfolio and submit a letter of recommendation to the graduate committee. The graduate committee will decide whether to accept the student based on its review of the portfolio, writing sample, and transcripts.

#### Courses Prerequisite to Graduate Study in Art and Design for those not completing a Bachelor's in Art

One year of developmental undergraduate courses for those lacking undergraduate degrees in art who wish to pursue graduate study in art will consist of a minimum of:

- A minimum of two courses from the following studio courses (selected in consultation with the graduate advisor): ART 214, 215, 217, 218, 219, 406 or 418 and,
- Art History 201 and 202
- Two courses in proposed area of studio concentration.

These courses will not be converted or substituted for graduate credit.

Prospective students who have completed comparable courses as undergraduates may substitute that work for some of these requirements in consultation with the chair or graduate coordinator.

At completion of the minimum of 18 hours of coursework, a portfolio and writing sample must be submitted to the graduate committee for review.

#### **Graduate Assistantships**

An applicant who wishes to be considered for an assistantship should contact the Department of Art and Design office, obtain the appropriate form, and schedule an interview with the department chair.

#### **Program Requirements**

#### **General Requirements**

- Each student will have a committee for the purposes of advising and reading the comprehensive examination. The student will select two faculty members plus the graduate coordinator or chair of the Department of Art and Design.
- All students are required to complete three semesters of ART 500, Co-Curricular Experiences.

#### (continued)

Degree Program Requirements

- A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.
- All students in studio areas are required to undergo a review of their artwork after completing 9 hours of work. Students must pass this review before registering for additional studio courses. All students in studio areas are additionally required to undergo an 18-hour review. Dates for both the 9-hour and 18-hour reviews are posted every semester in the Art and Design office.
- Transfer students must complete a minimum of 30 hours toward the degree in courses in the Marshall University Department of Art and Design.
- All students seeking an M.A. degree in art must pass a written comprehensive examination prior to graduation.
- All students in studio concentrations are required to exhibit art and design work completed at Marshall University, in the Birke Art Gallery, prior to graduation.
- Art and design majors may not take Art 507 as an art history credit toward their graduate degrees

#### **Studio Art Concentration**

The degree of Master of Arts in Art, with a concentration in Studio Art, requires a minimum of thirty-six credit hours. General Graduate College admission requirements must be fulfilled. It is suggested that applicants contact a studio faculty member in the area of concentration they wish to pursue if they have questions about the program. An exhibition of completed artwork is required.

Minimum Course Requirements	
Studio area	
Art History	6-9 hours
Seminar (ART 670)	
Electives in courses selected in consultation with advisor	6-9 hours

## MUSIC, M.A.

Areas of Emphasis:
Music Composition
<b>Music Education</b>
Music History/Literature
Music Performance

#### **Program Description**

The mission of the Department of Music is to prepare students for careers in performance, education, and other musicrelated fields who will make a positive impact on their artistic discipline and on schools and communities. Additionally, the Department will provide enriching experiences for those who will continue their musical activities as an avocation; and to cultivate within the region an increased awareness of the educational, cultural, and aesthetic aspects of music. In fulfilling its mission, the department is committed to the following goals:

- To provide a nurturing environment for musical, academic and personal growth;
- To educate students to think critically, work creatively, communicate effectively, and become technologically literate;
- To function as a visible, responsible and responsive student-centered department dedicated to academic excellence;
- To maintain a faculty of musicians/teachers who, through dedication to excellence, sound pedagogy and effective communication skills, present models that inspire students to achieve their full potential;
- To meet educational, research, and service needs of the region through collaboration with academic and technical institutions, businesses, government agencies, and cultural organizations;
- To contribute to the cultural life of the university and community by providing concerts, recitals, festivals, joint musical ventures and other services;
- To provide leadership within the university and the region in all matters pertaining to music.

The Department of Music offers the following areas of emphasis within the Master of Arts degree: Music Education, Applied Music Performance, Music History and Literature, and Music Composition. Programs require 32 to 36 hours (thesis or non-thesis options).

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must:

- Have a bachelor's degree from an accredited institution with a major in music or the equivalent.
- Submit an application to the Department of Music at *www.marshall.edu/cofa/music/documents/Graduate\_ Application.pdf*
- Have an interview with the Department Chair, Graduate Coordinator, and other graduate faculty.
- Have an audition on the major instrument (Performance) or a portfolio of previous academic work and/or professional work (Composition, Music Education, Music History).

Potential graduate students should contact the Department of Music Graduate Coordinator for more specific information.

#### **Placement Examinations**

Students in all graduate music degree areas of emphasis must complete a placement examination in music theory and piano prior to the end of the first semester of study. Preparatory classes are available for students needing assistance. Any hours attained in these classes (graduate class piano and graduate theory review) do not count toward degree completion.

#### **Comprehensive Examinations/Applied Study**

All graduate students, regardless of area of emphasis, must complete both written and oral comprehensive examinations. Requirements for performance levels in applied music can be found in the Department of Music Handbook.

#### **Thesis Option**

Students may choose the thesis or non-thesis option in select areas of emphasis. The thesis may take the form of a written report, graduate recital, and/or a musical composition as determined by one's graduate committee. Ordinarily, no more than 3-4 hours may be earned through work on a thesis.

#### **Ensemble Participation**

As recommended by their major advisors, all full-time graduate students may be required to participate in a music ensemble during the regular academic year. Credit will be awarded up to the amount listed in each degree program.

#### **Degree Requirements**

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

#### Master of Arts with Emphasis in Music Education - Thesis Option (32 credits)

Required Courses: (18 credits)

MUS 622, Styles and Analysis (3) MUS 610, History and Philosophy of Music Education (3) MUS 611, Music Psychology and Learning Theory (3) MUS 616, Curriculum and Administration (3) MUS 621, Music Research Methods (3) MUS 681, Thesis (3)

Specialization (8-10 credits)

MUS 511, Introduction to Orff (3) MUS 615, Advanced Marching Band Techniques (3) MUS 620A, Instrumental Techniques and Materials (3) MUS 630A, Instrumental Conducting (2) MUS 630B, Instrumental Conducting (2) MUS 604D, Choral Literature (2) MUS 619A, Vocal Pedagogy (2) MUS 620B, Choral Techniques and Materials (3) MUS 629A, Choral Conducting (2) MUS 629B, Choral Conducting (2)

*(continued)* 

MUS 670, Current Trends in Music Education (PreK-5) (3) MUS 675, Music in Early Childhood (Birth to Age 5) (3)

Electives (2-6 credits) to be selected from:

Graduate Music Courses 1-4 credits in Applied Music 1-2 credits in ensembles Graduate COEHS courses

#### Master of Arts with Emphasis in Music Education - Non-Thesis Option (36 credits)

Required Courses: (15 credits)

MUS 622, Styles and Analysis (3) MUS 610, History and Philosophy of Music Education (3) MUS 611, Music Psychology and Learning Theory (3) MUS 616, Curriculum and Administration (3) MUS 621, Music Research Methods (3)

#### Specialization (12-20 credits)

MUS 511, Introduction to Orff (3) MUS 615, Advanced Marching Band Techniques (3) MUS 620A, Instrumental Techniques and Materials (3) MUS 630A, Instrumental Conducting (2) MUS 630B, Instrumental Conducting (2) MUS 604D, Choral Literature (2) MUS 619A, Vocal Pedagogy (2) MUS 620B, Choral Techniques and Materials (3) MUS 629A, Choral Conducting (2) MUS 629B, Choral Conducting (2) MUS 670, Current Trends in Music Education (PreK-5) (3) MUS 675, Music in Early Childhood (Birth to Age 5) (3)

#### Electives (1-9 credits)

Graduate Music Courses 1-4 credits in Applied Music 1-2 credits in ensembles Graduate COEHS courses

#### Master of Arts with Emphasis in Music History/Literature - Thesis Option (32 credits)

Required Courses (26 credits) MUS 622, Styles and Analysis (3) MUS 612, Projects and Problems in Music (2) MUS 621, Music Research Methods (3) MUS 640A, Music Theory (3) 4 Music History period courses (12 credits) to be chosen from: MUS 510, MUS 526, MUS 650, MUS 651, MUS 652, MUS 653, MUS 654, MUS 655 MUS 681, Thesis (3)

#### Electives (6 credits)

Graduate Music Courses 1-4 credits in Applied Music 1-2 credits in ensembles

\* Students without reading knowledge in German are encouraged to complete appropriate undergraduate courses.

#### Master of Arts with Emphasis in Music History/Literature - Non-Thesis Option (36 credits)

Required Courses (23 credits) MUS 622, Styles and Analysis (3) MUS 612, Projects and Problems in Music (2) MUS 621, Music Research Methods (3) MUS 640A, Music Theory (3) 4 Music History period courses (12 credits) to be chosen from: MUS 510, MUS 526, MUS 650, MUS 651, MUS 652, MUS 653, MUS 654, MUS 655 Music Electives (7 credits)

Graduate Music Courses 1-4 credits in Applied Music 1-2 credits in ensembles

Non-Music Electives (6 credits)

May be chosen in consultation with advisor from the following areas: Art, Classics, English, Humanities, Languages, Philosophy, Religious Studies, Sociology, Theater

\* Students without reading knowledge in German are encouraged to complete appropriate undergraduate courses.

#### Master of Arts with Emphasis in Music Performance (32 credits)

Required Courses (25 credits) MUS 622, Styles and Analysis (3) MUS 621, Music Research Methods (3) MUS 640A, Music Theory (3) Applied Music (8) MUS 604, Literature Courses in Principal Applied Area (2) Graduate History Course (3) MUS 681, Thesis-Recital (3)

Instrumental Track Electives (7 credits) Graduate Music Courses 1-2 Graduate Ensemble Courses

Vocal Track Electives (7 credits) MUS 619A, Vocal Pedagogy (2) 2 Graduate Ensemble Credits Graduate Music Courses

\*Voice performance majors with fewer than 2 semesters study of French, German, or Italian must complete 2 semesters of undergraduate study in one of those languages.

\*\* Students must follow departmental policies in preparing and presenting the graduate performance recital.

#### Master of Arts with an Emphasis in Music Composition (32 credits)

Required Courses (28 credits) MUS 532, Electronic Music (2) MUS 622, Styles and Analysis (3) MUS 621, Music Research Methods (3) MUS 640A, Music Theory (3) MUS 641, Counterpoint (3) MUS 655, Music Since 1900 (3) MUS 645, Composition (8) MUS 681, Thesis-Recital (3)

Electives (4 credits)

MUS 640B, Music Theory (3) MUS 646, Choral Arranging (3) MUS 647, Instrumental Arranging (3) MUS 648, Orchestration (3) MUS 649, Advanced Jazz Arranging (3) Additional courses from applied, history, theory, technology 1-4 credits in Applied Music 1-2 credits in ensembles

\* Students must follow departmental policies in preparing and presenting the graduate performance recital.

## **COMMUNICATION DISORDERS, M.S.**

## **Program Description**

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.S. degree. Communication Disorders 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 Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must also meet these requirements and provide this documentation to the Office of Graduate Admissions by February 1.

- 1. An undergraduate major or the equivalent in Communication Disorders is required. Students with deficits in undergraduate coursework or those wishing public school certification may need to complete additional requirements after admission.
- 2. An overall and communication disorders Grade Point Average of at least 3.0 is required for full-time admission.
- 3. GRE Scores.
- 4. 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. All letters must be submitted to the Communication Disorders Department *with the program application*, and must be submitted in sealed envelopes with the recommender's signature across the flap. At least one letter must be from one of the applicant's classroom instructors in communication disorders. Additionally, if the undergraduate program included a clinical practicum, at least one letter must be from a clinical supervisor.
- 5. Students with undergraduate degrees from Marshall University must submit the names of three faculty who will serve as references.

A separate application form for the Graduate Program in Communication Disorders (available from the Communication Disorders department) must be submitted to the department by the specified deadline.

The program admits students once per year. Generally, more students apply than can be accepted; 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 College.

## **Program Requirements**

A minimum of 33 graduate credit hours of academic coursework without the thesis (or 30 hours with the thesis) is required in addition to clinical practicum. All practicum necessary to complete certification requirements must be completed prior to graduation. Minimum practicum requirements include 9 graded academic hours plus 6 CR/NC hours (excluding CD 672/673). 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.

The student and advisor will develop a Plan of Study or blueprint for graduation requirements. The Plan of Study must be on file in the Graduate College office before the student registers for the 12th semester hour.

The Speech-Language Pathology specialty area exam of the ETS Praxis Series (NESPA) serves as the comprehensive examination 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 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.

## DIETETICS, M.S. Dietetics Internship Certificate

## **Program Description**

The mission of the Master of Science degree program is to prepare graduates to practice in advanced level professional positions in the fields of clinical nutrition, community nutrition, and/or food and nutrition management. The program offers a unique opportunity to dietetics professionals in southern West Virginia. It is open to persons who have completed a bachelor's degree in dietetics at a regionally accredited institution and have been admitted to the dietetic internship certificate program or are currently a Registered Dietitian.

## **Admission Requirements**

Prospective students who wish to apply for admission to the master's degree program must meet the admission requirements for the internship, which are available at *www.marshall.edu/cohp/portal/Main/index. asp?w=pages&r=0&pid=41&sid= 3.* 

Upon successful completion of the internship certificate program, students will submit an additional application requesting full admission to the master's program.

Any other prospective students must currently hold the status of Registered Dietitian through the Commission on Dietetic Registration. Admission of these students will be handled on a case-by-case basis by the department. They should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp.* 

### **Program Requirements**

Students presently enrolled in or who have completed the internship certificate program, which consists of seven courses, accumulate 21 graduate credits, which provide the basis for the master's degree. The degree consists of a total of 36 graduate credit hours.

The student and advisor will develop a Plan of Study or blueprint for graduation requirements. The Plan of Study must be on file in the Graduate College office before the student registers for the 12th semester hour.

- In addition to the internship certificate requirements, students pursuing a master's degree choose from one of three concentration areas: clinical nutrition, community nutrition, or food/nutrition management.
- Course requirements can vary and must be approved by the student's advisor.
- Students are provided with an option to complete a thesis and six additional hours of coursework in the chosen area of concentration. Those choosing a thesis option will be required to defend the thesis orally.
- Students choosing a non-thesis option will be required to complete an additional 15 hours of coursework in the chosen concentration and to sit for a written comprehensive examination in their final semester.
- To successfully complete the program, students will be required to maintain a GPA of 3.0 or higher and receive a score of satisfactory or better on all preceptor evaluations, when applicable.

For specific course requirements, prospective students should consult the department chair for further details.

## **Dietetics Internship Certificate**

A post-baccalaureate certificate program 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 Accredited Dietetic Internship Program to receive the supervised practice component required before taking the exam. Enrollment is by a selective, competitive process. The internship has been granted full accreditation by the American Dietetic Association, Commission on Accreditation for Dietetics Education, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, telephone 312-899-4876.

Detailed internship information is available at *www.marshall.edu/cohp/portal/Main/index. asp?w=pages&r=0&pid=41&sid= 3.* 

## **HEALTH INFORMATICS, M.S.**

(This program will begin admitting students on a limited basis in Spring 2011.)

## **Program Mission and Description**

The mission of the Master of Science in Health Informatics (MSHI) program is to provide students with high-quality education and training that will make them valuable employees in today's data- and information-driven healthcare enterprises.

The program provides multidisciplinary education and training in the organizational, technical, and clinical/medical aspects of healthcare. The MSHI emphasizes the application of information systems and information systems management for medical research and clinical information technology support and the development of advanced imaging, database, and decision systems.

The program requires at least 4 semesters of coursework including a capstone, or practicum, experience. The total number of credits includes at least 33 post-baccalaureate hours of study. Because this graduate degree focuses both on didactic and clinical applications, the program is a combination of classroom and clinical application credits. Graduate level credits will be provided for supervised practicum. The program is an accepted entry level for accreditation in the health informatics field.

## **Admission Requirements**

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*. (Submit all materials to the Graduate Admissions Office.)

Students must have an undergraduate Grade Point Average (GPA) of 2.5 or higher on a 4.0 scale for all previously completed undergraduate university work.

Students may enter the program in three ways:

- 1. post bachelor's degree from any regionally accredited university,
- 2. full admission post MS degree from any regionally accredited university, or,
- 3. accelerated master's degree program, whereby a junior with exceptional standing may be admitted into the graduate program prior to completion of all undergraduate requirements.

## Program Requirements 33 hrs.

NOTE: Students with no informatics background may be advised to take additional foundational informatics courses.

Students must take courses from 3 colleges:

College of Health Professions Courses

HP605 HP615 HP650

Lewis College of Business Courses

MIS 678 HCA600 HCA 656 MIS 680

College of Information Technology and Engineering Courses

IS 623 EM 660 IS 665 TM664

## NURSING, M.S.N.

Areas of Emphasis Family Nurse Practitioner Nursing Administration Nursing Education Nurse-Midwifery (collaborative program with Shenandoah University) Graduate Certificates Family Nurse Practitioner (post master's) Nursing Administration (post master's) Nursing Education (post master's)

## **Program Description**

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.

Coursework 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 41 credit hours for the family nurse practitioner area of emphasis, 36 credit hours for the nursing administration and nursing education areas of emphasis, and 44 credit hours for the nurse-midwifery area of emphasis.

### Certifications

Upon successful completion of the MSN-FNP program, and depending on area of emphasis, graduates are eligible to take the American Academy of Nurse Practitioners (AANP) Certification Examination for Adult and Family Nurse Practitioners and/or the American Nurses' Credentialing Center (ANCC) Certification for Family Nurse Practitioners. Graduates of the MSN-NUR ADM program are eligible to take the ANCC Certification Examination for Nursing Administration or Nursing Administration Advanced, depending on their experience and stage of professional development. Graduates of the Nursing Education program are eligible to take the National League for Nursing Certified Nurse Educator Examination. Nurse-Midwifery graduates are eligible to take the American Midwife Certification Board Exam.

The MSN program purpose is achieved through three program components.

- 1. The core component (12 credits) focuses on knowledge and skills related to nursing theory, advanced nursing research, leadership, and health care issues.
- 2. The area of emphasis component (18 to 32 credits) allows the student to specialize in a particular area. The family nurse practitioner area of emphasis (29 credits) provides students with the opportunity to develop competency as a family nurse practitioner. The nursing administration area of emphasis (24 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 Nursing Education area of emphasis (21 credits) gives the student the opportunity to gain the knowledge and skills necessary to be a nurse educator. The Nurse-Midwifery area of emphasis (32 credits) provides knowledge and skills to practice as a nurse-midwife.
- 3. The elective component (6 credits) allows students to choose one of four options: 1) thesis, 2) role development courses in teaching, or 3) elective courses related to the student's area of interest, or 4) organizational dynamics or financial strategies in administration.

The MSN program must be completed in a period not to exceed 7 calendar years from the date of first class enrollment.

#### Accreditation

The Master of Science in Nursing program is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326; phone, 404-975-5000; fax, 404-975-5020; Web, *www.nlnac.org.* In addition, the NLNAC is a source for information regarding tuition, fees, and length of the program.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www. marshall.edu/graduate/admissionsrequirements.asp.* 

Students must also submit a separate application to the MSN program at *www.marshall.edu/cohp/portal/Main/index.asp?w=pages&r=75&pid=106&sid=%204*.

#### Deadline

Completed application by October 1 and April 1 of each year.

In addition:

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 NLNAC accredited program.
- 2. Baccalaureate degree with a major in nursing and a master's degree in any field.
- 3. Undergraduate course credit for 3 semester hours of basic statistics with a grade of "C" or better.
- 4. Undergraduate course credit for 3 semester hours of basic research with a grade of "C" or better.
- 5. Evidence of a current unencumbered license as a registered nurse in a U.S. jurisdiction. Verification form is included in the MSN application package.
- 6. Scholastic achievement as evidenced by an overall undergraduate/graduate Grade Point Average and scores on the Graduate Record Examination as follows:

(continued)

- GPA of 3.25 or higher: GRE waived
- GPA of 3.0-3.25: GRE of 800 (total of 2 subsets) and Analytical Writing Score of 3 or higher
- GPA of 2.5-2.99: GRE of 1000 (total of 2 subsets) and Analytical Writing Score of 3 or higher
- 7. It is strongly recommended that all MSN students have two years of full-time nursing practice prior to application to the program. Those who do not meet this criterion will be considered on an individual basis.
- 8. Midwifery applicants must have an interview with Marshall University and Shenandoah University faculty prior to the application deadline.

An applicant with a master's in nursing is eligible to be admitted as a post-master's student depending on space availability.

## **Program Requirements**

The student and advisor will develop a Plan of Study or blueprint for graduation requirements. The Plan of Study must be on file in the Graduate College office before the student registers for the 12th semester hour.

### **Course Requirements: Family Nurse Practitioner**

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 (29 credits)       Hours         NUR 620 Advanced Pathophysiology I       2         NUR 621 Advanced Pathophysiology II       2         NUR 622 Advanced Pathophysiology II       2         NUR 624 Advanced Family Nursing Practice I       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 633 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology II       2         NUR 665 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       3         Core Component Courses (12 credits)       Hours         NUR 604 Leadership in Nursing       3         NUR 606 Advanced Nursing Research       3         NUR 606 Issues in Health Care       3         NUR 606 Issues in Health Care       3         NUR 606 Issues in Health Care       3         NUR 608 Issues in Health Care       3         NUR 604 Issues in Health Care       3         NUR 604 Issues in Health Care	Core Component Courses (12 credits)	Hours
NUR 606 Advanced Nursing Research.       3         NUR 608 Issues in Health Care       3         Area of Emphasis Component Courses (29 credits)       Hours         NUR 621 Advanced Pathophysiology I.       2         NUR 621 Advanced Pathophysiology II       2         NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Physical Assessment.       5         NUR 626 Advanced Physical Assessment.       5         NUR 626 Advanced Pharmacology I       2         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology I       2         NUR 665 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       6         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 644 Nursing Management in Health Care Settings I       6	NUR 602 Theoretical Foundations in Nursing	3
NUR 608 Issues in Health Care.       3         Area of Emphasis Component Courses (29 credits)       Hours         NUR 620 Advanced Pathophysiology I.       2         NUR 621 Advanced Pathophysiology II.       2         NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Family Nursing Practice I.       5         NUR 626 Advanced Family Nursing Practice II.       5         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology I       2         NUR 665 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       6         Core Component Courses (12 credits)       Hours         NUR 602 Theoretical Foundations in Nursing       3         NUR 604 Leadership in Nursing Research       3         NUR 608 Issues in Health Care       3         Area of Emphasis Component Courses (18 credits)       NUR 642 Organizational Dynamics in Nursing         NUR 644 Financial Strategies in Nursing Administration       3         NUR 645 Nursing Management in Health Care Settings I       6         NUR 646 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Setti	NUR 604 Leadership in Nursing	3
Area of Emphasis Component Courses (29 credits)       Hours         NUR 620 Advanced Pathophysiology I       2         NUR 621 Advanced Pathophysiology II       2         NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Family Nursing Practice I       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology I       2         NUR 695 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       6         Core Component Courses (12 credits)       Hours         NUR 602 Theoretical Foundations in Nursing       3         NUR 604 Leadership in Nursing Research       3         NUR 608 Issues in Health Care       3         NUR 642 Organizational Dynamics in Nursing       3         NUR 644 Financial Strategies in Nursing Administration       3         NUR 648 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings I       6         NUR 681 Thesis       6         NUR 681 Thesis       6         NUR 616 Curriculum Development in Nursing	NUR 606 Advanced Nursing Research	3
NUR 620 Advanced Pathophysiology I       2         NUR 621 Advanced Pathophysiology II       2         NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Pamily Nursing Practice I       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology II.       2         NUR 665 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       6         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)       3         NUR 642 Organizational Dynamics in Nursing       3         NUR 644 Financial Strategies in Nursing Administration       3         NUR 644 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings II       6         NUR 681 Thesis       6         NUR 681 Thesis       6	NUR 608 Issues in Health Care	3
NUR 621 Advanced Pathophysiology II       2         NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Family Nursing Practice I.       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology II.       2         NUR 665 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       41         Core Component Courses (12 credits)       Hours         NUR 602 Theoretical Foundations in Nursing       3         NUR 604 Leadership in Nursing       3         NUR 608 Issues in Health Care.       3         NUR 608 Issues in Health Care       3         Area of Emphasis Component Courses (18 credits)       3         NUR 644 Financial Strategies in Nursing Administration.       3         NUR 644 Financial Strategies in Nursing Administration.       3         NUR 648 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings I       6         NUR 681 Thesis       6         NUR 681 Thesis       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3 <td>Area of Emphasis Component Courses (29 credits)</td> <td>Hours</td>	Area of Emphasis Component Courses (29 credits)	Hours
NUR 622 Advanced Physical Assessment.       5         NUR 624 Advanced Family Nursing Practice I.       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I.       2         NUR 664 Advanced Pharmacology II.       2         NUR 695 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       41         Core Component Courses (12 credits)       Hours         NUR 602 Theoretical Foundations in Nursing       3         NUR 604 Leadership in Nursing       3         NUR 605 Issues in Health Care       3         NUR 608 Issues in Health Care       3         Area of Emphasis Component Courses (18 credits)       3         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         NUR 616 Curriculum Development in Nursing       3         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing	NUR 620 Advanced Pathophysiology I	2
NUR 624 Advanced Family Nursing Practice I.       5         NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I.       2         NUR 664 Advanced Pharmacology II.       2         NUR 695 Internship: Advanced Family Nursing       6         TOTAL.       41         Course Requirements: Nursing Administration       41         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)       3         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         NUR 648 Nursing Management in Health Care Settings II       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Thesis       6         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing       3	NUR 621 Advanced Pathophysiology II	2
NUR 626 Advanced Family Nursing Practice II       5         NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology II.       2         NUR 695 Internship: Advanced Family Nursing       6 <b>TOTAL 41 Course Requirements: Nursing Administration 3</b> NUR 602 Theoretical Foundations in Nursing       3         NUR 604 Leadership in Nursing Research       3         NUR 606 Advanced Nursing Research       3         NUR 608 Issues in Health Care       3         NUR 642 Organizational Dynamics in Nursing       3         NUR 644 Financial Strategies in Nursing Administration       3         NUR 644 Financial Strategies in Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings II       6         Elective Comp	NUR 622 Advanced Physical Assessment	5
NUR 663 Advanced Pharmacology I       2         NUR 664 Advanced Pharmacology II       2         NUR 695 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       41         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)       3         NUR 642 Organizational Dynamics in Nursing       3         NUR 644 Financial Strategies in Nursing Administration       3         NUR 644 Nursing Management in Health Care Settings I       6         NUR 648 Nursing Management in Health Care Settings I       6         NUR 641 Thesis       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Thesis       6         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 624 Advanced Family Nursing Practice I	5
NUR 664 Advanced Pharmacology II	NUR 626 Advanced Family Nursing Practice II	5
NUR 695 Internship: Advanced Family Nursing       6         TOTAL       41         Course Requirements: Nursing Administration       41         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)       3         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)       3         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 663 Advanced Pharmacology I	2
TOTAL41Course Requirements: Nursing AdministrationCore Component Courses (12 credits)NUR 602 Theoretical Foundations in NursingNUR 604 Leadership in NursingNUR 606 Advanced Nursing ResearchNUR 608 Issues in Health CareNUR 608 Issues in Health CareArea of Emphasis Component Courses (18 credits)NUR 642 Organizational Dynamics in NursingNUR 644 Financial Strategies in Nursing AdministrationNUR 646 Nursing Management in Health Care Settings I6NUR 648 Nursing Management in Health Care Settings II6NUR 681 Thesis6NUR 616 Curriculum Development in Nursing3NUR 618 Teaching in Nursing3Other Electives6	NUR 664 Advanced Pharmacology II	2
Course Requirements: Nursing Administration         Core Component Courses (12 credits)         NUR 602 Theoretical Foundations in Nursing       3         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)       3         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)       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 695 Internship: Advanced Family Nursing	6
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)       3         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)       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	TOTAL	41
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)       3         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)       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	Course Requirements: Nursing Administration	
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)       3         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)       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	Core Component Courses (12 credits)	Hours
NUR 606 Advanced Nursing Research	NUR 602 Theoretical Foundations in Nursing	
NUR 608 Issues in Health Care       3         Area of Emphasis Component Courses (18 credits)       3         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)       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 604 Leadership in Nursing	
Area of Emphasis Component Courses (18 credits)         NUR 642 Organizational Dynamics in Nursing         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         NUR 648 Nursing Management in Health Care Settings II         6         NUR 648 Nursing Management in Health Care Settings II         6         NUR 648 Nursing Management in Health Care Settings II         6         NUR 648 Nursing Management in Health Care Settings II         6         NUR 648 Nursing Management in Health Care Settings II         6         NUR 681 Thesis         6         NUR 616 Curriculum Development in Nursing         3         NUR 618 Teaching in Nursing         3         Other Electives         6	NUR 606 Advanced Nursing Research	
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)       6         NUR 681 Thesis       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 608 Issues in Health Care	3
NUR 644 Financial Strategies in Nursing Administration	Area of Emphasis Component Courses (18 credits)	
NUR 646 Nursing Management in Health Care Settings I	NUR 642 Organizational Dynamics in Nursing	
NUR 648 Nursing Management in Health Care Settings II       6         Elective Component Courses (Select 6 credits from the following offerings)       6         NUR 681 Thesis       6         NUR 616 Curriculum Development in Nursing       3         NUR 618 Teaching in Nursing       3         Other Electives       6	NUR 644 Financial Strategies in Nursing Administration	
Elective Component Courses (Select 6 credits from the following offerings)         NUR 681 Thesis	NUR 646 Nursing Management in Health Care Settings I	6
NUR 681 Thesis6NUR 616 Curriculum Development in Nursing3NUR 618 Teaching in Nursing3Other Electives6	NUR 648 Nursing Management in Health Care Settings II	6
NUR 616 Curriculum Development in Nursing	Elective Component Courses (Select 6 credits from the following offering	gs)
NUR 618 Teaching in Nursing	NUR 681 Thesis	6
Other Electives	NUR 616 Curriculum Development in Nursing	3
	NUR 618 Teaching in Nursing	
TOTAL	Other Electives	
	TOTAL	

#### **Course Requirements: Nursing Education**

Core Component Courses (12 credits) Hours	
NUR 602 Theoretical Foundations in Nursing	
NUR 604 Nursing Leadership in Health Care Settings	
NUR 606 Advanced Nursing Research	
NUR 608 Issues in Health Care	
Area of Concentration Component Courses (18 credits) Hours	
NUR 616 Curriculum Development in Nursing3	
NUR 618 Teaching in Nursing	
NUR 619 Practicum: Teaching in Nursing3	
EDF 636, Classroom Assessment	
CIEC 600 Computing and Instructional Design	
EDF 619 Educational Psychology3	
Elective Course Options	Hours
NUR 681, Thesis OR Other Electives	
TOTAL	

#### Course Requirements: Nurse-Midwifery (offered in cooperation with Shenadoah University)

Core and Related Courses at Marshall University (25 credits)	Hours
NUR 602 Theoretical Foundations of Nursing	3
NUR 604 Leadership in Nursing	3
NUR 606 Advanced Nursing Research	3
NUR 608 Issues in Health Care	3
NUR 620 Advanced Pathophysiology I	2
NUR 621 Advanced Pathophysiology II	2
NUR 622 Advanced Physical Assessment	5
NUR 663 Advanced Pharmacology I	2
NUR 664 Advanced Pharmacology II	2

Once the student has successfully completed his or her 25 credit hours at Marshall University, the student will transfer to Shenandoah University to obtain an additional 19 credit hours of classroom and clinical midwifery courses. The student will spend one week at the beginning of each semester at Shenandoah and then return to rural WV to be placed with a preceptor to obtain the clinical portion of the program. The student will continue to receive didactic material from Shenandoah midwifery faculty.

Advanced Practice Midwifery Courses at Shenandoah University (19 credits)	Hours
NM 610 Primary Care of Women	
NM 620 Comprehensive Antepartal Care	3
NM 630 Midwifery Practicum	3
NM 640 Comprehensive Perinatal Care	3
NM 650 Integrated Midwifery Practicum	6
NM 660 Advanced Nurse-Midwifery Role Development	1
TOTAL	44

Upon successful completion of the 19 credit hours at Shenandoah, the student transfers these 19 hours to Marshall University. The student will receive an M.S.N. from Marshall University and a certificate in Nurse-Midwifery from Shenandoah University. The student is then eligible to take the Certified Nurse Midwifery Exam from the American Midwives Certification Board.

Deadlines for applications are April 1 and October 1 of each year. Deadlines for applications are April 1 and October 1 of each year. Please visit the COHP web page and click on nursing for application.

## Admission Requirements for Post Master's Certificates

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

Students must also submit a separate application to the MSN program at *http://www.marshall.edu/cohp/portal/Main/index.asp?w=pages&r=75&pid=106&sid=%204*.

In addition: The Post Master's Certificate 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 NLNAC accredited program. Applicants who are graduates of programs outside the NLNAC jurisdiction will be evaluated on an individual basis.
- 2. Evidence of a current unencumbered license as a registered nurse in a U.S. jurisdiction. Verification form is included in the MSN application package.

#### 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 and/or American Academy of Nurse Practitioners Certification Examination for Adult and Family Nurse Practitioners.

#### Course Requirements: Post Master's Certificate in Family Nurse Practitioner Program

NUR 620 Advanced Pathophysiology I	2
NUR 621 Advanced Pathophysiology II	2
NUR 622 Advanced Physical Assessment	5
NUR 624 Advanced Family Nursing Practice I	5
NUR 626 Advanced Family Nursing Practice II	5
NUR 663 Advanced Pharmacology I	2
NUR 664 Advanced Pharmacology II	2
NUR 695 Internship: Advanced Family Nursing	6
TOTAL	29
	c

Additional courses may be taken after consultation with the graduate faculty advisor for family nurse practitioners.

#### POST MASTER'S CERTIFICATE IN NURSING ADMINISTRATION PROGRAM

The purpose of the Post Master's Certificate in Nursing Administration program is to prepare nurses who have Master of Science in Nursing degrees as nurse administrators. The graduates of this program are eligible to take the American Nurses' Credentialing Center Certification Examination for Nursing Administration or Nursing Administration Advanced.

#### Course Requirements: Post Master's Certificate in Nursing Administration Program

Additional accuracy has taling after any disting with the surdersta faculty advisory	с.
TOTAL	;
NUR 648 Nursing Management in Healthcare Settings II	,
NUR 646 Nursing Management in Healthcare Settings I	,
NUR 644 Financial Strategies	;
NUR 642 Organizational Dynamics	5

Additional courses may be taken after consultation with the graduate faculty advisor for nursing administration.

### POST MASTER'S CERTIFICATE IN NURSING EDUCATION PROGRAM

The purpose of the Post Master's Certificate in Nursing Education program is to prepare nurses who have Master of Science in Nursing degrees as nurse educators. Graduates of this program are eligible to take the National League for Nursing Certified Nurse Educator Examination.

#### Course Requirements: Post Master's Certificate in Nursing Education Program

NUR 616 Curriculum Development in Nursing	
NUR 618 Teaching in Nursing	
NUR 619 Practicum: Teaching in Nursing(continu	ued)3

EDF 535 Tests and Measurements	3
CIEC 600 Computing and Instructional Design	3
EDF 619 Educational Psychology	3
TOTAL	.18

Additional courses may be taken after consultation with the graduate faculty advisor for nursing education.

## POLICIES

Students in both the MSN and Post Master's Certificate programs are governed by policies stated in the Marshall University Graduate College Catalog. Policies specific to the nursing programs are as follows:

## **Academic Policies**

- 1. The College of Health Professions 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. No more than 6 hours of *C* may be applied toward the MSN degree.
- 3. Students may repeat one required course in which they have earned less than a *C*. (The original grade remains.)
- 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. Students enrolled in the Post Master's Certificate 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 is required to have an annual PPD screening test for Tuberculosis. Documentation of a onetime two step TB test is also required.
- 3. Each student must show evidence of the following prior to registering for any nursing course with a clinical component: Current unencumbered professional nurse licensure in West Virginia, Ohio and/or Kentucky.
- 4. Current certification in cardiopulmonary resuscitation.
- 5. Students are responsible for own transportation to and from all clinical assignments.
- 6. Students are required to be in professional attire for all clinical practica and to wear a name pin. In addition, selected clinical agencies require a white lab coat.

For additional policies, see the Graduate Nursing Student Handbook.

## SCHOOL OF KINESIOLOGY

Exercise Science, M.S. Areas of Emphasis Athletic Training Clinical Applied: Cardiac Rehabilitation Exercise Physiology Integrative Physiology

Sport Administration, M.S. Areas of Emphasis Recreation and Physical Activity Sport Management Minor in Sport Studies

## **Program Description**

The School of Kinesiology offers graduate degrees in Exercise Science (M.S.) and Sport Administration (M.S.). Each degree program has distinct areas of emphasis. The Exercise Science program has four areas of emphases: Athletic Training, Clinical Applied- Cardiac Rehabilitation, Exercise Physiology, and Integrative Physiology. The Sport Administration degree program offers two areas of emphasis: Sport Management; and Recreation and Physical Activity.

(continued)

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

Admission requirements are different for the two degree programs. A personal interview may be required. Provisional admission to a program is possible, and will be considered on an individual basis. (See definition of Provisional Admission in this catalog). All students applying to the Exercise Science, M.S. program must have successfully completed an undergraduate course in either exercise physiology or human physiology. Applicants lacking these courses may be provisionally admitted and must complete required undergraduate courses within the first 12 hours of graduate coursework. Additional biological science, chemistry, and physics courses are required for admission to the Integrative Physiology Area of Emphasis. Students are limited to twelve semester hours of transfer credit from other institutions, and limited to a maximum of nine semester hours taught at the 500-level.

### **Program Description-Exercise Science**

The M.S. in Exercise Science prepares students for allied health and medical careers in the clinical, commercial, corporate, community, university, and medical settings. Options include an emphasis on leadership roles and skills that permit one to work with individuals on a client/patient 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. Options include careers as clinicians in cardiopulmonary rehabilitation and diabetes management programs, as athletic trainers, as exercise physiologists, as well as preparation for other medical fields including physical therapy, pharmaceutical and pacemaker sales, as pharmacists, as physician assistants, as physicians, and for advanced degrees in related doctoral programs.

The course of study for the M.S. in Exercise Science degree is a two-year program with a 36-39-hour requirement.

#### Admission Requirements-Exercise Science

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition: (submit all materials directly to Graduate Admissions office)

- an undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work;
- an appropriate undergraduate/graduate background;
- successful completion of an undergraduate course in either exercise physiology or human physiology; see requirements for Integrative Physiology above;
- Graduate Record Exam scores or MCAT scores;
- three letters of reference.

#### **Program Requirements-Exercise Science**

#### Athletic Training Area of Emphasis

The Athletic Training Area of Emphasis is designed to meet the needs of the clinical, high school, middle school, college, professional, industrial, and independent athletic trainer. The program is designed to build on existing knowledge and skills the student has acquired in the student's respective undergraduate program. Elective courses can be chosen from the approved courses with approval of the student's assigned academic advisor and/or can be determined by the academic advisor depending on the student's background, needs, and/or weaknesses. The emphasis in athletic training can be accomplished by a thesis or non-thesis track. Successful completion of oral comprehensive exam/thesis defense is required for graduation. Six hours of the degree may be fulfilled with coursework outside the School of Kinesiology.

Athletic Training Area of Emphasis	36 Hours
Research: ESS 670	3
Statistics: EDF 517 or equivalent	3
Required: ESS 621, HS 579, ESS 601, ESS 687	
HS 540 or HS 640	3
HS 548 or 646	3-5
Restricted Electives (as approved by advisor)	6
Thesis (HS 681) or Internship (HS 660)	6

#### **Clinical Applied: Cardiac Rehabilitation Area of Emphasis**

The Clinical Applied Area of Emphasis: Cardiac Rehabilitation focuses on health promotion, disease prevention, and rehabilitation in the clinical, corporate, commercial, community, and medical settings. The course of study has a strong

science orientation. 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, smoke cessation, 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, our graduates are becoming major players in an alternative approach and paradigm shift in medicine emphasizing health promotion, disease prevention, and rehabilitation.

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Physical Education: ESS 601, ESS 621, ESS 682, ESS 683, ESS 684,	
Physical Education: ESS 601, ESS 621, ESS 682, ESS 683, ESS 684, ESS 685, ESS 687	21
Research: ESS 670	
Statistics: EDF 517 or equivalent	3
Restricted Electives	6
Clinical Internship (ESS 660)	6

#### Exercise Physiology Area of Emphasis

The Exercise Physiology Area of Emphasis is broadly based upon basic sciences: human anatomy, physiology, biological sciences, chemistry, and physics. Exercise Physiology is chiefly concerned with how the acute and chronic effects of exercise influence various physiological systems. These students have opportunities to participate in basic research, applied human research, and human performance testing

Exercise Physiology Area of Emphasis	39 Hours
Required: ESS 578, ESS 601, ESS 621, ESS 642, ESS 683, ESS 684, ESS 687	21
Research: ESS 670	3
Statistics: EDF 517 or equivalent	3
Restricted Electives	6
Thesis (ESS 681) or Internship (ESS 660)	6

#### **Integrative Physiology Area of Emphasis**

The Integrative Physiology Area of Emphasis is broadly based upon basic sciences: anatomy, physiology, biological sciences, chemistry, and physics. These students are required to participate in both applied and basic research relative to the effects of exercise on physiological systems at the cellular and molecular levels utilizing tools in exercise physiology, physiology, biochemistry, endocrinology, molecular physiology, and molecular and cellular biology. Faculty members are located in the School of Kinesiology (SOK) and the Division of Biological Sciences (BSC) and Robert C. Byrd Biotechnology Science Center/Laboratory of Molecular Physiology. The Integrative Physiology Area of Emphasis will prepare students to work as researchers in exercise physiology, physiology, the biotechnology industry and apply to doctoral programs (Ph.D./ D.P.T./D.O./M.D.).

Integrative Physiology Area of Emphasis:	36 hours
Required: BSC 517, BSC 522, ESS 621, ESS 623, ESS 683,	
BSC 661, BSC 662	21
Elective(s)	6
Thesis	9

## **Program Description-Sport Administration**

The Sport Administration M.S. degree is a program in the School of Kinesiology with areas of emphasis in Sport Management or Recreation and Physical Activity. Graduates of this program are prepared to work in a variety of settings.

## Admission Requirements-Sport Administration

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

For Full Admission (submit all materials directly to Graduate Admissions office):

 an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work; (continued)

Degree Program Requirements

- at least a 1000 combined score on verbal and quantitative reasoning and 4.5 on analytical writing of the GRE;
- a strong background in sport participation and/or sport administration.

A limited number of students may be admitted provisionally (see definition of Provisional Admission in this catalog):

- an undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work;
- at least 800 combined score on verbal and quantitative reasoning and 4.0 on analytical writing of the GRE or at least 500 and 4.0 on analytical writing of the GMAT;
- meeting two of the three Full Admission requirements above and a strong background in sport participation and/or sport administration.

## **Program Requirements-Sport Administration**

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

Sport Management Area of Emphasis	
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ESS516, ESS600, ESS 615, ESS626 or ESS643, ESS 652, ESS 675	
Research: ESS 670	
Statistics: EDF 517, MGT 500, MGT601, PSY 517 or equivalent	
Internship: ESS 660	
Kinesiology Restricted Electives: (Select courses with the approval of advisor)	
External Electives: Graduate School of Management courses	
or selected courses with the approval of advisor	

Recreation & Physical Activity Area of Emphasis		
ESS615, ESS 652, ESS 675	9	
Research: ESS 670		
Statistics: EDF 517, MGT 500, MGT601, PSY 517 or equivalent	3	
Kinesiology Electives (Select courses with the approval of advisor)		
External Electives (Selected courses with the approval of advisor)		

## **Minor in Sport Studies**

Interested students should contact the director of the Sport Administration program.

# College of Information Technology and Engineering Dr. Betsy Dulin, Dean

www.marshall.edu/cite

## ENGINEERING, M.S. Areas of Emphasis

## Engineering Management Environmental Engineering Transportation and Infrastructure Engineering.

## **Program Description**

The M.S. in Engineering (M.S.E.) program is an interdisciplinary engineering program designed to meet the specific needs of engineers employed in industry, government, and consulting. The program offers a broad core curriculum with opportunities for concentrated study in three areas of emphasis: Engineering Management, Environmental Engineering, and Transportation and Infrastructure Engineering. Students wishing to have two areas of emphasis must meet special requirements—see below under Students Wishing to Have Two Areas of Emphasis.

## **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: http://www.marshall.edu/graduate/admissionsrequirements.asp

In addition:

Each applicant for admission to the M.S. in Engineering program must have an undergraduate engineering degree from an ABET-accredited college or university, and must satisfy at least TWO of the following criteria:

- Score at the mean or above on the verbal GRE
- Score at the mean or above on the quantitative GRE
- Score at the mean or above on the analytical GRE
- Have an undergraduate GPA of 2.75 or above
- Have passed the FE exam and/or the P.E. exam

Also, international students must score at the mean or above on the TOEFL, and must have met all other admission criteria prior to registering for the first semester of courses.

## **Degree Requirements**

Each degree candidate is required to complete at least 30 graduate credit hours, consisting of 9 credit hours of core courses plus 21 additional hours of required courses and electives in the applicable area of emphasis, with a cumulative Grade Point Average of 3.0 for the courses included in the student's Plan of Study. Each degree-seeking student must have an approved "Plan of Study," developed with a faculty advisor, that must be filed before the student registers for the 12th credit hour. Please consult the Academic Regulations portion of the Graduate Catalog for other information.

The Engineering program culminates with the comprehensive graduate project. This project is not the traditional graduate thesis with a research orientation, but rather a real-life, industry-type project in which the student undertakes an assignment that requires synthesis of all of the coursework and its application to a typical problem from a relevant subject area.

## **Core Courses**

EM 660 Project Management	3 hrs.
ENGR 610 Applied Statistics	3 hrs.
TE 699 Comprehensive Project	3 hrs.

#### **Requirements for Areas of Emphasis**

Engineering Management:	
EM 620 Management of Technical Human Resources and Organizations	3 hrs.
EM 668 Operations Management	3 hrs.
EM 670 Seminar in Engineering Management	3 hrs.
EM 675 Engineering Economics (or TM equivalent)	3 hrs.

#### (continued)

Degree Program Requirements

EM 694 Engineering Law
Environmental Engineering:
ES 614 Environmental Risk Assessment
ENVE 681 Environmental Engineering Design
ENVE 615 Environmental Chemistry
ES 660 Environmental Law I
Three CITE elective courses approved in advance by the student's advisor
Transportation and Infrastructure Engineering:
Any two of the following: CE 612, 614, 616, or 618
Any two of the following: CE 634, 635, 636, or 637
Three CITE elective courses approved in advance by the student's advisor
The following elective courses are approved for the Transportation and Infrastructure Engineering area of emphasis:
CE 612 Structural Steel Design and Behavior CE 614 Advanced Reinforced Concrete Structure Design and Behavior CE 615 Finite Element Applications in Civil Engineering CE 616 Prestressed Concrete Design CE 618 Bridge Engineering

- CE 634 Traffic Engineering
- CE 635 Evaluation of Transportation Systems
- CE 636 Transportation Planning
- CE 637 Highway Safety Engineering
- CE 638 Pavement Design
- CE 650-652 Special Topics in Civil Engineering
- CE 699 Civil Engineering Research
- EM 694 Engineering Law
- ENVE 670 Hydrology and Drainage Control
- ES 660 Environmental Law
- IS 645 Geographic Information Systems

#### Students Wishing to Have Two Areas of Emphasis

Master of Science in Engineering students who wish to complete two areas of emphasis must complete two comprehensive projects—one for each area of emphasis—and all the required courses for both areas of emphasis, as well as the M.S.E. core courses and needed electives as approved in advance by the student's advisor.

To complete both the Engineering Management and the Environmental Engineering areas of emphasis, the student must complete the following courses:

EM 660 Project Management	s.
ENGR 610 Applied Statistics	s.
TE 699 Comprehensive Project	s.
ENGR 687 Independent Study (for the second comprehensive project)	s.
EM 620 Management of Technical Human Resources and Organizations	s.
EM 668 Operations Management	s.
EM 670 Seminar in Engineering Management	s.
EM 675 Engineering Economics (or TM equivalent)	s.
EM 694 Engineering Law	s.
ES 614 Environmental Risk Assessment	s.
ENVE 681 Environmental Engineering Design	s.
ENVE 615 Environmental Chemistry	s.
ES 660 Environmental Law I	s.
One CITE ENVE or ES elective approved in advance by the advisor	s.
TOTAL Degree Semester Hours:	s.

To complete both the Engineering Management and the Transportation and Infrastructure Engineering areas of emphasis, the student must complete the following courses:

EM 660 Project Management	.3 hrs.
ENGR 610 Applied Statistics	.3 hrs.
TE 699 Comprehensive Project	.3 hrs.
ENGR 687 Independent Study (for the second comprehensive project)	.3 hrs.
EM 620 Management of Technical Human Resources and Organizations	.3 hrs.
EM 668 Operations Management	.3 hrs.
EM 670 Seminar in Engineering Management	.3 hrs.
EM 675 Engineering Economics (or TM equivalent)	.3 hrs.
EM 694 Engineering Law	.3 hrs.
Any two of the following: CE 612, 614, 616, or 618	.6 hrs.
Any two of the following: CE 634, 635, 636, or 637	.6 hrs.
One CITE CE or other related elective approved in advance by the advisor	.3 hrs.
TOTAL Degree Semester Hours: 4	2 hrs.

To complete both the Environmental Engineering and the Transportation and Infrastructure Engineering areas of emphasis, the student must complete the following courses:

EM 660 Project Management
ENGR 610 Applied Statistics
TE 699 Comprehensive Project
ENGR 687 Independent Study (for the second comprehensive project)
ES 614 Environmental Risk Assessment
ENVE 681 Environmental Engineering Design
ENVE 615 Environmental Chemistry
ES 660 Environmental Law I
Any two of the following: CE 612, 614, 616, or 618
Any two of the following: CE 634, 635, 636, or 637
One CITE ENVE or ES elective approved in advance by the advisor
One CITE CE or other related elective approved in advance by the advisor
TOTAL Degree Semester Hours:

## **ENVIRONMENTAL SCIENCE, M.S.** *Minor in Environmental Science*

#### **Program Description**

The environmental science program gives the student the broad multi-disciplinary subject matter and analytical tools necessary to be successful in such professions as consulting, industrial environmental management and environmental protection. Students from diverse science backgrounds apply their knowledge and skills to environmental problems, such as air pollution and control; water pollution and treatment; groundwater protection, contamination and remediation; solid and hazardous waste management.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp* 

Each applicant must satisfy at least ONE of the following criteria:

- Score at the mean or above on the verbal GRE
- Score at the mean or above on the quantitative GRE
- · Score at the mean or above on the analytical GRE
- · Score at the mean or above on the Miller Analogies Test

(continued)

- Have an undergraduate GPA of 2.50 or above
- $\cdot$   $\;$  Have passed the Fundamentals of Engineering exam and/or the Professional Engineering exam

In addition to the general requirements all students entering the graduate Environmental Science program must have completed prior to admission the following courses OR their equivalent:

Chemistry 211 and Math 130 with a grade of *C* or better, AND a minimum total of FIVE (5) courses/ competencies, relevant to environmental science, from the following: Chemistry (200 level or above); Physics (200 level or above); Biology; Geology; Geography; Statistics; Soil Science; Law; Health and Economics; 10 years relevant work experience.

### **Degree Requirements**

Students must complete 36 graduate credit hours at the graduate level, including at least 24 credit hours at Marshall University. The degree consists of 12 credit hours of core courses; 12 credit hours of required courses; and 12 credit hours of electives.

#### **Core Courses**

EM 660, Project Management	3 hrs.
ENGR 610, Applied Statistics	3 hrs.
TE 698, Comprehensive Project Formulation - after completion of 18 hours	3 hrs.
TE 699, Comprehensive Project - after completion of 27 hours	3 hrs.

#### Additional Degree Requirements for Program

#### **Required** Courses

ES 614, Environmental Risk Assessment	3 hrs
ENVE 615, Environmental Chemistry (or ES 646 or SFT 651)	3 hrs
ES 660, Environmental Law I (or ES 662 or ES 655)	3 hrs
ES 620, Environmental Management Systems	3 hrs

#### Electives

On completion of the MS Environmental Science degree program the student should have the requisite scope of knowledge and competency in specific environmental subject matter. Students are required to take 12 credit hours of elective courses and use them to satisfy proficiency courses: TWO Environmental Science program electives; ONE division elective (an approved course in the division); ONE CITE elective (an approved course in CITE). The required and elective courses should be outlined in the Plan of Study. The Plan of Study should be developed in cooperation with and signed by the student's advisor and should be completed prior to registration for the 12th credit hour.

#### **Graduate Minor in Environmental Science**

The Graduate Minor in Environmental Science can be completed through 9 hours of coursework:

- ES 614, Risk Assessment (or ES 610, Environmental Sampling Practice, or ES 630, Site Assessment) 3 hrs.
- ENVE 615, Environmental Chemistry (or ES 646, Dynamics of Ecosystems, or ES 654, Environmental Microbiology) 3 hrs.
- ES 660, Environmental Law (or ES 662, Environmental Policy, or ES 655, Environmental Ethics) 3 hrs

## **INFORMATION SYSTEMS, M.S.**

#### **Program Description**

The Information Systems program prepares participants to be effective users, designers, and developers of information systems, people who can add value to processes and products in organizations. The program also helps participants improve their professional writing, presentation, and teamwork abilities. Specific objectives expected of graduates include:

- The ability to describe a situation as a system, specifying components, boundaries, and interfaces
- Communication skills for effectively leading teams, collaborating with managers in defining needs and opportunities, and assisting colleagues
- Knowledge of the basic hardware and software components of computer systems and their configurations

- The ability to develop specifications for a software system in terms of functions, modules, and interfaces
- The ability to gather and use information needed by information systems professionals
- Mastery of the technical and human skills needed to successfully deploy information technologies in various organizational settings.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website *www. marshall.edu/graduate/admissionsrequirements.asp.* 

Each applicant for admission to the M. S. in Information Systems program must satisfy at least TWO of the following criteria:

- Score at the mean or above on the verbal GRE;
- Score at the mean or above on the quantitative GRE;
- Score at the mean or above on the analytical writing portion of the GRE;
- Score at the mean or above on the Miller Analogies Test;
- Have an undergraduate GPA of 2.75 or above;
- Have passed the Fundamentals of Engineering exam and/or the Professional Engineering exam.

Also, international students must score at the mean or above on the TOEFL, and must have met all CITE admission criteria prior to registering for the first semester of courses.

Applicants with a wide variety of backgrounds are welcome.

In addition to the admission requirements stated above, an applicant wishing to major in Information Systems must have the following credentials and abilities:

- Ability to write structured programs in a high-level language and familiarity with computer systems
- Basic mathematical ability. College algebra with a grade of *B* would minimally meet this requirement
- Ability to use computer software for word processing, spreadsheet analysis, telecommunications, and data management
- Ability to write a coherent, grammatically correct report

Prospective students without the skills outlined above should take the following courses or their equivalents before entering the degree program:

- Computer Systems and Programming: CS 110 or equivalent
- Mathematical Maturity: College algebra
- Communication Skills: This need will normally be addressed by requirements within the program. In some cases, additional work may be required.

#### **Degree Requirements**

Students must complete 36 graduate credit hours, including at least 24 credit hours at Marshall University. The degree consists of 27 credit hours of required courses and 9 hours of approved elective courses.

#### **Required courses:**

IS 600	Management Information Systems
IS 605	Systems Analysis Techniques
IS 610	Systems Design
IS 621	Information Structures 1
IS 622	Information Structures 2
IS 623	Database Management
EM 660	Project Management
TE 698	Comprehensive Project Formulation
TE 699	Comprehensive Project - after completion of min. 27 hours

#### **Electives:**

Three or more elective courses approved by the student's advisor complete the program. In addition to Information Systems courses, these may include courses offered by other majors and by other institutions.

### Required courses:

- IS 600 Management Information Systems
- IS 605 Systems Analysis Techniques
- IS 610 Systems Design

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- IS 621 Information Structures 1
- IS 622 Information Structures 2
- IS 623 Database Management
- EM 660 Project Management
- TE 698 Comprehensive Project Formulation
- TE 699 Comprehensive Project after completion of min. 27 hours

#### **Electives:**

Three or more elective courses approved by the student's advisor complete the program. In addition to Information Systems courses, these may include courses offered by other majors and by other institutions.

## SAFETY, M.S. Areas of Emphasis Mine Safety Occupational Safety and Health

## **Program Description**

No human endeavor or undertaking can be done without involving the field of safety technology. Safety professionals work in a variety of situations alongside management to ensure the health and safety of all employees. The graduate curriculum in offers two areas of emphasis: Mine Safety and Occupational Safety and Health. The Master of Science degree has a 36 semester credit-hour requirement. A thesis may be submitted which would require 32 credit hours of graduate coursework with no more than 6 credit-hours to be earned by the thesis. A final (written) comprehensive examination is administered to all candidates, thesis and non-thesis, by a committee of three members of the graduate faculty in the College of Information Technology and Engineering (CITE), including the student's advisor. Comprehensive examinations will be administered during the spring and fall semesters.

## **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

#### In addition:

Each applicant for admission must have an undergraduate degree from an accredited college or university, and must satisfy at least ONE of the following criteria:

- Score at the mean or above on the verbal GRE
- Score at the mean or above on the quantitative GRE
- Score at the mean or above on the analytical GRE
- Score at the mean or above on the Miller Analogies Test
- Have an undergraduate GPA of 2.50 or above
- Have passed the Fundamentals of Engineering exam and/or the Professional Engineering exam

In addition to the general requirements all students entering the graduate Safety program must have completed prior to admission the following courses OR their equivalent:

• For the Area of Emphasis in Occupational Safety and Health: MTH 130, PHY 101 and 101L, and CHM 203

## **Degree Requirements**

#### Area of Emphasis in Occupational Safety and Health

Core Courses	
SFT 599, Occupational Safety Program Management	3
SFT 610, Philosophical and Psychological Concepts in Occupational Safety and Health	3
SFT 630, Current Literature and Research in Occupational Safety and Health	3
Required Courses	
SFT 540 - Industrial Fire Prevention	3

SFT 554 - Industrial Hygiene I	3
SFT 597 - Occupational Safety Program Development	3
SFT 645 - Safety Engineering and Equipment Design	3
SFT 660 - Human Factors in Accident Prevention (3 hrs.) <i>or</i> SFT 560 - Fundamentals of Ergonomics (3 hrs.)	3
ES 660 - Environmental Law I	3
<i>Electives:</i> 9 hours chosen with advisor to give the student 18 hours of 600-level courses	
Total hours including core, required, and elective courses	6

#### Area of Emphasis in Mine Safety

The Mine Safety graduate program is offered in cooperation with the National Mine Safety and Health Academy (MSHA), Beckley, WV. The program is designed for underground and surface mining and is applicable to all aspects of the metallic and non-metallic mining industry. Typically students are MSHA employees and have five or more years experience in the mining industry, and have a technical background. A limited number of non-MSHA employees are permitted into the program. The Division Chair of Applied Science Technology grants permission for admission to this area of emphasis. Please contact the Division Chair for further information prior to applying for admission to this program.

## **TECHNOLOGY MANAGEMENT, M.S.**

Areas of Emphasis Environmental Management Information Security Information Technology Manufacturing Systems Pharmacy (see TM Program Coordinator) Transportation Systems and Technology Graduate Certificate in Information Security

## **Program Description**

The M.S. in Technology Management degree 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 coursework has a practical emphasis, with real-world projects designed to develop skills that can be put to use on the job immediately. Courses are currently available in Huntington and South Charleston with several courses offered online or virtually. 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

## **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must:

- 1. Have an undergraduate GPA of 2.5 or greater
- 2. Satisfy at least one of the following:
  - Score at the mean or above on the Analytical Writing portion of the GRE and achieve a composite score on the Verbal and Quantitative portions of the GRE greater than or equal to the sum of the two individual means (1070 or greater).

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- Score at the mean or above on the Analytical Writing portion of the GMAT, and achieve a composite score on the Verbal and Quantitative portions of the GMAT greater than or equal to the sum of the two individual means (526 or greater).
- Have previously completed a master's degree from a regionally accredited college or university.
- Have 10 or more years of relevant professional work experience (documented in the written summary required in item 3, below).
- 3. Submit a written summary (2 typewritten pages maximum) of education and professional experiences, and career goals related to the TM program including the Area of Emphasis the applicant is interested in pursuing.
- 4. Complete an interview with the TM program coordinator or designee, with part of the interview consisting of discussion of the written summary.

## **Degree Requirements**

Degree requirements consist of seven core courses (21 semester hours), four area-of-emphasis courses (12 semester hours), and a capstone project (3 semester hours), for a total of 36 semester hours. You must have the Technology Management advisor's approval to enroll in Technology Management degree program courses.

## **Plan of Study**

A Plan of Study approved by the student's advisor must be on file before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

### **Core Courses**

TM 610 Technology and Innovation Management TM 612 Economic and Financial Analysis for Technology Management

IM 612 Economic and Financial Analysis for Technology Man

TM 620 Technology Planning

TM 630 Quality and Productivity Methods

EM 620 Management of Technical Human Resources and Organizations

EM 660 Project Management

Plus one of the following:

TM 615 Information Technology Strategies

EM 694 Engineering Law

Completion of these seven 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, consisting of four courses. Currently the following emphases are available:

#### Environmental Management:

Environmental Regulations Environmental Risk Assessment Environmental Management Systems One course selected from among: Hazardous Waste Management, Environmental Site Assessment, or Geographic Information Systems

#### Information Security:

Information Security Communication and Network Technologies Computer Forensics and Incident Response One additional 3 credit hour elective, chosen from TM or IS courses, with permission of the student's advisor

#### Information Technology:

Four approved courses from the following list: Computing and Information Systems Technologies Communication and Network Technologies Multimedia Production and Electronic Information Dissemination Geographic Information Systems Health Informatics Software Engineering Information Security Computer Forensics Other courses may be taken with permission of the student's advisor.

Manufacturing Systems:

Applied Computer Integrated Manufacturing Modern Manufacturing Concepts Two courses selected from:

> Applied statistics Operations Research I Operations Management

Other courses with permission of the advisor

Transportation Systems and Technologies:

This area of emphasis is offered in cooperation with the Nick J. Rahall II Appalachian Transportation Institute.

Intelligent Transport Systems - Three courses, selected with Technology Management Advisor approval. Possible choices include: Traffic Engineering, Safety in Transportation, Human Factors in Accident Prevention, Traffic Safety Management, Urban and Regional Planning, Engineering Law, Operations Research I, Operations Research II, Transportation Systems, Geographic Information Systems. Some of these courses have prerequisites; students taking the courses must meet prerequisites.

The capstone technology management project (TM 699) will be work-related, oriented toward the area of emphasis, and directed by an academic advisor.

## **Graduate Certificate in Information Security**

Evidence of information security coursework is required for many federal and Department of Defense (DoD) funded projects. This certificate will meet the government requirements for certification and continuing education for several security certifications.

## **Admission Requirements**

Students may pursue the graduate certificate while enrolled in the Technology Management M.S. program OR as a certificate-only student. Students already enrolled in the M.S. degree program should submit to Graduate Admissions a Secondary Program Request form: http://www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf

Applicants interested in the certificate-only program should apply for admission to Marshall University as a Certificate/ Professional Development student and select on the application form the Certificate in Information Security. The admissions requirements for the certificate program is the same as for the Technology Management M.S. program.

## Curriculum

IS 631 Information Security IS 656 Communications and Network Technologies IS 646 Computer Systems Security IS 647 IT Disaster Planning & Recovery TM 615 IT Strategies Credit Hours: 15 – All required www.marshall.edu/cola

## **COMMUNICATION STUDIES, M.A.**

## **Program Description**

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, 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.

## **Admission Requirements**

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

Applicants must also submit GRE scores to the Graduate Admissions Office:

- must score a minimum of 800 on the verbal and quantitative sections of the GRE, and must score a 4 on the GRE writing sample.
- must have a minimum 2.5 GPA on a 4.0 scale for all previously completed undergraduate university work. Students with less than a 3.0 GPA on a 4.0 scale for all previously completed undergraduate university work must attain a 900 score on the verbal and quantitative sections of the GRE and a score of 4 on the GRE writing sample.
- International student applicants also must have a minimum score of 525 on the paper Test of English as a Foreign Language (TOEFL), 197 on the Computer-based test, or 71 on the Internet-based test.

## Assistantships and Financial Support

The Department of Communication Studies has funds available in the form of assistantships to provide financial support for graduate students. For complete information on graduate assistantships please see *www.marshall.edu/graduate/ assistantships.asp*.

For complete information on other financial support opportunities please see www.marshall.edu/graduate.

#### **Program Requirements**

A Plan of Study approved by the department/program and the graduate dean must be filed in the Graduate College office before the student registers for the 12th semester hour. Students prepare a Plan of Study in conjunction with a committee of three graduate faculty members. At least one member of the committee must have full graduate faculty status.

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

## CRIMINAL JUSTICE, M.S. Minor in Criminal Justice

## **Program Description**

The Master of Science degree in Criminal Justice provides students with advanced theoretical, legal, and methodological training for research, teaching, and management careers in criminal justice. The program serves to educate criminal justice professionals and prepare students for further advanced graduate work, legal studies, and scholarship. The Department of Criminal Justice and Criminology is committed to:

- providing students with the conceptual and research skills needed to undertake advanced analyses of the criminal justice system;
- serving criminal justice professionals and others who are interested in pursuing professional careers in management and administration;

- furnishing law enforcement, corrections and court practitioners with knowledge of justice administration, theoretical perspectives of human behavior, policy analysis and criminal justice theory; and
- preparing social scientists to pursue careers in university and research settings.

### **Admission Requirements**

*Deadlines:* Applications to the program are due by July 1 for the fall semester and by November 1 for the spring semester. However, students are strongly encouraged to apply early. Applications submitted after the due dates will be considered, but no later than three weeks from the start of classes for the fall semester and four weeks for the spring semester. Application for admission does not guarantee acceptance into the program.

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions Web site at www.marshall.edu/graduate/admissionsrequirements.asp. (Submit all materials to the Graduate Admissions Office.)

Applicants must also have:

- a baccalaureate degree from a regionally accredited college or university (preference will be given to applicants with undergraduate majors in criminal justice or closely related social science discipline);
- an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work;
- a score in 50th percentile or higher in each assessment area of the GRE;
- a score of 550 or higher on the TOEFL (for international students only);
- a *C* or better in an undergraduate statistics course;
- a *C* or better in an undergraduate research methods course or equivalent (documentation of course content may be required);
- two letters of recommendation (college instructors strongly preferred); and
- a personal statement (1-2 page essay regarding the student's interest in criminal justice and how the M.S. in Criminal Justice degree will benefit him or her).

Students may be considered for provisional admission or conditional enrollment. Please see *www.marshall.edu/graduate/typesofadmissions.asp.* All prospective students are strongly encouraged to contact the Criminal Justice Graduate Director before applying to the Master of Science in Criminal Justice program to discuss the application process and requirements.

## **Assistantships and Financial Support**

The Department of Criminal Justice and Criminology has funds available in the form of assistantships to provide financial support for graduate students. For complete information on graduate assistantships please see *www.marshall.edu/graduate/assistantships.asp*. For complete information on other financial support opportunities please see *www.marshall.edu/graduate/graduate*.

#### **Program Requirements**

#### **General Requirements**

The Master of Science degree requires the completion of 32 hours of coursework and writing a thesis, or completion of 36 hours of coursework and the passing of written and oral comprehensive examinations. The curriculum is structured around a set of core requirements that provide a broad foundation in criminological theory, research and statistics, criminal law as well as aspects of criminal justice policy and practice.

All students are required to complete 18 hours of core courses:

- CJ 602, Law and Social Control
- CJ 603, Criminal Justice Planning
- CJ 604, Advanced Theory in Criminal Justice
- CJ 621, Advanced Criminal Law and Procedure
- CJ 655, Research Methods in Criminal Justice
- CJ 656, Applied Statistics in Criminal Justice

CJ 655, Research Methods in Criminal Justice, and CJ 656, Applied Statistics in Criminal Justice, are a two course sequence that should be completed by all students during the first academic year in the graduate program (within the first 12 graduate credit hours for part-time students). Exceptions are made for students who must take prerequisite courses before enrolling in this sequence.

The Department of Criminal Justice and Criminology maintains a "two C rule" whereby students who earn more than two grades of *C* or lower in any graduate courses will be withdrawn from the program.

#### Plan of Study

Before registration for the 12th graduate credit hour, all graduate students must complete an official Plan of Study form to be approved by the Graduate Director and/or Department Chair and submitted for approval to the Graduate College Office.

#### **Thesis Option**

For students planning to continue graduate studies, the thesis is the preferred option for receipt of the M.S. degree in Criminal Justice. Students electing the thesis option must complete 32 hours of graduate credit from the Department of Criminal Justice and Criminology. Students selecting the thesis option must complete the core courses and have a written thesis proposal/prospectus approved by the thesis committee prior to enrolling for thesis credit. The remaining credit hours may be granted for thesis research (up to 6credit hours) or elective courses. The 6 thesis research hours are normally taken in three-hour increments over two successive semesters, immediately preceding graduation, and after course requirements are completed. Students must enroll in CJ 681, Thesis, for a maximum of 6 graduate credit hours. All students selecting the thesis option must pass an oral defense. In cooperation with the Graduate Director, a student should form a thesis committee. The thesis committee assists in selecting and developing the research problem and evaluates the student's work on that problem. A student who selects the thesis option should outline the thesis option early in his or her studies in consultation with members of the graduate faculty. The student should also determine the graduate faculty member of the department who will serve as chair of the student's thesis committee.

#### **Non-Thesis Option**

Students who select the M.S. degree without a thesis must complete 36 credit hours of graduate coursework. The credit hours include the 18-hour core course requirement and 18 CJ elective hours. The elective hours may be completed using a variety of classes offered by the Department of Criminal Justice and Criminology. All students who select the non-thesis option must pass both written and oral comprehensive exams. In order to sit for the comprehensive examination, students must select a committee as well as complete and return the Comprehensive Examinations form to the Graduate Director prior to the end of the second week of the semester they plan to graduate. The Comprehensive Examination form must be signed by all committee members and will remain valid only for the semester in which it is signed. The committee must consist of at least three readers/evaluators who hold Marshall University graduate faculty status. In addition, a majority of the committee must consist of full-time faculty from the Department of Criminal Justice and Criminology, and the committee chair must be a faculty member in the Department of Criminal Justice and Criminology with graduate faculty status. This committee will be responsible for both writing and/or selecting the examination questions and evaluating the adequacy of the student's responses. The comprehensive written examination consists of four questions. The four questions assess knowledge rooted in the program's core courses. Students will be asked to answer one question in each of the following content areas: criminological theory; research and advanced statistics; advanced criminal law and procedures; and criminal justice planning. The comprehensive oral examination will focus on areas deemed weak, incomplete, or inconsistent in the written portion of the test. However, the committee may ask students other related questions deemed appropriate. Both written and oral comprehensive examinations are administered once during the fall, spring, and summer semesters unless otherwise specified.

#### **Minor in Criminal Justice**

Graduate students from any program, with permission of the student's graduate advisor and the chair of the Department of Criminal Justice and Criminology can choose a graduate minor in Criminal Justice by taking six credit hours from the following list:

CJ 504, Theoretical Criminology CJ 506, Race, Ethnicity, Gender, & Crime CJ 510, Police Administration CJ 526, Civil Liability Issues in Criminal Justice CJ 533, Correctional Administration CJ 601, Seminar in Criminal Justice CJ 620, Criminology

Special topics courses appropriate for the minor are also frequently offered.

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## ENGLISH, M.A. Graduate Certificates Medieval and Renaissance Studies Creative Writing Applied Linguistics

## **Program Description**

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

### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition (send all materials below directly to the Graduate Admissions Office):

- an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work;
- a letter of interest/ personal statement (1-2 pages);
- a writing sample of 8-12 pages;
- at least two letters of recommendation, preferably from college instructors;
- GRE scores (applicants lacking GRE scores may be accepted for conditional enrollment for one semester only and must provide official scores to the Graduate Admissions Office before the end of the conditional semester or they will not be allowed to continue);
- at least 15 undergraduate hours in literary or language studies or related coursework (students lacking this coursework may be admitted but may be asked to take undergraduate courses suggested by the department);
- six hours of college credit in a foreign language or demonstrated reading ability to the satisfaction of the English Department.

#### **Program Requirements**

#### **General Requirements:**

Students who choose the non-thesis option must take 36 hours of coursework or, with a thesis, 32 hours, six of which may be earned by writing the thesis. All students must pass a comprehensive assessment upon the completion of the coursework.

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

#### **Course Requirements**

All students must take English 630 which is offered in the Fall semester. (ENG 633 may be substituted for ENG 630.) This course should be scheduled among the first 12 hours of graduate study.

All students must take at least one course in four areas of specialization and must choose the non-thesis or thesis option below:

- *Non-thesis option:* three courses from an area of specialization not selected above;
- *Thesis option:* two courses in an area of specialization not selected above and a thesis.

*Literature area of specializations:* Medieval; Renaissance and 17th Century; Restoration and 18th Century; Romantic and Victorian; 19th Century American; Modern British; and Modern American.

*Other areas of specialization:* Composition and Rhetoric; Language and Linguistics; Critical Approaches to Literature; Genre Study; and Writing.

## **GRADUATE CERTIFICATES**

#### **Admission Requirements**

Prospective certificate-only students should apply for admission to Marshall University as a Professional Development student and select on the application form the Certificate they wish to pursue. Please note that the certificate program in Creative Writing has additional requirements.

### Graduate Certificate in Medieval and Renaissance Studies

This is an interdisciplinary program housed in Marshall University's English department. It draws upon the faculty and resources of five graduate departments to promote the interdisciplinary and cross-cultural studies of the period from Late Antiquity to the end of the 17th Century. One of the unique strengths of this certificate program is its breadth; students are encouraged to following their own interests and select from a wide range of courses within the guidelines described below.

To earn a Certificate in Medieval and Renaissance Studies, students must complete 15 hours of relevant coursework. Six to 9 of these hours must come from the following list: ENG 509, 510, 511, 512, 517, 536, 537, 538, and 600. The remaining 6 to 9 hours may be drawn from the following: HST 506, 421, 602; ART 501, 405, 415, 519; MUS 650, 651; and advanced Latin. Certain Special Topics and Independent Studies courses may also be used. Students should check with the program administrator when selecting their courses.

### Graduate Certificate Program in Creative Writing

#### **Admission Requirements**

- Bachelor's degree in a Humanities field;
- GRE scores;
- A creative writing sample of 5-10 pages.

This certificate program is designed for writers wishing to pursue advanced, individualized study and practice in any genre(s): fiction, poetry, drama, nonfiction, and multiple genre work. With a diverse and well-published writing faculty, the English Department will work with all students to develop an appropriate course plan to suit their needs. Most courses qualify for teachers' re-certification and professional continuing education.

To earn a Certificate in Creative Writing, students must complete 15 hours of coursework selected from the following list: ENG 508, 544, 558, 585 (Independent Study), 591, 592, and 593. Special Topics courses with a creative writing focus or creative writing courses available through the Department of Humanities on the South Charleston campus may be substituted for up to 6 hours. A completed manuscript of twenty-five pages of original work constitutes the capstone requirement. A maximum of 9 hours of the certificate program courses, with approval of the chair, would be applicable for those wishing to pursue the M.A. in English.

## **Graduate Certificate in Applied Linguistics**

Note: Completion of this certificate program does not meet the requirements for teacher licensure.

This certificate may be earned by completing the following courses: ENG 615. Teaching English and Applied Linguistics, 3 credit hours; ENG 622. Language Development, 3 credit hours; ENG 627. Text Analysis, 3 credit hours; ENG 633. Research Methods in Applied Linguistics, 3 credit hours; and ENG 638. Language, Text, and Context, 3 credit hours. Total: 15 credit hours.

## GEOGRAPHY, M.A., M.S. Minor in Geography Graduate Certificate in Geospatial Information Science

### **Program Description**

The Geography Department at Marshall University offers a supportive atmosphere featuring responsive, accomplished faculty and state-of-the-art facilities. In order to prepare students for professional employment or further education, the faculty strives to maintain a flexible curriculum, involve students in research, keep offerings updated with changes in the field and the job market, and help students obtain internships. As a result, many of our students secure employment as professional geographers before graduation, obtaining positions as urban and regional planners, GIS professionals, environmental scientists, geography doctoral students, economic development consultants, city/county/state/federal government professionals, historic preservationists, international trade consultants, and more.

Students wishing to earn a master's degree in geography have the option of selecting either a Master of Arts (M.A.) or Master of Science (M.S.) degree. The core requirements are the same for both degrees. In consultation with a faculty

advisor, a student choosing the M.S. option will specialize in natural science-based geography such as environmental science/ planning, cartography, GIS/remote sensing, or physical geography. In consultation with a faculty advisor, a student pursuing an M.A. degree will specialize in social science based geography emphasizing GIS, planning, geographic education, human or regional geography. Both the M.S. and M.A. degree options prepare the graduate for professional employment or advanced work at the doctoral level. For more information, please see the departmental website at *www.marshall.edu/geography* or call (304) 696-4364.

### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must:

- Submit GRE (Graduate Record Examination) scores with the graduate application;
- Have completed nine semester hours of undergraduate coursework in geography for full admission to the program.

*Conditional admission* (see definition in this catalog), for applicants who have not yet completed the GRE or nine hours of undergraduate coursework in geography may be granted with consent of the faculty. Students with coursework deficiencies may enroll for graduate work but may be asked to take undergraduate courses suggested by the Chair before full admission to the degree program. Students who have not taken the GRE may enroll for graduate work but must complete the GRE before full admission to the degree program.

### **Graduate Assistantships**

Applications for department research or teaching assistantships are available from the Geography Department chair. For more information about graduate assistantship at Marshall University, please see *www.marshall.edu/graduate/assistantships.asp.* 

For more information about other financial support, please see www.marshall.edu/graduate/forms/scholarshipflyer.pdf.

### **Degree Requirements**

Candidates for the master's degree (M.A. or M.S.) must meet the general requirements for the Graduate College and either complete a thesis with a minimum of 30 total credits or comprehensive finals with a minimum of 36 total credits.

#### **Required Courses**

GEO609 Geographical Research I (taken during first year) - 3 credit hours

GEO615 Geographical Research II – 3 credit hours

GEO540 Quantitative Methods in Geography – 3 credit hours; requirement waived if taken at the undergraduate level Any graduate-level geography GIS course (GEO 526, 529, 530, 531, 631, or GIS special topics) – 3 credit Hours.

A *Plan of Study* approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

## **Minor in Geography**

Students who minor in Geography should choose a minimum of six hours of appropriate courses from one of the specialties below in consultation with their major faculty advisor and a Geography faculty advisor.

*Regional Geography*:
Choose from GEO 502, 503, 504, 507, 508, 509, 512, 520 (regional topic), 610-614, 617-619. *Physical Geography*:
Choose from GEO 520 (physical topic), 522, 525, 530, 531, 617-619, 620 *Human Geography*:
Choose from GEO 501, 505, 506, 510, 511, 518, 519, 520 (human topic), 607, 617, 619 *Planning*:
Choose from GEO 514, 515, 516, 520 (planning topic), 617-619
Geographic Information Systems/Remote Sensing:
Choose from GEO 526, 529, 530, 531, 617-619, 631

## Graduate Certificate in Geospatial Information Science

## **Admission Requirements**

Students may pursue the graduate certificate while enrolled in the Geography master's program OR as a certificate-only student.

- Students already enrolled in the master's degree program should submit to Graduate Admissions a Secondary Program Request form at www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf
- Applicants interested in the certificate-only program should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate in Geospatial Information Science.

#### Program

A graduate certificate in Geospatial Information Science consists of a minimum of 12 graduate hours in courses designated as GIScience Courses, including regularly offered courses as well as special topics courses. Students must take courses from at least two different departments for a graduate GIScience certificate. Students must have a B (3.0) average in their GIScience courses and no grade below a C (2.0) in their GIScience courses to earn the certificate. The program is designed to:

- offer GIS study in a variety of disciplines with a variety of applications;
- teach students GIS techniques;
- teach students to apply GIS to solve scientific research problems;
- encourage students to gain experience in the GIS field before graduation by means of internships and work study programs;
- integrate GIS applications with appropriate computer science training;
- prepare students for GIS employment or GIS work at the graduate level.

### **GIScience courses:**

BSC 510/PS 510 Remote Sensing/GIS Applications (4 credit hours)
BSC 511/PS 511 Digital Image Processing/GIS Model (4 hrs.)
ES 626 Remote Sensing and Map Use (3 hrs.)
GEO 526 Principles of GIS (3 hrs.)
GEO 529 Intermediate GIS - Vector Analysis (3 hrs.)
GEO 530 Intermediate GIS - Raster Analysis (3 hrs.)
GEO 531 Analysis of Digital Airborne and Space-Based Imagery (3 hrs.)
GEO 631 Applied GIS Projects (3 hrs.)
GEO 690 Internship (1-6 hrs.; must be GIScience approved in advance)
IS 645 Geographic Information Systems (3 hrs.)
Special Topics courses as approved by the GIScience Advisory Board

## HISTORY, M.A. Minor in History

## **Program Description**

Established in 1938, the history graduate program is one of the oldest at Marshall University. Since the program began, more than 300 Master of Arts degrees in history have been awarded. Although many students have concentrated on U. S. and European history, the department also offers courses in Asian, Middle Eastern, Latin American, African American, and Women's history. In all fields of study students receive personal attention and direction that is often not available in larger graduate programs. Students may pursue either the thesis option or non-thesis option, but are encouraged to write a Master's thesis.

## **Admission Requirements**

## **Deadlines:**

The department has established two deadlines for the submission of applications to the program.

October 1st (for a spring semester start) and March 1st (for a fall semester start) are the deadlines for the submission of all application materials. The graduate committee will review applications and make its decisions shortly after these dates.

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

#### All materials should be submitted to the Graduate Admissions office.

Applicants must also submit to the Graduate Admissions office:

- two letters of recommendation;
- a writing sample drawn from work in a college course;
- satisfactory scores from the Graduate Record Examination (GRE) General Test.

#### **Program Requirements**

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 be accepted provisionally and may be asked to take undergraduate courses suggested by the Director of Graduate Studies before full admission to the program.

## **Plan of Study**

Students must submit to the department's Director of Graduate Studies a Plan of Study in the semester prior to registering for the 12th semester hour. The Plan of Study is a student's blueprint for graduation.

Students must earn a quality point average of at least 3.0 (B) on all graduate work applicable to the degree. 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, M.A. students in History must earn at least a 3.0 (B) grade point average in all History courses as a requirement for graduation.

Students must complete a minimum of 36 semester hours of graduate coursework. At least fifty percent of these hours must be completed at the 600 level. All students are required to complete History 600 Methodology Seminar in Historical Methods.

#### **Thesis Option**

Students who choose the thesis option must complete HST 681 for three to six credit hours and HST 677, Thesis Writing Seminar I, for an additional three hours. Thesis students are encouraged to take HST 678, Thesis Writing Seminar II, for an additional three hours. It is recommended that students earn credit hours in a wide distribution of historical areas and periods from a diversity of instructors.

#### Minor in History

A minor in History is earned by taking at least 6 credit hours in courses at the 500- or 600- level in History as approved by the student's advisor and the Graduate Program Director in the Department of History.

## HUMANITIES, M.A. Graduate Certificate in Appalachian Studies Graduate Certificate in Women's Studies

#### **Program Description**

The Master of Arts in Humanities stresses an interdisciplinary approach, embracing a variety of fields, while allowing conventional disciplinary studies as an integral part of the program. Students consult with faculty advisors to determine individual plans of study. After completing a prescribed core of humanities courses, the student elects one of four areas of concentration (Arts and Society; Cultural Studies; Historical Studies; Literary Studies). Although the student's plan may encompass courses from more than one area of concentration it will have strong intellectual coherence. The program enhances the student's ability to deal critically and flexibly with intellectual, social, political, historical, literary, or artistic issues with a broad humanistic perspective. The Humanities Program strongly encourages students not concerned with pursuing the degree (such as teachers using classes for certification and those who want to take courses for their own continuing education) to enroll as non-degree students.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

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In addition applicants must have:

- a score of 450 or above (40%) on the verbal section of the Graduate Record Examination (GRE) General Test or an equivalent score on the Miller Analogies Test (MAT);
- an undergraduate major in the humanities broadly defined;
- an overall undergraduate grade point average of 3.0 on a scale of 4, or a score in or above the 40th percentile in the GRE subject test of Literature in English.

Applicants who do not meet all of the above admissions requirements may be admitted provisionally. A provisionally admitted student must earn a grade of B or above in their first twelve hours of coursework in the humanities, the twelve hours to include the course in Expository Writing for Research (Humanities 604) and one other core course (Humn 600, 601, 602, 603, or 605).

## **Program Requirements**

Degree students have the options of a thesis or final project. Students electing the thesis complete a total of 36 hours, six of which are the thesis (HUMN 680 and 681). Students electing the project option complete a total of 39 hours, three of which are the project (HUMN 680).

With both options, students must pass a comprehensive examination. All individual plans of study are organized according to the following general structure:

- I. Humanities Core (12 hours): Humn 600 and 604 and two others (Humn 601, 602, 603, or 605);
- II. Concentration (minimum of 15 hours);
- III. Program Electives (3-12 hours);
- IV. Independent Research Project (3 hours) or Thesis (6 hours).

## Plan of Study

Before registration for the 12th graduate credit hour, all graduate students must complete an official Plan of Study form to be approved by the Graduate Director and/or Department Chair and submitted to the Graduate College Office.

Within a concentration, a student may select courses to develop personal interests. Note: Not all courses are offered at every teaching site. Students should understand that some plans of study may require travel to other teaching sites in West Virginia.

No more than twelve hours may be taken at the 500 level. A student nearing the completion of a plan of study may request an independent study course on a topic unavailable through regular courses. In such a case, the student will work under the direct supervision of a faculty member. The student's advisor and the program director must approve the independent study.

Degree students are expected to maintain a 3.0 Grade Point Average in their courses. After a minimum of 24 hours of course credits and consultation with the advisor, a student is eligible to sit for the examination which is related to the core and to the individual plan of study.

Note: Students may not enroll in Humanities 680 until they have passed the comprehensive examination.

For further information on the degree program (sample plans of study, comprehensive examination, and independent research options), students should consult the Humanities Program Guide, available from the program director in South Charleston. Because degree students in Humanities have individualized plans of study, they are cautioned to contact the program director when applying for graduate study and to meet regularly with their advisors.

*Note:* Some courses in Art and Design, Classics, Communication Studies, English, History, Journalism and Mass Communications, and Philosophy also may be appropriate for the plan of study in Humanities.

## **GRADUATE CERTIFICATES**

## Graduate Certificate in Appalachian Studies

The Humanities program is home for the Graduate Certificate in Appalachian Studies, a non-degree program of 18 hours composed of foundation courses (CULS 611 and 612), electives to meet specific educational goals, and a capstone research experience (HUMN 680).

For additional information, contact the Humanities Program.

#### Admission

Students may pursue the graduate certificate in Appalachian Studies while enrolled in the Humanities M.A. program OR as a certificate-only student. Students already enrolled in the M.A. degree program should submit to Graduate Admissions a Secondary Program Request form: http://www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf

Applicants interested in the certificate-only program should apply for admission to Marshall University as a Certificate/ Professional Development student and select on the application form the Certificate in Appalachian Studies. Applicants must have a bachelor's degree from a regionally accredited institution.

## Graduate Certificate in Women's Studies

Scholarly work on women and gender has influenced all levels of academic discourse. For example, one of the most important dimensions of globalization has been the heightened awareness of the importance of women in societal development.

Applicants must have a bachelor's degree from a regionally accredited institution.

For additional information, contact the Humanities Program.

## LATIN, M.A, Graduate Certificate in Latin

### **Program Description**

The Latin M.A. is a 33-hour degree that consists of twenty-one hours of advanced Latin on the 500- and 600-levels, six hours of related courses taught in English, and six thesis hours.

The program fills significant needs in West Virginia and surrounding states. It will allow current Latin teachers to expand their knowledge base and to strengthen their own programs. It will also contribute to the training new teachers of Latin on the middle and secondary school levels, and will prepare students to enter Ph.D. programs in Classical Philology.

The M.A. in Latin is not designed to replace the M.A.T. in Latin currently offered by Marshall, nor does it guarantee licensing or certification to teach Latin in WV. It will, however, allow teachers certified in other disciplines to add Latin as a content area, and it will provide additional graduate hours for persons that hold professional teaching certification in Latin.

### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

Applicants must also have:

- GRE (Graduate Record Examination) scores sent to Graduate Admissions
- three letters of recommendation sent to Graduate Admissions
- appropriate prerequisites for upper-level Latin courses, which minimally consist of the completion of at least six semesters of Latin, at least two of which were taken at the 300-level or above.

#### **Program Requirements**

The M.A. degree will consist of twenty-one hours of advanced Latin on the 500- and 600-levels, of which LAT 640 and 660 are required, six hours of related courses taught in English, of which CL 620 is required, and six thesis hours. NOTE: at least 16 hours must be at the 600 level.

- From the Latin courses, students will be required to take LAT 640 (Advanced Latin Prose Composition) and LAT 660 (Special Author in Latin Literature), and will select 15 hours from the other courses.
- From the courses taught in English, students will be required to take CL 620 (Theoretical Approaches to Latin Literature) and will select 3 hours from the other courses.

#### Thesis

All students will be required to write an M.A. thesis of approximately 50-70 pages. Topics will be literary, and grounded in cultural contexts and literary critical techniques. They can focus on one author, or on themes or subjects found in more than one author. The research and writing of the thesis will extend over two semesters. In the first, students, working with an advisor, will develop and begin preliminary research on an author. In the second, they will continue their research and complete the actual writing. Students will be encouraged to present their research at national or regional conferences.

## **Plan of Study**

Before registration for the 12th graduate credit hour, all graduate students must complete an official Plan of Study form

to be approved by the Graduate Director and/or Department Chair and submitted to the Graduate College Office.

Courses that may be used to fulfill the advanced Latin requirement are:

- LAT 503: Roman Comedy. A close reading in Latin of selected comedies of Plautus and Terence, along with a study
  of their literary antecedents.
- LAT 504: Roman Elegy: Propertius and Tibullus. A close reading in Latin of the poetry of Propertius and Tibullus, along with a study of literary antecedents, cultural contexts and contemporary theories.

(continued)

Degree Program Requirements

- LAT 505: Readings in Vergil. A close reading in Latin of the poetry of Vergil, along with a study of his literary antecedents, cultural contexts and contemporary theories.
- LAT 506: Horace: Odes and Epodes. A close reading in Latin of the poetry of Horace, along with a study of his literary antecedents, cultural contexts and contemporary theories.
- LAT 507: Livy's History of Rome. A close reading in Latin of the selections from the histories of Livy, along with a study of his literary antecedents and historiographical theory.
- LAT 509: Roman Satire: Horace, Martial and Juvenal. A close reading in Latin of the selections from satires of Horace, Juvenal and Martial.
- LAT 510: Tacitus. A close reading in Latin of the selections from the histories of Tacitus, along with a study of his literary antecedents and historiographical theory.
- LAT 580-583: Special Topics in Latin Literature.
- LAT 585-588: Independent Study.
- LAT 680-683: Special Topics in Latin Literature.
- AT 685-688: Independent Study.

Other required courses:

- LAT 640: Advanced Latin Prose Composition. A detailed study of Latin prose composition that focuses heavily on the more complex grammatical structures of the language.
- LAT 660-665: Special Author in Latin Literature. A detailed study of one Latin author with close attention to primary and secondary sources on that author.
- CL 620: Theoretical Approaches to Latin Literature.
- LAT 681: Thesis Hours.

Courses that may be used to fulfill the related courses requirement are:

- ART 508: Art of the Ancient World
- CL 535: Greek Civilization
- CL 536: Roman Civilization
- CL 560: Ancient Goddess Religions
- CL 570: Transformations of Myth
- CL 580-583: Special Topics in Greek and Roman Literature
- CL 585-588: Independent Study

## **GRADUATE CERTIFICATE IN LATIN**

The Graduate Certificate in Latin provides a convenient way for individuals to add a consistent study of the Latin language and literature to their undergraduate and graduate credentials. Currently, all credits can be used toward teacher certification and toward the M.A.T. at Marshall.

#### **Admission Requirements**

Students already enrolled in the Latin M.A. program should submit to Graduate Admissions a Secondary Program Request form *www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf*.

Prospective certificate-only students should apply for admission to Marshall University as a Professional Development student and select on the application form the Certificate in Latin.

#### **Program Requirements**

The program requires 15 hours, 12 of which consist of 500-level Latin courses, and 3 of which consist of CL 536, Roman Civilization.

## PHILOSOPHY MINOR

The minor in philosophy consists of any two 500-level courses in Philosophy.

## POLITICAL SCIENCE, M.A.

## **Program Description**

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

### **Admission Requirements**

Applicants should follow the admissions process outlined in the Graduate Catalog or at the Graduate College website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

Additional requirements:

- · completion of 12 hours of undergraduate social science coursework
- Graduate Record Examination (GRE) General Test and TOEFL (if applicable): combined GRE score of at least 1000; 550 or higher for TOEFL;
- Two letters of recommendation that discuss the applicant's abilities (college instructors strongly preferred)
- A personal statement (1-2 page essay regarding the student's interest in political science and how the M.A. degree will benefit him or her).
- an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work.;

Applicants may be accepted for Provisional Admission (see definition of Provisional Admission in this catalog), based on all of the above criteria except:

- undergraduate GPA between 2.50 and 2.99 on a 4.0 scale for all previously completed undergraduate university work.; OR
- GRE scores lower than the combined 1000.

## **Plan of Study**

A Plan of Study approved by the Director of Graduate Studies and the Graduate Dean must be filed in the Graduate College office before the student registers for the 12th semester hour.

## **Core Curriculum**

The Master of Arts degree requires the completion of 30 hours of coursework and writing a thesis and passing an oral defense, or completion of 36 hours of coursework and the passing of written and oral comprehensive examinations.

The graduate curriculum in political science is divided into five fields of specialization. The student who elects to write a thesis must take at least nine credit hours in one of these, and the topic of the thesis must be within that field. Under the non-thesis option, at least twelve credit hours must be taken within a single field.

	h	ours
Minimum requirements		36
1.	Political Science 600 and 604 (required of all majors)	6
2.	Major Field	12
3.	Minor Field	9
4.	Thesis option	6
6.	Electives	9.

Electives must be approved by the Director of Graduate Studies and be related to the major or minor field of study.

## **GRADUATE FIELD CONCENTRATIONS**

American National, State, and Local Politics: 523, 533, 536, 540, 542, 560, 584, 606, 611, 612, 648, 652, 675. International/Comparative Politics: 505, 506, 507, 508, 510, 511, 512, 515, 516, 520, 522, 523, 524, 529, 531, 544, 609, 614, 620, 652.

Political Theory: 518, 519, 521, 525, 526, 528, 529, 530, 531, 546, 629.

Public Administration/Urban Studies: 531, 533, 542, 550, 552, 553, 554, 561, 618, 620, 621, 660.

All courses are designated PSC unless otherwise noted.

\*Must take any two of these courses for a major field.

Courses that fall in two or more specializations may be counted in an appropriate area upon the approval of the Director of Graduate Studies.

The Director of Graduate Studies must approve all coursework that constitutes each student's specialization. Enrollment in specializations and elective courses is subject to the completion of any prerequisite courses and/or any requirement for

permission to enroll from an individual instructor and/or other department faculty member. In addition, all courses to be considered toward graduation require approval from the Director of Graduate Studies.

### **Thesis Option**

For students planning to continue graduate studies in a doctoral program, the thesis is the preferred option for receipt of the M.A. degree in Political Science. Students electing the thesis option must complete 30 hours of graduate course credit. Students selecting the thesis option must complete the core courses and area of concentration requirements and have a written thesis proposal/prospectus approved by the thesis committee prior to enrolling for thesis credit. The remaining credit hours are obtained by taking thesis research (PSC 681) (6 credit hours). The 6 thesis research hours are normally taken in three-hour increments over two successive semesters, immediately preceding graduation, and after course requirements are completed.

All students selecting the thesis option must pass an oral defense. In cooperation with the Director of Graduate Studies, a student should form a thesis committee. The thesis committee assists in selecting and developing the research problem and evaluates the student's work on that problem. A student who selects the thesis option should outline the thesis option early in his or her studies in consultation with members of the graduate faculty. The student should also determine the graduate faculty member of the department who will serve as chair of the student's thesis committee.

#### **Non-Thesis Option**

Students who select the M.A. degree without a thesis must complete 36 credit hours of graduate coursework with a GPA of at least 3.0 and meet all other requirements. The credit hours include the 18-hour core course requirement, which includes the 12-hour specialization requirement. Nine credit hours must be completed in a minor area of specialization offered by the Political Science Department. The remaining 9 hours may be taken from a variety of graduate level courses offered at Marshall University. All elective courses must enhance the major or minor field and be approved in advance by the Director of Graduate Studies. All students who select the non-thesis option must pass both written and oral comprehensive exams. Both written and oral comprehensive examinations are administered once during the fall and spring semesters.

## **Choosing Classes**

All curriculum choices should be made in consultation with the Director of Graduate Studies. Students should keep in mind that they cannot retake undergraduate/graduate classes they took as an undergraduate student at Marshall University (if applicable).

#### Advising

Each new graduate student must meet with the Director of Graduate Studies before his or her first semester as a graduate student. Continued advising throughout a student's tenure at Marshall University is strongly encouraged.

## PSYCHOLOGY, M.A. Area of Emphasis Clinical Psychology Graduate Certificate in Behavioral Statistics

## **Program Description**

The M.A. program requires a minimum of 36 graduate credit hours, though students may complete significantly more, depending upon their objectives. A common "core" of 24 credits (see below) is required of all students. The remaining hours are selected in consultation with an advisor to help meet students' academic and professional goals.

The Clinical Psychology area of emphasis (see below) requires a minimum of 26 specified credits beyond the core.

For both educational and ethical reasons, it is important that students obtain education and training that is consistent with their career goals. For example, students who intend to work in applied fields of psychology (e.g clinical, counseling, school, industrial/organizational) should pursue and complete programs of study that prepare them with the skills, knowledge and supervised experience needed to develop competence in that field; this process is consistent with the APA ethical requirement that psychologists restrict their professional work to areas in which they have developed and maintained competence.

Prospective students in our M.A. program should recognize that the general M.A. program is NOT in itself a clinical training program; students who plan to do clinical work should apply for and complete the entire Clinical Area of Emphasis sequence (described in a separate section below), which is designed to prepare graduates for entry-level clinical positions.

## **Admission Requirements**

#### **Deadlines:**

- Application for admission to the Psychology MA will be received throughout the year and acted on within one week of receipt by the program.
- Clinical Emphasis

Applications for the clinical emphasis are due by March 15 and will be acted on by April 15 of each year. Students who are already admitted to the MA program may submit a letter of interest in the clinical emphasis to the coordinator. Slots in the clinical emphasis are limited by the faculty resources which are available to supervise the practica. The most qualified applicants will be accepted until the slots have been filled. Grade point averages (undergraduate and graduate) GRE scores, and faculty recommendations will be considered

All applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website at www.marshall.edu/graduate/admissionsrequirements.asp. (Submit all materials to the Graduate Admissions Office.)

Applicants must also have:

- an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work;
- Graduate Record Exam (General Test) scores no lower than 400 on either the Verbal or Quantitative sections, and a minimum total of 900 on those two sections;
- Completion of the following prerequisite courses: Elementary or Introductory Statistics, Experimental Psychology or Research Methods; Abnormal Psychology; Learning, Social Psychology and Developmental Psychology.

*PROVISIONAL STATUS:* Students may be admitted to the psychology master's program with "Provisional" status if either the GRE admission criterion OR the GPA criterion is met. (Students who do not meet either criterion are not eligible for admission to the program.) Provisionally admitted students will be fully admitted to the program when they have completed 12 hours of classes (which must include PSY 517 and 506) from the core courses listed below with no grade being below a *B*. A student who earns a *C* or lower in any of the listed core classes during the period of provisional status will not be permitted to take further graduate hours within the psychology department.

Students granted provisional admission status must take:

Statistics (PSY 517)
Psychometrics (PSY 506)
And two of the following:

Biological Bases of Behavior (PSY 674)
Cognitive Psychology (PSY 672)
Advanced or Applied Social Psychology (PSY 606 or 503)
Advanced or Applied Developmental (PSY 615 or 617)

# No student may take more than 12 hours in the psychology department nor take any courses in the clinical concentration without receiving full admission to the department.

Provisional students will be assigned an advisor who must approve all course registrations. Provisional students will have a departmental hold placed on their registration to assure advisor approval and compliance with this policy. This hold will be permanently removed upon full admittance.

Students who meet the undergraduate GPA and GRE test score requirements but who are missing no more than two of the required undergraduate prerequisite classes listed above may also be granted provisional admission status. They will then be able to take some graduate classes with the approval of their advisors while completing the prerequisites. However, they may only enroll in graduate classes for which they have taken the prerequisite as an undergraduate. For example, a student who has not had elementary statistics cannot enroll in Intermediate Statistics (PSY 517); a student without an undergraduate social psychology course cannot take Advanced Social Psychology, etc.

Students granted provisional admission status because of missing course prerequisites will be fully admitted to the program upon successful completion of the missing prerequisites and of any graduate courses taken during the provisional period.

#### **Program Requirements**

#### **General Requirements**

The M.A. program requires a minimum of 36 graduate credit hours, though students may complete significantly more, depending upon their objectives. A common "core" of 24 credits (see below) is required of all students. The remaining hours are selected in consultation with an advisor to help meet students' academic and professional goals. The Clinical Psychology area of emphasis (see below) requires a minimum of 26 specified credits beyond the core.

(continued)

Degree Program Requirements

*2-C Rule:* Psychology students cannot be admitted to, or continue in, a graduate program in psychology if they earn more than one grade of "C" or lower in any graduate course in psychology or any course included in the plan of study. Such students will not be permitted to continue taking courses or to work on a thesis.

*Ethics and Student Behavior:* Students in all programs are expected to behave in accordance with the APA Ethical Principles and Code of Conduct. Consequences for violations may include suspension or dismissal from the student's program of study. When students in the clinical area of emphasis (M.A. program) exhibit behavior indicating inability or limited capacity to successfully perform clinical roles and functions, they may be suspended or dismissed from their program of study.

## Plan of Study

Before registration for the 12th graduate credit hour, all graduate students must complete an official Plan of Study form to be approved by the Graduate Director and/or Department Chair and submitted for approval to the Graduate College Office.

#### **Comprehensive Evaluation**

A written comprehensive examination is required of all students in the M.A. program. Details about the exam are available from advisors and the program coordinator. In addition, students in the Clinical Psychology area of emphasis must, as part of their clinical internship, complete a comprehensive evaluation based on identified clinical competencies.

# **Thesis Option**

Students have the option of completing a research thesis. The department has established a set of criteria and procedures for doing a thesis; these are available from advisors. These may be good choices for students intending to continue their education in research-oriented Ph. D. programs. This issue should be carefully discussed with the advisor. Up to 6 credits of PSY 681 (Thesis) may be included as "additional coursework" discussed below.

# Curriculum

# **Core Requirements**

- Intermediate Behavioral Statistics (PSY 517). NOTE: if PSY 417 or its equivalent was completed with a *B* or better as an undergraduate, an additional statistics course must be substituted, in consultation with the student's advisor.
- Biological Bases of Behavior (PSY 674)
- Cognitive Psychology (PSY 672)
- Advanced or Applied Social Psychology (PSY 606 or PSY 503); NOTE: if either course or its equivalent was completed with a *B* or better as an undergraduate, the student must take the other course at the graduate level.
- Advanced or Applied Developmental Psychology (PSY 615 or PSY 617)
- Psychometrics (PSY 506).
   NOTE: If PSY 406 or its equivalent was completed with a *B* or better as an undergraduate, an acceptable alternative must be substituted, in consultation with the student's advisor.
- Ethical and Legal Issues in Psychology (PSY 605)
- M.A. Research Seminar (PSY 692) Total: 24 credits

## **Additional Coursework**

A minimum of 12 additional credit hours are to be selected in consultation with the advisor. With the advisor's approval, courses from other departments that are consistent with the student's academic and career goals may be included in the required 12 additional credits. Students may, and often do, take more than 36 credit hours as part of their degree programs; in preparing their plans of study, students should carefully discuss their academic and career goals with their advisors and other faculty members.

# **Clinical Psychology Area of Emphasis**

The Clinical Psychology area of emphasis consists of 26 credit hours of clinical coursework and supervised clinical experience beyond the required department core. (Note: These 26 credits will meet the requirements for 12 additional credits as noted above in Additional Coursework.) It is designed to prepare graduates for master's degree level clinical roles within professional psychology. Any student who is fully admitted to the Psychology M.A. program may apply for admission to the clinical psychology area of emphasis. More information and application materials are available from advisors and from the Clinical area coordinator.

## **Required Courses**

Those marked with \* are restricted to students in the clinical track. Students in the M.A. clinical area of emphasis must take their specialty track courses in South Charleston. It is important to note that students in the clinical area of

emphasis *must* complete the entire track to receive any letters of support or other indication from individual faculty members, the department or the university that the student has achieved appropriate competence in the skills or knowledge bases associated with master's level clinical training, and such students must complete the entire sequence for the Clinical Psychology Area of Emphasis to appear on their transcripts.

Current Models of Psychotherapy (PSY 533; 3 cr.) Diagnosis and Treatment Planning (PSY 608; 3 cr.) Individual Psychotherapy and Interviewing (PSY 633; 3 cr.)\* Assessment of Adults (PSY 610; 3 cr.)\* Assessment of Children (PSY 611; 3 cr.)\* Adult Assessment Practicum (PSY 620; 1 cr.)\* Child Assessment Practicum (PSY 621; 1 cr.)\* Group Therapy (PSY 634, 3 cr.)\* Clinical Practicum (PSY 670; 6 cr.)\* Clinical Internship (PSY 680; 3 cr.)\*

# **Graduate Certificate in Behavioral Statistics**

Psychology and behavioral research are based, in part, upon the assumption of an orderly analysis of empirical data. Within psychology, behavioral statistics offer the foundation for discovery and advancement of the profession and provide the support for the demonstrability of treatment programs and other forms of psychological intervention.

The Graduate Certificate in Behavioral Statistics offers a comprehensive array of statistical tools and analyses that will enable those who complete the certificate both private and public sector opportunity. The certificate represents a balance between the large sample parametric statistics of experimental design [ANOVA] and regression and the areas of nonparametric and small or single subject design.

Certificate holders will be able to create, design, and implement real-world statistical paradigms.

Employers will benefit from the breadth of the program in the graduates' ability to apply behavioral statistical paradigms to their knowledge base.

#### Admissions

Applicants interested in the certificate-only program should apply for admission to Marshall University as a Certificate/ Professional Development student and select on the application form the Certificate in Behavioral Statistics. The Admissions requirements for the certificate program is the same as for the M.A. program in Psychology.

All credits earned in the Graduate Certificate Program in Behavioral Statistics may be applied to a master's degree. For example, PSY 517 is a current requirement for the master's degree in Psychology. Other credits earned in the behavioral statistics program may be applied in part to the elective hours required for the M.A. degree in Psychology.

#### **Requirements: 12 hours**

PSY 517, Intermediate Behavioral Statistics	. 3 hours
PSY 623, Experimental Design	. 3 hours
PSY 624, Multivariate Analysis	. 3 hours
And one of the following:	
PSY 651, Advanced Nonparametric Statistics	. 3 hours
PSY 654, Single Subject Analysis	. 3 hours

# DOCTOR OF PSYCHOLOGY, PSY.D.

## Clinical Psychology (Psy.D.) Program Mission

The primary mission of the Clinical Psychology (Psy.D.) Program at Marshall University is to train doctoral-level psychologists who are highly skilled generalists. Training within the program will foster an appreciation for the importance of critical inquiry at all levels of clinical practice. There is a specific emphasis on developing a sensitivity to the needs of rural and underserved people. The Psy.D. program is accredited by the American Psychological Association.

## **Model and Goals**

The philosophy of the program follows a practitioner-scholar model of education and training; consequently, graduates of the program are trained as practitioners of clinical psychology as an empirically informed field. Education and training within the program emphasize the importance of critical inquiry at all levels of clinical practice, including treatment planning

for individual clients, assessment of program outcomes, and the design and execution of rigorous research. The program is dedicated to educating students for professional practice careers. The program faculty has set forth several pertinent goals and objectives to be obtained by students during their time in the program. These goals and objectives are founded on the core competencies of clinical education and training stated by the National Council of Schools in Professional Psychology (NCSPP).

The program exposes students to the following primary clinical orientations: integrative, behavioral, cognitive behavioral, and psychodynamic. In the context of this exposure, we encourage each student to develop an orientation that is best suited to his or her style and situation. We endeavor to support students in their development, whether they prefer to remain eclectic or choose to invest in a particular theoretical orientation. The fact that the faculty represents a variety of orientations fits well with this model. Although the perspectives of clinical faculty vary, they share a common mission to provide education and training that is solidly grounded empirically. We also emphasize that multiple systemic and individual factors must be considered in developing a cooperative relationship between client and therapist that will ultimately lead to more positive life experiences for the client. There is a sharp focus on the impacts of community and culture from a biopsychosocial model of influence on human development. As such, the generalist orientation of the program serves as a model to students that the field of clinical psychology is as diverse as the human population it serves.

# **Education and Training Goals and Objectives**

1. The primary goal of the program is to provide high quality graduate education and training in clinical psychology with an emphasis on the role of empirical knowledge as it pertains to clinical practice. As such, students will develop the specific competencies that are the foundation of the education and training model developed by NCSPP.

*Objective 1.1:* Relationship competence: Students are expected to develop the ability to form productive partnerships with clients, peers, supervisors, faculty, and community members.

*Objective 1.2:* Assessment competence: Students are expected to develop competency in clinical assessment as evidenced by knowledge of basic psychometric theory and sound test administration and interpretation skills. In addition, students should be able to demonstrate the use of sound assessment methodologies that allow them to describe their client, to plan a course of intervention, and to assess intervention outcomes.

*Objective 1.3:* Intervention competence: Students are expected to demonstrate the ability to form a coherent, theoretically based, empirically-supported treatment plan that is refined during the course of intervention.

*Objective 1.4:* Research and evaluation competence: Students must demonstrate the ability to conceptualize as appropriate a logical research question, frame it in terms of an operational definition, and develop a sound method for addressing the question. Students must be able to execute the plan and analyze the quantitative and/or qualitative data in a rigorous and systematic manner.

*Objective 1.5:* Consultation and education competence: A rural behavioral health practitioner may often find that the most important function s/he can serve is as a consultant within existing systems. Students will demonstrate competence in distinguishing various types of consultation from direct intervention.

*Objective 1.6:* Management and supervision competence: Students will become knowledgeable in the areas of organization and supervision of psychological services. Students will demonstrate this knowledge in their ability to provide formal and information supervision to less experienced students. They will also demonstrate this knowledge in their ability to function professionally in at least two different agency settings.

*Objective 1.7:* Legal and Ethical competence: Students are expected to understand and abide by the APA Code of Ethics in all professional and academic settings.

*Objective 1.8:* Cultural/Diversity competence: Students will understand the significant impact cultural differences have on clinical practice and be able to articulate those impacts in reference to specific clinical cases. Students will be able to identify cultural differences in an academic sense and demonstrate through program planning and service delivery that the differences are appreciated.

2. The second goal is to ensure that the clinical training of students is thoroughly grounded in the broad scientific areas of psychology.

*Objective 2.1:* Students will demonstrate knowledge in the following broad areas of scientific psychology: biological aspects of behavior; cognitive and affective aspects of behavior; social aspects of behavior; history and systems of psychology; psychological measurement; research methodology; and techniques of data analysis;

*Objective 2.2:* Students will demonstrate knowledge in the following scientific, methodological, and theoretical areas of psychology: individual differences in behavior, human development, dysfunctional behavior and analysis, and professional standards of ethics.

3. Rural areas are characterized by unique needs that are not often met by service delivery models and therapeutic modalities developed primarily in urban settings. Therefore, a third goal is to promote an understanding regarding the impact of rural culture on clinical practice.

*Objective 3.1:* Students will develop an understanding of the diverse forces at work in rural areas that can and do impact various aspects of human development and community functioning.

*Objective 3.2:* Students will be able to articulate alternative service delivery models that may improve access and use of behavioral health services in rural areas.

Objective 3.3: Students will be encouraged to seek internships in settings that serve rural populations.

4. Finally, the program seeks to nurture in students the spirit of lifelong learning. In the service of this goal, the faculty strives to create an atmosphere of inquiry in which students are encouraged to utilize a variety of means to answer complex questions related to human nature.

*Objective 4.1:* Faculty and students will regularly engage in formal and informal discussions of current literature and pertinent research issues.

*Objective 4.2:* Faculty and students will be encouraged to regularly attend conferences and workshops that promote critical thinking regarding issues pertinent to the broad field of psychology.

# **Program Goals and Objectives**

1. The primary program goal is to enhance the scope and quality of services available in rural areas by increasing the likelihood that doctoral students graduating the program will choose to work in rural and underserved regions, particularly those regions in West Virginia.

*Objective 1.1:* As research has shown that students who are native to rural areas and who train there are more likely to return to those areas to practice, the department has determined that 50% of the slots be reserved within the program for residents of West Virginia and the surrounding region. The department anticipates offering the remaining slots to individuals from a broad range of geographic regions and all interested individuals are strongly encouraged to apply.

*Objective 1.2:* Quality practicum placements are cultivated in rural settings to allow students to be trained in alternative service delivery models.

2. The second program goal is to promote an understanding of the impact(s) of rural culture, particularly Appalachian culture, on human behavior and behavioral health needs.

*Objective 2.1:* Faculty and students are encouraged to develop research projects that permit the examination of the impact of rural/Appalachian culture.

*Objective 2.2:* Faculty and students are encouraged to present their work in conferences and workshops that address issues pertinent to rural populations.

# Applying to the Psy.D. Program

Prerequisite Coursework. Applicants must have completed a minimum of 18 undergraduate semester hours of psychology, including statistics, experimental psychology or research methods, personality, abnormal psychology, and psychometrics in order to be considered for admission.

Application Deadline and Materials. Students are admitted to the Psy.D. program once per year for classes starting in the Fall semester. Applicants are required to submit the completed application form with all requested supplemental materials, official transcripts of all previous coursework, official report of the Graduate Record Examination (GRE) General Test (scores may not be more than five (5) years old), and three letters of recommendation. Completed applications along with all supporting materials must be received by the January 15 deadline to be considered for admission the following fall. It should be noted that the application process is competitive. Average scores for successful applicants for the verbal and quantitative sections for the GRE are around 550 and 540 respectively. Grade point averages for successful candidates typically range from 3.2 to 3.6. Application materials and current program information can be obtained by contacting the Marshall University Psychology Department, the Marshall University Graduate College Admissions office, or by consulting the Psychology Department Web site at www.marshall.edu/psych.

Applicant review process. Applicants are divided into two groups as follows:

- 1. Post-B.A.: This track is designed for students who either possess no graduate degree or whose graduate degree is in an area other than psychology. Students who have completed some graduate work towards a master's degree in psychology but will not have completed the degree prior to admission to the Psy.D.program would also be a part of this track. Students accepted into this track are expected to enroll as full-time students throughout the program. A student accepted through this track may earn a master's degree in general psychology as he or she makes successful progress toward the Psy.D.
- 2. Advanced Standing: A student who already has a master's degree in psychology can apply for advanced standing in the Psy.D. program. In order to apply for advanced standing, a student must have completed a master's degree in psychology from a regionally accredited institution. Students who are admitted with advanced standing must select to enter in either a full-time track or a part-time track by the end of their first semester of enrollment. These tracks are described below:

*Full-time track:* Students who apply for advanced standing and the full-time track must be able to document coursework and practicum equivalencies equal to approximately 36 hours of coursework required in the Psy.D.

(continued)

program at Marshall University. Review of equivalencies is described in the next section. Students in the full-time track must commit to a minimum of 9 hours of coursework and practica per semester during the entire time of their enrollment. They must also commit to taking summer coursework as needed. As such, these students can anticipate completing the program in approximately four years. This would assume 5-6 semesters of coursework and a full year for the pre-doctoral internship. Students admitted to the full-time track can apply to change to the part-time track if their circumstances warrant such a change. Although students with extenuating circumstances may drop below full-time for a given semester without changing tracks, they should recognize that this change may impact the time it will take to complete the program. Students in this track desiring to attend part time for more than one semester may be required to switch formally to the part-time track.

*Part-time track:* Students who apply for advanced standing and the part-time track are not required to document equivalencies at any particular level, although they must still posses a master's degree in psychology from an accredited institution. Students in the part-time track may enroll either full-time or part-time in any given semester with the exception of the residency year, described in the next section. During the residency year, full-time enrollment is required. Students in this track should anticipate completing the program in no fewer than 5 years and no more than 7 years from the date of enrollment.

*Vertical Team Practica:* Practica in the program are arranged according to vertical teams. Each team is lead by a clinical faculty member who is a licensed psychologist. Teams are organized around a particular orientation to clinical conceptualization and treatment planning. Teams include students at all levels of training and allow newer students to be exposed to practica in which they may be placed as they progress through the program. Vertical team arrangements also allow more experienced students to become mentors to more junior students.

*Comprehensive Evaluation Process:* All students admitted to the program must complete the portfolio evaluation review as part of the comprehensive evaluation process. In addition, students who are admitted without a master's degree will take a written comprehensive prior to being awarded the master's degree.

*Doctoral Research Project:* All students are required to complete a doctoral research project prior to receiving their Psy.D. degree. Details of the doctoral research process are discussed in the Psy.D. Student Handbook.

*Internship Requirement:* All students are required to complete a one year, full time (or two year, half time) internship in clinical psychology at an approved internship training site. There are a very limited number of local approved sites and students should anticipate the possibility of relocation during this portion of the training period. Please contact the Psy.D. program coordinator for additional information concerning this requirement.

*Residency Requirement:* All students are required to enroll as full time students for a one year "residency" period. For most students, this will be the 4th year, when students focus on their doctoral research and their rural practicum placements.

*Rural Practicum Placement:* A key component of our program is training in and supervised delivery of psychological services in rural settings. All students will spend at least one academic year (two sequential full semesters) placed in an approved rural training site. This placement will require driving to the site and may require an overnight stay each week. More information about this part of the program is available from the Psy.D. program coordinator and/or the Practicum Coordinator.

*Scheduling of Coursework:* Courses are offered during Fall, Spring and Summer terms, with most courses offered no more than once per year. Students must plan to take courses during each term to make appropriate progress through the curriculum.

Other information about program (e.g. comprehensive exams, specific procedures for requesting evaluation of prior graduate coursework, graduate assistantships and other student funding opportunities; the doctoral program fee charged to students each semester of enrollment) is available from the psychology department; please contact the Psy.D. Program Coordinator.

## Accreditation

Marshall University's Psy.D. is fully accredited by the American Psychological Association. In addition, Marshall University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504). The Psy.D. program has also been recognized as a designated program by the National Register/Association of State and Provincial Boards of Professional Psychology. The Psy.D. program is also a member of the Association of Psychology Postdoctoral and Internship Centers (APPIC).

## **Course Requirements**

Below are the courses required for the Psy.D. program. A curriculum by year can be found by visiting the website at *www.marshall.edu/psych*.

#### I. Foundational Psychotherapy

PSY 633, Individual Interviewing & Psychotherapy (3 cr.)

## II. Foundational Assessment

PSY 706, Integrated Assessment I (3 cr.) PSY 707, Integrated Assessment I Practicum (1 cr.) PSY 708, Integrated Assessment II (3 cr.) PSY 709, Integrated Assessment II Practicum (1 cr.) Optional: PSY 710, Advanced Assessment (3 cr.)

# III Biological Bases of Behavior

PSY 674, Biological Bases of Behavior (3 cr.) PSY 618, Psychopharmacology (1 cr.) PSY 750, Behavioral Health Psychology (3cr.)

# IV. Cognitive and Affective Aspects of Behavior

PSY 672, Cognitive Psychology (3 cr.)

# V. History and Systems of Behavior

PSY 560, History and Systems of Psychology (3 cr.)

# VI. Research Methodology and Data Analysis

PSY 517, Intermediate Statistics (3 cr.) PSY 723, Clinical Research Methods (3 cr.) Choose one of the following: PSY 717, Advanced Quantitative Methods (3 cr.) EDF 625, Qualitative Research in Education (3 cr.) PSY 799, Doctoral Research (6 or more cr.)

# VII. Human Development and Individual Differences

PSY 615, Advanced Developmental Psychology (3 cr.) PSY 712, Geropsychology (3 cr.) PSY 764, Human Sexuality and Dysfunction (3 cr.)

## VII. Psychopathology

PSY 608, Differential Diagnosis and Treatment Planning (3 cr.)

# IX. Professional Standards and Ethics

PSY 605, Ethics, Legal, and Professional Issues (3 cr.)

# X. Social Aspects of Behavior

PSY 606, Advanced Social Psychology (3 cr.)

# XI. Cultural and Individual Diversity

PSY 755, Rural/Community Psychology I (3 cr.) PSY 726, Cross-Cultural Psychology (3 cr.)

# XII. Advanced Psychotherapy

PSY 635, Child and Family Therapy (3 cr.) PSY 732, Behavior Therapy (3 cr.) PSY 731, Psychodynamic Therapy (3 cr.) PSY 733, Cognitive Psychotherapy (3 cr.) PSY 752, Rural/Community Psychology II (3 cr.) PSY 634, Group Therapy (3 cr.)

# XIII. Consultation and Supervision

PSY 753, Supervision in Clinical Psychology (3 cr.)

## XIV. Clinical Practica

PSY 670, Practicum I (3 cr.) PSY 671, Practicum II (3 cr.) PSY 769, Practicum in Clinical Psychology (3 cr.) *(continued)*  PSY 713, Advanced Assessment Practicum (2 cr.) PSY 714, Advanced Assessment Practicum (2 cr.) PSY 770, Advanced Practicum in Clinical Psychology (3 cr.) PSY 771, Advanced Practicum in Clinical Psychology (3 cr.) PSY 772, Rural Practicum I (3 cr.) PSY 773, Rural Practicum II (3 cr.)

#### XV. Internship

PSY 780-783, Pre-Doctoral Internship (3-9 cr.)

#### XVI. Clinical Seminar

PSY 790-796, Clinical Seminars (3 cr. each/2 required)

#### XVII. Teaching Experience (Optional)

PSY 600, Teaching Seminar (3 cr.)

The following two statements are applicable to all psychology graduate programs:

- 1. *2-C Rule:* Psychology students cannot be admitted to, or continue in, a graduate program in psychology if they earn more than one grade of "C" or lower in any graduate course in psychology or any course included in the plan of study. Such students will not be permitted to continue taking courses or to work on a doctoral research project.
- 2. *Ethics and Student Behavior:* Students in all programs are expected to behave in accordance with the APA Ethical Principles and Code of Conduct. Consequences for violations may include suspension or dismissal from the student's program of study. When students in the clinical area of emphasis (M.A. program) or the Psy.D. program exhibit behavior indicating inability or limited capacity to successfully perform clinical roles and functions, they may be suspended or dismissed from their program of study.

# Education/Training Outcomes for the Psy.D. Program

In keeping with APA Accreditation Guidelines, the following information is provided to permit students considering application to the Psy.D. program to make an informed decision.

**Timeframe for Program Completion.** The Psy.D. Program is designed to be a five year, full-time program. On average, students attending the program full time complete the program in that time frame. Those attending half-time include only those students who have completed a master's degree prior to entry. For these students, average length of completion time is approximately 5.5 years.

**Tuition and fees.** Because tuition and fees are subject to change on an annual basis, students are encouraged to contact the Bursar's Office at 1-800-438-5389 or the website at *www.marshall.edu/bursar* to obtain current program costs.

**Internship acceptance rates.** The program has had a total of 37 students apply for internship as of AY 2009-2010. Figures for internship acceptance are as follows:

Percent obtaining internships: 100% Percent obtaining paid internships: 100% Percent obtaining APPIC member internships: 58%\* Percent obtaining APA/CPA internships: 42%\*

\*The program maintains an affiliated internship which is relatively new and thus not affiliated with Association of Psychology Postdoctoral and Internship Centers (APPIC) at this time nor is it eligible for accreditation. Approximately 42% of our students have chosen this option rather than applying to the national match.

Attrition. At present, the overall attrition rate is 9%.

Licensure outcomes. The program claims a licensure rate of 70% within two years of graduation.

# SOCIOLOGY, M.A. Area of Emphasis Anthropology Minor in Anthropology Minor in Sociology

# **Program Orientation**

The Department of Sociology and Anthropology at Marshall University offers a supportive environment for students who wish to pursue advanced training in sociology or anthropology as well as those for whom the Master's level is the final degree. The curriculum is designed to provide our students with a wide range of options in pursuit of their academic and professional goals and interests, while also providing solid training in core foundational aspects of the two disciplines. Students learn both qualitative and quantitative research methods and are exposed to a variety of subfields and theoretical perspectives. Faculty core strengths include: theory, social movements and social change, inequality, stratification, deviance, cultural diversity, social interaction and group processes, world systems/globalization, social institutions (religion, family, work and occupations, health care, politics and the economy), criminology, gerontology, qualitative and quantitative research methods, and advanced statistical analysis.

# **Admission Requirements**

Interested students may seek admission to the program for full-time or part-time studies, with preferred entrance in the fall semester of each year. To receive full consideration all application materials must be received by the Graduate Admissions Office by April 15 for the Fall semester and by November 15 for the Spring semester. Students should plan to take the GRE as early in the year as possible. Applicants should follow the admission process outlined in the Graduate Catalog or at the Graduate College website at *www.marshall.edu/graduate/admissionsrequirements.asp.* 

In addition to the materials described in the Catalog and on the Web site, applicants for regular admission to the Master of Arts in Sociology must submit to the Graduate Admissions Office:

A personal statement describing interests in the program and future plans;

- Standardized test scores (GRE);
- International students must provide evidence of English language proficiency such as the TOEFL;
- Evidence of a minimum of 12 credit hours of undergraduate sociology course work;
- Undergraduate grade point average (GPA), overall and in sociology;
- A writing sample: a copy of one paper (10-25 pages) from an undergraduate course, preferably a sociology or anthropology course; and
- Two letters of recommendation from persons familiar with the applicant's academic or professional competence.

Admission to the program is offered to a limited number of qualified students demonstrating academic excellence and professional promise. Applicants who have submitted a complete application, who fulfill the requirements stated above, and who have achieved a combined GRE score of 651 will be considered for Full Admission. Students who do not fulfill all requirements stated above (including the minimum GRE score) may be considered for admission on a provisional or conditional basis. (See definitions of Provisional and Conditional admission in this catalog).

# Requirements

In addition to regular courses and seminars, students are expected to contribute to their professional growth through interaction with the faculty and other graduate students as well as from independent study and reading. A student must earn at least a 3.0 GPA in all Sociology and Anthropology classes as a requirement for graduation. A student who receives a second grade of C or below while pursuing the MA in Sociology must review her/his academic plans with the department's Director of Graduate Programs; this review may result in the student being dismissed from the program.

The Sociology Master of Arts degree requires the completion of 33 hours of coursework plus SOC 681 thesis hours for the Thesis Option, or completion of 36 hours of coursework plus SOC 679 for the Non-Thesis Option. The curriculum is structured around a set of core requirements and a set of disciplinary focus areas that together provide a strong foundation in sociological theory, research methods and data analysis. At least half of the minimum required hours for the student's master's degree must be earned in classes numbered 600 or above. Students, in consultation with their advisor, must complete an official "Plan of Study" during their first semester or before completion of 12 credit hours. The Plan of Study must be approved by the Director of Graduate Programs in the department before submission for approval to the Office of the Graduate College. All students must successfully pass comprehensive exams to demonstrate broad comprehension and synthesis of sociology (and, in case the Anthropology Area of Emphasis is chosen, also anthropology); the comprehensive exam will be in conjunction with the defense of the thesis for students choosing that option or will be an examination in an appropriate form after the approval of a problem report.

## **Core Requirements**

All students are required to complete 15 hours of core courses:

- SOC 600 Classical Sociological Theory
- SOC 601 Contemporary Sociological Theory
- SOC 605 Qualitative Research Methods and Analysis
- SOC 606 Quantitative Research Methods and Analysis
- SOC 609 Professional Development

SOC 605 and SOC 606 is a two-course research methods sequence that should be completed by all students during the first academic year in the graduate program if possible (or within the first 12 graduate credit hours for part-time students). Exceptions are made for students who must take prerequisite courses before enrolling in this sequence.

# Electives (18 hours for thesis option and 21 hours for non-thesis option; for the specific requirements for the Anthropology Area of Emphasis see below)

The department offers a variety of electives which are bundled in four disciplinary focus areas and an area of emphasis in anthropology. Graduate level courses from other departments may be taken with approval from the Director of Graduate Studies and the course instructor.

To guarantee breadth of education, courses from more than one focus area have to be taken. Note that some classes contribute to more than one focus area; a student can count such classes in more than one focus area for this requirement, but must of course still meet the requirement for the total number of credit hours.

To guarantee depth, students also have to take more courses of a particular focus area, declare a minor, or opt for the area of emphasis in anthropology as described below:

#### Breadth:

Non-thesis option: One course from each focus area 1 thru 4 (12 hrs.)

Thesis option: Thesis related to one focus, one course from each of the three remaining focus areas (9 hrs.)

#### Depth:

Additional courses from one focus area or a Minor (9 hrs.)

#### Focus area 1: Organizations and Institutions

SOC 508 The Family SOC 533 Sociology of Work SOC 550 Sociology of Religion SOC 564 Complex Organizations SOC 580 Special Topic (dependent on content) SOC 668 Seminar (dependent on content)

#### Focus area 2: Stratification and diversity

SOC 523 Social Class, Power and Conflict SOC 525 Race and Ethnicity SOC 532 Sociology of Appalachia SOC 555 Sociology of Sex and Gender SOC 655 Feminist Social Theory SOC 580 Special Topic (dependent on content) SOC 668 Seminar (dependent on content)

#### Focus area 3: Demography, health, and human environments

SOC 501 Population and Human Ecology SOC 528 Medical Sociology SOC 532 Sociology of Appalachia SOC 540 Introduction to Sociology of Aging SOC 542 Urban Sociology SOC 552 Sociology of Death and Dying SOC 640 Problems and Prospects for an Aging Society SOC 580 Special Topic (dependent on content) SOC 668 Seminar (dependent on content)

#### Focus area 4: Social problems and collective behavior

SOC 513 Social Movements and Social Change SOC 520 Criminology SOC 535 Juvenile Delinquency SOC 560 The Holocaust and Genocide SOC 602 Contemporary Social Change SOC 620 Criminology SOC 640 Problems and Prospects for an Aging Society SOC 580 Special Topic (dependent on content) SOC 668 Seminar (dependent on content)

# Anthropology Area of Emphasis (12 credit hours)

The requirements for the Area of Emphasis include:

ANT 600 Ethnographic Methods

ANT 567 Culture through Ethnography or ANT 591 Theory in Ethnology

An additional two classes (6 credit hours) of courses at the 500- or 600-level in Anthropology as approved by the student's advisor and the Graduate Program Director in the Department of Sociology and Anthropology and included in the Plan of Study mentioned above.

Students who opt for the Anthropology Area of Emphasis have to choose courses from two out of the four sociology focus areas if they write a thesis or from three out of the four sociology focus areas if they write a problem report to comply with the breadth requirements discussed above.

# **Sociology Minor**

A minor in sociology is earned by taking at least 6 credit hours in courses at the 500- or 600- level in Sociology as approved by the student's advisor and the Graduate Program Director in the Department of Sociology and Anthropology.

# **Anthropology Minor**

A minor in anthropology is earned by taking at least 6 credit hours in courses at the 500- or 600- level in Anthropology as approved by the student's advisor and the Graduate Program Director in the Department of Sociology and Anthropology.

# SPANISH, M.A.

## **Program Description**

The M.A. in Spanish provides an opportunity for students to further their knowledge of the Spanish language and of the cultures and literatures of the Latin/Hispanic world. Students completing this degree would increase their qualifications as secondary education teachers or would be prepared to pursue a Ph.D. in Spanish.

# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition: (send all materials directly to the Graduate Admissions Office)

- Undergraduate degree in Spanish or an undergraduate degree in any field in liberal arts and proven preparation in and command of the Spanish language; or educated native speaker with an appropriate command of the Spanish language;
- Undergraduate GPA of 3.0 on a 4.0 scale for all previously completed undergraduate university work.; GRE scores;
- Three letters of recommendation, at least two of which are from individuals familiar with the student's academic abilities;
- Admission examination (interview, essay, and short translation) in the Department of Modern Languages, which will evaluate students on all four language skills: reading, writing, listening and speaking;
- Study abroad strongly encouraged before starting the program or shortly after.

# **Program Requirements**

- Students must develop a Plan of Study with the Director of Graduate Studies. A Plan of Study approved by the department/program and the graduate dean must be filed in the Graduate College office before the student registers for the 12th semester hour.
- Grade Point Average in all graduate courses must be maintained at or above 3.00.
- A final, written comprehensive examination.
- Completion of ACTFL Oral Proficiency Examination, at the student's expense, is required. This examination is administered by the American Council of Teachers of Foreign Languages and can be completed by telephone.

## **Required Introductory Courses:**

SPN 533, Intensive Spanish Grammar Review or SPN 544, Bilingual Contrastive Grammar

SPN 655, Introduction to Spanish Linguistics

SPN 656, Critical Theory for Spanish/Latin American Literature

SPN 535, Culture and Civilization: Contemporary Latin America or SPN 436/536 Culture and Civilization: Contemporary Spain.

The following options are available to pursue. Thesis Option 1 or 2 or Non-Thesis Option.

# **Thesis Option 1:**

Required/Introductory courses above (four): 12 hours Applied linguistics courses online from the Universidad A. de Nebrija (four): 12 hours Spanish or Latin American literature (two): 6 hours Thesis in (Spanish or Latin American) literature: 6 hours **Total: 36 hours** 

# **Thesis Option 2:**

Required/Introductory courses above (four): 12 hours Spanish or Latin American literature (four): 12 hours Applied linguistics courses online from the Universidad A. de Nebrija (two): 6 hours Thesis in applied linguistics: 6 hours **Total: 36 hours** 

# **Non-Thesis Option:**

Required/Introductory courses above (four): 12 hours Applied linguistics courses online from the Universidad A. de Nebrija (four): 12 hours Spanish or Latin American literature (four): 12 hours **Total: 36 hours** 

# BIOLOGICAL SCIENCES, M.S., M.A. Area of Emphasis Watershed Resource Science

# **Program Description**

The Department of Biological Sciences at Marshall University offers Master of Science (M.S.) and Master of Arts (M.A.) degrees with a major in Biological Sciences.

The Master of Science (M.S.) degree in Biological Sciences is preparation for further study or employment requiring research experience in areas ranging from cellular and molecular to evolutionary and population biology. The M.S. degree requires a thesis. An M.S. student must be mentored by a faculty member, so applicants are encouraged (but not required) to contact potential faculty advisors about research projects and graduate assistantships prior to application for admission. Information about faculty may be accessed through the Biological Sciences website (*www.marshall.edu/biology*).

The Master of Arts (M.A.) degree does not require a thesis and allows students to strengthen their education in Biological Sciences through the completion of advanced coursework.

# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp.* Application deadlines are April 15 and November 15 for Fall and Spring admissions, respectively.

Applicants should send these materials directly to the Graduate Admissions Office:

- three letters of recommendation from academic or professional references;
- a written statement of educational and professional goals (250-500 words);
- Graduate Record Exam (GRE) scores. Applicants must specify that official test scores are to be sent directly to Marshall University.

Applicant must also have:

• A combination undergraduate GPA of 2.75 on a 4.0 scale for all previously completed undergraduate university work and 1100 GRE score (composite verbal and quantitative test scores) and an undergraduate GPA in biology courses of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work.

## **Graduate Assistantships**

Students interested in applying for teaching assistantships must submit a completed Application for Graduate Assistantship by April 15 or November 15 for the Fall or Spring semester, respectively. The Application for Graduate Assistantship Form is available from the Department of Biological Sciences, One John Marshall Drive, Huntington, WV 25755.

## **Requirement for All Degrees**

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

## **M.S. Degree Requirements**

- Students must complete at least 32 hours of graduate coursework, including the thesis. The maximum amount of credit that may be earned for the thesis (BSC 681) is 12 hours.
- Candidates for the M.S. degree must register for and participate in Graduate Seminar (BSC 660 and 661 during their first year and BSC 662 in subsequent semesters) during each of the semesters in which they are actively enrolled in the graduate program and complete at least 18 hours in graded BSC electives at the graduate level (which may include BSC 660, 661, 662, and 681).
- Not more than 6 hours of seminar (BSC 660, 661, 662) may be used to complete the 32-hour requirement.

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Degree Program Requirements

- Not more than 4 semester hours credit in Independent Study (BSC 585-588) or Special Problems (BSC 650-652) may be used to complete the 32 hour requirement, and these may only be applied beyond the 18 hours in BSC graduate credits.
- Students may elect to take 6 hours of graduate work in a minor field.
- Successful completion of the program in Biological Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation. Upon completion of course requirements and the thesis, M.S. candidates must pass a comprehensive oral examination.

# **M.A. Degree Requirements**

- Students who select the M.A. option must complete a minimum of 36 hours of graduate coursework.
- M.A. candidates do not conduct thesis research. The Graduate Seminar, BSC electives, Independent Study/Special Problems, GPA, "C" grades, and comprehensive oral exam requirements are as stated for the M.S. degree.

# Area of Emphasis in Watershed Resource Science

Watershed Resource Science as an area of emphasis in Biological Sciences will provide participating students with a systematic and integrated approach to the study of water resources as well as the analysis and implementation of the most effective way to assess their quality and manage their use and conservation. In this program, the integration of course offerings in assessment, informatics, and management into traditional and integrated science curricula provides students with the knowledge base necessary to effectively and innovatively assess and manage water resources.

#### Admissions Requirements for Watershed Resource Science Area of Emphasis

- Must be admitted to the BSC master's degree program;
- Must have a bachelor's degree which includes a minimum of 6 courses from the following disciplines: two courses in mathematics (must include 1 semester of calculus and one semester of statistics); two courses in physical science (physics, chemistry, geology, etc.); and two courses in life science (biology, agronomy, microbiology, etc.).

## Degree Requirements for Watershed Resource Science Area of Emphasis

- The curriculum of this program is made up of a research component, a core of required courses, and specialization in either environmental assessment, environmental management, or environmental informatics.
- Students choosing the M.S. option must complete 32 hours of coursework including up to six hours of thesis.
- Students choosing a non-thesis option will receive an M.A. degree and must complete 36 hours of credit.
- The M.A. degree also requires completion of a minimum of three hours of independent study credit.
- A minimum of sixteen hours for M.S. and eighteen hours for M.A. degrees must be completed in coursework at the 600 level.
- A successful graduate must complete the research core, which may be a thesis (M.S.) or independent study (M.A.) project, the core of required courses, and courses in a specialization chosen in collaboration with a faculty advisor.

# CHEMISTRY, M.S.

# **Program Description**

The Master's Degree in Chemistry is a two-year program 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 postsecondary school education. Students are expected to be well grounded in one or more of the program's five areas of specialization: Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry. The Department of Chemistry currently offers both a thesis and non-thesis option for the Chemistry M.S. degree.

# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must:

- hold an undergraduate degree in Chemistry;
- have GRE (Graduate Record Exam) scores sent to Graduate Admissions.

# **Program Requirements**

#### **General Requirements**

Students are required to complete 32 and 36 hours of graduate credit (see below) for the thesis and non-thesis options, respectively. No more than six hours of Special Topics courses may be counted in the minimum hours required by either route; any exceptions require specific departmental approval.

Students following the thesis option will receive up to 12 hours credit for 682 and one hour each for 631 and 632. The remaining 18 hours of graduate credit will come from courses in the various areas of chemistry, chosen in consultation with one's advisor. It is required that at least three of the five areas be represented in the Plan of Study (see below), and it is recommended that all courses pertaining to the area of one's research be included.

*Plan of Study:* A newly admitted student will take placement examinations the week before the beginning of the first term of study and then should meet with his or her advisor before registering for classes. The student and advisor will develop a Plan of Study or blueprint for graduation requirements. The Plan of Study must be on file in the Graduate College office before the student registers for the 12th semester hour. Programs will be adjusted to reflect major interests and prior training of the student.

# **Non-Thesis Option**

The non-thesis option is a seldom-utilized alternative route available for students currently employed full-time and requires department authorization. Basic requirements are the same as the thesis option; however, it requires 36 hours of graduate credit and a problem report followed by a public lecture. This program organization ensures that all students develop research, writing and public speaking skills regardless of their area of concentration. Due to limitations in course offerings, this option may require more than two years to complete.

#### **Thesis Option**

The preferred route requires a thesis with 32 hours of graduate credit, two public lectures, and an oral thesis defense. The Master of Science thesis demonstrates that you are capable of pursuing a program of original and independent research, that you can formulate and carry out a research project, and that you can report on the project in a proper scientific manner. The thesis option prepares students for technical careers in industry, or for further study toward a more advanced degree. This option requires advanced coursework in chemistry, biochemistry, or environmental chemistry and research, with the latter culminating in an M.S. thesis.

Shortly after entering the program students select a faculty advisor based on their research interests and agree on a research problem. Under the guidance of their faculty advisor students carry out the research program, select a graduate research committee and write and defend the thesis in a final oral examination.

The defense of the thesis will take place when the student, the research advisor, and the graduate research committee agree that a defensible copy of the thesis is complete. The thesis examination is graded on a pass/ provisional pass/fail basis. To pass the examination, there can be no more than one unsatisfactory grade from the committee members. A student who fails may submit another thesis or a revised version upon approval of the student's committee. A student may only be re-examined once. A student earning a provisional pass will generally be required to make minor revisions or corrections to the thesis

# MATHEMATICS, M.A. Minor in Mathematics

# **Program Description**

The Master of Arts degree in Mathematics is offered by the Department of Mathematics. This is a two-year program designed to prepare students for positions in industry, government agencies, or business, for further graduate study at the doctoral level, and for teaching positions at the secondary or two year college level.

NOTE: An area of emphasis in mathematics, Math through Algebra I, is offered by the M.A. degree programs in Elementary Education and Secondary Education. These programs, which are offered through the College of Education and Human Services and the Graduate School of Education and Professional Development, are intended to meet the needs of public school teachers (K-12).

# **Admission Requirements**

Applicants should follow the admissions process described in the Graduate Catalog, or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

In addition:

 Applicants must also submit GRE scores to Graduate Admissions. The scores are considered when awarding graduate assistantships and during initial advising.

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Degree Program Requirements

- To ensure full consideration for admission, applicants must submit duly completed applications, including all required admission credentials to the Graduate Admissions Office at least two weeks before the beginning of the upcoming semester.
- Applicants wishing to be considered for the Graduate/Teaching Assistantship are advised to have all required credentials submitted by May 15 for the fall semester and by November 15, if admission is for the spring semester.

# **Degree Requirements**

A Plan of Study approved by the department/program and the graduate dean must be filed in the Graduate College office before the student registers for the 12th semester hour.

For graduation, a student is required to pass at least 36 approved credit hours, of which 18 credit hours must be at the 600 level. These 18 credit hours may include Special Topics, but neither Thesis nor Independent Study. A maximum of 6 credit hours of Thesis shall count toward the 36-hour requirement. Students must pass or be exempted from each of MTH 528 – Advanced Calculus II, MTH 546 – Probability and Statistics II, and MTH 552 – Modern Algebra II. Students may choose either to write and defend an acceptable thesis or pass a comprehensive oral examination. Teaching Assistant Seminar hours do not count toward graduation.

The specific coursework requirements for the program are:

- 18 credit hours of 600-level courses, excluding Thesis and Independent Study.
- 18 additional credit hours at the 500-level or higher, which will include MTH 528, 546, and 552 unless exempted. These additional credit hours may also include an optional 6 credit hours at the 500-level or higher from another department at Marshall offering a graduate program as a minor.

*Comprehensive Oral Exam:* With the approval of the Assistant Chair for Graduate Studies, the student will select three graduate courses at the 600 level demonstrating a depth of knowledge in those areas of mathematics. The student will select, with the approval of the Assistant Chair for Graduate Studies, a committee consisting of three faculty members. The chairman of the Oral Examination Committee must have the level of Graduate Faculty Status as determined by the Graduate College.

## Assistantships and Financial Support

Applicants wishing to be considered for the Graduate/Teaching Assistantship must submit a separate application form to the Assistant Chair for Graduate Studies. This application can be obtained from the Department of Mathematics. The application must be accompanied by three letters of reference and a personal statement.

For complete information on graduate assistantships please see *www.marshall.edu/graduate/assistantships.asp* Information on other financial support opportunities may be found at *www.marshall.edu/graduate/forms/ scholarshipflyer.pdf*.

## **Minor in Mathematics**

The Department of Mathematics also offers a minor in mathematics. A minor is earned by taking at least 6 credit hours in courses at the 500- or 600- level in Mathematics as approved by the student's advisor and the Assistant Chair for Graduate Studies in the Department of Mathematics.

# PHYSICAL AND APPLIED SCIENCE, M.S. Areas of Emphasis Chemistry Area of Emphasis Modeling Area of Emphasis Geology Area of Emphasis Mathematics Area of Emphasis Physics and Physical Science Area of Emphasis Minor in Geobiophysical Science

The Master of Science in Physical and Applied Science, offered in cooperation with the Departments of Chemistry, Geology, Integrated Science and Technology, and Mathematics, is intended to provide the opportunity for students with diverse qualifications to improve the depth and breadth of their knowledge in the Physical Sciences.

The degree offered is a M.S. in Physical and Applied Science, with an Area of Emphasis in one of the following: Chemistry, Geobiophysical Modeling, Geology, Mathematics, Physics.

The area of emphasis in Geobiophysical Modeling is interdisciplinary, with core courses in Remote Sensing and GIS Modeling. Thereafter, students may chose from areas of concentration in Aquatic, Terrestrial or Biophysical Systems and Models.

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# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

# **Degree Requirements**

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

Programs will be designed to meet individual needs. Students must consult with their advisors for specific requirements. The writing of a thesis is optional in all areas of emphasis.

If the thesis option is chosen, a minimum of 32 hours is 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
Area of Emphasis (Chemistry, Geobiophysical Modeling, Geology, Mathematics, Physics)	
Minor area (Chemistry, Geobiophysical Modeling, Geology, Mathematics, Physics)	6
Electives	12-18

# **Minor in Geobiophysical Science**

The Department of Physics and Physical Science also offers a minor field in Geobiophysical Science. Please contact the Department Chair for information about this minor.

# **Graduate School of Education and Professional Development**

Dr. Teresa Eagle, Dean www.marshall.edu/gsepd

# COUNSELING, M.A. Areas of Emphasis Correctional Counseling Marriage, Couple, and Family Counseling Mental Health Counseling School Counseling Education Specialist with Area of Emphasis in Counseling, Ed.S. Graduate Certificates Domestic Violence Counseling Marriage, Couple, and Family Therapy

# **Program Description, M.A.**

The Master of Arts degree in Counseling is a 60-hour planned program of study designed to meet the necessary competencies of professional counselors, and satisfies the curricular requirements for counselor licensure. There are currently four distinct Areas of Emphasis offered within the Counseling program. Curricular elements consist of core courses required of all counseling majors and emphasis courses specific to: mental health counseling, correctional counseling, school counseling, and marriage, couple and family counseling.

- 1. All core courses are offered on the Huntington and South Charleston campuses.
- 2. Areas of Emphasis in School Counseling and Mental Health Counseling are offered on the Huntington and South Charleston campuses.
- 3. Areas of Emphasis in Correctional Counseling and Marriage, Couple and Family Counseling are offered on the South Charleston campus only.
- 4. The Certificate Programs in Domestic Violence Counseling and Marriage, Couple and Family Therapy are offered through the South Charleston campus only.
- 5. The Ed.S. with an Area of Emphasis in Counseling is offered on the South Charleston campus only.

The Master of Arts degree in Counseling at Marshall University is built upon the training standards and codes of ethics recognized by CACREP (Council for Accreditation of Counseling and Related Educational Programs), ACA (American Counseling Association), and ASCA (American School Counselors Association) and is consistent with the Marshall University School of Education conceptual framework theme of Preparing The Experienced Professional as Specialist. Within this context it is the mission of the Counseling Program to prepare graduates with the knowledge and skills needed to meet the challenges associated with entry into the field of counseling and into their role as professional counselors. Program graduates are eligible to apply for WV licensure in counseling at the point they complete post-graduate supervision and pass a comprehensive licensure examination.

# **Admission Requirements**

Admission to the Counseling Program is selective and competitive. Admission decisions for all program applicants are rooted in the specific standards of the Marshall University Graduate College and the minimum standards of the Counseling program. Students are admitted to an Area of Emphasis and must indicate their preferences during the admission application process.

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

Multiple criteria are used in making decisions to admit students to the degree program. Each applicant is evaluated using the following criteria (all material should be submitted directly to Graduate Admissions):

- 1. GRE score of 800 (quantitative & verbal combined) or MAT scale score of 395 (Raw score 40).
- 2. Undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work.
- 3. Three written references (two from current or former professors)
- 4. Writing sample expressing the applicant's interest in the counseling profession.

Flexibility is maintained in applying the criteria to individual cases. For example, an applicant who does not meet the minimum criteria may be granted provisional admission and be directed to complete a prescribed set of courses. A

provisionally admitted student can be reclassified as a fully admitted student no later than completion of the  $12^{th}$  credit hour by maintaining a 3.50 GPA in these courses.

## **Program Requirements**

It is the responsibility of all admitted students to meet with their advisors prior to the beginning of coursework. Each student must complete an advisor-approved Plan of Study prior to registering for the 12<sup>th</sup> credit hour. A minimum Grade Point Average of 3.0 in all degree courses is required prior to enrollment in the practicum, internship, and for graduation

#### **CORE CURRICULUM**

The Master of Arts degree in Counseling is a 60 hour planned program of study designed to meet the necessary competencies of professional counselors. The curricular elements consist of core courses required of all counseling students and emphasis courses specific to: mental health counseling; correctional counseling; marriage, couple & family counseling; and school counseling emphases.

The following 39 semester hours of core courses are required of all students:

	Phase I	
COUN 574	Social & Cultural Foundations	3
COUN 600	Professional Orientation	3
COUN 602	Human Development & Psychopathology	3
EDF 621	Research Writing	3
	Phase II	
COUN 603	Counseling Theories	3
COUN 604	Group Counseling	3
COUN 605	Theory & Practice of Human Appraisal	3
COUN 607	Counseling Techniques & Human Appraisal	3
	Phase III	
COUN 606	Career & Lifestyle Development	3
COUN 608	Practicum	3
	Phase IV	
	Internship	

\*All emphases (60 hours) satisfy the curricular requirements for professional counselor licensure in the State of West Virginia.

#### **AREAS OF EMPHASIS**

#### Mental Health Counseling

In addition to the core courses, students specializing in Mental Health Counseling must complete the following emphasis courses:

PSY 508	Abnormal Psychology	3
COUN 555	Crisis Intervention and Conflict Resolution	
COUN 601	Counselors in Consulting and Community Roles	3
COUN 630	Introduction to Mental Health Counseling	3
COUN 631	Diagnosis and Treatment Planning	3
COUN 691	Internship: Mental Health Counseling	9
	Advisor-Approved Electives	6
	Emphasis total	
	Total credit hours (including core)	60

#### **Correctional Counseling**

In addition to the core courses, students specializing in Correctional Counseling must complete the following emphasis courses:

COUN 555	Crisis Intervention and Conflict Resolution	3
COUN 556	Grief Counseling	3
COUN 575	Prevention and Treatment of Addictions	3
COUN 630	Introduction to Mental Health Counseling	3

COUN 631	Diagnosis and Treatment Planning	3
COUN 632	Introduction To Marriage, Couple and Family Counseling	3
COUN 641	Seminar in Correctional Counseling	3
COUN 695	Internship: Correctional Counseling	9
	Emphasis total	30
	Total credit hours (including core)	60

#### Marriage, Couple & Family Counseling

In addition to the core courses, students specializing in Marriage, Couple & Family Counseling must complete the following emphasis courses:

<b>COUN 575</b>	Prevention and Treatment of Addictions
COUN 622	Parent Education
COUN 631	Diagnosis and Treatment Planning3
COUN 632	Introduction to Marriage, Couple, and Family Counseling3
COUN 636	Couple Counseling3
COUN 637	Adult Development and Transition3
COUN 638	Practicum: Interventions:
	Marriage, Couple & Family Counseling
COUN 693	Internship: Marriage, Couple & Family Counseling9
	Emphasis total
	Total credit hours (including core)60

#### **School Counseling**

The school counseling curriculum meets 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 school counselors. In addition to the core courses, students specializing in School Counseling must complete the following emphasis courses:

COUN 575	Prevention and Treatment of Addictions
COUN 631	Diagnosis and Treatment Planning3
COUN 632	Introduction to Marriage, Couple, and Family Counseling3
COUN 670	Interventions: Current Issues in School Counseling
COUN 672	Organization and Administration
	of School Counseling Programs3
COUN 673	Counseling Children, Parents and Adolescents
COUN 675	Legal and Ethical Issues for School Counselors
COUN 698	Internship: School Counseling9
	Emphasis total
	Total credit hours (including core)60

#### Certification Requirements for School Counselors

Students in school counseling must meet certification requirements established by the West Virginia Department of Education. All students must pass the Praxis II: Specialty Area Test (formerly the National Teachers Examination) in School Counseling prior to applying for certification. Applications for certification are available in the central offices of the county school systems. An alternative school counseling program certification is available for students without a teacher education background to qualify for West Virginia certification as elementary or secondary school counselors.

Students who do not hold a valid West Virginia teaching certificate (non-education majors) must submit passing scores on the Pre-Professional Skills Tests (PPST) prior to enrollment in courses leading to certification.

Non-education majors must also complete 6 hours of additional coursework from the following:

#### Alternative Certification Courses

EDF 665	Sociology of American Schools
	OR
LS 532	Human Relations Skills for Leaders
CISP 521	Children with Exceptionalities (check with advisor)3

Total Credit Hours with Alternative Certification (including core)....66

#### ADDITIONAL ELECTIVE COURSE OPTIONS

(Courses identified as TBA are new courses in the process of being developed)

Course Title Cr. Hrs.	
COUN 555, Crisis Intervention and Conflict Resolution	
COUN 579, Pharmacology in Counseling	
COUN 611, Foundations of Community Counseling	
COUN 556, Death and Grief Counseling	
COUN TBA, Health and Wellness Counseling	
COUN 577, Stress Management Counseling	
COUN TBA, Counseling the Blended Family	
COUN 616, Domestic Violence	
COUN 617, Seminar in Counseling1-6	
COUN 545, Beginning Manual Communication	
COUN 554, Advanced Manual Communication	
COUN 620, Workshop in Counseling1-6	
COUN 621, Introduction to Child Abuse and Neglect1-3	
COUN 622, Parent Education	
COUN TBA, Issues in Counseling Women	
COUN 580-583, Special Topics	
COUN 585-588, Independent Study	

# Graduate Certificate in Domestic Violence Counseling (courses available on the South Charleston campus only)

*NOTE:* Professional Continuing Education coursework offered in the certificate program will be eligible for continuing education units by the Counseling Board of Examiners. Efforts are being made to facilitate receipt of continuing education units from the West Virginia Board of Social Work Examiners. Individuals must submit course information to the Psychology Board of Examiners for review. The coursework meets and exceeds the training requirements for facilitators of Batterer Intervention Programs. These requirements are set forth in Title 119 Legislative Rule Family Protection Services Board Standards.

The graduate certificate program in Domestic Violence Counseling can be completed in one of two ways:

- 1. The student may apply and be accepted into the Mental Health Area of Emphasis of the Counseling program and take the certificate courses in conjunction with the required degree courses and graduate with a Master of Arts degree in Counseling in addition to a graduate certificate denoting the Domestic Violence Counseling area of specialty.
- 2. Second, the certificate coursework may be taken as a stand-alone program to be completed in one year. The program is currently the state's only post-baccalaureate initiative providing a sequential, specialized professional development opportunity for mental health professionals and paraprofessionals who contribute to the identification of, and interventions in family/partner abuse situations.

## **Admission Requirements**

Students already enrolled in the Counseling program, Mental Health Counseling Area of Emphasis, should submit to Graduate Admissions a Secondary Program Request form: *www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf*.

Prospective certificate-only students should apply for admission to Marshall University as a Professional Development student and select on the application form the Certificate in Domestic Violence Counseling.

It is expected that enrollees of this program will generally be engaged in clinical practice or some support aspect of direct client service and/or intervention where family violence has been identified or suspected.

Admission requirements for the stand-alone Domestic Violence Certificate program include the following:

- a baccalaureate degree from a regionally accredited college or university with an undergraduate Grade Point Average (GPA) of 2.50 or higher on a 4.0 scale for all previously completed undergraduate university work.
- current employment in a community mental health agency, private practice, or related/supporting role that provides direct client contact involving general mental health/psycho-educational interventions; or a master's degree in counseling, social work, psychology; or departmental approval.

It should be noted that gaining admission to the certificate program will not guarantee admission to the Counseling M.A. program.

## **Course Requirements (12 hours)**

COUN 654, An Ecological Approach to Domestic Violence	. 3
COUN 655, Domestic Violence I: Working with Victims	. 3
COUN 656, Domestic Violence II: Working with Perpetrators	. 3
COUN 657, Domestic Violence III: Children as Victims and Witnesses	. 3

# Graduate Certificate in Marriage, Couple and Family Therapy (courses available on the South Charleston campus only)

*NOTE:* Coursework in Marriage, Couple and Family Therapy is eligible for continuing education units with the West Virginia Counseling Board of Examiners, as individual study with the West Virginia Board of Social Work Examiners, and can be submitted to the West Virginia Psychology Board of Examiners for review and approval.

This certificate program is currently the state's only program focusing on the knowledge base and clinical skills in Marriage, Couple and Family Therapy.

The Graduate Certificate Program in Marriage, Couple and Family Therapy can be completed in one of two ways:

- 1. The student may apply and be accepted into the Mental Health Area of Emphasis of the Counseling program and take the certificate courses in conjunction with the required degree courses and graduate with a Master of Arts degree in Counseling in addition to a graduate certificate denoting the Marriage, Couple and Family Therapy area of specialty.
- 2. Students with a master's degree in counseling, social work, psychology or departmental approval, may be accepted into the certificate program as a post-master's professional development student.

#### **Admission Requirements**

Applicants must meet admission requirements for the master's degree in counseling OR hold a master's degree in counseling, social work, psychology, or divinity.

#### **Course Requirements (18 hours)**

COUN 622, Parent Education	3
COUN 632, Introduction to Marriage, Couple, and Family Therapy	
COUN 637, Adult and Family Development and Transition	3
COUN 636, Couple Counseling	3
COUN 638, Practicum: Interventions in Marriage,	
Couple, and Family Counseling.	3
COUN 693, Internship	

# Ed.S. in Education with an Area of Emphasis in Counseling (courses available on the South Charleston campus only)

The Ed.S. with an Area of Emphasis in Counseling is designed to accommodate those students who already possess a master's degree in counseling. The program promotes advanced knowledge and skills in the field of professional counseling with a focus on intervention and supervision skills. A strong component of the program is the attainment of knowledge and skills in three areas:

- 1. supervision processes,
- 2. advanced theoretical applications
- 3. advanced internship experiences.

A minimum of 27 semester hours beyond the master's degree must be earned for completion of the program.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must:

- possess a master's degree in counseling or closely related field, from a regionally accredited university or college;
- be eligible for West Virginia certification as a school counselor or licensure as a Licensed Professional Counselor by the West Virginia Board of Examiners in Counseling;

- have a graduate Grade Point Average (GPA) of 3.50 or higher on a 4.0 scale for all previously completed graduate university work.
- have completed coursework at the graduate level in the following areas:
  - Human development
  - Human relationships: listening and communication skills
  - Individual counseling theories and techniques
  - Group counseling theories and techniques
  - Developmental guidance
  - Career development
  - Organization and development of counseling and guidance
  - Legal and ethical issues in counseling
  - Consultation
  - Research methods
  - Tests and measurements
- possess appropriate counseling and intervention skills evidenced by a portfolio of previously completed courses or professional experiences.

Students who are deficient in any or all of the above requirements may be required to complete advisor-approved prerequisite courses or experiences in addition to the 27 hours in the Ed.S.

Students are admitted to the Ed.S. program in the fall of each year, at which time an individualized plan of study will be developed based on the program requirements and the student's past academic and professional experiences.

#### **Program Requirements**

The Ed.S. program consists of a minimum of 27 hours of prescribed coursework built around competencies considered crucial to the practice of a master professional counselor. Students in the Ed.S. program must earn a grade of at least a *B* in all coursework. The courses comprising the core curriculum are as follows:

Course Number/Course Title	Cr. Hrs.
COUN 740 Internship	6 - 12
COUN 742 Current Issues in Professional Counseling	3
COUN 746 Systems Intervention	3
COUN 747 Advanced Group Counseling	3
COUN 750 Seminar	3
COUN 755 Models of Counselor Supervision	3
COUN 756 Residency in Counselor Supervision	3
COUN 760 Special Topics	3 - 6
Total for Ed.S	27

# CURRICULUM AND INSTRUCTION, Ed.S. ,Ed.D. Education Specialist with Area of Emphasis in Curriculum and Instruction, Ed.S. Curriculum and Instruction Ed.D.

# Education Specialist in Education, Ed.S. with Area of Emphasis in Curriculum and Instruction

The Education Specialist degree with an Area of Emphasis in Curriculum and Instruction is designed for post-master's professionals who are seeking a planned and structured program of study. Students may elect to be dually enrolled in the Education Specialist program and Doctor of Education in Curriculum and Instruction program.

#### **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

## **Degree Requirements**

Education Specialist degree (Ed.S.) students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

# Curriculum and Instruction, Ed.D.

This program is designed to offer the opportunity to earn the Doctor of Education (Ed.D.) degree in Curriculum and Instruction. Coursework and other requirements will be met on the South Charleston campus. The mission of the doctoral program in education is to prepare practitioners to be reflective, ethical educators and researchers who contribute to the field of education. Program faculty are committed to creating a community of scholars through mentoring, engaging in collaborative research, and maintaining a focus on sound educational practices.

## Acceptance into the Program

The decision to admit an applicant to doctoral work constitutes a significant commitment from the faculty of the department in the form of advising, teaching, chairing or serving on the student's committee, preparing and evaluating examinations, and guiding the successful completion of the dissertation. The applicant should note that the decision to admit students to the doctoral program is a collective judgment of the program faculty and represents their determination of the likelihood of the candidate to succeed in all major phases of the degree program. These judgments take into account the applicant's professional experiences, communication and thinking skills, and other relevant capabilities. Thus, an applicant is not automatically admitted on the basis of meeting only the minimum criteria.

An applicant must have earned at least a master's degree from an accredited institution in Educational Leadership, Curriculum and Instruction, or a related field. Details of all admission requirements and other pertinent information can be found at *www.marshall/edu/gsepd/edd*.

# EDUCATION, M.A. Ed.S.

# **Teacher Licensure in West Virginia**

With the exception of the Master of Arts in Teaching Program, the master's degree and professional development programs described herein *do not* result in *initial* licensure in West Virginia. Students seeking initial West Virginia licensure are advised to consult with their advisors regarding appropriate programs and courses.

# ELEMENTARY, M.A.

Areas of Emphasis Early Childhood Education Educational Computing Elementary Science Individualized Plan of Study Instructional Processes and Strategies Literacy, Language and Learning (Dean's approval required) Math through Algebra I Middle Childhood Education School Library Media Teaching English as a Second Language

# SECONDARY, M.A.

Areas of Emphasis Educational Computing Individualized Plan of Study Instructional Processes and Strategies Math through Algebra I Middle Childhood Education School Library Media Teaching English as a Second Language

# **Graduate Certificates**

Early Childhood Education Educational Computing Elementary Science Education Mathematics through Algebra I Middle Childhood Education Post-Baccalaureate Teacher Certificate School Library Media Specialist Social Service and Attendance Teaching English as a Second Language

# **Program Description**

The goal of the Early Childhood, Elementary and Secondary Education programs is to provide coordinated, sequential programs of study in an identified area of education. These programs provide the educators and those in education-related fields four venues for graduate level professional development:

- Graduate certificate programs,
- Master's degree (M.A.),
- Education Specialist degree (Ed.S.)
- Doctor of Education degree (Ed.D.).

In addition, graduate courses are available outside planned programs to allow professionals to augment their knowledge on topics of current interest or meet individual needs.

The graduate certificate programs provide concentrated graduate-level study of a specialty. Master's degrees offer a theoretical orientation with a focus on the application of theory to practice. The Education Specialist degree with an Area of Emphasis in Curriculum and Instruction is designed for post-master's professionals who are seeking a planned and structured program of study. Students may elect to be dually enrolled in the Education Specialist program and Doctor of Education in Curriculum and Instruction program. The Doctor of Education in Curriculum and Instruction serves the need of professionals who are seeking a terminal degree in the field. For more information on these post-master's degrees please see individual listings in this catalog.

# Admission Requirements to Master's Degree Programs

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition:

• Submit directly to Graduate Admissions your Graduate Record Examinations (GRE) General Test or Miller Analogies Test (MAT) scores; applicants should score 800 or above on the verbal and quantitative sections of the GRE or at least 387 on the MAT.

Multiple criteria are used in arriving at decisions to admit students to the master's degree programs in Early Childhood, Elementary and Secondary Education. Each applicant is evaluated with reference to the following criteria:

- 1. Undergraduate Grade Point Average;
- 2. GRE or MAT scores;
- 3. Performance in any prior graduate courses.

Flexibility is maintained in applying the criteria to individual cases. In practice, superior performance in one criterion may compensate for failing to meet the required standard on another. An applicant who does not meet minimum requirements for admission may be granted provisional admission. Provisionally admitted students may be directed to complete certain courses up to 12 credit hours. If a 3.0 GPA is maintained in those courses, then the applicant will be fully admitted to the degree program no later than completion of the 12th credit hour.

# **Plan of Study**

A Plan of Study approved by the student's advisor must be on file before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

# EARLY CHILDHOOD EDUCATION, M.A. Program Requirements

The Master of Arts in Early Childhood Education consists of a set of core course requirements, an area of emphasis, and a capstone experience. All students must complete 15 hours of coursework in research, growth and development, technology, instructional methods and assessment. Each student must also select an area of emphasis consisting of 18 hours of required and elective coursework. The capstone experience is the program component through which students demonstrate their ability to synthesize and apply the problem solving, research and writing capabilities developed throughout the program. Students may meet the capstone experience requirement by either completing a research project (Final Symposium: CI 659 and CI 680) or satisfactorily completing a written comprehensive examination and six hours of coursework.

(continued)

Graduate Catalog 2010-2011

Degree Program Requirements

Two options for advanced studies in Early Childhood are available:

- 1. The Master's Degree in Early Childhood Education designed for those who are licensed Early Education (Pre K-K) teachers.
- 2. The Master's Degree in Early Childhood Education designed for those who are licensed Elementary teachers with no endorsement in Early Education.

Hours may vary, depending on the student's undergraduate program. For those earning an endorsement in Early Childhood (Pre K-K) under Option 2, a practicum and a passing grade on the Praxis II: Specialty Area Test in Early Education (Pre K-K) is required. Candidates with three or more years of teaching experience must consult the Director of Clinical Experiences to determine if they qualify for a performance assessment.

# Option 1: The Master's Degree in Early Childhood Education designed for those who are licensed Early Education (Pre K-K) teachers

TOTAL	39
Capstone Experience	6
Specialty: CIRG 653, CI 631, CI 632, CI 633, CI 634, FCS 603	18
CI 623 or 624 or approved methods course; EDF 612 or CI 609 or CI 501	15
Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660;	

# Option 2: The Master's Degree in Early Childhood Education designed for those who are licensed Elementary teachers with no endorsement in Early Education.

Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660;	
CI 623 or 624 or approved methods course; EDF 612 or CI 609 or CI 501 1	5
Specialty: CI 632, CI 633, CI 634, FCS 535, EDF 513, CI 630 1	8
Capstone Experience	6
TOTAL	9

# **ELEMENTARY EDUCATION, M.A.**

# **Program Requirements**

The Master of Arts in Elementary Education consists of a set of core course requirements, area of emphasis requirements, and a capstone experience. All students must complete 15 hours of coursework in research, growth and development, technology, instructional methods and assessment. Each student must also select an area of emphasis consisting of 18 hours of required and elective coursework. The capstone experience is the program component through which students demonstrate their ability to synthesize and apply the problem solving, research and writing capabilities developed throughout the program. Students also will meet the comprehensive assessment requirement through the framework of the capstone experience.

Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660; EDF 612 or CI 609 or CI 501; CI 623 or 624 or approved methods course	
Area of Emphasis	
Capstone Experience	6
TOTAL	39

Areas of Emphasis include (descriptions follow on page 161):

- 1. Early Childhood Education
- 2. Educational Computing
- 3. Elementary Science
- 4. Instructional Processes and Strategies
- 5. Literary, Language, and Learning
- 6. Math through Algebra I
- 7. Middle Childhood Education
- 8. School Library Media
- 9. Teaching English as a Second Language (ESL)
- 10. Individualized Plan of Study

# **Capstone Experience:**

Students may meet the capstone experience requirement by either completing a research project (Final Symposium: CI 659 and CI 680) or satisfactorily completing a written comprehensive examination and six hours of coursework.

# SECONDARY EDUCATION, M.A. Program Requirements

The Master of Arts in Secondary Education consists of a set of core course requirements, Area of Emphasis requirements, and a capstone experience. All students must complete 15 hours of coursework in research, growth and development, technology, instructional methods and assessment. Each student must also select an Area of Emphasis consisting of 18 hours of required and elective coursework. The capstone experience is the program component through which students demonstrate their ability to synthesize and apply the problem solving, research and writing capabilities developed throughout the program. Students also will meet the comprehensive assessment requirement through the framework of the capstone experience.

TOTAL	39
Capstone Experience	6
Area of Emphasis	18
CI 623 or 624 or approved methods course; EDF 612 or CI 610 or CI 501	15
Core Subjects: EDF 621 or 625; EDF 616; CIEC 530 or 534 or 600 or 660;	

Areas of Emphasis include (descriptions follow on page 165):

- 1. Educational Computing
- 2. Instructional Processes and Strategies
- 3. Math through Algebra I
- 4. Middle Childhood Education
- 5. School Library Media
- 6. Teaching English as a Second Language (ESL)
- 7. Individualized Plan of Study

# **Capstone Experience:**

Students may meet the capstone experience requirement by either completing a portfolio project (Final Symposium: CI 659 and CI 680) or satisfactorily completing a written comprehensive examination and six hours of coursework.

# ADDITIONAL CERTIFICATION FOR TEACHERS

Teachers who want to add another teaching endorsement may do so by completing the course requirements, a performance assessment at the appropriate grade level, and the appropriate Praxis II test.

## Plans of Study for Areas of Emphasis, Professional Development Programs

Plans of study marked with an asterisk (\*) may be used as endorsements for teaching certification. Endorsement programs are available only to teachers who hold a valid professional license in any area other than the one for which endorsement is desired.

Plans of study marked with a plus sign (+) may be used as graduate certificate programs. Certificate coursework may be taken as a stand-alone program.

#### **Certificate Program Admission Requirements**

Prospective certificate-only students should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the certificate they wish to pursue. Education certificate programs require:

- · A baccalaureate degree from a regionally accredited college or university; and
- An undergraduate Grade Point Average (GPA) of 2.50 or higher on a 4.0 scale for all previously completed undergraduate university work OR a Master's Degree.

\*+Early Childhood Education: This concentration combines theory, research, and practical applications to child development and early childhood education. It is designed for teachers who wish to pursue a master's degree with an emphasis in early childhood education, as well as teachers who wish to add a Pre K-K endorsement to their professional licensure. This concentration is available to teachers who hold a valid K-6 or K-8 professional license and wish to pursue a master's degree with an early childhood education emphasis.

CIEC 534, CI 632, CI 633, CI 634, FCS 535, EDF 513, CI 630.

+Educational Computing: The program focuses on instructional applications and classroom utilization of computing.

(continued)

Graduate Catalog 2010-2011

Degree Program Requirements

CIEC 534 or CIEC 530 or CIEC 660, CIEC 600, CIEC 610, CIEC 620, CIEC 630, CIEC 699, and an approved elective.

+Elementary Science Education: This concentration combines theory, research, and practical applications to enhance content knowledge and strategies and techniques of delivering instruction through the use of hands-on, discovery/inquiry teaching.

CISE 571, CI 657, CIEC 600, CISE 576 or CISE 577, CISE 572 or CISE 573, CISE 570 or CISE 574 or CISE 575, and an approved elective.

#### **Instructional Processes and Strategies:**

EDF 610, CI 623, CI 624, CIEC 530 or 534, CI 539, CI 551, CI 657, and CI 671.

**Literacy, Language, and Learning:** This combines theory, research, and practical applications in the areas of speaking, listening, writing, and reading. It is designed to help teachers explore literacy within an interactive and student-centered framework.

CIRG 615, CI 551, CI 539, CI 636, one additional reading course with advisor approval, two electives with advisor approval.

\*+**Mathematics through Algebra I:** This concentration is available to teachers who hold a valid professional license in any area other than mathematics. Satisfactory completion of the required courses, and passing the Praxis II meets the requirements for certification.

CIME 555, CIME 556, CIME 650, CIME 657, CIME 658, CIEC 600, CIME 670, and CIME 675 or CIME 677

\*+**Middle Childhood Education:** The concentration in middle childhood education provides a certificate endorsement program for elementary and secondary teachers who have met initial licensure requirements. The endorsement will allow teachers to provide instruction in grades 5-9 within their area(s) of specialization.

The coursework in this program may be used as an area of emphasis within the master's degree program in Elementary Education or Secondary Education or may be completed as a separate Professional Development program. Individuals who wish to take the endorsement program but not pursue a master's degree should apply to the Professional Development program in middle childhood education. Teachers selecting this option must have an initial content specialization or complete a new one. Elementary Education is not a content area for 5-9 or 5-12. Passing the Praxis II is required.

CIEC 534, CI 501, CI 503, EDF 502, CI 672

TOTAL ...... 15 hrs.

\*+School Library Media Specialist: The concentration in Library Media provides a certificate endorsement program for elementary and secondary teachers who have met initial licensure requirements. The program will prepare K-12 teachers to manage school library media centers, collaborate with faculty to support the school curriculum and facilitate information literacy.

ITL 501, 502, 515, 622, 625, 631, 650, CIRG 613

\*+**Teaching English as a Second Language (ESL):** The concentration in Teaching English as a Second Language provides a certificate endorsement program for elementary and secondary teachers who have met initial licensure requirements. The purpose of the program is to prepare teachers who work with learners who enter schools with a language other than English.

CIEC 534, CISL 550, 551, 552, 653, 654, 655

**Individualized Plan of Study:** Students selecting a planned program must complete the curriculum course CI 501, CI 609, or CI 610 appropriate for their certification.

# LEADERSHIP STUDIES, M.A., Ed.S., Ed.D.

Leadership Studies, M.A. Areas of Emphasis **Educational Leadership (School Principal)** Justice Leadership Leadership Specialist Education Specialist with Area of Emphasis in Leadership Studies, Ed.S. Educational Leadership, Ed.D. **Areas of Emphasis Higher Education Administration Public School Administration Graduate Certificates** School Principalship (post master's) Social Service and Attendance Licensure School Principalship Social Service and Attendance **Supervisor of Instruction** School Superintendent

# **Program Descriptions**

The Leadership Studies program offers the following degree programs:

- Master of Arts degree in Leadership Studies with Areas of Emphasis in Educational Leadership, Justice Leadership, Leadership Specialist
- Education Specialist in Education (Ed.S.) with an Area of Emphasis in Leadership Studies and specializations in Public School or Higher Education Administration.
- Doctoral Degree in Education (Ed. D.) with a major in Educational Leadership with Areas of Emphasis in Higher Education Administration and Public School Administration.

Leadership Studies also offers professional licensure programs for School Principal, Supervisor of Instruction, School Superintendent, and Social Services and Attendance.

# Leadership Studies, M.A. with Educational Leadership Area of Emphasis

The Master of Arts Degree in Leadership Studies offers an area of emphasis in Educational Leadership which includes the coursework for professional administrative licensure as a school principal. It is a portfolio-based program which requires a minimum of 36 semester hours. Courses may not be used if they are more than seven years old at the time of graduation. Students must complete all field-based experiences for courses that are transferred from other accredited institutions or programs. All persons seeking professional licensure as a school principal are required to pass the PRAXIS II (0410) Educational Leadership Administration and Supervision Test. West Virginia licensure also requires the completion of the Evaluation Leadership Institute offered by the West Virginia Center for Professional Development.

## Admission Requirements for Educational Leadership Area of Emphasis

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition:

Each candidate for the Educational Leadership Area of Emphasis must meet all admission requirements as a degree student. Scores from the Graduate Record Examination, the Miller Analogies Test, or a previous master's degree from an accredited institution must be on file at the time of admission. Students must score at least a 40 (tested prior to October, 2004) or at least a 392 (after October, 2004) on the Miller Analogies Test. Students who take the Graduate Record Examination must have a combined score of 800 (verbal and quantitative). Students must hold a Professional Teaching Certificate and have a minimum of one year of teaching experience at the time of admission to the program.

(continued)

LS 510, LS 515, LS 520, LS 530, LS 600, LS 606, LS 610, LS 612, LS 630, LS 675, LS 661 , LS 685

# Leadership Studies, M.A. with Justice Leadership Area of Emphasis

## **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition:

Scores from the Graduate Record Examination, the Miller Analogies Test, or a previous master's degree from an accredited institution must be on file at the time of admission. Students must score at least a 40 (tested prior to October 2004) or at least a 392 (after October, 2004) on the Miller Analogies Test. Students who take the Graduate Record Examination must have a combined score of 800 (verbal and quantitative). All degree students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

#### **Degree Requirements**

All degree students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0. Upon completion of required courses, master's degree students must participate in an externship experiences which synthesizes the content of required courses in their program of studies. A Master of Arts degree in Leadership Studies with an area of emphasis in Justice Leadership requires a minimum of 36 semester hours. A core of 15 hours in Leadership Studies is required. A block of Counseling courses consisting of 9 hours relating to the student's needs is also required. An elective block of 12 hours is individualized to meet the career needs and goals of the student.

#### **Program of Studies**

TOTAL	36 hrs.
Select twelve hours of electives	12 hrs.
COUN 611, COUN 616, COUN 641	9 hrs.
Select three from COUN 555, COUN 556, COUN 574,	
LS 532, LS 625, LS 645, LS 615, LS 655	15 hrs.

# Leadership Studies, M.A. with Leadership Specialist Area of Emphasis

This program is ideally suited to the needs of working professional adult students who wish to gain leadership skills, but do not want to limit their knowledge to any particular area of study.

#### **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must have:

An undergraduate Grade Point Average (GPA) of 2.75 or higher on a 4.0 scale for all previously completed undergraduate university work.

The applicant may be granted provisional enrollment and directed to complete 12 hours of selected courses designated by the department. If a 3.25 grade point average is maintained in those courses, then the applicant will be admitted to the degree program. All degree students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

## **Program of Studies**

LS 532, LS 625, LS 645, LS 615, LS 655, EDF 679, LS 626	21 hrs.
9 hours of electives selected to enhance student skills in specific areas	9 hrs.
TOTAL	30 hrs.

# EDUCATION SPECIALIST (Ed.S.) WITH AREA OF EMPHASIS IN LEADERSHIP STUDIES

# **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

# **Degree Requirements**

Education Specialist degree (Ed.S.) students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

Two specializations are offered: Higher Education Administration and Public School Administration.

# **Program of Studies**

# EDUCATIONAL LEADERSHIP, Ed.D.

This program is designed to offer the opportunity to earn the Doctor of Education (Ed.D.) degree in Educational Leadership with Areas of Emphasis in Public School Administration or Higher Education Administration. Coursework and other requirements will be met on the South Charleston campus. The mission of the doctoral program in education is to prepare practitioners to be reflective, ethical educators and researchers who contribute to the field of education. Program faculty are committed to creating a community of scholars through mentoring, engaging in collaborative research, and maintaining a focus on sound educational practices.

# Acceptance into the Program

The decision to admit an applicant to doctoral work constitutes a significant commitment from the faculty of the department in the form of advising, teaching, chairing or serving on the student's committee, preparing and evaluating examinations, and guiding the successful completion of the dissertation. The applicant should note that the decision to admit students to the doctoral program is a collective judgment of the program faculty and represents their determination of the likelihood of the candidate to succeed in all major phases of the degree program. These judgments take into account the applicant's professional experiences, communication and thinking skills, and other relevant capabilities. Thus, an applicant is not automatically admitted on the basis of meeting only the minimum criteria.

An applicant must have earned at least a master's degree from an accredited institution in Educational Leadership, Curriculum and Instruction, or a related field. Applicants for Public School Administration must have an earned Principal's Licensure. Details of all admission requirements and other pertinent information can be found at *www.marshall/edu/gsepd/edd*.

# LICENSURE/CERTIFICATE PROGRAMS IN LEADERSHIP STUDIES

## Certificate/Licensure in School Principalship (post-master's)

This program is designed for students who have completed a master's degree in education. Students completing the program qualify for professional administrative licensure as a PreK-Adult school principal in West Virginia, Ohio and Kentucky. Those seeking professional administrative licensure as a school principal are required to pass the PRAXIS" (0410) Educational Leadership Administration and Supervision Test. West Virginia students are also required to complete the Evaluation Leadership Institute offered by the West Virginia Center for Professional Development.

#### Admission Requirements - Principal Licensure and Graduate Certificate Program

Applicants may apply as Non-Degree students, or, if they wish to earn the certificate, as a Certificate/Professional Development student and select on the application form the School Principalship Certificate.

- A student who desires admission to the Post Master's Principal Licensure/Graduate Certificate program must have an overall Graduate Grade Point Average (GPA) of 3.0 on a 4.0 scale in an education field from an ELCC-accredited institution.
- Transcripts from the student's graduate institution(s) must be provided to Graduate Admissions at the time of application.
- Students are also required to have a Professional Teaching Certificate and a minimum of one year of teaching experience at the time of application.

# 

# Certificate/Licensure in Social Service and Attendance

This program provides the required coursework for Social Service and Attendance licensure. The program is designed for educational personnel who hold a valid license, or for social workers who hold at least a bachelor's degree.

## Admission Requirements - Social Service and Attendance Licensure/Graduate Certificate Program

Applicants may apply as a Non-Degree students, or, if they wish to earn the certificate, as a Certificate/Professional Development student and select on the application form the Social Service and Attendance Certificate.

- A student who desires admission to the Social Service and Attendance Licensure/Graduate Certificate program must have an overall Graduate Grade Point Average (GPA) of 3.0 on a 4.0 scale in an education field from an ELCCaccredited institution.
- Transcripts from the student's graduate institution(s) must be provided to Graduate Admissions at the time of application.
- Students are also required to have a minimum of one year of teaching experience at the time of application.
- Each candidate for the Social Services and Attendance Worker licensure must meet all admission requirements as a degree student. Scores from the Graduate Record Examination, the Miller Analogies Test, or a previous master's degree from an accredited institution must be on file at the time of admission. Students must score at least a 40 (tested prior to October 2004) or at least a 392 (after October, 2004) on the Miller Analogies Test. Students who take the Graduate Record Examination must have a combined score of 800 (verbal and quantitative).
- All students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

# **Program of Studies**

# Licensure in Supervisor of Instruction

Students who hold a Master's Degree in Educational Leadership from an ELCCnationally recognized program may add the West Virginia Supervisor of Instruction licensure by completing LS 661. This licensure is for persons who work in central office supervisory positions.

# **School Superintendent Licensure**

Students who hold a master's degree in education leadership program from an ELCC-accredited institution will need the following additional courses to complete the licensure requirements for School Superintendency:

## **Program of Studies**

# **READING EDUCATION, M.A.**

# **Program Description**

The Master of Arts in Reading Education consists of six foundation courses, four advanced courses two of which are two practicum experiences, and two elective courses for a total of 36 credit hours.

# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition, applicants must have:

• An undergraduate Grade Point Average (GPA) of 2.7 or higher on a 4.0 scale for all previously completed undergraduate university work;

- A valid WV teaching certificate;
- Graduate Record Examinations (GRE) General Test verbal score of 400 or above or a score of 389 on the MAT.
- A minimum of one year of teaching experience or equivalent as a long-term substitute by the time of program completion.

## **Program Requirements**

Degree candidates follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0. The program of study includes several assessments that are completed as candidates move through the program.

# **Plan of Study**

A Plan of Study approved by the student's advisor must be on file with the Reading Education Program within 30 days of acceptance into the program. The Plan of Study is a student's "blueprint" for completing graduation requirements.

CIRG 636 Developmental Reading CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 653 Literacy Acquisition CIRG 653 Literacy Acquisition CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment CIRG 654 Aligning Assessment and Instruction CIRG 643 Teaching Struggling Readers: A Practicum CIRG 623 Reading Instruction for Literacy Facilitators: A Practicum Two electives, chosen in consultation with the program advisor.

This program requires six hours of supervised practicum and a series of performance assessments completed as candidates move through the program.

# Ed.S. WITH AREA OF EMPHASIS IN READING EDUCATION

The Graduate School of Education and Professional Development offers an Education Specialist degree (Ed.S.) with an area of emphasis in Reading. The goal of the Education Specialist (Ed.S.) program is to provide a unified sequence of graduate studies for school and related personnel who wish to achieve proficiency beyond the master's level in Reading Education. Please contact the Reading Education program faculty for additional information.

#### **Admission Requirements**

Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

#### **Degree Requirements**

Education Specialist degree (Ed.S.) students follow a planned program of study and must maintain a cumulative Grade Point Average (GPA) of 3.0.

## ADDITIONAL LITERACY ENDORSEMENTS AND CERTIFICATES FOR TEACHERS

Teachers who want to add another teaching endorsement may do so by completing the course requirements and performance assessments, and the appropriate PRAXIS II test.

The program offers several certificate programs that support literacy education.

Programs marked with an asterisk (\*) may be used as endorsements for teaching reading. Programs marked with a plus sign (+) may be used as graduate certificates.

## **Certificate Program Admission Requirements**

Prospective certificate-only students should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate they wish to pursue.

## \*Reading Specialist (24 hours)

The Reading Specialist Endorsement is intended for candidates who already hold a Master's Degree in Education and who desire additional training as a literacy specialist. It consists of eight courses two of which are supervised practicum courses.

## **Admission Requirements**

- 1. A relevant master's degree, as determined by the Reading Education program, from a regionally accredited college or university
- 2. A valid teaching license.

## **Program Requirements**

CIRG 636 Developmental Reading CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment CIRG 654 Aligning Assessment and Instruction CIRG 643 Teaching Struggling Readers: A Practicum CIRG 623 Reading Instruction for Literacy Facilitators: A Practicum

This program requires six-hours of supervised practicum and a series of performance assessments completed as candidates move through the program.

# \*Reading Education (18 hours)

The Reading Education Certificate is intended for educators who hold an initial teaching license and wish to become highly qualified teachers of reading. It consists of six courses.

## **Admission Requirements**

- 1. An initial undergraduate degree in education from a regionally accredited college or university; and
- 2. A valid teaching license

#### **Program Requirements**

CIRG 636 Developmental Reading CIRG 653 Literacy Acquisition CIRG 644 Content Literacy CIRG 615 Writing in the Literacy Curriculum CIRG 622 The Use of Technology for Literacy Instruction CIRG 637 Literacy Assessment A series of performance assessments completed as candidates move through the program.

# +Family Literacy

## Admission Requirements

A relevant undergraduate degree, as determined by the Reading Education program, from a regionally accredited college or university is needed for admission to the program.

## **Program Requirements**

CIRG 653 Literacy Acquisition CIRG 651 Principles of Family Literacy CIRG 652 Implementing and Evaluating a Family Literacy Program CI 634 Language and Cognition in Early Childhood

# **PROFESSIONAL DEVELOPMENT STUDENTS**

A student who holds a master's degree in education and seeks a Reading Specialist endorsement to the teaching certification completes 24 credit hours within the Reading program. Students should contact the Reading Education program area for information.

# SCHOOL PSYCHOLOGY, Ed.S.

## **Program Description**

The Ed.S. program in School Psychology is designed to prepare students to meet the Department of Education requirements for certification in West Virginia and other states. The program, which is approved by the National Association of School Psychologists (NASP), consists of 75 hours of required coursework and field experiences. Students who possess graduate degrees in psychology or education are encouraged to apply and enter with advanced standing. The program faculty will review such students' transcripts and determine the extent of credit to be awarded for previous coursework.

# **Admission Requirements**

Admission is competitive because of the limited number of available internships. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at www.marshall.edu/graduate/ admissionsrequirements.asp.

In addition, applicants must (submit all materials to Graduate Admissions):

- have a minimum undergraduate and/or graduate GPA of 3.0.
- must obtain GRE (General Test) scores of no lower than 400 on either the Verbal or Quantitative sections, or a minimum total of 900 on those two sections. As an alternative to the GRE, students may take the Miller Analogies Test. On this test, students must achieve a scaled score of at least 400 (raw score of 40).
- must submit a sample of their professional writing (a scholarly paper on any subject) and a statement of their professional goals (1000 words or fewer).

Creating a diverse student body is a priority and minority applicants are encouraged to apply. Graduate assistantships are available. Students can be accepted into the school psychology program throughout the school year; however, school psychology competency classes begin in the fall semester of each academic year.

# **Program Requirements**

Students are expected to have previous coursework in abnormal psychology, tests & measurements, and statistics. Any prerequisite courses must be completed prior to fall enrollment. In addition, each students is required to have a school psychologist mentor (a practicing school psychologist who has volunteered to serve as a mentor for a school psychology graduate student in his or her geographic area) and an adopting school (the adoptive school is a public school that has agreed to serve as a "home" for the student during his or her years in the program as he or she becomes socialized to the role of school psychologist) at the time of admission. Program faculty will help potential students connect with potential mentors in their own areas if needed.

Students are admitted to the Ed.S. program with the expectation that they will complete the program within three to five years, depending on the number of classes in which they enroll each semester. Students are expected to enroll in all three semesters. Failure to make the expected amount of progress may result in reassignment to another internship year.

During the first year, each student is required to complete seven courses in the core competencies of school psychology. The final year begins with the summer semester preceding internship in which the student takes the final practicum and completes the thesis requirement. The student then completes the 1200 hour (12 credit hours) internship that is required for certification in school psychology. The internship requires a commitment to a school system for a full academic year. A maximum of 18 students will be admitted to this final-year experience.

The program consists of 63 hours of coursework followed by a year-long internship earning 12 hours of graduate credit. This paid internship must occur within a school setting and meet stringent criteria specified by the program and the National Association of School Psychologists. In addition, students must complete a thesis or program evaluation and earn a passing score on Praxis I and Praxis II Specialty Area Test in School Psychology before graduation.

# Plan of Study: Ed.S. in School Psychology

#### **Requirements:**

Course Number/Course Title	Hours
SPSY 616, Psy Foundations I: Typical & Atypical Child Developn	nent3
SPSY 618, Direct Service Delivery I: Instruction & Behavior Mod	1
SPSY 601, Professional Competence I: Schools as Systems	
CISP 535, Educational Foundations I: General Special Ed Progra	mming3
PSY 517, Research I: Statistics or EDF 517	
SPSY 621, Data-Based Decision Making I	
PSY 674, Psy Foundations II: Biological Bases of Behavior or SP	SY 6753
SPSY 675, Psy Foundations III: Psych Foundations of School Psy	ych 3
PSY 623, Research II: Experimental Design or EDF 621	

(continued)

PSY 526, Psy Foundations IV: Cross Cultural Psychology or COUN 574	3
SPSY 603, Professional Competence II: Professional School Psych	3
SPSY 622, Data-Based Decision Making II	3
SPSY 738, Practicum I	3
SPSY 617, Indirect Service Delivery I: Consultation	3
CIRG 636, Educational Foundations II: Developmental Reading	3
SPSY 624, Data-Based Decision Making III	3
SPSY 739, Practicum II	3
SPSY 619, Direct Service Delivery II: Individual & Group Counseling	3
SPSY 620, Indirect Service Delivery II: Primary Prevention	3
SPSY 740, Practicum III	
SPSY 750, Research III: Thesis or SPSY 751, Program Evaluation	

# Defend Thesis

SPSY 745, Internship	6
SPSY 745, Internship	6

Take Praxis II Specialty Examination in School Psychology

Total of 75 hours required

# SPECIAL EDUCATION, M.A.

# Areas of Emphasis

Autism (see College of Education and Human Services [COEHS]) Deaf and Hard of Hearing Gifted (see College of Education and Human Services [COEHS]) Multi-Categorical Special Education Preschool Special Education (see College of Education and Human Services [COEHS]) Teaching Visually Impaired

# Admission Requirements for Special Education M.A.

All Applicants (including those seeking admission as professional development (certification only), should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp*.

Applicants must:

- Have an undergraduate Grade Point Average (GPA) of 2.50 or higher on a 4.0 scale for all previously completed undergraduate university work.
- Meet *one* of the following two requirements:
- A total of 800 on the verbal and quantitative sections of the Graduate Record Examinations (GRE) or
- A raw score of at least 30 or a scaled score of 378 on the Miller Analogies Test (MAT)

# Program Requirements for Special Education M.A.

A master's degree may be earned with a specialization in any of the Areas of Emphasis listed below. Students without a background in education must acquire certification in regular education prior to endorsement in Special Education, or they can enter the Alternative Certification Program (see Section 6 under Program of Study). The Preschool Special Education endorsement is exempt from this requirement.

# Plan of Study

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

# Program of Study - M.A. in Special Education

	Grun of Study Mint in Special Dateution
1.	Master's Degree Requirements (Preschool Special Education, see #5)
	CISP 611 and CISP 615 6 hrs.
	CISP 627 or CISP 629
2.	Special Education Core:
	CIEC 534, CISP 606, CISP 607, CIRG 644, CISP 626 (CIEC 534, CIRG 644, CISP 606, and CISP 607 are not required for the degree in gifted)15 hrs.
3.	Certification Area (select one)
	Autism CISP 527, 662, 664
	Behavioral Disorders CISP 645, 649
	Deaf and Hard of Hearing (special education core not required) CIDH 501, 502, 504, 505, 506, 601, 602, 607, CISD 607, CISC 524
	506, 601, 602, 607, CISP 607, CIEC 534 Mentally Impaired 553, 651
	Specific Learning Disabilities CISP 523, 646, 647
	Gifted CISP 526, 601, 602, 603
	Vision Impaired (special education core not required) CIVI 500, 501, 502, 503, 504, 600, 601, 602, 603, CIEC 534
	Multicategorical CISP 553, 647, 645, 655
4.	Electives
	Total hours
5.	Preschool Special Education
	General Education: EDF 621 or 625 and CISP 627 or 629 6 hrs.
	Early Childhood Education: CI 632 and 634

Special Education: CISP 520, 529, 554, 661, 663, 665, 666, 674 ...... 27 hrs.

Due to the nature of a student's undergraduate program the total required in Preschool Special Education may only be 36.

## 6. Alternative Certification Program

The Alternative Certification Program is designed to allow candidates from non-education backgrounds to obtain West Virginia teacher licensure in Specific Learning Disabilities, Mental Impairments, Visual Impairments, Behavior Disorders, Multicategorical, and Autism at the 5-Adult level. The alternative program does not include a general education teaching endorsement.

Students must meet all Special Education Program admission requirements. In addition to the general Special Education Admission requirements, applicants must pass the Praxis I (Pre-Professional Skills Test) in Reading, Mathematics, and Writing within their first twelve hours of coursework. The Praxis I requirement is waived for applicants with an enhanced ACT score of 26 or higher, a re-centered SAT score of 1125 or higher or if the applicant holds a master's degree.

Current West Virginia Department of Education initial certification requirements also require a minimum overall GPA of 2.5, as well as a 2.5 GPA in the content specialization area. Candidates in the Alternative Certification program must also meet the WVDE Praxis II testing requirements including the Principles of Learning and Teaching (PLT) test at the 5-9 or 7-12 levels.

In addition to the Special Education Core and Certification Area course requirements, students in the Alternative Certification program must complete EDF 619 and EDF 616 for certification. Additional master's degree requirements are the same as for all other Special Education master's degree programs.

# **Additional Certification Requirements**

All Special Education majors must pass the Praxis II Test in the area(s) in which they seek endorsement. The Special Education Content Specialization Test is taken at or near the end of the certification coursework in Special Education. Students should contact the Special Education Program Area for additional information about these tests.

# **Special Note**

The reauthorization of the Individuals with Disabilities Education Act (IDEA) has strengthened the requirements in the definition of "highly qualified" for special education teachers if they provide direct instruction in core academic subject

areas (English, mathematics, science, etc.). Applicants' transcripts and teacher licenses will be analyzed upon admission to determine what, if any, additional coursework may be required to meet the federal requirements.

# TEACHING, M.A.T. Post-Baccalaureate Teacher Certificate

# **Program Description: Master of Arts in Teaching**

The Master of Arts in Teaching (M.A.T.) degree program is an alternative means for college graduates with degrees in liberal arts, fine arts, business, and professional fields to attain teacher certification. The program provides the professional education courses and clinical experiences, including student teaching, necessary to prepare individuals for teaching a specific content area in grades PreK-Adult, 5-Adult or 9-Adult. Program completion results in the awarding of a Master of Arts in Teaching degree. Recommendation for certification typically takes place at the same time, unless there are West Virginia Department of Education requirements still pending. Please note that the M.A.T. program does not offer certification in Elementary Education.

# Admission and Program Requirements: Master of Arts in Teaching

Candidates must request a transcript analysis through a certification officer either in Huntington or South Charleston. An unofficial copy of the transcript may be used for the analysis. The analysis will identify the courses that can be used to meet content licensure requirements and the list of additional courses needed. Candidates must have at least 50% of the required content courses.

- 1. Candidates deciding to apply to the program after reviewing the transcript analysis should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/ admissionsrequirements.asp.* Please note that all admissions documents must be submitted to Graduate Admissions before an applicant will be considered for admission.
- 2. In addition to university admission requirements, applicants must have an undergraduate Grade Point Average (GPA) of 2.70 or higher on a 4.0 scale for all previously completed undergraduate coursework and a GPA of 2.70 in the content area, must meet the Praxis I, Pre-Professional Skills Test (PPST) requirement, must submit Graduate Record (GRE) or Miller Analogies Test (MAT) scores with a required minimum total score of 800 on the GRE (verbal and quantitative sections) or a minimum score of 387 on the MAT.
- 3. An applicant may qualify for an exemption of the Praxis I if he or she has an enhanced ACT score of 26 or higher, a recentered SAT score of 1125 or higher, or a master's degree or higher.
- 4. Applicants must take and pass all three subtests (reading, writing and math) of the Praxis I prior to being admitted to the PBC program. The required Praxis I scores are Reading = 174, Writing =172, and Math = 172.
- 5. Students may enroll in graduate courses only after they have been fully admitted to the university and the MAT program. All students must maintain a cumulative Grade Point Average of 3.0.
- 6. A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.
- 7. In the last semester of the program students will be enrolled in EDF 677, MAT Level III Clinical Experience, a 15 week, full-time student teaching experience under the direct supervision of a certified teacher(s). Prerequisites for student teaching include the following: 3.0 GPA in all graduate MAT courses; completion of at least 90% of content courses (100% recommended); completion of EDF 537 and EDF 637, Level I and II Clinical Experiences; completion of all MAT coursework and the Praxis II content test(s)
- 8. Candidates must apply to take and pass the comprehensive examination prior to the completion of student teaching and graduation.
- 9. Before a candidate may apply for certification/licensure, he or she must take and pass the PRAXIS II, Principles of Learning and Teaching (PLT) Grades 7-12. The PLT may be taken during or following the final semester in the MAT program.
- 10. Upon completion of the MAT program and all testing requirements, the student should apply for licensure. The teaching license is awarded by the West Virginia Department of Education; however, the candidate must be recommended for licensure by the institution.

# Program Options and Degree Requirements: Master of Arts in Teaching

1. Master of Arts in Teaching - Grades PreK-Adult

1.	Fuster of fitte in feating of the fiftheat	
	Art Education	
	Physical Education	
	Music Education	
	Foundations of Education and Technology	15 Hours
	EDF 621 or 625, Research and Writing3	
	EDF 660, 665, or 615 - Social and Cultural Foundations	
	EDF 616, Advanced Studies in Human Development	
	OR EDF 619, Educational Psychology	
	EDF 537, Clinical I - Lab to accompany EDF 616 or EDF 6190	
	CIEC 530, 534, 600, or 660, Instructional Technology	
	EDF 612 or 535, Educational Evaluation or Classroom Assessment3	
	Curriculum and Instruction	24 Hours
	CI 503, Methods and Materials	
	of Teaching in the Middle Childhood Grades	
	CISP 510, Intro. to Instructional Practices/Exceptional Children3	
	CISP 521, Children with Exceptionalities	
	· ·	
	CI 515, Integrated Methods and Materials	
	EDF 637, Clinical II - Lab to accompany CI 5150	
	CI 624, Advanced Instructional Strategies	
	CI 631, Current Influences on Early Childhood	
	CIRG 644, Literacy in the Content Area	
	*EDF 677, Clinical III - Student Teaching	
	TOTAL	39 Hours
	*Requires minimum of 90% completion of content courses.	
2.	Master of Arts in Teaching - Grades 5-Adult	
	Athletic Training (second certification area only)	
	Business Education	
	Family and Consumer Science	
	• French	
	• English	
	<ul> <li>Health Education (second certification area only)</li> </ul>	
	Latin (second certification area only)	
	Mathematics	
	<ul> <li>Oral Communications (Speech) (second certification area only)</li> </ul>	
	Physical Education	
	General Science	
	Social Studies	
	• Spanish	
	Foundations of Education and Technology	15 Hours
	EDF 621 or 625, Research and Writing3	
	EDF 660, 665, or 615 - Social and Cultural Foundations	
	EDF 616, Advanced Studies in Human Development	
	OR EDF 619, Educational Psychology	
	EDF 537, Clinical I - Lab to accompany EDF 616 or 6190	
	CIEC 530, 534, 600, or 660, Instructional Technology	
	EDF 612 or 535, Educational Evaluation or Classroom Assessment3	
	Curriculum and Instruction	24 Hours

in the Middle Childhood Grades
CISP 510, Intro. to Instructional Practices/Exceptional Children3
CISP 521, Children with Exceptionalities
CI 515, Integrated Methods and Materials
EDF 637, Clinical II - Lab to accompany CI 5150
CI 624, Advanced Instructional Strategies
CIRG 644, Literacy in the Content Area
*EDF 677, Clinical III - Student Teaching

In addition to the above courses, students must also complete all courses in their teaching specialization.

\*Requires minimum of 90% completion of content courses and passing score on Praxis II content exam.

- 3. Master of Arts in Teaching Grades 9-Adult
  - Biology
  - Chemistry
  - Journalism (second certification area only)
  - Marketing Education
  - Physics

Foundations of Education and Technology	15 Hours
EDF 621 or 625, Research and Writing	
EDF 660, 665, or 615 - Social and Cultural Foundations	
EDF 616, Advanced Studies in Human Development	
OR EDF 619, Educational Psychology	
EDF 537, Clinical I - Lab to accompany EDF 616 or 6190	
CIEC 530, 534, 600, or 660, Instructional Technology	
EDF 612 or 535, Educational Evaluation or Classroom Assessment3	

Curriculum and Instruction	24 Hours
CISP 510, Intro. to Instructional Practices/Exceptional Children3	
CISP 521, Children with Exceptionalities	
CI 515, Integrated Methods and Materials: Secondary Education3	
EDF 637, Clinical II, Lab to accompany CI 5150	
CI 624, Advanced Instructional Strategies	
CIRG 644, Literacy in the Content Area3	
CI 549, Instructional and Classroom Management	
in Secondary Education	
EDF or CI Elective	
*EDF 677, Clinical III - Student Teaching	

In addition to the above courses, students must also complete all courses in their teaching specialization.

\*Requires minimum of 90% completion of content courses and passing score on Praxis II content exam.

# Post -Baccalaureate Teacher Certificate Program

In West Virginia the license to teach is granted by the West Virginia Department of Education and is typically issued upon the completion of a four-year undergraduate program of study that included content and professional education courses. The Post-Baccalaureate Teacher Certificate (PBC) program offers an accelerated route to teacher certification for persons who already have undergraduate degrees in content areas such as chemistry, music, French, and other liberal and fine arts, business or professional fields. Using the previously completed content courses as a foundation, this program provides the required professional education courses at the graduate level. Additional undergraduate classes may be needed in the content area. Upon successful completion of the PBC program, all content courses, and testing requirements, the candidate earns a recommendation to the West Virginia Department of Education for a teaching certificate at the secondary level and is eligible to apply for a certificate from the university. The PBC does not include Elementary Education or Special Education certification.

## Admission to PBC and Licensure Requirements

- 1. Candidates must request a transcript analysis through a certification officer either in Huntington or South Charleston. An unofficial copy of the transcript may be used for the analysis. The analysis will identify the courses that can be used to meet content licensure requirements and the list of additional courses needed. Candidates must have at least 90% of the required content courses.
- 2. Candidates deciding to apply to the program after reviewing the transcript analysis should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/ admissionsrequirements.asp.* Students should apply as Certificate/Professional Development students and select the Post-Baccalaureate Teacher Certificate on the admissions form. Please note that all admissions documents must be submitted to Graduate Admissions before an applicant will be considered for admission.
- 3. In addition to university admissions requirements, applicants must have an overall undergraduate GPA of 2.70 and a GPA of 2.70 in the content area, and must meet the Praxis I, Pre-Professional Skills Test (PPST) requirement.
- 4. An applicant may qualify for an exemption of the PPST if he or she has an enhanced ACT score of 26 or higher, a recentered SAT score of 1125 or higher, or a master's degree or higher.
- 5. Applicants must take and pass all three subtests (reading, writing and math) of the PPST prior to being admitted to the PBC program. The required PPST scores are Reading = 174, Writing = 172, and Math = 172.
- 6. Students may enroll in graduate courses only after they have been fully admitted to the PBC program. All students must maintain a cumulative Grade Point Average of 3.0.
- 7. In the last semester of the program students will be enrolled in EDF 677, MAT Level III Clinical Experience, a 15 week, full-time student teaching experience under the direct supervision of a certified teacher(s). Prerequisites for student teaching include the following: 3.0 GPA in all graduate PBC courses; completion of at least 90% of content courses (100% recommended); completion of EDF 537 and EDF 637, Level I and II Clinical Experiences; completion of all PBC coursework and the Praxis II content test(s).
- 8. Before a candidate may apply for certification/licensure, he or she must take and pass the PRAXIS II, Principles of Learning and Teaching (PLT) Grades 7-12. The PLT may be taken during or following the final semester in the PBC program.
- 9. Upon completion of the PBC program and all testing requirements, the student should apply for licensure. The teaching license is awarded by the West Virginia Department of Education; however, the candidate must be recommended for licensure by the institution

## **Program Requirements**

Foundations of Education
Curriculum and Instruction12 HoursCISP 5103 hoursCISP 5213 hoursCIRG 6443 hoursCI 515 or Specialized Methods Course3 hoursEDF 6370 hours
Technology
Supervised Student Teaching
Total

*Eligibility for Student Teaching:* Students must successfully complete the courses listed above, the appropriate Praxis II content knowledge test(s), and have 90% of their content requirements completed prior to enrolling for supervised student teaching.

*Eligibility for Licensure:* Students must meet content requirements, professional education requirements, and testing requirements. Testing requirements include the appropriate Praxis II content knowledge test(s), and the Principles of Learning and Teaching. Students who apply for licensure from the West Virginia Department of Education are required to submit to the department a fingerprint card for federal and state background checks.

## **Certification Options:**

Art Education, grades PreK-Adult Athletic Training, grades 5-Adult (must be taken with another certification area) Biological Science, grades 9-Adult Business Education, grades 5-Adult Chemistry, grades 9-Adult English, grades 5-Adult Family and Consumer Science, grades 5-Adult French, grades 5-Adult General Science, grades 5-Adult Health, grades 5-Adult (must be taken with another certification area) Journalism, grades 9-Adult (must be taken with another certification area) Latin, grades 5-Adult (must be taken with another certification area) Marketing Education, grades 9-Adult Mathematics, grades 5-Adult Music, grades PreK-Adult Oral Communications, grades 5-Adult (must be taken with another certification area) Physics, grades 9-Adult Physical Education, grades PreK-Adult Social Studies, grades 5-Adult Spanish, grades 5-Adult

# **School of Medicine**

Dr. Charles McKown, Dean *http://musom.marshall.edu* 

Biomedical Sciences, M.S., Ph.D. Forensic Science, M.S.

BIOMEDICAL SCIENCES, M.S., Ph.D. Areas of Emphasis Medical Sciences Cancer Biology Cardiovascular Disease, Obesity, and Diabetes Molecular Mechanisms of Pathogens Neuroscience and Developmental Biology Toxicology and Environmental Health Sciences

# **Program Description**

The basic science departments of the Joan C. Edwards School of Medicine offer an interdisciplinary program leading to the Master of Science and Doctor of Philosophy degrees in Biomedical Sciences. The primary aim of the Biomedical Sciences (BMS) Program is to produce graduate students who are broadly based in the biomedical sciences with definite interests and special in-depth training in one of the following areas of emphasis: cancer biology; cardiovascular disease, obesity, and diabetes; molecular mechanisms of pathogenesis; neuroscience and developmental biology; and toxicology and environmental health sciences. These areas are designed to be flexible and research oriented in order to develop the interests, capabilities and potential of all students pursuing careers in academic or industrial biomedical sciences.

In addition, the BMS Program offers a non-thesis Master of Science degree in a medical sciences area of emphasis for students wishing to pursue non-research careers in the health professions or in biotechnology and pharmaceutical industries. This area of emphasis is also designed to improve the science foundation of students seeking admission into doctoral programs in medicine. Admission into this Program does not guarantee admission into medical school. Students in this area of emphasis are required to pay a Health Professions Fee each semester while enrolled in the program. Because of the nature of the curriculum, applicants to the medical sciences area of emphasis will only be considered for admission for the Fall semester.

The Biomedical Sciences Doctor of Philosophy Degree program accepts a very limited number of students to study concurrently with the Doctor of Medicine degree. Individuals must be admitted into each program separately.

## **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp* 

Applicants must also meet the admissions requirements of the Graduate Studies Committee of Marshall University's Joan C. Edwards School of Medicine. Interested persons should contact the Office of Research and Graduate Education, Byrd Biotechnology Science Center, Marshall University School of Medicine, One John Marshall Drive, Huntington, WV 25755 or via the Internet at *www.bms.marshall.edu/admissions*.

# Minimum Requirements for Admission into Master of Science and Doctor of Philosophy Program

All applicants must have baccalaureate degrees in one of the sciences, with one year of general biology, physics, general chemistry, and organic chemistry, all with associated laboratories. Although calculus and physical chemistry are not requirements for admission, they may be required for certain areas of emphasis and are highly recommended.

- Graduate Record Examination (General) scores (minimum of 1,000 Verbal and Quantitative) or MCAT scores (medical science area of emphasis only, minimum of 20 total),
- three letters of recommendation from references familiar with the applicant's relevant academic/professional performance and
- a personal statement describing educational and career goals.
- A score of 80 on the Internet-based TOEFL examination or 550 on the paper-based TOEFL examination

# **Duration of Degree Programs**

Students generally complete the requirements for the Master of Science degree within two to three years. Those who pursue the doctoral degree usually complete the requirements within five to six years. Students who possess a M.S. degree in Biomedical Sciences or the equivalent when admitted into the doctoral degree program, generally require three to four years to complete the Doctor of Philosophy degree.

# **BIOMEDICAL SCIENCES, M.S.**

All students are required to meet the general requirements of the Graduate College for receipt of a master's degree. A minimum of thirty-six credit hours is required for a non-thesis degree, while a minimum of thirty-two credit hours is required for the thesis degree. No more than six hours of thesis (BMS 681) may be credited toward the thirty-two hour requirement. Each student will specialize in one of the six areas of emphasis as defined in the program overview. All students are required to successfully complete Foundations of Biomedical Sciences (BMS 600, 6 hrs.), Statistics/Biostatistics (MTH 518, BSC 517, PSY 517, EDF 517 or equivalent, 3 or 4 hrs.), Introduction to Research (BMS 685, minimum of 3 hrs.), and Seminar (BMS 680, minimum of 4 hrs.). In addition, the student must successfully complete other courses required by his/her area of emphasis and advisory committee and pass a written and/or oral comprehensive examination.

# **BIOMEDICAL SCIENCES, Ph.D.**

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

# **Degree Requirements**

To qualify for the Doctor of Philosophy degree, the student must pass (*C* or better or *CR*) the following courses:

- Foundations of Biomedical Sciences (BMS 600, 6 hrs)
- Statistics/Biostatistics (MTH 518, BSC 517, PSY 517, EDF 517 or equivalent, 3 or 4 hrs)
- Biomedical Sciences Communication Skills (BMS 600/661, 1 hr. each)
- Seminar (BMS 680, minimum of 6 hrs.), Introduction to Research (BMS 685), and Research (BMS 882, maximum of 15 hrs).

In addition, the student must successfully complete other courses required by his/her area of emphasis and advisory committee. All courses will be defined in the student's Course of Study.

# **Advisory Committee**

The advisory committee should be formed no later than the end of the first year of graduate education or upon completion of 18 semester hours of credit. As soon as the committee has been identified, an Approval for Dissertation Topic and Committee Membership form is completed and submitted to the Associate Dean for Research and Graduate Education and the Dean of the Graduate College.

The committee will be selected by the student and research advisor and approved by the Associate Dean for Research and Graduate Education and the Dean of the Graduate College. The advisory committee will be composed of at least five faculty members with appropriate expertise. One of the members may be from another institution. The student's research advisor will act as the chairperson of the committee.

# Approval of Course of Study

It is essential for the student and advisory committee to carefully define a Course of Study by the end of the first year. This is considered a basic contract between the student and the program and includes:

- 1. All transfer credits
- 2. Required and elective courses to be taken at Marshall University and
- 3. All competencies to be achieved by the student during graduate study. These details must be recorded on a Course of Study form and submitted for approval by the Associate Dean for Research and Graduate Education and the Dean of the Graduate College.

# Graduate Assistantships for the Doctor of Philosophy Program

Research assistantships are available for students in the doctoral degree program on a competitive basis. Applications will be reviewed as soon as complete. The base stipend is renewable annually for up to five years. Priority consideration for the Doctor of Philosophy graduate assistantships will be given to West Virginia residents.

# **Academic Performance**

- The student must maintain a grade point average of 3.0, and no more than six hours of C and no grades below C may be applied toward the degree.
- If the GPA falls below 3.0, the student will be placed on academic probation. Following notification of probation, the student will be counseled by his/her advisor. At this time, the deficiency will be identified and a written plan will be prepared for removing it within the next nine semester hours. This plan, co-signed by the student and the advisor, must be approved by the Dean of the Graduate College before the student can register for additional coursework.
- If probationary status is not removed within nine semester hours, the Dean of the Graduate College, in consultation with the Associate Dean for Research and Graduate Education and the Graduate Studies Committee will determine whether the student is retained or dismissed from the program. Retention must be recommended by the interim advisor or student's advisory committee and endorsed by the Graduate Studies Committee.

# **Transfer Credit**

The student may transfer credits completed at other regionally accredited graduate institutions. Approval of the Associate Dean for Research and Graduate Education and the Dean of the Graduate College is contingent on:

- 1. the grades earned were *B*'s or better
- 2. the credits are appropriate to the student's program and acceptable to the advisory committee, and
- 3. the time limitations were not exceeded.

The number of transfer hours acceptable for the Ph.D. degree will be determined by the student's advisory committee. Approval must be received from both the Associate Dean for Research and Graduate Education and the Dean of the Graduate College. Transfer credit will not become part of the Marshall University Grade Point Average.

Transfer of credits should be accomplished as early as possible. This should be accomplished either when the student is admitted to candidacy or submits an approved Course of Study. Attempts to transfer credits during the last semester may delay graduation. Official transcripts must be on file in the Graduate College office by the date that grades are due in the Marshall University Registrar's Office.

# Validation of Outdated Coursework

The advisory committee has the option to require validation, by special examination, of courses which members deem to be outdated.

# **Time Limitations**

Students must meet all requirements for the Doctor of Philosophy degree within seven years from the date of enrollment in the first course to be used in the degree program. The Graduate Dean may grant an extension upon recommendation by the Graduate Studies Committee. Absence due to military obligations, long serious illness, or similar circumstances beyond the student's control may be considered valid reasons for an extension. It is the option of the advisory committee to require validation of outdated courses by special examination.

# Admission to Candidacy

Admission to graduate study and enrollment in graduate courses does not guarantee acceptance as a candidate for the Doctor of Philosophy degree. This is only accomplished by satisfactorily passing a comprehensive qualifying examination and meeting all other specified requirements. The qualifying examination assesses whether the student has attained sufficient knowledge to undertake independent research. The examination should be completed at the end of the second year of study. The examination consists of written and oral components covering all areas specified in the Course of Study. The examination is prepared, administered and graded by the advisory committee. The written portion includes all coursework and relevant topics determined by the advisory committee. The student will be given 2-3 days to complete the written component of the examination. Upon passing the written examination, the student must submit a grant proposal on the topic of his/her dissertation research or a related topic approved by the advisory committee. The proposal must be in the style of an NIH Predoctoral grant proposal. Links to the instructions for the proposal format can be found on the BMS Graduate Program Website. The grant proposal must be submitted within 2 months of completion of the written exam and given to the advisory committee members at least 2 weeks in advance of the oral defense. The oral examination consists of a defense of the grant proposal and, at the discretion of the advisory committee, may include topics from the written portion of the exam in which the student was deemed to be deficient. Successful completion of the qualifying examination is based on approval of the committee. Only one dissenting vote is permitted on each component. If necessary, a single portion of the examination may be repeated at the discretion of the advisory committee. The student must have the approval of the advisory committee to repeat either the written or oral component of the qualifying examination. The committee assesses the deficiencies and determines the time required for the student to make corrections. A student may take a given component of the qualifying examination no more than three times. Failure to pass this examination on the third attempt will result in dismissal. The

advisory committee must complete an Admission to Candidacy for Ph.D. form after the student completes the examinations and submit it for approval of the Associate Dean for Research and Graduate Education and the Dean of the Graduate College.

# Dissertation

All candidates must successfully complete a biomedical research project and prepare, submit, and defend a dissertation. The dissertation must present the results of the candidate's individual investigation and make a definite contribution to the current state of knowledge. While conducting research and writing a dissertation, the student must register for Research (BMS 882) at the beginning of each semester or summer term for which progress is to be earned. No more than 15 hours of doctoral research may be credited toward the degree.

Candidates are to follow the general guidelines outlined in Publishing Your Dissertation: How to Prepare Your Manuscript for Publication and General Information About Dissertations. Copies of these documents are on file in the Office of Research and Graduate Education.

# **Oral Defense of the Dissertation**

The oral defense of the dissertation is held during the semester or summer session in which all other degree requirements have been met. The advisory committee must read and tentatively approve the dissertation before the examination can be scheduled. The committee chairperson will complete an Approval to Schedule Dissertation Defense form and submit it for approval of the Associate Dean for Research and Graduate Education and the Dean of the Graduate College before the examination can be given. Such notification must occur at least three weeks before the proposed date of the defense. A portion of the defense is an open examination and sufficient time is required for adequate public notice.

The open examination usually takes the form of a one-hour seminar. This is followed by a thorough review of the dissertation by the advisory committee and the candidate. Successful completion of the defense requires the approval of all but one of the members of the advisory committee. The results (pass/fail) must be recorded on a Results of Dissertation Examination form which is to be reported to the Office of Research and Graduate Education and forwarded to the Graduate College Office within 24 hours. Should the candidate fail the defense, reexamination may not be scheduled without the approval of the advisory committee, Associate Dean for Research and Graduate Education and the Dean of the Graduate College.

All advisory committee members are to be present for the defense. If this is not possible, the Dean of the Graduate College, or designee, may permit one substitute for any member of the committee except the chairperson. A request for a substitute must be submitted in writing to, and approved by, the Associate Dean for Research and Graduate Education and the Dean of the Graduate College. The committee chairperson, the student, and both the original member of the committee to be replaced, and the substitute must sign this request. The substitute must have the same, or higher, graduate faculty status as the original member and represent the same academic discipline or area of emphasis.

# Acceptance of Dissertation

Acceptance of the dissertation is a requirement for the doctoral degree. An accepted dissertation must bear the original signatures of at least all but one member of the advisory committee. If more than one member cannot approve the dissertation, the doctoral degree cannot be recommended. If the substitute member attends and approves the dissertation defense, he or she signs the dissertation. For complete information on the preparation and submission of electronic theses and dissertations see *www.marshall.edu/graduate/etd/default.asp*.

## **Survey of Earned Doctorates**

Please complete and submit the online Survey of Earned Doctorates. Survey of Earned Doctorate information is used by a number of government agencies to assess the state of doctoral education in the U.S., and also to inform their decisions concerning funding of U.S. graduate institutions. The online survey is available at http://survey.norc.uchicago.edu/ doctorate/index.jsp

# Publication

All doctoral dissertations and their abstracts will be microfilmed through University Microfilms, Ann Arbor, Michigan. This requirement cannot be satisfied by any other publication, but other publication of material in the dissertation is both permitted and encouraged.

## **Process Summary**

- 1. Inquiry from prospective student to the Office of Research and Graduate Education or Graduate Admissions Office.
- 2. Mailing of application from the Office of Research and Graduate Education or the Graduate Admissions Office.
- 3. Receipt of application materials and required fee by the Office of Research and Graduate Education or the Graduate Admissions Office.

- 4. Referral of application materials and required fee by the Office of Research and Graduate Education or the Graduate Admissions Office.
- 5. The Office of Research and Graduate Education notifies the Graduate Admissions Office 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 coursework.
- 7. Selection of an area of emphasis/advisor must be achieved by the end of the first year. After a permanent advisor has been selected, an advisory committee is formed. A Course of Study should be developed by the end of the first year.
- 8. The student completes requisite coursework and other program requirements.
- 9. The student takes written and oral qualifying examinations for admission to candidacy to Ph.D. These examinations should be scheduled within two months of each other.
- 10. The student continues doctoral research under the guidance of his/her advisory committee. The dissertation phase begins with the approval of a dissertation prospectus by the advisory committee, the Office of Research and Graduate Education and the Graduate College Dean.
- 11. The student applies for graduation at the beginning of his or her last semester no later than the university deadline in the academic calendar. The diploma fee must be paid by this time.
- 12. A copy of the preliminary draft of the dissertation is given to each member of the advisory committee and the Graduate College Dean at least one month prior to the final defense of the dissertation.
- 13. The chair of the advisory committee requests clearance for the defense from the Office of Research and Graduate Education and the Graduate College for approval no later than three weeks before the scheduled date of the defense.
- 14. The time and place of the defense of the dissertation are announced.
- 15. The student defends the dissertation in an oral defense.
- 16. The student follows the steps to prepare and submit the electronic thesis or dissertation at *www.marshall.edu/graduate/ etd/default.asp*.

# FORENSIC SCIENCE, M.S.

The Master of Science degree in Forensic Science is a broad-science-based, five-consecutive semester curriculum. While all forensic science students are required to complete a research project, both thesis and non-thesis options are available.

*Thesis Option:* The thesis option stresses a research component where students conduct original research and prepare, as well as defend, a written thesis based on their investigative findings. The thesis option requires a minimum of FSC 685 (3 credit hours) and FSC 681 (3 credit hours) in addition to the general Core Curriculum and a minimum of one Area of Emphasis. The thesis option often requires 1-2 additional semesters to complete. The students' research committee consists of a minimum of three working professionals or faculty skilled in the art with at least one external to the academic program. The students' thesis defense and presentation is in addition to the research project and associated activities described for the non-thesis option.

*Non-Thesis Option:* The research project associated with the non-thesis option is required of all forensic science students. Students electing the non-thesis option only are required to successfully complete an applied research project generally conducted during their summer internship which requires a research paper, formal slide-based and poster presentations. The committee composition is similar for the non-thesis as it is for the thesis option.

## **Core Curriculum**

The core curriculum is required of all forensic science students to provide broad-based education and experience. The core curriculum includes:

Course No	Course Description	Credit Hrs
FSC 604	Genetics and DNA Technologies	3
FSC 606	Crime Scene and Death Investigation	2
FSC 612	Forensic Microscopy	2
FSC 618	Forensic Comparative Sciences	2
FSC 622	Forensic Analytical Chemistry	3
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 624	Biochemistry	4
FSC 630	Forensic Science Internship	5
FSC 632	Foundations and Fundamentals in Digital Evi	dence3
FSC 665	Legal Issues in Forensic Science	3

(continued)

FSC 680	Seminar (semesters 1, 2, 4, 5)	4
MTH 519	Statistical Issues in Forensic Science	3
Approved Elective		
Total		

## **Areas of Emphasis**

The Forensic Science Program offers four areas of emphasis that students may complete to enhance the core curriculum. The student is required to complete at least one area of emphasis but may complete up to four within the five-semester course of study. Completing multiple areas of emphasis is contingent on maintaining good academic standing while enrolled in the program. Students may choose from the following four Areas of Emphasis:

## **Computer Forensics**

Criminals use computers to carry out a variety of crimes, from viral attacks to financial fraud. This emphasis prepares the student for positions in law enforcement and private industry to combat the threat of these computer-based criminals. For the Computer Forensics area of emphasis, the student must complete the following courses in addition to the core curriculum:

Course No.	Course Description	Credit Hrs
FSC 605	Forensic Digital Imaging	3
FSC 609	Introduction to Cybercrimes	3
FSC 634	Digital Evidence Search and Seizure	3
FSC 676	Advanced Digital Evidence Detection & Recov	very2
	Total emphasis requirements	
	Total including core requirements	49

## Forensic DNA Analysis

The Marshall University Forensic Science Center is home to the academic program as well as a service-oriented DNA laboratory. This lab also serves as a Combined DNA Indexing System (CODIS) for West Virginia. MU DNA Lab facility and staff serve as instructors and supervisors for various DNA-based courses while providing select students with real-world experience, training, and exposure to the inner workings of a Forensic DNA Laboratory. The DNA emphasis exceeds the DNA Advisory Board standards by requiring a total of 12 graduate-level credit hours addressing the DNA guidelines. For the Forensic DNA Analysis area of emphasis, the student must complete the following courses in addition to the core curriculum:

Course No.	Course Title	Credit Hrs.
FSC 600	Cell and Molecular Biology/	3
or BSC 550	Molecular Biology	
FSC 603	Genetics and DNA Technologies Lab	1
FSC 627	Human Genetics	2
FSC 629	Advanced DNA Technologies	2
	Total emphasis requirements*	8
	Total including core requirements	

\*Students considering a career in Forensic DNA Analysis are encouraged to enroll in FSC 650 Crime Laboratory Technical Assistance (Fall, 2 credits ; and Spring, 2 credits).

## **Forensic Chemistry**

Students pursuing careers in forensic drug analysis, toxicology, and trace evidence will benefit from the completion of the Forensic Chemistry emphasis. As some agencies may require 30 or more hours of chemistry coursework, the Forensic Chemistry emphasis provides additional education and hands-on training to meet these federal and state guidelines.. This emphasis requires the completion of the following chemistry related courses in addition to the core curriculum:

Course No	Course Description	Credit Hrs.
FSC 608	Forensic Toxicology	3
FSC 626	Chemical Analysis of Trace Evidence	2
FSC 628	Advanced Drug Analysis	
	Total emphasis requirements	7
	Total including core requirements	45

## **Crime Scene Investigation**

The Crime Scene Investigation emphasis provides students with additional education and training in the area of crime scene investigation beyond that offered in the core curriculum and utilizes the Forensic Science Center's Crime Scene House. In addition to the core curriculum, this area of emphasis includes:

Course No.	Course Description	Credit Hrs.
FSC 607	Bloodstain Pattern Analysis	3
FSC 615	Adv. Crime Scene Investigation	3
FSC 617	Adv. Crime Scene Photography & Documenta	ation3
	Total Emphasis requirements	9
	Total including Core requirements	

## **Other Requirements**

In the third term, students are required to complete an approved research-based internship in a crime laboratory or other approved facility. In the fifth term, students are expected to pass a written, comprehensive examination.

# FORENSIC SCIENCE ADMISSION POLICY

Entrance into the Forensic Science Program is restricted to the fall semester only. Applicant materials should be submitted by March 1 to have the best chance for admission for the fall term. The program observes a rolling application policy so that individuals may apply at any time. Applicants are considered after the deadline if openings are available in the program. Students who apply by or before March 1 have a better chance of admission than those who apply after March1; however, it is not uncommon for applicants to be notified throughout the year.

The complete application process includes:

- 1. Submission of the Marshall University Graduate College Application available online at *www.marshall.edu/graduate*.
- 2. Completion of a Free Application for Federal Student Aid (FAFSA) as soon after January 1 as possible at *www.fafsa. ed.gov.*
- 3. Submission of formal transcript(s) documenting that the applicant has:
  - a) A bachelor's degree in a forensic or natural science (or its equivalent coursework in a relevant field) for entrance into the graduate forensic science program.
  - b) Achieved an overall Grade Point Average of 3.0 or better.
  - c) Completed 1 academic year of biology and its associated labs with no grade of less than a *C*.
  - d) Completed 1 academic year of general chemistry and its associated labs with no grade of less than C.
  - e) Completed 1 academic year of organic chemistry and its associated labs with no grade of less than C.
  - f) Completed 1 academic year of physics and its associated labs with no grade of less than *C*.
  - g) It should be noted that successful completion of an undergraduate course in biochemistry is recommended, but not required, prior to entry into this program.
- 4. Graduate Record Exam scores documenting that the applicant has a Combined Score (Verbal + Quantitative) of 1000 or better, consisting of:
  - a) A verbal score of 420 or better.
  - b) A quantitative score of 550 or better.
- 5. Formal Letters
  - a) Applicant's personal statement providing reasons why he or she should be admitted to the Forensic Science Program.
  - b) 3 Letters of Recommendation on formal letterhead from individuals familiar with applicants.

\*With minor deficiencies, individuals who do not meet the preceding criteria may be considered for provisional or conditional admission. Students admitted with deficiencies must maintain a 3.0 GPA or above while enrolled in the program and those deficiencies determined by the admissions committee must be rectified prior to the completion of the 12th credit hour of enrollment in the program.

Full admission to the program, once an offer is made, is also contingent on successful completion of a background check, required hepatitis B vaccination/titer or formal declination of vaccination, and receipt of other documentation required for enrollment.

The Forensic Science Fee is a special fee designed to support the Forensic Science Program. For more information on tuition and fees, e-mail forensics@marshall.edu or call 304-691-8931. For more information regarding the Forensic Science Center and the MSFS Program, go to *www.marshall.edu/forensics*.

# W. Page Pitt School of Journalism and Mass Communications Dr. Corley Dennison, III, Dean www.marshall.edu/sojmc

# JOURNALISM, M.A.J.

# **Program Description**

Journalism and Mass Communications offers a flexible program designed to accommodate persons with or without an undergraduate degree in journalism and with or without mass communications or professional media experience. Career interests should include one or more of the following: advertising, broadcast journalism, online journalism, print journalism, public relations, radio-television, sports journalism and journalism education.

# **Admission Requirements**

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www. marshall.edu/graduate/admissionsrequirements.asp.* 

In addition:

- 1. Applicants who earned an undergraduate GPA of 3.0 or better must score a minimum of 1200 on the three combined sections of the GRE.
- 2. Applicants who earned an undergraduate GPA of 2.5 to 2.99 must score a minimum of 1500 on the three combined sections of the GRE.

GRE scores are reported in three areas of verbal, quantitative and analytical writing. The verbal and quantitative sections are scored on a scale of 200 to 800. The analytical writing score is reported on a scale of 0 to 6. Before adding the three sections to determine if the 1200 or 1500 requirements have been met, convert the analytical writing score using the following scale:

0.5 = 67 2.5 = 333 4.5 = 600 1.0 = 133 3.0 = 400 5.0 = 667 1.5 = 200 3.5 = 467 5.5 = 733 2.0 = 267 4.0 = 533 6.0 = 800

3. International student applicants must have a minimum score of 525 on the paper Test of English as a Foreign Language (TOEFL) or 71 on the Internet-based test, or they must complete English as a Second Language.

# **Program Requirements**

Students are required to complete EDF 517 (not required if student completed an acceptable statistics course before enrolling in the master's program); Journalism 600, Proseminar in Mass Communications; Journalism 601, Theory of Mass Communications; and Journalism 602, Mass Communications Research and Methodology, JMC 604, Law and Ethics, and JMC 612, History of American Journalism. In addition students who opt for the thesis track must take JMC 630, Seminar in Media Criticism, and students who opt for the professional track must take JMC 603, Media Management. Completing the core meets the 18 hour 600 level course requirement. The remainder of each student's program is determined in consultation with and approval from the graduate coordinator.

- International students are not required to take JMC 612, but they must identify, with the approval of the graduate coordinator, an acceptable substitution for their plan of study and for their comprehensive assessment.
- *Plan of Study:* During the first term students must plan with the graduate coordinator a detailed program of courses and discuss other requirements for the Master of Arts in Journalism degree. A *Plan of Study* approved by the student's graduate coordinator must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.
- Students are responsible for learning and for meeting all requirements, guidelines and deadlines included in the *Graduate Catalog*.
- Professional track students must complete a minimum of 30 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 three-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 coursework 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. International students may substitute another area of concentration (approved by the graduate coordinator) for history.



# **Courses** of Instruction

# ABBREVIATIONS

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

A & S	ARTS AND SOCIETY	
ACC	ACCOUNTING ADULT AND TECHNICAL	195
ATE	ADULT AND TECHNICAL	
	EDUCATION	195
ACB	ANATOMY, CELL	
	AND NEUROBIOLOGY	198
ANT	ANTHROPOLOGY	199
ART	ART AND DESIGN	199
ARTS	STUDIO ART	237
BIC	BIOCHEMISTRY	
	AND MOLECULAR BIOLOGY	200
BMS	BIOMEDICAL SCIENCES	202
BSC	BIOLOGICAL SCIENCES	201
CD	COMMUNICATION	
	DISORDERS	205
CE	CIVIL ENGINEERING	204
CHE	CHEMICAL ENGINEERING	203
СНМ	CHEMISTRY	203
CI	CURRICULUM	
	AND INSTRUCTION	211
CIDH	CURRICULUM AND INSTRUCTION:	
	DEAF/HARD OF HEARING	213
CIEC	CURRICULUM AND INSTRUCTION:	
	EDUCATIONAL COMPUTING	213
CIME	CURRICULUM AND INSTRUCTION:	
	MATHEMATICS EDUCATION	214
CIRG	CURRICULUM AND INSTRUCTION:	
	READING EDUCATION	215
CISE	CURRICILLIM AND INSTRUCTION:	
	SCIENCE EDUCATION	216
CISL	CURRICULUM AND INSTRUCTION:	
	ENGLISH AS A SECOND LANGUAGE	214
CISP	CURRICULUM AND INSTRUCTION:	
	SPECIAL EDUCATION	216
CIVI	CURRICULUM AND INSTRUCTION:	
	VISUAL IMPAIRMENTS	218
CJ	CRIMINAL JUSTICE	210
CL	CLASSICS	204
СММ	COMMUNICATION STUDIES	
COUN	COUNSELING	208
CS	COMPUTER SCIENCE	207

CSE	CONTROL SYSTEMS
CULS	CULTURAL STUDIES
DTS	DIETETICS
ECN	ECONOMICS
EDF	EDUCATIONAL FOUNDATIONS 219
EE	ELECTRICAL ENGINEERING
EM	ENGINEERING MANAGEMENT220
ENG	ENGLISH
ENGR	ENGINEERING 220
ENVE	ENVIRONMENTAL ENGINEERING 223
ES	ENVIRONMENTAL SCIENCE
ESS	EXERCISE SCIENCE AND SPORT 225
FCS	FAMILY AND CONSUMER SCIENCE 226
FIN	FINANCE
FRN	FRENCH
FSC	FORENSIC SCIENCE
GEO	GEOGRAPHY
GLY	GEOLOGY
HCA	HEALTH CARE ADMINISTRATION
HS	HEALTH SCIENCE
HIST	HISTORICAL STUDIES 236
HRM	HUMAN RESOURCE MANAGEMENT
HST	HISTORY
HUMN	HUMANITIES235
IS	INFORMATION SYSTEMS 238
ITL	INSTRUCTIONAL TECHNOLOGY
	AND LIBRARY SCIENCE
JMC	JOURNALISM AND
	MASS COMMUNICATIONS
LAT	LATIN
LE	LEGAL ENVIRONMENT244
LITS	LITERARY STUDIES
LS	LEADERSHIP STUDIES 241
MCB	MICROBIOLOGY, IMMUNOLOGY
	AND MOLECULAR GENETICS
MGT	MANAGEMENT243
MIS	MANAGEMENT
	INFORMATION SYSTEMS
MKT	MARKETING244
MSF	MINE SAFETY
MTH	MATHEMATICS245

MUS	MUSIC	247
NUR	NURSING	249
PHL	PHILOSOPHY	252
PHS	PHYSIOLOGY	253
PHY	PHYSICS	252
PLS	PARK RESOURCES	
	AND LEISURE SERVICES	250
PMC	PHARMACOLOGY	251
PS	PHYSICAL SCIENCE	252
PSC	POLITICAL SCIENCE	254
PSY	PSYCHOLOGY	256
РТН	PATHOLOGY	251

QA	QUALITY ASSURANCE	
RST	RELIGIOUS STUDIES	
SFT	SAFETY TECHNOLOGY	
SOC	SOCIOLOGY	
SPN	SPANISH	
SPSY	SCHOOL PSYCHOLOGY	
ТЕ	<b>TECHNOLOGY AND ENGINEERING</b>	
THE	THEATRE	
ТМ	TECHNOLOGY MANAGEMENT	

## ACCOUNTING (ACC)

#### 510 Survey of 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.

## 580-583 Special Topics. 4 hrs.

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

A study of the generation, transformation, and presentation of quantitative data produced by the accounting process. Emphasis is given to the modern accounting system that generates information (1) for 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 M.B.A. admission or permission of GSM academic advisor)

#### 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 M.B.A. admission or permission of GSM academic advisor)

## 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 M.B.A. admission or permission of GSM academic advisor)

#### 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: Admission to Master of Science in Accountancy program or permission of Program 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 M.B.A. admission or permission of GSM academic advisor)

#### 617 Advanced Controllership. 3 hrs.

Functions of the modern corporate controller. Topics and problems demonstrating the integrative nature of the controller's role are investigated. The use of the computer is integrated into the course. (PR: Admission to Master of Science in Accountancy program or permission of Program 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: Admission to Master of Science in Accountancy program or permission of Program Director)

## 648 Tax Research. 3 hrs.

Examines the primary and secondary sources of income tax law. Assignments will address using paper and electronic research tools to locate, understand, and interpret primary and secondary source materials.

#### 650 Special Topics. 1-3, 1-3 hrs.

(PR: Permission of the division head and full M.B.A. admission)

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

Independent 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 M.B.A. admission or permission of GSM academic advisor)

#### **ADULT AND TECHNICAL EDUCATION (ATE)**

#### 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 Instructional Methods in Technical Training. 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.

#### 508 Teaching Methods in Career and Technical Education. 3 hrs.

Correlating lab instruction with classroom instruction; individual and group instruction sheets and materials; the four teaching steps in career and technical education; physical factors relating to classroom and lab.

## 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.

## 511 Introduction to Career and Technical Education. 3 hrs.

Designed as a follow-up to Teaching Methods in Careeer and Technical Education and intended to provide the new teacher guidance and supervision in developing teacher competence.

# 512 Course Construction and Planning in Career and Technical Education. 3 hrs.

Analysis procedures for determining career abd technical curriculum content; determination of program goals and objectives; involvement of advisory committees; factors, principles, and techniques of developing a course of study.

513	Organization and Management of School Shops and Laboratories. 3 hrs.
	Responsibilities as a manager; methods of handling tools, equipment, and supplies; project instructional resource needs and reporting; improvement
	of facilities; filing system, and career and technical laboratory.
520	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.
521	Occupational Analysis. 3 hrs.
021	Assist the instructor in analyzing an occupation; goals and objectives to form a basis for vocational curriculum; classifying and describing
	occupations; analysis procedures; course content, and technical skills and knowledge.
522	Administration of Cooperative Programs. 3 hrs.
344	Administration of cooperative ringrams, or ms. Administering cooperative education programs, recruiting, and selecting students; selecting training agencies and placing students; conducting
<b>F</b> 94	public relations activities for the program; and advising the student organization.
524	Safety in Career and Technical Education. 3 hrs.
	Responsibilities of the teacher in providing a safe learning/working environment; effective approaches to accident prevention; laws and regulatory
	agencies regarding safety management in the classroom and laboratory.
525	Computer Applications in Business and Marketing Education. 3 hrs.
	Study of computer applications and software for Business and Marketing Education.
535	Methods of Examination in Career and Technical Education. 3 hrs.
	Develop written and performance evaluation instruments; develop and use progress charts; determine appropriate grading procedures. Develope
	rating scales, objectives tests, classroom tests, and manipulative tests. Introduction to statistics.
536	Coordination of Cooperative Career and Technical Education. 3 hrs.
	Background of coordination; methods of techniques for evaluating and selecting work stations; student selection, placement, and follow-up; role of
	advisory committees; methods of evaluating cooperative work experience.
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. 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.
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 utilizing an advisory committee.
547	Computer Applications in Career and Technical Education. 3 hrs.
	Designed to introduce modern instructional technology in today's classrooms and labs. Introduction to disk operating systems; application software
	for instruction and instructional management; student evaluation; record keeping, and work processing.
548	Applications of Basic Skills in Career and Technical Education. 3 hrs.
010	Methods, techniques, and strategies for incorporating basic skills in career and technical instruction; emphasis on reading, writing, math, oral
	communication, and critical thinking skills; job-seeking and job-keeping skills.
549	Occupational Analysis and Instructional Design. 3 hrs.
545	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.
550	Interpersonal Skills in the Workplace. 3 hrs.
330	Course is designed to provide opportunities to learn in preparation for career success with supervisors, co-workers, clients, and customers. Human
<b>55</b> 0	relations skills are examined and related to business success.
552	History and Philosophy of Career and Technical Education. 3 hrs.
	Historical influences in the development of workforce education in America and Europe; motivating influences and the implications of philosophy
	in modern career and technical education.
559	Coordination of Career and Technical Youth Activities. 3 hrs.
	Organize and develop co-curricular student organization; defining the purpose of the organization; plan application and integration into the
	vocational program; competencies in leadership and team building.
560-563	Professional Development. 1-4 hrs.
565	Career Exploration and Development. 3 hrs.
	Exploring principles and techniques for career planning and job search. An overview of strategies for gaining a competitive edge in the labor market
	and for experiencing a successful career beginning.
569	Business and Occupational Teaching Methods. 3 hrs.
	Survey materials and methods for developing competencies in teaching business education and/or occupational training programs.
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.
580-584	Special Topics. 1-4 hrs.
585-588	Independent Study. 1-4 hrs.
591-594	Workshop. 1-4 hrs.
589	Grant Proposal Writing for Business and Industry. 3 hrs.
	This course provides a step-by-step guide to the proposal writing process, from the initial stages of planning, to writing the first draft, to preparing
	the final document.
595	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.
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,
609	emphasizing the techniques for coordination of federally aided programs. 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	<b>Current Issues in Business and Marketing Education. 3 hrs.</b> 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.
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 542 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.
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,
631	which will be translated into appropriate intervention strategies. 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
635	adult and technical education. Specialized Practicum in Computer Applications in Business and Industry, 3 hrs.
000	An advanced course for persons who want to further their knowledge of the application of computers in the business/industrial fields represented
C07	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	<b>Program Design in Technical Education. 3 hrs.</b> An overview of technical education history, philosophy, legislation, certification, evaluation, and operations. Comparison to academic programs to
	emphasize similarities and differences.
643	Teaching EFL Abroad. 3 hrs.
650	Designed to explore the educational history of teaching a foreign language in different countries. (PR: CISL 550 and CISL 551) 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;
651	includes goals, objectives, procedures, student activities, resources, and evaluation. Developing Marketing Curriculum. 3 hrs.
001	Conduct library research, review marketing content, select content objectives, identify content appropriate for the target group, prepare teaching
652	outlines, and design evaluation instruments. Field Based Job Analysis and Curriculum Design. 3 hrs.
052	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 Human Resources Curriculum. 3 hrs.
	Conduct library research, review personnel 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.
659	EFL Methods. 3 hrs.
CC1	Designed to provide students with the latest methodologies associated with teaching EFL to the adult learner. (PR: ATE 643)
661	<b>Practicum in Adult and Continuing Education. 3 hrs.</b> 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.
662	<b>Applied Field Experience in Prevocational Exploration. 3 hrs.</b> 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 542)
663	<b>EFL Practicum. 3 hrs.</b> Designed to engage the student in hands-on teaching in a classroom setting. (PR: ATE 659)
664	Technical 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.
667	<b>Cooperative Education Workforce Experience. 1-10 hrs.</b> 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. (PR: ATE 609, 628, 652 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	Assessment 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.
	in the encorrowin of 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.
680	International Workforce Development. 3 hrs.
	This course is designed for students in technical and social fields who are interested in workforce development. It has three components: education
	and training, collaborative research, and technical assistance.
681	Thesis. 1-6 hrs.
690-692	Seminar. 1-4 hrs.
701	The Community and Technical College. 3 hrs.
	History, functions, and unique characteristics of the two-year college in the American education system.
702	Analysis of Literature on Community and Technical College Teaching. 3 hrs.
	Identification and analysis of current issues in community technical college teaching with application of procedures for investigation, accompanied
	by a critical examination of findings and their application to local programs.
703	Interpretation and Utilization of Applied Research in Community and Technical College Teaching.
	Students will learn how to choose the appropriate statistics, interpret the outputs, and develop skills in writing about the meaning of the results.
707	Professional Seminar I. 1 hr.
-	Selected topics in program and institutional assessments related to community and technical colleges.
708	Professional Seminar II. 1 hr.
	Selected topics in thesis proposal, overview of grantsmanship, and funding sources. Discussion of the effects of new technologies and the Internet
-	on the proposal process.
709	Professional Seminar III. 1 hr.
710	Provides students an opportunity to synthesize prior course experiences and to prepare and present a draft thesis prospectus.
712	<b>Classroom Assessment for Community and Technical College Students. 3 hrs.</b> Presentation of assessment principles that clearly and specifically relate to instruction, current research and new directions in the assessment field,
714	and practical and realistic examples and suggestions. Community and Technical College Curriculum Design. 3 hrs.
714	Study of the major curricular programs of the comprehensive community college, including factors that influence the design and implementation,
	processes for assessing, and strategies for changing the curriculum for open access colleges.
718	Education and Employment Preparation for Diverse Populations. 3 hrs.
110	The needs of diverse/special needs populations, including youth and adults with disabilities, disadvantaged, limited English proficient, displaced
	workers, minorities, incarcerated, and single teen parents. Specific attention to federal legislation.
723	Perspectives and Strategies for Teaching Workforce Education. 3 hrs.
	Teaching/learning process and consideration of teaching methods employed to encourage, guide, and evaluate community and technical college
	students' learning.
726	Funding, Planning, and Administrative Issues of Community and Technical Colleges. 3 hrs.
	Governance and administration of the contemporary community and technical college in the United States with a focus on planning, funding, and
	selected administrative issues.
781	Thesis. 6 hrs.
	Individual research in a selected field of community and technical college teaching under the direction of a graduate faculty member of the
	department.
	ANATOMY, CELL AND NEUROBIOLOGY (ACB)
620	Gross Anatomy/Embryology. 8 hrs. I.
010	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 to establish the anatomical basis of the practice of medicine.
621	Gross Anatomy/Embryology I. 2 hrs.
	Morphology of the upper and lower limbs with dissection. (PR: Permission of instructor)
622	Gross Anatomy/Embryology II. 6 hrs.
	Morphology of the head and neck, thorax, abdomen, pelvis with dissection. (PR: Permission of instructor)
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 techniques of tissue preparation, staining, histochemistry and immune localization. (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)
629	Microscopic Anatomy and Ultrastructure Part I. 1 hr.
	The basic tissue types of the human body will be examined at the light and electron microscopic level. (PR: Permission of instructor)
630	Microscopic Anatomy and Ultrastructure Part II. 3 hrs.
	The organ systems of the human body will be examined at the light and electron microscopic level. (PR: Permission of instructor)
632	Principles of Mammalian Development. 3 hrs. I.
	A course designed to present the salient features of normal human development so that students will have a basis for comprehending normal adult
<u></u>	anatomic relations and variations, and a basis for interpreting congenital pathologic conditions. (PR: Consent of instructor)
633	Neuroanatomy I: Clinical Anatomy of the Brain and Spinal Cord. 2 hrs.
	To study the essential organization of the cerebrum and spinal cord, blood supply, the spinal ascending and descending pathways, and clinically
634	related disorders.(PR: BMS 600 or permission of instructor) Neuroanatomy II: Clinical Anatomy of the Brain Stem and Forebrain. 2 hrs.
034	To study the functional organization and neurological disorders associated with the brain stem, thalamus, hypothalamus, cerebellum, basal ganglia,
	limbic system, and cerebral cortex. (PR: ACB 633)

#### 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.
 655 Digital Video Imaging. 3 hrs. I, II.

An in-depth study of the theory and practice of fluorescence and confocal microscopy (including Image Deconvolution, Multiphoton Imaging, FRET, FRAP, and GFPs), intracellular ion measurements and Immunocytochemistry. (PR: Consent of instructor)

## 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.

# **ANTHROPOLOGY (ANT)**

## (See Sociology)

511	Deconstructing Appalachia. 3 hrs.
	Exploration of the historical and cultural significance of Appalachia in the American experience and imagination. (PR: Six hours of undergraduate
	anthropology on 300 level or higher or departmental permission)
512	Appalachian Field Experience I. 3 hrs.
	Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. (PR: ANT 511 or equivalent)
513	Appalachian Field Experience II. 3 hrs.
	Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. (PR: ANT 511 or equivalent)
528	Archeological Theory and Analysis. 3 hrs.
	An introduction to archaeological theory and its application to the material record of cultures, past and present. (PR: Six hours of undergraduate
	anthropology on 300 level or higher or departmental permission)
540	African Cultures. 3 hrs.
	Comparative analysis of the ethnic groups of Africa, using archaeological and ethnographic data. (PR: Six hours of undergraduate anthropology on
	300 level or higher or departmental permission)
541	Oceania. 3 hrs.
	Comparative analysis of the indigenous peoples and cultures Melanesia and Polynesia using archaeological and ethnographic data (PR: Six hours
<b>5</b> 49	of undergraduate anthropology on 300 level or higher or departmental permission)
542	The Native Americans. 3 hrs. Comparative analysis of the indigenous inhabitants of North America using archaeological end ethnographic data. (PR: Six hours of undergraduate
	anthropology on 300 level or higher or departmental permission)
545	American Ethnicities. 3 hrs.
343	Comparative overview of historical and contemporary patterns of immigration, settlement, and interethnic relations in the United States. (PR: Six
	hours of undergraduate anthropology on 300 level or higher or departmental permission)
565	Anthropology of Global Problems. 3 hrs.
000	Anthropological study of contemporary environmental and social problems with global impact emphasizing the rise of a culture of capitalism. (PR:
	Six hours of undergraduate anthropology on 300 level or higher or departmental permission)
567	Culture through Ethnography. 3 hrs.
	In depth exploration and comparison of diverse cultural groups through reading and discussing ethnographic texts. (PR: Six hours of undergraduate
	anthropology on 300 level or higher or departmental permission)
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)
591	Theory in Ethnology. 3 hrs.
	Introduction to major theoretical traditions of cultural anthropology with emphasis on the connection between fieldwork and development of theory.
	(PR: Six hours of undergraduate anthropology on 300 level or higher or departmental permission)
600	Ethnographic Research. 3 hrs.
	An advanced project-based introduction to ethnographic research design and practice. (PR: Six hours of undergraduate anthropology on 300 level or
685-688	higher or departmental permission) Independent Study. 1-4 hrs.
000-000	Independent Study. 1-4 hrs. Individual study of topics not offered in regularly scheduled classes. (PR: Graduate status and six hours of undergraduate anthropology on 300 level
	or higher or departmental permission)
	ART AND DESIGN (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
504	for graduation.
504	Iconography of Mary. 3 hrs.
505	Traces the sources and evolution of Catholic doctrine and images of the Virgin Mary.
505	Art in the United States. 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.
	· ravies in araning room the posed number ingene.

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.
508	Art and Architecture of Ancient Egypt 3 hrs.
	History of the visual arts and architecture in Ancient Mesopotamia, Egypt, Greece and Rome.
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 19th century.
510	Art and Architecture of Ancient Greece. 3 hrs.
	Explores the art and architecture of the ancient Greek world in light of social and religious influences.
511	Art and Architecture of Ancient Rome. 3 hrs.
	Explores the art and architecture of ancient Rome in light of social and religious influences.
512	20th Century Art. 3 hrs.
	A survey of the development of architecture, painting and sculpture in the Western World from 1900 to 2000.
513	Contemporary Art. 3 hrs.
	A survey of the development of architecture, painting and sculpture in the Western World from World War II to the present.
514	Art and Architecture of the Italian Renaissance. 3 hrs. I or II or S.
	Explores the art and architecture of the Italian Renaissance in light of social and religious influences.
515	Art of the Renaissance in Northern Europe. 3 hrs.
	Explores the art of northern Europe during the Renaissance in light of social and religious influences.
516	Baroque Art. 3 hrs.
	Analyzes Baroque art and social milieu that influenced, commissioned, financed, and produced it.
519	Spinning, Dyeing, and Tapestry. 3 hrs. I or II or S.
	Basic procedures in hand spinning, dyeing and tapestry weaving.
524	Women and Art. 3 hrs.
	Explores the relationship of women to art historically: as artists, as subject matter, and as patrons/consumers.
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, website design and advanced image processing.
555-556	Painting: Acrylic and Oil. 3; 3 hrs. I, II, S.
557	Study and practice of painting in expressing still life, landscape and the human figure.
55 <i>1</i>	Figure Painting. 3 hrs. S. Painting the nude model using modern and classical methods.
560	History and Philosophy of Art Education, 3 hrs. I.
300	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.
500	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.
000	Experiments in the media of Intaglio, Lithography, Serigraphy, Relief, Collagraphs and new techniques of printmaking.
570-573	Practicum. 3 hrs. I, II, S.
010010	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.
000000	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; 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.
	<b>BIOCHEMISTRY AND MOLECULAR BIOLOGY (BIC)</b>
620	Human Biochemistry. 6 hrs. I.
020	A study of structure and metabolism of biological compounds with special reference to the human. Must be taken concurrently with BIC 621. (PR:
	Organic chemistry and consent of instructor; CR: BIC 621)
621	Human Biochemistry Discussion. 1 hr. CR/NC.
	Co-requisite weekly discussion group for Human Biochemistry. Selected topics from the lecture course will be covered in greater depth. Must be
	taken concurrently with BIC 620. (CR: BIC 620)
634	
	Lipid Biochemistry. 2 hrs. II.
	Lipid Biochemistry. 2 hrs. II. Advanced study of lipid structure and metabolism. (PR: Biochemistry and consent of instructor)
636	• •
636	Advanced study of lipid structure and metabolism. (PR: Biochemistry and consent of instructor)
636	Advanced study of lipid structure and metabolism. (PR: Biochemistry and consent of instructor) Enzymes and Proteins. 3 hrs. I.

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
643	instructor) <b>Molecular Signal Transduction. 3 hrs.</b> An advanced exploration of the newest information on cellular signalling pathways. Special emphasis will be placed on current literature in
675	following signal transduction from the plasma membrane to the nucleus. (PR: BMS 600 or equivalent) <b>Special Topics. 1-4 hrs.</b> Present course material on special areas of research or topics which are not routinely covered in existing courses.
	<b>BIOLOGICAL SCIENCES (BSC)</b>
501	Ichthyology. 4 hrs. II. (Alternate years)
504	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) Cellular Physiology. 4 hrs.
505	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 lec3 lab. (REC: Background in chemistry and physics; PR: 12 hours biological sciences) <b>Economic Botany. 3 hrs.</b>
	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, (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	<b>Ornithology. 4 hrs. II, (Alternate years)</b> 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 (Alternate years). Study of morphology, evolution and classification, zoogeography, ecology, economic importance; survey techniques and recognition of native mammals of West Virginia. (PR: BSC 121 plus an additional 8 hours of BSC courses
510	<b>Remote Sensing/GIS Applications. 4 hrs. I.</b> A study of the physical systems for collecting remotely sensed data. Statistical/spatial analysis and modeling using image processing/geographic information/spatial computer software systems with earth resources applications. (PR: PHY 203-204, MTH 225 or permission)
511	<b>Digital Image Processing/GIS Model. 4 hrs. II.</b> A study of image processing/geographic information/spatial analysis systems, concurrent and parallel image processing 3-D modeling scenarios utilizing geophysical data for computer simulation modeling. (PR: BSC/PS 410 or BSC 510)
512	Biogeography. 3 hrs.
<b>F</b> 10	Biogeography studies distributions of animals and plants in space and time; it combines knowledge from evolutionary biology, ecology, zoology, botany, and conservation science with basics of physical geography and geology.
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. 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)
517	Biostatistics. 3 hrs.
	Statistical skills for biological/biomedical research, with emphasis on applications. Experimental design/survey sampling, estimation/hypothesis testing procedures, regression, ANOVA, multiple comparisions. Implementation using statistical software such as SAS, BMDP. Same as MTH 518. (PR: Permission)
518	Mycology. 4 hrs. I. Nature, cause and control of plant diseases. 2 lec-4 lab. (PR: BSC 120-121)
519	<b>Plant Anatomy. 4 hrs. II.</b> 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. (Alternate years) Experimental study of plant life processes to include applicable biophysical and biochemical principles, water relations, molecular biology, stress
521	physiology, and growth and development. (PR: BSC 322 or equivalent) <b>Phycology. 4 hrs.</b> Taxonomy and morphology of algae. Techniques used in the study of algae with emphasis upon application of ecological principles to current water
522	quality problems. 2 lec-4 lab. (PR: BSC 105 or 121) Animal Physiology. 4 hrs. I.
524	Physiological principles operating in the organ systems of vertebrate animals. (PR: BSC 120, 121 or equivalent; BSC 322) Animal Parasitology. 4 hrs. I, S.
525	Morphology, life histories, classification, and host relationships of common parasites. 2 lec4 lab. (REC: BSC 212 or equivalent) <b>Biosystematics. 3 hrs.</b>
	Biosystematics is a unifying discipline that combines taxonomy (collecting, describing and naming organisms), phylogenetics (evolutionary relationships among species), and classification (organization of taxa into groups which ultimately reflect evolutionary relationship.
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
530	equivalent) Plant Ecology. 4 hrs. II. 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.
	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)
543	Microbial Genetics. 3 hrs.
	Microbial Genetics covers the essential functions of DNA replication and gene expression in prokaryotic cells. The course includes molecular
	genetics of bacteria and phages, bioinformatics and discussion of laboratory techniques.
545	Microbial Ecology. 3 hrs. II.
	This course introduces students to the vital roles that microbes play in sustaining life on earth. Includes both theoretical and practical concepts
546	ranging from the origin of life to biodegradation. (PR: BSC 121 or permission) Microbial Ecology Lab. 2 hrs. II.
540	A laboratory course emphasizing the recovery, cultivation, enumeration, and identification of bacteria from environmental samples. Also introduces
	students to molecular-based methods fro studying microbial community structure and dynamics. (PR: BSC 121, CR: BSC 545 or consent)
550	Molecular Biology. 3 hrs. II.
	Advanced principles in molecular function emphasizing current research using recombinant DNA methodology. (PR: BSC 322 or equivalent)
556	Genes and Development. 3 hrs.
	An in-depth study of the genetic mechanisms of complex organismal development including cell specification, induction and morphogenesis. (PR: BSC 324 or BSC 322 or equivalent)
560	Conservation of Forests, Soil and Wildlife. 3 hrs. I.
	Primarily for students in the biological sciences, general and applied sciences. Includes fieldwork, seminars, and demonstrations related to
	conservation. 2 lec-4 lab. (PR: BSC 105 or 121 or equivalent)
580-583	Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.
585-588	(PR: Permission) Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. CR/NC
000 000	(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. (Alternate years) 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)
610	Advanced Vertebrate Morphology. 3 hrs.
	AVM is an intensive, laboratory-based course in vertebrate morphology. Core responsibilities include detailed dissection and comparative cranial
<u></u>	osteology. Each student must complete an independent dissection project and term paper. (PR: biology core)
620-622	<b>Taxonomy of Vascular Plants. 1-2; 1-2 hrs.</b> 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.
	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.
	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.
660	By permission of adviser, graded CR/NC. Introductory Graduate Seminar. 2 hrs.
000	Topics relevant to preparation for a career in the life sciences including: literature mining and interpretation, scientific ethics, preparation and
	delivery of scientific presentations, and career development tools
661	Seminar I. 2 hrs. I.
662	In depth group discussion of current biological issues. Seminar II. 1 hr. II.
004	Oral presentation of individual topics. (PR: BSC 661)
679	Problem Report. 1-4 hrs.
	Preparation and completion of a written report from experimental or field research in biological sciences. (PR: permission)
680 681	Special Topics. 1-4 hrs.
681	Thesis. 1-12 hrs. (PR: By permission of advisor).
	<b>BIOMEDICAL SCIENCE (BMS)</b>
600	Biochemical, Cellular and Molecular Foundations of Biomedical Science. 6 hrs. I.
	A study of the structure and metabolism of biological compounds, the molecular biology of the cell, and the interactions of cell components. (PR:
c14	One year of Biology and Organic Chemistry and consent of instructor)
614	Basic Human Genetics. 2 hrs. II. 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
698	second half of the class. (PR: Graduate status in one of the biomedical sciences)
628	Neuroscience I: Major Structures of the Brain, Neuron Function, and Spinal Cord. 3 hrs. To study and understand the structure and function of the nervous system and disorders of neuronal function. (PR: BMS 600 or permission of
	instructor)
629	Neuroscience II: Structures and Functions of the Brain Stem and Forebrain. 3 hrs.
	To study and understand the structure and function of the nervous system and disorders of neuronal function. (BMS 628 or permission of
630	instructor) Neuroscience. 5 hrs., II.
	The structure and function of the nervous system. (PR: Permission of instructor)

# 631 Neuroscience and Developmental Biology Literature Review. 1 hr.

A seminar course where published articles in the fields of neuroscience and developmental biology will be presented by students and faculty. (PR: Permission of instructor)

#### 632 Neuroscience Research Techniques. 3 hrs.

Class participants will be exposed to state-of-the-art neuroscience research techniques while in the laboratories of the neuroscience faculty. (PR: Permission of instructor)

### 641 Molecular Developmental Biology. 3 hrs.

An in-depth discussion of current literature in developmental biology with emphasis on early embryo development, morphogenesis, lineage determination and regulation of developmental processes. (PR: Permission of instructor)

## 651 Cancer Biology. 4 hrs.

This is an advanced graduate course on the core principles underlying the initiation, progression, treatment and prevention of cancer, based on the most current literature in the field. (PR: BMS 600, BIC 620, and permission of instructor)

## 652 Cancer Biology Colloquium. 1 hr.

This is a mentored journal club for graduate students covering selected areas of current interest in cancer biology research. (PR: Permission of instructor)

## 660 Communication Skills for Biomedical Sciences I. 1 hr.

Biomedical graduate students are trained to plan, prepare, and deliver effective scientific presentations.

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665 Cardiovascular Disease, Obesity, Diabetes Research Colloquium. 1 hrs. CR/NC.

A seminar-style series that will focus on recent advances in topics related to cardiovascular disease, diabetes and obesity.

#### 670 Basic Methods in Molecular Cloning. 2 hrs. II.

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. I, II, S. CR/NC

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. 1-6 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

## **CHEMICAL ENGINEERING (CHE)**

**650-653 Special Topics. 1-4 hrs.** Designed to increase the depth of study in a specialized area of chemical engineering. (PR: Consent)

## **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)
   511 Modern Instrumental Methods in Chemistry and Biochemistry. 4 hrs. This course investigates the theory and functional aspects of modern analytical instrumentation. Emphasis is placed on components of instruments and the applicability of various techniques to specific analytical problems.
   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. **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)

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	Advanzed Outer is Chemistry I. 2 by I	
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)	
567	Intermediate Biochemistry. 3 hrs.	
580-583	A survey course including introduction to basic biochemical concepts, bioenergetics and information transfer. 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.	
607	Offered on demand. (PR: CHM 556) 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.	
628	Offered on demand. 3 lec-6 lab. (PR: CHM 520 or equivalent) Special Topics (Inorganic). 1-3 hrs. Offered on demand.	
628 629	Special Topics (Organic). 1-3 hrs. Offered on demand.	
630	Special Topics (Physical). 1-3 hrs. Offered on demand	
631-632 678	Seminar. 1; 1 hr. I, II.	
678	Applied Microscopy in Research. 4 hrs. Catalog Description: A combined lecture/lab/self-motivated research course that results in a microscopy-based project to be presented by each	
	student at an open forum (can augment thesis project). (PR: instructor permission)	
679	<b>Problem Report. 3 hrs.</b> Preparation of a comprehensive written report on a topic in Chemistry of current importance. Registration only by permission of Department.	
685-688	Independent Study. 1-4 hrs.	
609	Individual study of topics not offered in regularly scheduled classes.	
682	<b>Research. 1-12 hrs. I, II, S.</b> 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)	
	CIVIL ENGINEERING (CE)	
612	Structural Steel Design and Behavior. 3 hrs.	
	Principles and methodologies for conceptual and detailed design of steel structures emphasizing LRFD. Topics include behavior and design of hot-	
614	rolled/cold-formed steel, connections, members, frames, plate girders, and advanced analysis techniques. Advanced Reinforced Concrete Structure Design and Behavior. 3 hrs.	
014	Background of modern reinforced concrete design procedures. Comparison of standard design codes. Review of research on behavior of reinforced	
~	concrete structures and projection of future changes in design and construction practices.	
615	<b>Finite Element Applications in Civil Engineering. 3 hrs.</b> FEM theory and basic analysis steps. Structures and elements: trusses, beams, frames and thin-walled. Two dimensional, three dimensional, and	
	axi-symmetric solids, static and dynamic problems, pre-post processing, data interpretation, and advanced modeling techniques.	
616	Prestressed Concrete Design. 3 hrs.	
	Design of prestressed concrete structures, methods and losses. Design for flexure, shear torsion, camber, deflections, continuity, connections, fire rating, and review of research and projection to changes in construction practices.	
618	Bridge Engineering. 3 hrs.	
	An overview of design of highway bridges, and an introduction to maintenance of highway bridges, including the history of bridge engineering, types, design rules, loads, inspection, rating, preventive maintenance and aesthetics. (PR: CE 616 and advisor approval)	
634	Traffic Engineering. 3 hrs.	
	Design and application of signs, markings and signals. Timing of isolated and interconnected signals, speed regulation, one-way streets, capacity	
635	and analysis of highway facilities. Evaluation of Transportation Systems. 3 hrs.	
000	Concepts of transportation economic analysis, transportation costs and benefits, needs studies, finance and taxation, methods of evaluation of plans	
696	and projects and environmental impact assessment.	
636	<b>Transportation Planning. 3 hrs.</b> Techniques used to plan urban transportation systems, data collection, trip generation, trip distribution, mode choice, traffic assignment, modeling,	
	evaluation techniques and travel demand modeling.	
637	Highway Safety Engineering. 3 hrs.	
	Traffic safety studies including crash analysis, control and geometry improvements, hazard and counter measured identification, before-and-after studies, data collection and computer tools for highway safety and traffic evaluation.	
638	Pavement Design. 3 hrs.	
	Design of highway pavement systems, subgrades, subbases and bases, soil stabilization, flexible and rigid pavements, cost analysis and pavement	
650-652	selection, traffic data collection, drainage, earthwork, pavement evaluation and maintenance. Special Topics. 3 hrs.	
	Formal study of civil engineering topics of current interest. (PR: advisor approval)	
699	<b>Civil Engineering Research. 1-6 hrs.</b> Directed research in fields of study relevant to civil engineering including transportation, structural analysis, environmental engineering and	
	engineering management. A limit of six semester hours credit may be applied toward the MSE degree with permission of the student's advisor. (PR:	
	Advisor approval)	
	CLASSICS (CL)	
These courses are given in English and require no knowledge of Greek or Latin		

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.
560	Study of ancient Roman culture, emphasizing parallels with present-day issues. Ancient Goddess Religions. 3 hrs.
500 570	Study of the mythology and cults of the goddesses of Greece, Crete, Asia Minor and Rome, with a view to discovering cultural contexts. <b>Transformations of Myth. 3 hrs.</b>
	An examination of how ancient myth transforms into the psychological and fictional works of more modern times.
575	Roman Law. 3 hrs. Taught in English, this course provides an introduction to the basic tenets of Roman Law, with particular attention to court cases and speeches.
580-583	
585-588	Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.
599 620	Humanities Seminar. 3 hrs. Theoretical Approaches to Ancient Literature. 3 hrs.
	A close study of ancient and modern literary approaches to and theories about ancient literature with emphasis on genre and cultural contexts.
	<b>COMMUNICATION DISORDERS (CD)</b>
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
524	majors. Diagnostic Processes with Communication Disorders. 3 hrs.
	Evaluation of procedures for securing behavioral information to differentiate among various communication disorders; a study of symptom complexes. (PR: Permission of instructor and graduate standing)
524L	Diagnostic Processes with Communication Disorders. 3 hrs.
526	Observation and practice in evaluating individuals with communication disorders (PR: Permission of instructor and graduate standing) Therapeutic Procedures I. 3 hrs.
<b>5</b> 961	Examination of therapeutic procedures relative to developmental speech disorders. (PR: Permission of instructor and graduate standing)
526L	<b>Therapeutic Procedures I. 1 hrs.</b> Observation of individuals with communication disorders and introduction to analysis of the Clinical process. (PR: Permission of instructor and graduate standing)
527	Therapeutic Procedures II. 3 hrs.
	Examination of therapeutic procedures relative to speech and language disorders. Investigation into the clinician's role in case management as well as behavior management techniques. (PR: Permission of instructor and graduate standing)
527L	Therapeutic Procedures Laboratory II. 1 hr.
561	Observation and in-depth analysis of the clinical process . (PR: Permission of instructor and graduate standing) Sign Language for the SLP. 3 hrs.
562	Introduction to basic signs and finger spelling. Overview of different sign systems. Sign Language for the SLP II. 3 hrs.
502	This course will focus on the continuation of exposure to sign language and deaf culture and the various techniques of manual communication.(PR: CD 561)
570-571	
580-583	
585-588	(PR: Permission of chair) Independent Study. 1-4 hrs.
001	(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	<b>Communication Disorders Related to Cleft Palate and Voice. 3 hrs.</b> Intensive study of the anatomy and physiology of laryngeal and maxillofacial structures; voice production and resonance; nature and etiology of
<b>COO</b>	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
<b>C</b> 00	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	Foundations in Neurogenic Communication and Swallowing Disorders. 3 hrs.
	Study of anatomy/physiology of the nervous and motor systems for communication and swallowing; foundational principles of service provision for people with neurologically based disorders. (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	Child Language Disorders: Infancy through Preschool. 3 hrs.
	Advanced study of the characteristics and etiology of language disorders in young children. Special emphasis will be placed on diagnosis and treatment of young children with language disorders. Helping children with language disorders acquire the oral language skills they need to
	successfully acquire literate language also will be covered (PR: Permission of instructor).
629	Child Language Disorders: School-Age through Adolescence. 3 hrs.
	Advanced study of the characteristics and etiology of language disorders in school-aged and adolescence children. Special emphasis will be placed on diagnosis and treatment of language disorders in these children (PR: Permission of instructor).
630	Cognitive Communication Disorders. 3 hrs.
	Intensive study of the nature and etiology of communication disorders associated with traumatic brain injury, right hemisphere lesions, dementia, and other neuropathologies; diagnosis and treatment; critical analysis of research literature. (PR: Permission of instructor)
660	<b>Special Populations: Clinical Considerations. 3 hrs.</b> Examination of the principles of assessment and treatment for special populations with a focus on the interacting processes of the sensory,
	behavioral, physical, and communicative systems. (PR: Permission of instructor)

670-671	Advanced Clinical Practicum. 1-3 hrs. Supervised clinical practicum in the Marshall University Speech and Hearing Center and in affiliated educational, rehabilitation and medical settings. (CD 671 may be repeated but cannot be applied to a master's degree in accordance with the American Speech-Language-Hearing Association's standard regarding application of practicum credits to master's degree programs. Clinical Clock hours will apply for certification. (PR:
672-673	CD 570 or equivalent; Permission of instructor) <b>Clinical Practicum in the Schools. 1-3 hrs.</b> Supervised clinical practicum with school-aged children; fulfills student teaching requirements for West Virginia Certification as a Speech Language Pathologist. (PR: 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 hrs. (PR: Permission of chair)
691	Motor Speech and Swallowing Disorders. 3 hrs. Study of the nature, assessment, and treatment of dysarthrias, apraxias, and dysphagia, including critical analysis of the literature. (PR: CD 624 or permission of instructor)
690,692-3	Seminar. 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)
501	<b>Organizational Communication. 3 hrs.</b> Investigation of information flow in organizations with emphasis on identifying communication problems.
502	<b>Rhetorical Theory. 3 hrs.</b> An exploration of theories of rhetoric from the Greek philosophers to the present. This course will examine the strategic use of symbols in
504	persuasive discourse.
504	Rhetorical Communication Criticism. 3 hrs. An examination of the construction of situated rhetorical texts and the effects they produce.
506	Interviewing. 3 hrs. Skill development in the question-answer-response process as it applies to a variety of interviewing situations.
508	<b>Leadership and Group Communication. 3 hrs.</b> A study of the variables affecting, and affected by, the communication process in small groups, with particular emphasis upon leadership variables.
509	<b>Theories of Persuasion and Change. 3 hrs.</b> Study of the relationship between persuasion and social change, including theories of attitude and behavioral change and contemporary theories of persuasion.
511	<b>Communication Study and Research. 3 hrs.</b> Introduction to the advanced study of theory and research areas with emphasis on communication research methods and reporting.
513	<b>Theories of Interpersonal Communication. 3 hrs.</b> A survey and analysis of theories related to interpersonal communication in relationships. Emphasis is on the communication processes and
520	contingencies underlying relationship development, maintenance, and disengagement in various interpersonal contexts. Communication and Conflict. 3 hrs.
521	An exploration of the theory, research, and practice of communication in understanding and negotiating interpersonal conflict. Gender and Communication. 3 hrs.
541	An exploration of gender as an organizing principle for communication. <b>Development and Appreciation of Film Since 1930. 3 hrs.</b> A study of important directions in modern film, including style, genre, and the relationship to contemporary society. A variety of films will be viewed
550	for analysis.
550	Direction of Speech Activities. 3 hrs. Direction of extracurricular speech activities/assemblies, forensic events, etc. (PR: 15 hours of Communication Studies or permission)
556	<b>Computer-Mediated Communication. 3 hrs.</b> This course explores the impact of computer-mediated communication on human organization. (PR: E-mail capability; web search capability)
574	Health Communication. 3 hrs. Explores communication demands of human health care and health care promotion; examines communication controversies in the modern health care system, and examines communication strategies to resolve health care 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.
601 602	Problems and Methods in Communication Research. 3 hrs. Communication Consultation Strategies. 3 hrs.
002	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.
603	Nonverbal Communication 3 hrs. Examines the major dimensions and functions of nonverbal communication with a focus on what constitutes nonverbal competence in a variety of
606	contexts. Studies in Communication Theory. 3 hrs.
650	An extensive investigation into the major concepts of contemporary communication theory. 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) 689 Internship. 1-3 hrs. Supervised work experience in communication. **COMPUTER SCIENCE (CS)** Please see Information Systems and Technology Management for degree programs. 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 hierarchial. 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. **CONTROL SYSTEMS (CSE)** 601 Advanced Differential Equations. 3 hrs. Systems of linear ordinary differential equations and nonlinear equations. Linearization, approximation, and stability. Use of dynamic simulation software. 602 Modeling and Simulation. 3 hrs. Process models for flow, heat transfer, mass transfer, and reactions. Analysis includes various lumped parameter and distributed parameter methods. 611 State Space Control-Continuous. 3 hrs.

State space representation of dynamic systems; dynamics of linear systems; frequency domain analyses; controllability and observability; shaping the dynamic response; linear observers and compensator design; linear, quadratic optimum control.

620	<b>Digital Control. 3 hrs.</b> Discrete time systems and the Z transform; sampling and reconstruction; open-loop and closed-loop discrete systems. System time response
621	characteristics; stability analysis techniques. Pole assignment design and state estimation.
021	<b>Control Systems Design. 3 hrs.</b> Design of simple control systems. Multivariable control systems. Periodic processing. The concepts will be illustrated using chemical, electrical
624	and mechanical engineering processes. Advanced Control. 3 hrs.
	Specific advanced control topics such as dead time compensation, inverse response, cascade control, ratio control, adaptive control, inferential
626	control, decoupling control, process identification, and optimal control. Non-Deterministic Systems. 3 hrs.
	Probability models used in engineering, transformations of random variables, multivariant random variables, application of statistical process control. Stochastic processes for engineering applications, linear least-square estimation and regression analysis.
629	Nonlinear Control. 3 hrs.
	Methods for analysis and design of nonlinear control systems. State space models, phase plane limit cycles, stability, describing functions, relay system stabilization theory, variable structure systems and advanced topics.
630	Optimal Control. 3 hrs.
	General theory of optimal control; calculus of variations; Pontryagin's maximum principle; Hamilton-Jacobi theory, application of optimal control theory to design of feedback systems, using several performance criteria; advanced topics.
631	Adaptive Control. 3 hrs. Study of developments in the field of adaptive control; stability, convergence of adaptive systems, model reference, self-tuning and robust adaptive
	control, adaptive observer, autotuning and gain scheduling, and advanced topics.
650-653	<b>Special Topics. 3 hrs.</b> Designed to increase the depth of study in a specialized area of control systems. (PR: Consent)
	COUNSELING (COUN)
545	Beginning Manual Communication. 3 hrs.
	This course provides a beginning study of the psychological characteristics of the hearing impaired and fundamental techniques of manual communication.
554	Advanced Manual Communication. 3 hrs.
	This is the follow-up course to COUN 618 and provides an advanced study of the grammar, syntax and idioms of American Sign Language (ASL) and a comprehensive overview of the effect of hearing impairment. Emphasis will be upon communicating in ASL. (PR: COUN 545)
555	<b>Crisis Intervention and Conflict Resolution. 3 hrs.</b> Students explore various types of crises such as situational and developmental. Specific topics include suicide and sexual assault. Requirements
	include a class presentation, and 30 supervised clinical hours in a crisis setting approved by instructor.
556	<b>Death and Grief Counseling. 3 hrs.</b> A study of the stages of death, dying and the grief process are presented in practical, theoretical, social, and psychological aspects. Emphasis is on
	counseling elating to various forms of loss.
574	Social & Cultural Foundations. 3 hrs. Examines the use of appropriate resources for effective counseling of individuals of different cultural, ethnic, social, racial, geographic, or other
	backgrounds. Personal, social, and cultural sources contributing to social and emotional disenfranchisement are explored, as well as the impact of using stereotypes and practicing discrimination in society and human service delivery systems. (PR: program admission or permission.)
575	<b>Prevention and Treatment of Addictions. 3 hrs.</b> Course surveys the field of addictions covering assessment, treatment, prevention, and education. It will explore the development of addiction
	theory and with particular focus on the bio-psycho-social model. (PR: COUN 600 & 603)
577	<b>Stress Management Counseling. 3 hrs.</b> This course provides counseling students and others with a comprehensive analysis of stress in contemporary society. Of particular emphasis is an
	orientation to stress management as a counselor helping intervention. Students explore theoretical and practical alternative in helping the stressed client.
579	<b>Pharmacology in Counseling. 3 hrs.</b> Provides basic understanding of the role of therapeutic drugs in the treatment of psychiatric disorders, familiarizes with most commonly used
	drugs, side effects, and adverse reactions in specific mental illness. (PR: COUN 600 & 601)
580 - 583	<b>Special Topics.</b> 1-4 hrs. Study, reading, and research in specialized areas of counseling and human relations. Areas of interest are offered at various times by the faculty to
	provide specialized study for advanced students or practicing professionals in the field of counseling. (PR: Consent)
585-588	Independent Study. 1-4 hrs. Individual or group study and research of various issues and fields of emphasis in counseling. (PR: Consent)
600	<b>Professional Orientation. 1-3 hrs.</b> This course provides an understanding of all aspects of professional helping in mental health including history, roles, ethics, standards and
001	credentialing. (PR: Program admission or permission)
601	<b>Counselors in Consulting Roles. 3 hrs.</b> This course provides an exploration of consultation roles that are integrated into the various settings in which counselors work. Content includes
	an orientation to consultation and its historical development, theory and practice issues, and major models. Of special emphasis is the focus upon case applications and presentations. (PR: COUN 600)
602	Human Development and Psychopathology. 3 hrs.
	The course will explore human growth/development from birth through adulthood. Theories of character development, social maturation, abnormalities and variations in development due to gender, culture, and environmental factors will be covered. The change processes, helping
	relationships, and strategies for facilitating development appropriate to various phases of the life span will be addressed. (PR: program admission
603	or permission) Counseling Theories. 3 hrs.
	Survey of classical and contemporary counseling philosophies, history, and techniques as related to interpersonal relationships in the counseling process. (PR: COUN 574, 600, 602, EDF 621)
604	Group Counseling & Theories. 3 hrs.
	An examination of group dynamics and theories of group counseling with demonstrations of specific group techniques and the practice of popular approaches in group counseling. (PR: COUN 574, 600, 602, EDF 621)
605	<b>Theory and Practice of Human Appraisal. 3 hrs.</b> Provide an understanding of individual and group approaches to assessment and evaluation including history, theoretical and statistical aspects,
	applications to special populations, and legal and ethical concerns and issues. (PR: COUN 574, 600, 602, EDF 621)

#### 606 Career and Lifestyle Development. 3 hrs.

A study of career development theories and decision-making models that impact career development and related life factors. (PR: COUN 603, 604, 605, and 607)

#### 607 Counseling Techniques in Human Relationships. 3 hrs.

Study of a variety of counseling and therapeutic techniques within the framework of a systematic counseling model. Emphasis on basic interviewing, assessment and counseling skills that facilitate the helping process through integration of various theoretical orientations. (PR: COUN 574, 600, 602, EDF 621))

#### 608 Practicum. 3 hrs.

A clinical experience under professional supervision preparing the student for internship; audio and video tapes, group supervision and feedback are used to achieve competency in the application of a counseling process. Students must achieve a minimum grade of *B*. (PR: COUN 603, 604, 605, 607)

#### 611 Foundations of Community Counseling. 3 hrs.

Examines the history of deinstitutionalization in human services with an emphasis on prevention in the delivery of such services in community agencies. Proposal writing for grants and needs assessment processes and procedures will be emphasized. (PR: COUN 603)

#### 616 Domestic Violence. 3 hrs.

An introduction to the epidemiology, dynamics, clinical interventions and treatment of domestic violence.

#### 617 Seminar in Counseling. 1 -6 hrs.

For students in degree programs or in post-master's work who wish to discuss and study theory, principles, and techniques of counseling or other special topics. Instructor will indicate in course syllabus whether class is letter graded or S/U. (PR: Consent)

#### 620 Workshop. 1 - 6 hrs.

Special workshops and short intensive courses on theory, methods, supervision and other special topics in counseling, designed for advanced students and professionals in the counseling field or related fields. (PR: Consent)

#### 621 Introduction to Child Abuse & Neglect. 1 hr.

Introduction to the dynamics of child abuse and neglect and to the legal and ethical issues of persons mandated to report child abuse and neglect. (PR: COUN 600 & 603)

#### 622 Parent Education. 3 hrs.

Study of family education skills training for conducting family education groups and parent training.

#### 630 Introduction to Mental Health Counseling. 3 hrs.

Provides an introduction to the foundations and contextual dimensions of mental health counseling. Emphasis is given to an exploration of mental health counseling roles and functions, theories and techniques, professional standards and operations, administration, evaluation, and special issues. (PR: COUN 603 and 607)

## 631 Diagnosis and Treatment Planning in Mental Health Counseling. 3 hrs.

Provides an in-depth exploration of the knowledge and skills necessary for the practice of mental health counseling. Emphasis is given to the principles and practices that relate to psychopathology, DSM diagnosis, etiology and assessment, systematic treatment planning, interviewing, and short and long-term interventions. (PR: COUN 600, 603, and 607)

#### 632 Introduction to Marriage, Couple, and Family Counseling. 3 hrs.

A comprehensive survey of the major theoretical models of marriage, couple, and family therapy from a systems perspective and the applied practices evolving from each orientation.

#### 635 Core Functions of Addiction Counseling . 3 hrs.

Advanced course designed to prepare students for work with clients presenting with substance abuse, and addiction disorders. The course will address the nature and treatment of addiction with attention to the core functions of the addiction counselor. (PR: COUN 575)

#### 636 Couple Counseling. 3 hrs.

A comprehensive survey of the major theoretical models of couple counseling and the applied practices evolving from each orientation.

#### 637 Adult and Family Development and Transition. 3 hrs.

An in-depth study of various theories of family development and interaction. Focus will be on theoretical understanding of family relationships across the stages of the family life cycle and related treatment strategies.

#### 638 Interventions: Marriage, Couple, and Family Counseling. 3 hrs.

An intensive practical experience in marriage, couple, and family therapy techniques to prepare the student to enter the supervised internship of the program. (PR: Students must have achieved minimum grades of *B* in COUN 622, 632, 636, and 637)

#### 641 Correctional Counseling Seminar. 1-9 hrs.

A critical examination of counseling models in corrections and an appraisal of current professional trends in community corrections. The course may include field experience in correctional settings. The course is designed for visiting professors and/or consultants who offer an expertise in a correctional setting. (PR: COUN 600 & 603 or Consent)

#### 646 Correctional Counseling: Client Advocacy. 3 hrs.

Designed to provide the counselor in a correctional setting with an integration of current contributions from related disciplines. Emphasis will be upon client advocacy, as well as the public, administrative, and legal responsibilities of correctional counselors and others who work with correctional clients. (PR: Consent)

#### 651 Seminar in Career Counseling. 3 hrs.

For students in career counseling who wish to discuss and study theory, principles, and techniques of career counseling or to study specific topics and issues in the field of career counseling. (PR: Consent)

#### 652 Career Counseling with Special Populations. 3 hrs.

Introduction to the special career development needs and concerns of various groups of people in a variety of settings. Emphasis will be given to the special concerns of women, various ethnic groups, the physically and mentally challenged, and person at various stages of vocational maturity. (PR: COUN 600 & 603)

#### 653 Career Assessment Techniques and Report Writing. 3 hrs.

A study of career assessment tools needed to assist individuals in making career choices. Focus will be given to the administering, scoring, and interpreting of vocational and career instruments utilized in career decision making. (PR: COUN 605 and 606)

## 654 Ecology of Domestic Violence. 3 hrs.

The course will examine domestic violence from an ecological and sociocultural perspective in the context of the community infrastructure, and its response to victims, child safety, and batterer accountability.

#### 655 DV 1 - Working with Victims. 3 hrs.

This course will focus on victim dynamics, diagnostic indicators that victims may present without revealing an abusive relationship, and interventions that empower and focus on victim strengths.

#### 656 DVII – Working with Perpetrators. 3 hrs.

This course will focus on working with the domestic violence perpetrators, by providing guidelines for interviewing, assessment, and interventions for the cessation of violence toward victims.

657	DVIII – Working with Children, 3 hrs.
	This course will address issues related to the cognitive, behavioral and emotional problems of children who witness and/or experience domestic
	violence, and explore appropriate interventions.
660	Introduction to Student Affairs. 3 hrs.
	Provides a broad, comprehensive introduction to the field of college student affairs and its role with the context of American higher education.
	Various student affairs functional areas, historical, and philosophical foundations of the field, professional standards, guiding theories, and models,
	and competencies needed to work with diverse student populations are examined. (PR: COUN 603)
662	Current Issues in Student Affairs. 3 hrs.
	To enhance the student's awareness and understanding of the educational, environmental, administrative, legal, and ethical issues in the field of
	Student Affairs in colleges and universities, this course provides the opportunity to discover, discuss and analyze current issues impacting student
	affairs practices both nationally and internationally. (PR: COUN 603 and 607)
670	Interventions for Current Issues in School Counseling. 3 hrs.
	An in-depth examination of effective strategies for dealing with current issues in K-12 environment. Issues such as academic failure, substance
	abuse, loss, violence, multicultural factors, etc. will be explored. (PR: COUN 603 and 607)
672	Organization and Administration of School Counseling Programs. 3 hrs.
	Operation and administration of elementary and secondary school counseling programs in terms of personnel functions, relationships, physical
	facilities, instructional integration, financial standards, laws, and regulation. (PR: COUN 670)
673	Counseling Children, Adolescents, and Parents. 3 hrs.
	Consideration of effective counseling strategies and techniques appropriate for children, adolescents and parents through lecture, demonstration
	and laboratory experiences. Personal, social, career, academic and family related issues and dynamics will be explored. (PR: COUN 600 & 603)
675	Legal and Ethical Issues for School Counselors. 3 hrs.
	An overview of professional issues in the field of counseling, mental health and education; an overview of legal and ethical issues specific to the
	field of school counseling; an overview of international, national, regional and state legal and ethical cases effecting the field of school counseling;
	an introduction to ethical and legal issues including an ethical and legal decision making models, licensure and Certification requirements,
<b>CO1</b>	confidentiality, etc. (PR: COUN 600 and COUN 603)
691	Internship in Mental Health Counseling. 3 - 9 hrs.
	Supervised experience in mental health counseling. Participation in seminars on specified topics. Minimum 100 clock hours for each semester
609	hour credit. (PR: COUN 608 and 631 with minimum grade of <i>B</i> or permission)
692	<b>Internship in Community Counseling. 3-6 hrs.</b> Supervised experience in community counseling. Minimum 100 clock hours for each semester hour credit. (PR: COUN 608 with a minimum grade
	of B or permission)
693	Internship in Marriage and Family Counseling. 3 · 9 hrs.
055	Supervised experience in marriage and family courseling. Participation in seminars on specified topics. Minimum 100 clock hours for each
	semester hour credit. (PR: Student must have achieved a minimum grade of B in COUN 638)
695	Internship in Corrections Counseling. 3 - 6 hrs.
050	Supervised experience in corrections counseling. Participation in seminars on specified topics. Minimum 100 clock hours for each semester hour
	credit. (PR: COUN 608 and 641 with a minimum grade of <i>B</i> or permission)
696	Internship in Career Counseling. 3 - 6 hrs.
	Supervised experience in career counseling. Participation in seminars on specified topics. Minimum 100 clock hours for each semester hour credit.
	(PR: COUN 608 and 653 with a minimum grade of B or permission)
697	Internship in Student Affairs Counseling. 3 - 6 hrs.
	Supervised experience in student affairs counseling. Participation in seminars on specified topics. Minimum 100 clock hours for each semester
	hour credit. (PR: COUN 608 with a minimum grade of B or permission)
698	Internship in School Counseling, 3 - 6 hrs.
	Supervised experience in school counseling. Participation in seminars on specified topics. Minimum 100 clock hours for each semester hour credit.
	(PR: COUN 608 and 673 with a minimum grade of B or permission)
740	Internship. 1-12 hrs.
	A course designed to offer advanced graduate students an opportunity to practice under close supervision the professional skills required in the broad field of counseling in school and
	community settings. Instructor will indicate in course syllabus whether dass is letter graded or S/U. (PR: Consent)
742	Current Issues in Counseling. 3 hrs.
	An examination of current issues affecting professional counselors and training in effectively dealing with the issues. Selected readings, guest
	speakers, and class discussion will center around professional issues relevant to counselors in various settings (i.e., legal and ethical considerations).
	(PR: Consent)
746	Systems Intervention 3 hrs.
	Examination of the major systems which may require intervention by a supervisor of counselors and training in effective intervention strategies.
	(PR: Consent)
747	Advanced Group Counseling 3 hrs.
750	The application of counseling theories in group settings, including supervised group leadership experiences. (PR: Consent)
750	Seminar 3 hrs.
	For students in post-master's work who wish to discuss and study theory, principles, and techniques of counseling or other special topics. Instructor
755	will indicate in course syllabus whether class is letter graded of S/U. (PR: Consent) Models of Counselor Supervision 3 hrs.
155	A survey of theoretical approaches and techniques counseling supervision. Emphasis is placed on supervision of counselors in various settings.
	(PR: Consent)
756	Residency in Counselor Supervision 6 hrs.
150	Supervised application of the knowledge and skills gained in the Ed.S. Program. Students will supervise practicing counselors in approved settings.
	(PR: Acceptance into the Ed.S. Program, completion of all other Ed.S. academic requirements, and consent)
760	Special Topics 3-6 hrs.
100	Study, reading, and research in specialized areas of counseling, human relations, guidance or other special topics.
	errag, reading, and receared in operandou areas or counsening, numan relations, guitance of other special topics.
<b>CRIMINAL JUSTICE (CJ)</b>	
=00	
500	Applied Ethics in Criminal Justice. 3 hrs.
	Examines ethical issues and moral dilemmas faced by criminal justice professionals. Traditional ethical theories and practices designed to foster
501	public trust in the criminal justice system are examined and applied.
501	Teaching and Training in Criminal Justice. 3 hrs.
	Students examine various theories and techniques used in teaching and training criminal justice professionals, develop lesson plans, and use
	technology based presentation media to present information.

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.
506	Race, Ethnicity, Gender, & Crime. 3 hrs.
	Examines the impact of race, ethnicity, and culture within the criminal justice system. Explores minorities and women as victims, witnesses, and
	offenders.
510	Police Administration. 3 hrs.
	This course studies the functions and activities of police agencies, including police department organizations and responsibilities of police
	administrators. Current administrative and management techniques and theories are also explored.
521	Corrections and the Law. 3 hrs.
	Review of legal principles relating to convicted criminals, including plea negotiations, sentencing, post-conviction remedies, constitutional rights of
	inmates, and conditions of confinement.
<b>522</b>	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.
526	Civil Liability Issues in Criminal Justice. 3 hrs.
	This course examines various theories of civil liability that relate to Criminal Justice professionals, the civil justice system, and preventing and
-	defending civil liability claims.
533	Correctional Administration. 3 hrs.
	Objectives of correctional institutions; records; personnel, program development, security; educational programs.
550	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.
553	Seminar in Crime Prevention. 3 hrs.
	This course examines theory, operation, and evaluation of crime prevention as a function of the criminal justice system. Techniques for crime prevention are analyzed from various orientations, including environmental design.(PR: permission)
580-583	<b>Special Topics in Criminal Justice. 1-4; 1-4; 1-4; 1-4 hrs.</b> A study of special interest criminal justice topics under the supervision of a qualified faculty member. (PR: Consent of instructor)
585-588	
292-299	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.
390	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.
001	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.
002	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.
000	A systematic review of procedures to plan and evaluate criminal justice organizations and their operations.
604	Advanced Theory in Criminal Justice. 3 hrs.
004	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 Delinguency. 3 hrs.
000	Juvenile delinguency in the modern world; nature, extent, causes, treatment, and control.
620	Criminology. 3 hrs.
020	Seminar in crime and delinquency.
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.
655	Research Methods in Criminal Justice. 3 hrs.
	Elements of scientific research; interaction between research and theory; use of data processing resources. (PR: Undergraduate research methodology
	course, 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, CJ
	655, 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.
	CURRICULUM AND INSTRUCTION (CI)
501	Middle Childhood Curriculum. 3 hrs. I, II, S.
501	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.
303	The study of methods appropriate for teaching in the middle childhood grades and the production and utilization of materials and resources in
	these grades.
511	Analysis of Teaching in Early Years. 2 hrs.
511	The analysis and appraisal of teaching strategies employed in the teaching of young children. (CR: CI 630)
515	Integrated Methods and Materials: Secondary Education. 3 hrs.
010	General secondary/middle school course with emphasis on instructional standards and objectives, methods, and materials of the disciplines. A
	clinical experience provides observation and teaching. <i>MAT students only</i> . (PR: EDF 537; CR: EDF 637)
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
	Classroom motivation with an emphasis on theoretical constructs and practical applications for teachers of students from early childhood through adolescence.

539	Language Arts and Literature. 3 hrs.
542	An examination of theory, research, and practical strategies for integrating language arts and teaching literature for students K-8. Instructional and Classroom Management in Elementary Education. 3 hrs.
342	This course allows elementary education students to critically examine a variety of classroom management strategies and educational issues that
549	impact instruction. Instructional and Classroom Management in Secondary Education. 3 hrs.
545	Classroom management with an emphasis on practical techniques for dealing with management problems in secondary and middle school settings.
550	<b>Writing in an Integrated Literacy Framework. 3 hrs.</b> Views writing from an integrated literacy framework emphasizing multiple methods of writing and writing assessment.
551	Writing to Learn in Content Areas. 3 hrs.
	Designed to introduce teachers to successful approaches and strategies to foster thinking and learning through writing, and experiment with a variety of approaches and techniques in their classrooms.
552	Summer Institute: The National Writing Project Model. 6 hrs.
	Participants will examine problems in the teaching of writing, present and demonstrate approaches to the teaching of writing, study current and past research in the field.
557	Elementary Education: Teaching Contemporary Mathematics. 3 hrs.
559	Application of modern methods and techniques in the implementation of a contemporary elementary mathematics program. 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	Staff Development: (Identifying content title to be added). I-4; 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.
580-583 585-588	Special Topics. 1-6 hrs. I, II, S. Independent Study. 1-4 hrs. I, II, S.
	Permission of Chair and GPA 3.0 to take class. Limit of 6 hrs. of Independent Study to be used in master's degree program.
591-594	<b>Workshop.</b> 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	<b>Instructional Television Course. 1-4 hrs.</b> 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.
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
<b>61</b> 0	today.
618	<b>Elementary Education: Informal Learning in Primary and Middle Schools. 3 hrs.</b> Informal learning in the primary and middle school with emphasis on the significance of natural child development, learning through games and
<b>COO</b>	play, and the British model for infant and junior schools, and related activities for the middle years (ages 10-14) in middle school settings.
623	<b>Instructional Models and Assessment Techniques. 3 hrs.</b> 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.
630	Performance-based laboratory experiences in a micro-teaching laboratory development of a personalized teaching repertoire. Early Childhood Education: Practicum in Early Childhood Education. 1-4 hrs.
631	Supervised experience in teaching kindergarten with a concurrent seminar in organization and administration. Early Childhood Education: Current Influences on Early Childhood Education. 3 hrs.
031	A study of recent findings in the behavioral sciences and their implications for early childhood education.
632	<b>Early Childhood Education: Early Childhood Programs. 3 hrs.</b> An examination of past and present programs for young children with opportunity provided for curriculum development.
633	Early Childhood Education: Adult Involvement in Early Education. 3 hrs.
634	Ways of communicating and involving paraprofessionals, parents, volunteers, staff in the education of young children. Language and Cognition in Early Childhood. 3 hrs.
	Examination of selected studies in language acquisition and cognitive development of children from birth to eight years of age.
638	<b>Curriculum Planning. 3 hrs.</b> A study of the fundamental skills needed to evaluate educational progress at the classroom, program, and school levels.
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.
656	A guided program of readings, reports and discussions. No student may register for this course a second time. (PR: Permission of chair) Elementary Education: Teaching Language Arts. 3 hrs.
	A unified Reading-Language instructional approach to develop a basic understanding of reading- language related principles derived from disciplines,
657	research, and innovative classroom practices. 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
659	programs. Symposium-Elementary and Secondary Education, Part I. 3 hrs.
	The symposium is the culmination of the master's degree program in Elementary Education, Secondary Education, and Early Childhood Education.
670	This is the first of a two-part sequence. (PR: Consent) Elementary Education: Teaching Social Studies in Elementary Schools. 3 hrs.
	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.
672	<b>Practicum in Education. 3-6 hrs.</b> Clinical Experience: Directed activity in a clinical setting. (PR: Permission)
675	Curriculum Theory. 3 hrs.
	Analysis of the assumptions undergirding curriculum development.

676	Program Evaluation. 1-3 hrs.
	An examination of program evaluation models and techniques for instructional supervisors.
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.
c <b>7</b> 0	Duties and responsibilities of the teacher who supervises student teachers.
679	<b>Classroom Management for Elementary Teachers. 3 hrs.</b> This course is designed for elementary teachers. The content includes methods of managing the physical and social environment in the classroom.
680	Symposium-Elementary and Secondary Education, Part II. 3 hrs.
	The comprehensive assessment requirement is met within the framework of this course. (PR: Consent.)
681	Thesis. 1-6 hrs. I, II, S.
690	Students completing 681 must defend their thesis in an oral examination. Capstone Experience. 3 hrs.
030	This course is designed as a culminating experience that allows participants to demonstrate professional knowledge and skills related to program
	experiences. (PR: Permission only)
701	Curriculum Development. 3 hrs.
	This course is designed to review curriculum development and planning from the historical perspective – the four foundations of curriculum that can be translated into instructional design. (PR: Admission to C&I doctoral program or permission)
702	Curriculum Theories. 3 hrs.
	This course will give the student a foundation in the theories and paradigms underlying curriculum from the past, present and future. (PR:
	Admission to C&I doctoral program or permission)
703	<b>Theories, Models, and Research of Teaching. 3 hrs.</b> This course will analyze and synthesize the historical development of curriculum and the implications on instructional design. Behaviorism,
	cognitivism, constructivism, humanism, brain-based learning, and multiple intelligences will be examined. (PR: Admission to C&I doctoral program
	or permission)
704	Social and Political Determinants of Curriculum Development. 3 hrs.
	The goal of this course is to help the student develop a critical analysis of the social, political, and cultural determinants of curriculum design. (PR: Admission to C&I doctoral program or permission)
705	Higher Education Curriculum. 3 hrs.
	This course is an introduction to the development and management of the curriculum in higher education institutions.
706	Multicultural and Diversity Issues in Curriculum and Instruction. 3 hrs. This course attempts to understand the issue of differences and equity through personal and critical analyses of the philosophical, social, and
	cultural perspectives that inform and shape curriculum and teaching.
707	Curriculum Change. 3 hrs.
	This course will explore current developments in curriculum transformation and change theory. This course will examine the impact of change
780	theory on curriculum development. Special Topics in Curriculum and Instruction. 1-9 hrs.
100	This course requires study, reading and research in an advisor/chair approved area of curriculum and instruction. This course is limited to Ed.D.
	and Ed.S. students. (PR: Permission)
797	Curriculum and Instruction Dissertation Research. 1-12 hrs.
	This course is designed to support the student's doctoral research. The major focus is completion of the dissertation. (PR: Admitted to candidacy of C & I doctoral program)
	<b>CURRICULUM AND INSTRUCTION: DEAF AND HARD OF HEARING (CIDH)</b>
501	American Sign Language (ASL) I. 3 hrs.
	This course emphasizes the learning of basic person-to-person conversational signing skills as a second language, including use and comprehension
502	of ASL vocabulary, syntax, and fingerspelling. American Sign Language (ASL) II. 3 hrs.
001	For professionals serving deaf/hard of hearing (D/HH) individuals. Includes deaf culture, functional language, and legal issues in deaf education.
503	American Sign Language (ASL) III. 3 hrs.
	For professionals serving deaf/hard of hearing (D/HH). Includes deaf culture, the impact of cross-cultural perspectives on D/HH children, language in the Deaf Education classroom.
504	Auditory Habilitation: Communication Approaches and Sensory Devices for Children with Hearing Loss. 3 hrs.
	Course will consist of lecture, demonstration discussion, and student presentations. Graduate students in the course will be required to develop a
	Web-based instructional module illustrating one of the major communication approaches used with children with hearing loss.
505	Introduction to Deaf and Hard of Hearing. 3 hrs. Introduction to the education of deaf and hard of hearing students. (PreK-12) for pospective teachers and other professionals serving deaf/hard of
	hearing students.
506	Curriculum and Methods for Deaf and Hard of Hearing Students. 3 hrs.
	Study of curriculum, methods, techniques, and materials used in the education of deaf/hard of hearing students. Includes information on classroom organization, classroom management.
601	Teaching Internship and Practicum (Deaf/Hard of Hearing) I (Residential). 3 hrs.
001	This course represents a residential pacement in which the students works with deaf and hard of hearing students in a classroom under the
	direction of a licensed teacher.
602	Teaching Internship and Practicum (Deaf/Hard of Hearing) I (Local School District). 3 hrs.
	This course represents a residential pacement in which the students works with deaf and hard of hearing students in a classroom under the direction of a licensed teacher.
607	Development and Remediation of Reading, Writing, and Discourse for the Deaf and Hard of Hearing. 3 hrs.
	Study of complex nature of language acquisition, reading, and writing in deaf/hard of hearing students and techniques for enhancing language and
	teaching reading in this population.
	CURRICULUM AND INSTRUCTION: EDUCATIONAL COMPUTING (CIEC)
530	Computer Software and Methodology in Education. 3 hrs.
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- 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.
- 534 Applications Software in the Classroom Curriculum Area. 3 hrs. A hands-on overview of major classes of applications software. A range of computing topics such as hardware, communications, ethics, and types of software will be discussed.

560-564	Staff Development. 1-4 hrs.
	Courses and activities designed to meet the inservice needs of public school personnel. Credit in these courses may be used for certificate renewal
	and salary upgrades if approved, but may not be used a degree programs. CR\NC grading.
580-583	Special Topics. 1-4 hrs.
585-588 591-594	Independent Study. 1-4 hrs.
591-594 600	Workshop. 1-4 hrs. Instructional Design and Technology. 3 hrs.
000	An analysis of current systems of educational computing based on models of instruction, learning modalities, and desired learning outcomes. (PR:
	CIEC 534 or equivalent or consent).
610	Local Area Networks and Telecommunications in the School. 3 hrs.
	A hands-on approach to managing and using local area networks and telecommunications to meet the instructional needs of the school. (PR: CIEC
	534 or equivalent or consent).
620	Software Evaluation and Selection. 3 hrs.
630	In-depth evaluation of software based on student-developed criteria. (PR: CIEC 600 or equivalent).
030	Authoring Systems and Multimedia. 3 hrs. A hands-on approach to authoring systems, including stackware, and the integration of other technologies such as CD-ROM, video disk, still video,
	and video and audio cassette recordings. (PR: CIEC 620 or equivalent).
635	Using the Internet in the Classroom. 3 hrs.
	This course provides and introduction to the Internet, with an emphasis on the World Wide Web and its potential uses in the K-12 classroom.
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
699	microcomputer can be utilized in a content area. Final Project in Curriculum Area. 3 hrs.
055	A final project related to the student's curriculum area which demonstrates the ability to design and implement a computer-based curriculum
	application. (PR: CIEC 630 or equivalent).
700	Technology and Curriculum. 3 hrs.
	This course provides and overview of current issues related to technology in education while also providing participants with the opportunity to
	improve personal technology skills and use.
715	Online Course Development and Delivery. 3 hrs.
	This course offers participants the opportunity to explore strategies and issues related to the development and delivery of online courses.
	CURRICULUM AND INSTRUCTION: ENGLISH AS A SECOND LANGUAGE (CISL)
550	
550	Second Language Acquisition. 3 hrs. This course examines current theories of second language acquisition and their implications for second language teaching and learning.
CISL 551	Linguistics for ESL. 3 hrs.
	This course examines major linguistic theories on first- and second-language acquisition, emphasizing acquisition of English by non-native students
	in prekindergarten through twelfth grade. (PR: CISL 550)
CISL 552	Intercultural Communication. 3 hrs.
	This course focuses on the interrelationship of language and culture and includes analyses of world cultures, with literature and arts as bridges.
CISL 653	Participants develop teaching materials for ESL classrooms. Methods and Materials for ESL: Language Development. 3 hrs.
CISE 055	Approaches to developing and assessing listening and speaking skills among second language populations at different stages in academic
	development, with an overview of traditional ESL methods. (PR: CISL 550)
CISL 654	Methods and Materials for ESL: Literacy Acquisition. 3 hrs.
	Approaches to developing and assessing writing and reading skills among second language populations at different stages in academic development.
	Focus also includes literacy acquisition in content areas. (PR: CISL 550)
CISL 055	ESL Practicum for Teaching ESL. 3 hrs. A culminating practicum that involves participation in ESL curriculum evaluation and development. (PR: CISL 550, 551, 552, 553, 554)
	CURRICULUM AND INSTRUCTION: MATH EDUCATION (CIME)
500	Mathematics for the Elementary Teacher I. 3 hrs.
	Systems of numeration, sets, relations, binary operations, decimal and other base systems, natural numbers, integers, rational numbers, and real
	numbers with emphasis on the algebraic structure.
501	Mathematics for the Elementary Teacher II. 3 hrs.
555	Continuation of CIME 500. PR: CIME 500 Technical Mathematics for Mathematics Educators. 3 hrs.
555	Specialized mathematics for mathematics Educators. 3 ins. Specialized mathematical knowledge for teaching: an in-depth analysis of the foundations of mathematics: numbers and operations, ratio and
	proportion, and numbering systems, with emphasis on workplace applications and mathematical tools.
556	Finite Mathematics for Mathematics Educators. 3 hrs.
	Specialized mathematical knowledge for teaching: a study of set theory; probability; data analysis; elements of discrete mathematics, such as
	combinatorics and graph theory; and the mathematics of finance.
560-564	Staff Development. 1-4 hrs.
	Courses and activities designed to meet the inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrades if approved, but may not be used a degree programs. CR\NC grading.
580-582	Special Topics. 1-4 hrs.
585-588	Independent Study. 1-4 hrs.
591-594	Workshop. 1-4 hrs.
650	Algebra for Mathematics Educators. 3 hrs.
	Specialized mathematical knowledge for teaching: an in-depth study of topics typically found in a college algebra course. (PR: CIME 555 and CIME
657	556) Precalculus for Mathematics Educators. 3 hrs.
001	Specialized mathematical knowledge for teaching: a study of advanced algebraic structures and functions of change, including an introduction to
	calculus. (PR: CIME 650)
658	Geometry for Mathematics Educators. 3 hrs.
	Specialized mathematical knowledge for teaching: basic concepts of logic and mathematical proofs. Topics include angle relationships, parallel, and
	perpendicular lines, circles, polygons, solids, triangles, elementary trigonometry, and use of geometry software. (PR: CIME 650)

670	Teaching Mathematics. 3 hrs.
	Emphasis will be on planning for instruction based on how students learn mathematics, state or district standards, research on best practices, NCLB
	goals, and data from a variety of assessments. (PR: CIME 555 and CIME 556)
675	Supervised Field Practicum/Seminar in Mathematics, 5-9. 3 hrs.
	Supervised practicum in which the student demonstrates and is assessed in mathematics teaching skills in a clinical setting in grades 5-9. (PR: CIME 670 and any two of the following: CIME 555, 556, 650, 657, or 658; or permission)
677	Supervised Field Practicum/Seminar in Mathematics, 5-12. 3 hrs.
011	Supervised practicum in which the student demonstrates and is assessed in mathematics teaching skills in a clinical setting in grades 5-12. (PR:
	CIME 670 and any two of the following: CIME 555, 556, 650, 657, or 658; or permission)
	<b>CURRICULUM AND INSTRUCTION: READING EDUCATION (CIRG)</b>
500	Building Supportive Classrooms for Early Literacy Learning. 3 hrs.
	This is a field-based course designed for schools that are adjusting the literacy curriculum to support literacy acquisition. Participants learn to
506	provide appropriate assessment and instruction to foster the development of learning strategies for reading and writing for their pupils. <b>Introduction to Reading Recovery. 3 hrs.</b>
500	A course designed for Reading Recovery Teachers-in-Training including the basic concepts, practices, theory, and philosophy. Participants will
	administer, score, and interpret an observation survey.
507	Reading Recovery: Theory and Practice. 6 hrs.
	Provides information, direction, and supervision in implementing Reading Recovery within the school setting. This course includes a daily
560-564	practicum and weekly seminar session relating theory to practice. (PR: CIRG 506) Staff Development. 1-4 hrs.
300-304	Courses and activities designed to meet the inservice needs of public school personnel. Credit in these courses may be used for certificate renewal
	and salary upgrades if approved, but may not be used a degree programs. CR\NC grading.
565	Reading for Supervisors of Instruction. 1 hr
	A course for individuals seeking certification as a supervisor of instruction. Attention will be given to comprehensive reading programs, approaches
580-583	to reading instruction, and inservice programs. (PR: Consent) Special Topics. 1-4 hrs.
585-588	Independent Study. 1-4 hrs.
601	Professional Guidance for the Literacy Specialist. 3 hrs.
	An elective course for candidates in the master's in reading education. It supports the program's assessment plan that prepares candidates as
613	literacy specialists. Children's Literature. 3 hrs.
010	An examination of teaching methods and of children's literature that are conductive to promoting permanent interests, skills, and interests in
	reading for ECE and MCE.
614	Adolescent Literature. 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.
615	Writing in the Literacy Curriculum. 3 hrs.
	Examine, develop, implement and evaluate traditional and electronic writing within a balanced literacy framework.
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
<b>COO</b>	experience will be used to identify problems and solutions. (PR: CIRG 643)
622	The Use of Technology for Literacy Instruction. 3 hrs. Candidates will plan for literacy instruction and use literacy technology in their classrooms. Emphasis will be given to the Internet and educational
	software.
623	Reading Instruction for Literacy Facilitators: A Practicum. 3 hrs.
	Practicum experiences requiring demonstration of literacy leadership including demonstration teaching, classroom support of literacy instruction,
636	and developing, implementing, and evaluating the literacy curriculum within the school setting. (PR: CIRG 654) <b>Developmental Reading. 3 hrs.</b>
030	Principles and practices of teaching developmental reading.
637	Literacy Assessment. 3 hrs.
	Study and the causes of reading difficulties, diagnostic devices and techniques, and theory related to assessing literacy development.
639	Reading Education Seminar: Planning, Organizing and Supervising a Reading Program. 3 hrs. 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)
642	Reading Education Seminar: Reading Instruction for Individuals with Special Needs. 3 hrs.
	Study of research findings, methodology and instructional materials for atypical learners, illiterate adults and others.
643	Teaching Struggling Readers: A Practicum. 3 hrs.
644	Clinical experiences in the diagnosis and corrective treatment of reading disabilities. (PR: CIRG 654) Literacy in the Content Area. 3 hrs.
011	Principles underlying the teaching of reading in the content fields.
653	Literacy Acquisition. 3 hrs.
0 <b>7</b> 4	Literacy acquisition is a foundation course open to professionals whose interests require understanding of the process involved in becoming literate.
654	Aligning Assessment with Instruction. 3 hrs. Experiences in analyzing diagnostic test results, preparing diagnostic reports, and selecting appropriate materials and procedures to meet specific
	reading needs. (PR: CIRG 637)
701	Reading Education Seminar I. 3 hrs.
	An investigation of research in reading that has made a difference in education, pupil achievement in reading, the role of reading, and the role of
702	the reading specialist. (PR: Master's degree, consent of instructor) Reading Education Seminar II. 3 hrs.
104	An examination of research that has the potential to bring about changes in reading education and school curriculum.
703	Reading and Reading-Related Tests and Techniques. 3 hrs.
	An examination of research related to the development of reading and reading-related diagnostic procedures. Detailed study will be made of
	standardized tests, the Informal Reading Inventory (IRI) and other similar diagnostic measures and competency-based instruments.

704	Advanced Instructional Reading Processes. 3 hrs. A study of advanced instructional techniques in reading. Attention will be given to such concepts as self-concept, intelligence, nature/nurture, interaction, perception, physiological differences, and exceptionalities.
705-706	Applied Research in Reading Education I and II. 3-6 hrs.
707	Planning and implementing a study investigating aspects of reading theory. The study will necessitate deriving empirical data under field conditions. <b>Issues in Reading. 3 hrs.</b>
708	A review of trends and issues in reading education focusing on the complexity of the reading process. Philosophy and History of Reading Education. 3 hrs.
	A study of the philosophical foundation of current reading programs. This course will review the historical background and progress in reading education.
709	Field Experience: An Aspect of Reading Education. 3 hrs. A field-based course designed to study the theory, preparation, presentation, and evaluation of inservice education. Emphasis will be placed on the
-10	refinement of teacher education in specialized areas of the curriculum.
710	Independent Study. 3 hrs. Individualized study of advanced topics in reading.
	CURRICULUM AND INSTRUCTION: SCIENCE EDUCATION (CISE)
560-564	Professional Development. 1-4 hrs.
000001	Courses and activities designed to meet the inservice needs of public school personnel. Credit in these courses may be used for certificate renewal
570	and salary upgrades if approved, but may not be used a degree programs. CR\NC grading. Flora and Fauna for the Elementary/Middle School. 3 hrs.
	A study of the flora, fauna, and physical geography of West Virginia. Field-based experiences will lead to a greater understanding of the forces that shaped Appalachia and the flora and fauna that live here.
571	<b>Developing Thematic Science in the Elementary/Middle School. 3 hrs.</b> A study of the strategies and techniques needed to plan, implement and evaluate a thematic, coordinated, and integrated science program in the
	schools.
572	Environmental Education for the Elementary/Middle School Teacher. 3 hrs. A study of man's interactions with the environment. Awareness, conservation, problem-solving and stressed using strategies and techniques
573	appropriate for the elementary/middle school student. Chemistry for the Elementary/Middle School. 3 hrs.
	A study of the fundamental principles of chemistry focusing on developmentally appropriate methods, strategies and techniques to assist with
574	concept development and attainment. Integrated Science for the Elementary School. 3 hrs.
575	Study and application of the concepts and activities included in an integrated science program for the elementary school. Integrated Science for the Middle School. 3 hrs.
576	Study and applications of the concepts and activities included in an integrated science program for the middle school. Wave Phenomena and Electricity for the Elementary/Middle School. 3 hrs.
577	A study of the fundamental principals of physics focusing on wave phenomena and electricity for the elementary/middle school teacher. Energy and Matter for the Elementary/Middle School. 3 hrs.
	A study of the fundamental principles of physics focusing on energy and matter for elementary and middle school teachers.
580-582 585-588	Special Topics. 1-4 hrs. Independent Study. 1-4 hrs.
591-594	Workshop. 1-4 hrs.
	CURRICULUM AND INSTRUCTION: SPECIAL EDUCATION (CISP)
510	Introduction to Instruction Practices/Exceptional Children. 3 hrs. An introductory course on applied planning and instructional approaches for the exceptional child. The course will introduce students to validated
	instructional practices for the beginning classroom teacher.
520	<b>Introduction to Exceptional Children. 3 hrs.</b> An introduction to the study of children who deviate from the average in mental, physical, and social characteristics, including a study of the
521	characteristics of such children and the adaptation of educational procedures to their abilities and disabilities. Children with Exceptionalities. 3 hrs.
021	Behavioral characteristics of children with exceptional development, dynamics of family- community interaction, and attitudes toward exceptional
523	conditions. Implications for amelioration and educational planning. Introduction to Learning Disabilities. 3 hrs.
	An integrated, concise overview of specific learning disabilities; definitions, etiology; observable and identifiable symptoms and implications for amelioration.
524	Introduction to Emotional Disturbances. 3 hrs. Characteristics of emotional-social disturbances in children; dysfunction in behavior, academic achievement, and social relationships, etiology and
500	educational implications are presented.
526	Introduction to the Gifted. 3 hrs. An overview of giftedness in children, definitions, etiology, observable characteristics and implications for educational agencies.
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
<b>F</b> 90	relating to autistic children, youth, and adults. (PR: Permission)
529	Introduction to the Physically Handicapped. 3 hrs. An introduction to the characteristics and needs of crippled and other health impaired children. The medical aspects of physically handicapping
533	conditions are considered. (PR: CI 520; CR: Field Experience) Special Education: Introduction to Mental Retardation. 3 hrs.
	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.
	Address the educational/curricular needs of students with mild learning problems in the categorical areas of mental retardation, behavior disorders, and specific learning disabilities.
553	and specific learning disabilities. Characteristics/Methods Mentally Impaired. 3 hrs.
553	and specific learning disabilities.

#### 554 Working with Families of Exceptional Students. 3 hrs.

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.

#### 560-564 Staff Development. 1-4 hrs.

Courses and activities designed to meet the inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrades if approved, but may not be used a degree programs. CR\NC grading.

#### 580-583 Special Topics. 1-4 hrs.

585-588 Independent Study. 1-4 hrs.

### 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.

602 Education of the Gifted. 3 hrs. Educational models identification

Educational models, identification techniques, teaching strategies and resources available for gifted children. Current trends in curriculum development for the gifted are also examined. (PR: CISP 526)

# 603 Field Experience: Gifted. 3 hrs.

Supervised experiences (one semester) in field work with children who exhibit potential giftedness.

# 604 Practicum in Emotional Disturbances. 3 hrs.

An initial participation and observation experience with children experiencing behavior problems. Course evolves around bi-weekly seminar and selected projects.

#### 606 Reading Strategies for Exceptional Students. 3 hrs.

This course examines the purposes, findings and recommendations from the National Reading Panel (NRP) (2001) report. This report is the basis for the reform of instruction currently being carried out throughout the United States and is related to the "No Child Left Behind" legislation. In addition to examining this content of the NRP report, candidates will engage students with assessment and instructional strategies identified as having facilitative effects.

#### 607 Math Strategies for Exceptional Students. 3 hrs.

This course examines the characteristics and mathematics performance of mildly-disabled students. In addition, teachers will explore those interventions which have been found to be effective in critical areas of mathematics instruction that will permit special education students to acquire those skills and strategies necessary for access to the general education curriculum, including higher-level courses. All course content will address and adhere to the curriculum and evaluation standards established in the Principles and Standards for School Mathematics (NCTM, 2000).

### 611 Special Education Research, Part I. 3 hrs.

- The study of problems related to the area of exceptionality receiving emphasis in the student's degree program. (PR: CISP 603, 649, 651 or 647) **Special Education Research, Part II. 3 hrs.**
- As a part of the requirements for this course, the student will submit a written, bound document, which will be added to the college library collection. (PR: CISP 611)

#### 626 Special Education: Diagnostic-Clinical Practices. 3 hrs.

Collaborative/consultative multi-disciplinary and curriculum-based assessment process and their use in developing appropriate interventions linking instruction to content standards and objectives. (PR: CISP 520)

# 627 Trends and Issues in Special Education. 3 hrs.

An in-depth look at current issues affecting all areas of special education as well as issues specific to each special education category.

# 629 Special Education: Seminar 3 hrs.

Research methods and current significant findings in special education. Guest speakers. Advanced special education students only.

# 645 Characteristics/Methods Emotionally Disturbed. 3 hrs.

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.

# 646 Special Education: Field Experiences: Learning Disabilities. 3 hrs. S.

Field Experience (practicum) affords graduate students an opportunity to demonstrate the skill-based competences required by CEC standards and to qualify for an LD teaching license.

#### 647 Characteristics/Methods Specific Learning Disabilities. 3 hrs. I.

Theories, diagnosis, and teaching strategies concerning children who exhibit any or several learning disabilities.

#### 649 Special Education: Field Experiences: Emotional Disturbances. 3 hrs.

Supervised field experiences (one semester) working with children who exhibit symptoms of emotional disturbances-behavioral disorders. (PR: CISP 645)

#### 650 Special Education: Diagnostic Evaluation and Prescriptive Teaching Techniques. 3 hrs.

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: CISP 626)

#### 651 Field Experience: Mental Impairment (Mild/Moderate). 3 hrs.

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: CISP 553)

# 655 Field Experience: Multi-categorical: Mild/Moderate MI, LD, BD. 3 hrs.

Field Experience (practicum) affords graduate students an opportunity to demonstrate the skill-based competencies required by CEC Standards and to qualify for the multi-categorical teaching license. (PR: CISP 647, 649 and 651)

#### 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.

# 662 Instructional Characteristics of Autism. 3 hrs.

This course is designed to provide students with practical information on classroom arrangement, teaching techniques, and how to support students with autism who have diverse behavioral and educational need. There is an emphasis on current developments in the field of autism which are presented through reading research articles, viewing videotapes, and reading the textbooks. Because the literature related to the educational treatment of autism has suggested that a behavioral approach to autism is most effective, the course will rely heavily on material from the field of Applied Behavior Analysis. (PR: CISP 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.

#### 664 Practicum in Autism. 3 hrs.

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: CISP 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.

#### 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.

# 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.

#### 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 nonhandicapped preschoolers are required. Specific competencies will be individually determined.

# CURRICULUM AND INSTRUCTION: VISUAL IMPAIRMENTS (CIVI)

#### 500 Introduction to Visual Impairments. 3 hrs.

Introduction to educational programs and services for students with visual impairments, history, definitions, incidence and prevalence, development, psychosocial aspects, service delivery models, issues, and professionalism.

#### 501 Reading and Writing Strategies/Instruction for Students with Visual Impairments. 3 hrs.

- Knowledge and skills in reading and writing literary braille code, braillewriter, slate and stylus, proofreading, interlining, basic Nemeth mathematics code, textbook formatting, computer translation, overview of other braille codes.
- 502 Structures and Functions of the Human Visual System. 3 hrs.
- Structure and function of the eye, development of the visual system, causes of eye conditions, vision assessments, environmental modifications, relationship to other disabilities, and neurological aspects of visual impairment.
- 503 Assessment and Program Planning of Students with Visual Impairments. 3 hrs. Design and adaptation of instruction for students with visual impairments, expanded core curriculum, teaching literacy and other communication skills, assessment, early childhood intervention, parent involvement, and collaboration.
- 504 Assessment and Program Planning of Students with Visual Impairments and Additional Disabilities. 3 hrs. Strategies for students with visual impairments and severe/multiple disabilities, interaction of sensory disabilities with other disabilities, functional curricula, alternative communication and mobility systems, and collaboration.

#### 507 Advanced Braille and Technology for Teaching Students with Visual Impairments. 3 hrs.

Codes and techniques for advanced braille. Essential skills in transcribing Nemeth code for mathematics and science, formatting techniques, and computer translation. (PR: CIVI 501 or equivalent)

- 600 Math Methods for Visually Impaired. 3 hrs.
   An exploration of scientifically-based instructional math research will be developed and applied to the visually impaired. Emphasis will be placed on Nemeth Code and linkage to content standards and objectives.(PR: CIVI 500 and CIVI 501)
   601 Practicum in Visual Impairment I. 3 hrs.
  - Three hundred documented hours of supervised practicum experiences with students with visual impairments, including those with severe/multiple disabilities ranging from infancy to early adulthood. (PR: Permission of instructor)

# 602 Practicum in Visual Impairment II. 3 hrs.

The graduate student will complete an advanced selection of experiences in inclusive and residential settings in order to demonstrate competence as an entry-level teacher. (PR: Permission of instructor)

603 Basic Orientation and Mobility Skills. 3 hrs. Strategies for teaching and reinforcing orientation mobility skills, basic concept development, movement, exploration of space in the home an school environment, environmental orientation, and collaboration with O & M specialists.

# **DIETETICS (DTS)**

# 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 dietetics.
- 670 Advanced Medical Nutrition Therapy I. 3 hrs. Pathophysiology, medical nutrition therapy, and current research of common and unique disease states and conditions. (PR: Dietetic Internship

#### Students or permission) 673 Administrative Dieteties. 3 hrs.

Application of a systems approach to transforming resources in a foodservice setting. Management theories, principles, organizational climate, and continuous quality improvement are discussed as vehicles to achieve the desired outputs. (PR: Dietetic Internship Students or permission)

675 Dietetic Internship Practicum I. 3 hrs. Supervised practice experience focusing on the nutritional screening assessment and education of individuals and groups across the lifespan in a variety of community and long-term settings.

- 676 Dietetic Internship Practicum II. 3 hrs. Supervised practice experience focusing on a
- Supervised practice experience focusing on activities necessary for managing foodservice facilities and introduction to clinical practice.
   Dietetic Internship Practicum III. 3 hrs.

Supervised practice experience focusing on skills required to become a competent entry-level clinical practitioner.

#### 679 Advanced Medical Nutrition Therapy II. 3 hrs.

- The continued study of pathophysiology, medical nutrition therapy, and current research of common and unique disease states and conditions. **Thesis. 1-6 hrs.**
- Individual research in a selected field of dietetics under the direction of a graduate faculty member.
- 690 Research Applications in Dietetics. 3 hrs.

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A synopsis of research design and analysis, with principles applied in development and presentation of a research proposal.
Problem Report in Dietetics. 3 hrs.
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Implementation of research proposal developed in DTS 690 and development of manuscript to describe findings. (PR: DTS 690)
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# **ECONOMICS (ECN)**

# 501 Economic Analysis. 3 hrs.

Overview of the basic principles of both microeconomics and macroeconomics.

505	Environmental Economics. 3 hrs.
	The application of basic economic theory to a wide range of environmental problems, including pollution, natural resource exhaustion, population and economic growth. (PR: ECN 253 or permission of GSM academic advisor)
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 of GSM academic advisor)
515	Regional Economics. 3 hrs.
520	A study of location theory and regional development within a framework of economic theory. (PR: ECN 253 or permission of GSM academic advisor) International Economics. 3 hrs.
520	Movement of goods and balance of payments among nations; exchange rates; exchange controls and tariffs; problems and policies. (PR: ECN 253
	or permission of GSM academic advisor)
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 of GSM academic
540	advisor) History of Economic Thought. 3 hrs.
540	Economic theories and ideas from the earliest economists to those of Marshall and Keynes. (PR: ECN 253 or permission of GSM academic advisor)
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 of GSM academic advisor)
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 of GSM academic advisor)
561	Economics Education Workshop. 3 hrs.
501	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 1-3 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: GSM admission)
630	Managerial Economics. 3 hrs.
CE0 CE 1	Utilization of microeconomic theory and optimization techniques for management decision making. (PR: Full M.B.A. admission)
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 permission of division head and of GSM academic advisor)
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 M.B.A. admission)
660	Independent Study. 1-4 hrs.
	Independent study of a specific nature under the supervision of a qualified faculty member. Hours of credit are determined by the magnitude of the project. (PR: Permission of division head and of GSM academic advisor)
	project (i it i emission of division nead and of OSP academic advisor)

# EDUCATION (See Curriculum and Instruction)

# (See Curriculum and Instruction)

# EDUCATIONAL FOUNDATIONS (EDF)

	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.
513	Human Growth and Development Birth-8. 3 hrs.
	A study of various topics and instructional implications for birth-8.
514	Human Growth and Development Adolescents. 3 hrs.
	A study of various topics and instructional implications for adolescents.
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.
537	MAT Level I Clinical Experience. 0 hrs.
	Twenty-hour public school clinical experience in middle/secondary schools designed to provide an opportunity for MAT students to work with
	faculty, staff and students in a teaching environment. (CR: EDF 616)
580-583	Special Topics. 1-4 hrs.
585-588	Independent Studies. 1-4 hrs.
610	Trends and Issues in Education. 3 hrs.
	An investigation of current trends and issues in education through extensive reading, research and discussions. Implications for schools, classrooms,
010	and teachers are the focus of the course.
612	Educational Evaluation. 3 hrs.
	A study of the fundamental skills needed to evaluate educational progress at the individual, classroom, program, and school levels.
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. *MAT students only.* (CR: EDF 537)

617	Multiple Regression. 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,
618	Behavioral and Natural Sciences. Multilevel Analysis and Growth Models. 3 hrs.
010	An introduction to applied multilevel analysis and growth curve modeling for nested educational data. The nested data may have a repeated
	measures dependent variable.
619	Educational Psychology. 3 hrs.
	Study of learning theories and their applications to teaching.
621	Educational Research and Writing. 3 hrs.
60 <b>5</b>	Research methods, techniques, and their application to education.
625	<b>Qualitative Research in Education. 3 hrs.</b> Study of qualitative research methods: understanding historical and philosophical foundations of qualitative research and developing expertise in
	qualitative research methods, understanding instortear and philosophical foundations of qualitative research and developing experies in qualitative research and developing experies in qualitative research and developing experies in the second seco
626	Advanced Qualitative Research in Education. 3 hrs.
	Advanced study of selected topics in qualitative research. Emphasis on application of qualitative research knowledge and skills. (PR: EDF 625)
630	Comparative Education. 3 hrs.
<b>CO 1</b>	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.
636	Classroom Assessment. 3 hrs.
c 9 <b>7</b>	History, philosophy and elementary statistical methods for testing, measuring and evaluating pupil behavior are studied.
637	MAT Level II Clinical Experience. 0 hrs. Sixty-hour secondary public school experience provides opportunity for preservice, master's-level teachers to put theory into classroom practice
	through observation, participation, reflection, individual/small group teaching, and up-front classroom teaching. (PR: EDF 537; CR: CI 515)
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.
660	A guided program of readings, reports and discussions. No student may register for this course a second time. Philosophy of Education. 3 hrs.
000	Surveys basic philosophy schools and concepts and their application to educational practice.
665	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.
677	MAT Level III Clinical Experience. 3-6 hrs.
679	Culminating clinical experience through directed activity in a clinical setting for MAT students. (PR: EDF 537 and EDF 637) <b>Problem Report. 1-3 hrs.</b>
015	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 theses in an oral examination.
711	Survey Research in Education. 3 hrs.
	Advanced research, theories, methods, and procedures for conducting survey research in education.
	ELECTRICAL ENGINEERING (EE)
650-653	Special Topics. 1-4 hrs.
	Formal study of electrical engineering topics of current interest. (PR: Consent)
	ENCINEEDING (ENCD)
	ENGINEERING (ENGR)
610	<b>Applied Statistics 3 hrs.</b> Practical application of statistical techniques to decision-making, forecasting, optimization, experimental design. Interpretation of data using
	central tendency and dispersion, t-test, F-test, variance analysis, correlation, and linear regression. (PR: Permission)
620	Computer Applications 3 hrs.
	Introduction to current software technology to solve problems of interest to technical professionals. Covers the use of tables, databases, modeling,
	curve fitting, and solution of equations. (PR: Permission)
650-653	Special Topics. 1-4 hrs.
	Formal study of engineering topics of current interest. (PR: Consent)
685-688	<b>Independent Study. 1-4 hrs.</b> An approved study of special interest concerning engineering, under the supervision of a faculty member. (PR: Consent)
	The approved study of special interest concerning engineering, under the supervision of a faculty memoer. (i R. consent)
	ENGINEERING MANAGEMENT (EM)
620	Management of Technical Human Resources and Organizations. 3 hrs.
	Principles leading to better management and development of technical human resources and organizations. Included are concepts technical
	managers need to change themselves positively and to lead others toward desired behaviors.
646	Operations Research I. 3 hrs.
	Examination of the methodology of operations research, including linear programming, transportation methods, network flows, economic analysis, desiring analysis, guaring theory and simulation (PP, FNCP, 610).
647	decision analysis, queuing theory and simulation.(PR: ENGR 610) Operations Research II. 3 hrs.
	A continuation of EM 646 including an introduction to sensitivity and parametric analysis in linear programming, integer programming, nonlinear
	programming, dynamic programming, reliability theory, and inventory control. (PR: EM 646)

650-653	Special Topics. 1-4 hrs.
660	Study of special topics of an advanced nature. (PR: Consent) <b>Project Management.</b> 3 hrs.
	Provides the student with a practical knowledge of how to integrate effectively the functional efforts of many in the execution of programs and projects.
661	Advanced Project Management. 3 hrs. Course is designed to increase proficiency in the advanced aspects of project management. Participants will become aware of all the project
664	management processes in PMI's <i>Project Management Body of Knowledge</i> . (PR: EM 660) Management of Research & Development Organizations. 3 hrs.
	Techniques and methods for effective management of research and development organizations, projects, and personnel. (PR: EM 601)
665	Management of Engineering Organizations. 3 hrs. Techniques and methods for effective management of engineering firms, departments, and personnel. (PR: EM 601)
668	<b>Operations Management. 3 hrs.</b> Examination of the quantitative and conceptual tools for generating goods and services in manufacturing and non-manufacturing organizations.
670	Seminar in Engineering Management. 3 hrs. Provides the student an opportunity to examine issues in engineering management and to evaluate their consequences in organizations, in the
675	profession, and in society. (PR: Consent)
675	<b>Engineering Economics.</b> 3 hrs. The concepts and methods for the financial calculations involving time value of money and uncertainty. Capital and departmental budgeting
694	processes and engineering inputs to cost accounting. (PR: Consent) Engineering Law. 3 hrs.
	The American legal system, contracts and specifications, liability of professional engineers, product liability, agency relationships, patent and proprietary rights, and special problems in contracts are studied.
	ENGLISH (ENG)
502	Composition and Rhetoric for Teachers. 3 hrs. S.
508	Study of rhetorical invention and models of composing process, with intensive practice in writing. Advanced Expository Writing. 3 hrs.
	An advanced general composition course. 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.
511	Intensive study of Shakespeare's comedies, tragicomedies, and late romances. Also includes the Sonnets and Venus and Adonis. Chaucer. 3 hrs.
512	The poetry of Chaucer, including the Canterbury Tales, in the light of medieval tradition and critical analysis. Shakespeare's Histories and Tragedies. 3 hrs.
513	Intensive study of Shakespeare's histories and tragedies. British Novel to 1800. 3 hrs.
514	Defoe, Richardson, Fielding, Smollett, and Sterne, with supporting study of their most important predecessors and contemporaries. Nineteenth-Century British Novel. 3 hrs.
	Austen, Scott, the Brontes, Eliot, Dickens, Thackeray, Trollope, Meredith, Hardy, Butler, Wilde, and their contemporaries.
515	Victorian Poetry. 3 hrs. Emphasis on Tennyson, the Brownings, Arnold, Hopkins, Christina Rossetti, Hardy and the pre-Raphaelites.
517	British Drama to 1642. 3 hrs. Non-Shakespearean British drama from its beginnings to the closing of the theatres.
519	<b>Approaches to Teaching Literature. 3 hrs.</b> The intensive study of the pedagogy of literature and literary critical theory and its classroom applications.
521	American Literature to 1830. 3 hrs. Study of American literature of the Puritan, Colonial, and Federal periods, including such authors as Jonathan Edwards, Edward Taylor, Anne
<b>F</b> 00	Bradsheet, Benjamin Franklin, Phillis Wheatley, Washington Irving, and Catharine Maria Sedgwick.
522	American Literature, 1830-1865. 3 hrs. American literature of the Romantic Period, including such authors as Emerson, Poe, Melville, Hawthorne, Dickinson, Whitman, Fuller, Douglass,
523	Stowe, and other figures of the period. American Literature, 1865-1914. 3 hrs.
	American literature of the Realistic and Naturalistic periods, including such authors as Howells, Twain, James, Dreiser, Chesnutt, Wharton, Crane, and Chopin.
524	American Literature, 1914-1945. 3 hrs. A survey of American writers of the Modern period to World War II.
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 Renascence.
526	<b>Appalachian Literature and Theory. 3 hrs.</b> Appalachian Literature and Theory conducts an in-depth study of aspects of Appalachian culture and literature through the lens of select literary
528	and social theories such as multiculturalism, feminism, or post-colonialism. International Literature. 3 hrs.
	Readings in contemporary literature from the non Anglo-European world. Texts by Asian, African, South American, Australian, and other authors.
533	Twentieth-Century British and Irish Poetry. 3 hrs. British poetry since the Victorian period.
534	Twentieth-Century American Poetry. 3 hrs. American poetry since 1900.
535	<b>Modernism. 3 hrs.</b> A study of trans-Atlantic Modernist writers, including both poetry and prose.
536	Medieval British Literature. 3 hrs.
537	Old English elegiac and heroic poetry; Middle English lyrics and romances; the Ricardian poets and Malory. <b>Tudor Literature: Poetry and Prose of the Sixteenth Century. 3 hrs.</b>
	Survey may include works by More, Skelton, Wyatt, Sidney, Spenser, Nashe, Marlowe, Ralegh, Lyly, Sidney, Mary Sidney, 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, Wroth, Cary, Lanyer, Herbert, Jonson, Burton, Walton, Hobbes, and Bunyan.
544	<b>Rendering the Landscape. 3 hrs.</b> Historical and contemporary approaches to the representation of landscape in art and writing (poetry, fiction, non-fiction, etc.). Joins with course in Art and Design department for a one-week trip to a West Virginia state park for field work (lodging fee required).
546	<b>Drama of the Restoration and 18th Century. 3 hrs.</b> Trends, movements, and dramatic types in the British theatre of this period.
547	British Romantic Poets. 3 hrs.
555	Emphasis on Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Literary Criticism. 3 hrs.
558	Historical study, with application of principles. Contemporary Fiction: Form & Theory. 3 hrs.
000	Readings in contemporary fiction addressing the work in terms of the formal and theoretical concerns that drive it. Texts that challenge our notions
560	of genre, form, theory, and practice. <b>Composition Theory I: An Introduction to the Discipline. 3 hrs.</b> Introduces students to the discipline of Composition and Rhetoric through a survey of historical and theoretical texts related to the study and
562	teaching of writing. (PR: graduate program admission) <b>Restoration and Eighteenth Century British Poetry and Prose. 3 hrs</b> . British poetry and prose of the Restoration and eighteenth century (1660-1800), exclusive of the novel. Authors studied include Dryden, Swift,
566	Pope, Johnson, Boswell, Wollstonecraft. Emphasis on satire, biography, essay. Literacy Studies. 3 hrs.
567	Surveys theories of writing and reading literacy development with a focus on teaching writing through multi-modal and multi-genre approaches. Visual Rhetoric. 3 hrs.
	The study of visual texts as expressions of cultural meaning which, much like semiotics, seeks to analyze rhetorical messages.
575	Introduction to Linguistics. 3 hrs. The structural and descriptive approach to the study of the English language.
576	<b>Modern Grammar. 3 hrs.</b> A descriptive analysis of the structure of present-day American English, utilizing the basic theory of generative transformational grammar.
578	Introduction to Sociolinguistics. 3 hrs. Sociolinguistics is the study of the effects of language in society, relevant to discourse practices, language attitudes, variations, shifts, and changes.
580-583	Special Topics. 1-4 hrs. each.
585-588	(PR: Permission of the chair) Independent Study. 1-4 hrs.
591	(PR: Permission of the chair) Creative Writing: Poetry Workshop. 3 hrs.
592	A practical and intensive class in exploring the varieties of creative expression; exercises on the creating of verse in different forms and styles. Creative Writing: Fiction Workshop. 3 hrs.
	A forum for presentation, discussion, and refinement of the student's work, either short stories or novels.
593	Creative Writing: Nonfiction Workshop. 3 hrs. A writing workshop where students develop and refine their original creative nonfiction (memoir, biography, essays, travel/leisure writing, etc.),
601	employing techniques typically reserved for fiction (dialogue, narrative, poetic language, etc.). Folk and Popular Literature. 3 hrs.
	A study of types, variants, backgrounds, and influences. (PR: ENG 630 or permission of the chair)
610	Readings in British 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:
611	Permission of the chair) Independent Readings. 3 hrs.
615	Independent readings and research. Open only to students with an M.A. degree with a major in English or English Education. <b>Teaching English and Applied Linguistics. 3 hrs.</b>
010	This course aims at teaching English for academic purposes, ranging from teaching language skills to pragmatics to cultural understanding in
620	relation to theories of language and language learning. (PR: ENG 575 and ENG 576) <b>Twentieth Century Drama. 3 hrs</b> .
622	Major British and American dramatists since 1870. (PR: ENG 630 or permission of the chair) Language Development. 3 hrs.
	This course starts with an overview of disciplinary frameworks of language development, then addresses the four major theoretical perspectives: linguistics, cognitive, sociolinguistic and socioculture. (PR: ENG 575; ENG 576)_
624	Twentieth Century British Novel. 3 hrs.
625	Major British novelists of the twentieth century. (PR: ENG 630 or permission of the chair) <b>Twentieth Century American Novel. 3 hrs.</b>
627	Major American novelists of the twentieth century. (PR: ENG 630 or permission of the chair) Text Analysis. 3 hrs.
•=•	Text analysis compares crucial aspects of English syntax, discourse pragmatics, and prepositional and lexical semantics with those of other
628	languages. (PR: ENG 575 and 576) Twentieth Century African-American Literature. 3 hrs.
630	An intensive study of selected novels, plays and poems of the period. (PR: ENG 630 or permission of the chair) Materials and Methods of Research. 4 hrs.
601	Instruction and practice in scholarly literary research. Required among first 12 hours of coursework 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 selected American authors. (PR: ENG 630 or permission of the chair)
632	<b>Topics in American Literature. 3 hrs.</b> Concentrated study of continuing themes or influences in American literature; for example, narrative perspectives, regional influences, or conflicting
633	agrarian and industrial values. (PR: ENG 630 or permission of the chair) Research Methods in Applied Linguistics. 3 hrs.
000	To inform students of various approaches to research in applied linguistics. To equip students with the critical skills to evaluate research with the
	end result of conducting their own research. (PR: ENG 575 and ENG 576)

635	Major	Texts.	3 hrs.
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An intensive study of a single major text from any period of British, American, or anglophone literature, leading to mastery of the text, its critical responses, and its influences. (PR: ENG 630 or permission of the chair)

# 636 Selected British Writers. 3 hrs.

An intensive study of selected British writers such as the Metaphysical Poets, the Cavalier Poets, or the Bloomsbury Group. (PR: ENG 630 or permission of the chair)

#### 637 Topics in British Literature. 3 hrs.

A concentrated study of themes or influences in British literature; for example, narrative strategies, medievalism, the pastoral mode, or conflicting moral, social or literary values. (PR: ENG 630 or permission of the chair)

# 638 Language and Context. 3 hrs.

Survey of genre and register analysis research from the three perspectives of ESP (English for Special Purpose), New Rhetoric, and Systemic Functional Linguistics. (PR: ENG 575 and ENG 576)

# 640 Composition Pedagogy. 3 hrs.

This course builds on composition theory to address the various pedagogies and strategies most commonly practiced in the beginning composition classroom. This course is required for graduate assistants in English. (PR: ENG 560, Composition Theory)

#### The following four courses are for inservice teachers and require permission of the chair and the Director of Writing. 641 Advanced Composition Institute I. 3 hrs. The study of characteristics of effective writing instruction; strategies of effective writers; an introduction to teaching writing with technology; an introduction to field research in writing. (PR: Graduate School Acceptance and Permission) 642 Advanced Composition Institute II. 3 hrs. CR/NC. Advanced Composition Institute II is a seminar course, a follow-up to the intensive summer Advanced Composition Institute I. (PR: ENG 641) 643 Electronic Writing Project. 3 hrs. Study in the application of teaching writing with technology. Teachers create online syllawebs, databases, peer responses, and conferencing environments, and use technology for research, for teaching research, and for publication. (PR: Graduate School Acceptance and Permission) 644 Teacher Inquiry. 3 hrs. An intensive study of composition research methodologies (ethnographic study, classroom based inquiry, reflective practice, qualitative research) with a proposal for an inquiry project. Upon completion, Fellow becomes part of Teacher Inquiry Community (TIC). (PR: ENG 641, 642, and permission) 645 Research Methods in Composition and Rhetoric. 3 hrs. An applied survey course in the theories, methods, and designs of research in the discipline of Composition and Rhetoric. (PR: ENG 560, Composition Theory) 646 Composition Theory II: Advanced Disciplinary Theory. 3 hrs. In-depth analaysis of prevailing research within the field of Composition and Rhetoric. 647 Teaching Writing in the Two-Year College. 3 hrs. Survey and pedagogical research informing the teaching of writing in the two-year college. (PR: ENG 560, Composition Theory or permission from chair) 648 Femininst Rhetorics. 3 hrs. An intensive study of various rhetorics which challenge patriarchy and power structurs including, but not limited to, feminist histories of rhetoric, theories, pedagogies, epistemologies, and uses of technology. 650-653 **Special Topics.** (PR: ENG 630 or permission of the chair) 660 Literary Theory. 3 hrs. Intensive introduction to one or more literary or cultural theories, familiarizing students with the major developments, terms, premises, and debates of the theory or theories in question. 661 Studies in Genre. 3 hrs. An intensive study of one or more literary genres, familiarizing students with the major developments, terms, premises, and debates concerning the genre or genres in question. (PR: ENG 630) 681 Thesis. 1-6 hrs. Independent Study. 1-4 hrs. 685-688 (PR: Permission of Chair) 689 Internship. 1-4 hrs. Supervised work experience in English-related field. (PR: Permission of Chair) **ENVIRONMENTAL ENGINEERING (ENVE)** 611 Air Pollution Design I: Control of Gaseous Emissions. 3 hrs. An introduction to adsorption, condensation, incineration, absorption, and process modification relevant to the design of abatement systems for gaseous air pollutant emissions. (PR: unit operations, thermodynamics and calculus) 612 Air Pollution Design II: Control of Particulate Emissions. 3 hrs. An introduction to equipment, processes, and basic principles relevant to the design of particulate collection systems including electrostatic precipitators, fabric filtration units, cyclones, and high energy scrubbers. (PR: ES 604 or courses in physics, fluid mechanics, and process design) 615 Environmental Chemistry. 3 hrs. Fundamental principles governing the various aspects of chemistry relevant to the environment will be addressed. The chemistry of waste treatment, cyclical processes and other applications will be evaluated. (PR: Consent) 616 Principles of Biological Waste Treatment. 3 hrs. Principles and practices of the process design of biological systems employed in wastewater treatment, including such topics as microbial metabolism, oxygen transfer, and biomass-separation. Lectures, laboratory, and field trips. (PR: ES 651) Physiochemical Treatment of Water and Wastewater. 3 hrs. 617 A unit operation/unit process approach to industrial and advanced waste treatment covering physical and chemical methods. Application of methods to specific waters and wastes. Lectures and laboratory sessions. (Prerequisite: ENVE. 615) Pollution Prevention. 3 hrs. 618 Introduces the student to the basic understanding and criteria required for establishing a pollution prevention program, including a review of successful industry practices. Emphasis on management strategies. (PR: undergraduate degree in science or engineering) 620 Solid Waste Management. 3 hrs.

Solid waste management and minimization: options, methods, laws and regulations. Landfill design, testing, operation, monitoring, and closure. Use of composting in landfills. Incinerator design and operation. Separation and recycling approaches.

625	Hazardous Waste Management. 3 hrs.
	Options and methods of managing hazardous waste. Landfill design, testing, operation, monitoring, and closure. Incinerator design, testing,
	operation, and monitoring. Design and operation of treatment facilities. Waste reduction practices.
650-653	Special Topics
663	Occasional special offerings in Environmental Engineering. (PR: Consent) Environmental Permitting. 3 hrs.
000	The permit process for the construction and operation of facilities, including stream crossing, wetlands, etc.; permits under Clean Air Act, Clean
	Water Act, NPDES, RCRA and TSCA.
670	Hydrology and Drainage Control. 1-6 hrs.
	The course provides an introduction to practical applications of hydrology and sedimentology including precipitation, infiltration, quantification of
673	runoff, flow modeling, soil erosion, sediment transport, basic highway drainage concepts and design of channels and other control structures. Industrial Ventilation. 3 hrs.
015	The design and analysis of industrial ventilation systems, including properties of air contaminants; hood, duct and fan design; system performance;
	mine ventilation; air cleaning devices; testing; diagnosis; troubleshooting, cost analysis. (PR: Consent.)
675	Industrial Noise Control. 3 hrs.
	Physics of sound, absorption and reflection, sound level measurements and instruments, and noise control criteria; audiometry and the physiology
690	of hearing; community noise abatement; laws and regulations. (PR: undergraduate degree in science or engineering)
680	Air Pollutant Dispersion and Meteorological Modeling. 3 hrs. Meteorological concepts with emphasis on air pollution; atmospheric dynamics, adiabatic processes; temperature profiles, behavior of stack effluent,
	atmospheric chemistry, attenuation of solar radiation, and climatology application to dispersion models. (PR: undergraduate course in physics, and
	spreadsheet capability)
681	Environmental Engineering Design. 3 hrs.
	Principles of engineering design of water and wastewater treatment systems and processes, including physical, chemical, and biological treatment
682	and handling of treatment residuals. Includes coverage of relevant water quality concepts. (PR: Engineering degree or permission) <b>Environmental Remediation Technologies.</b> 3 hrs.
002	Decontamination or removal of pollutants from soil. Aeration of excavated soil on site. Use of solvents and surfactants as removal aids. Removal of
	soil for treatment at an off-site facility. (PR: ES 651)
683	Environmental Geotechnology. 3 hrs.
	Surface and subsurface geology; geotechnical properties of soil and rock. Geotechnical engineering design aspects of landfills, groundwater
	barriers, tunneling. Mechanics of ground movement; sediment and erosion control. (PR: engineering or geology degree)
	ENVIRONMENTAL SCIENCE (ES)
582-83	Special Topics. 1-4 hrs.
502-05	Occasional offerings of current topics in environmental sciences, providing important supplementary material for participating students.
586-88	Independent Study. 1-4 hrs.
	An approved study of special interest concerning environmental science that is appropriate for the student's program of study. Carried out under
<b>COO</b>	the supervision of a faculty member.
600	<b>Introduction to Environmental Science. 3 hrs.</b> The principles of chemistry, geology, and mathematics used in pollution analysis and control. Topographic maps, environmental regulations, field
	testing, and compliance. Economics of use of pollution control devices.
602	A Study of the West Virginia Environment. 3 hrs.
	An overview of the diversity of the local natural environment, including the plants, insects, amphibians, reptiles, other wildlife, and the impact of
<b>COD</b>	human activities on the local environment.
603	Seminar In Current Environmental Issues. 3 hrs. The influence of environmental laws, common law, contract law, tort law, and regulatory interpretations, as well as the impact of citizens' groups,
	professional societies, and trade associations on current practice. (PR: Consent)
604	Air Pollution. 3 hrs.
	Major air pollution sources; meteorological concepts; physical and chemical characterization; effects on plant and animal life; and development of
60 <b>5</b>	air pollution laws, with emphasis on West Virginia regulations. (PR: Consent)
605	Analytical Principles of Environmental Sampling. 3 hrs. Identifying and measuring contaminants in air, water, soil, and sludge. Methods of analysis including gas chromatography, nuclear magnetic
	resonance, colorimetry, infrared absorption, ultraviolet absorption, atomic absorption, and mass spectroscopy. (PR: Chemistry and ES 600, or
	equivalent experience)
609	Topics in Bioscience Education. 1-6 hrs
610	Selected topics of interest to teachers of biology. (PR: Consent)
610	<b>Environmental Sampling Practice.</b> 3 hrs. Current practice in environmental testing and monitoring. Traditional wastewater tests, bioassay analysis, aquatic toxicity. Current procedures
	in gas chromatographic analysis, mass spectrometry. Sample preservation, quality control, and quality assurance. (PR: analytical chemistry and
	instrumental methods, or ES 605)
614	Environmental Risk Assessment. 3 hrs.
	The course will provide a comprehensive review of currently used methods and applications of risk assessment in environmental science and
	engineering. The course will focus on the analysis of potential risks in all media, and will include state and federal requirements and guidelines for human health and ecological risk assessment. (PR: Consent)
620	Environmental Management Systems. 3 hrs.
	EMS principles and elements; environmental, health and safety regulatory issues; ISO 14000 EMS specifications and guidelines; environmental
	auditing; environmental performance evaluation; life cycle assessment and environmental labeling.
626	Remote Sensing and Map Use. 3 hrs.
	Introduction to topographic, soil, and geologic maps and aerial and satellite photography as sources of environmental information. Application of various data sources to specific types of environmental problems.
630	Environmental Site Assessment. 3 hrs.
	Site inspection and investigation, emphasizing the "due diligence" clause of Section 107 of the Comprehensive Environmental Response
	Compensation Liability Act of 1980, site remediation, and data analysis and reporting.
640	Groundwater Principles and Monitoring. 3 hrs. Introduction to groundwater hydrogeology; including porosity, hydraulic conductivity, aquifers, groundwater flow, well hydraulics, groundwater
	geology, and water chemistry. (PR: A background in environmental science or geology is recommended)

645	Applied Hydrogeology. 3 hrs.
045	The fundamentals of hydrogeology are utilized to implement a case study investigation of a contaminated groundwater site from the planning stage
	through a final report. (PR: ES 640 or equivalent experience)
646	Dynamics of Ecosystems. 3 hrs
	Species interaction; population, community and ecosystem ecology; productivity; nutrient cycling; physiological ecology, population dynamics;
	pollution and conservation; and aquatic, marine, and terrestrial ecosystems. (PR: Consent)
648	Vegetation of West Virginia. 3 hrs.
	Introduces the student with a minimal biology background to basic field and laboratory botany. Introduction to science of plant taxonomy and
	community ecology, with emphasis given to West Virginia. (PR: Consent)
650-653	Special Topics in Environmental Science. 1-4 hrs.
654	(PR: Consent) Environmental Microbiology. 3 hrs.
054	Microbiology of the environment; ecology of the microbial cell; microbial ecosystems; the microbe's interaction with other micro-organisms and
	macro-organisms; how micro-organisms obtain nutrients, and the effect on the environment. (PR: General biology and general chemistry or consent)
655	Environmental Ethics. 3 hrs.
	Introduction to the subject of ethics, environmental ethical theory, moral reasoning, free market regulation, right to know, proprietary information,
	product liability, cost-benefit analysis, risk assessment, waste disposal, and resource depletion. (PR: Consent)
656	Preparation and Evaluation of Environmental Impact Statements. 3 hrs.
	A practical course designed to provide students with the ability to prepare and evaluate impact statements. The course is based on the concepts of
660	the environment as a single interrelated system.
660	Environmental Law I. 3 hrs. Introduction to major federal environmental legislation and related state programs, including policy issues, judicial review, and practical effects.
	Includes CERCLA, RCRA, Clean Water Act, Clean Air Act, NEPA, ESA, and SDWA. (PR: Consent)
661	Environmental Regulations 3 hrs.
	Practical applications and concentrated study of regulations under all major federal environmental programs, including permitting, reporting, and
	other compliance issues. Includes discussion of procedures used in development of regulations. (PR: ES 660)
662	Environmental Policy 3 hrs.
	Introduction to processes for formulation and development of env. policy, including administrative procedure and the policy process. Discussion of
	current env. policy issues in relevant political, legal, social, and scientific contexts.
663	Environmental Law II. 3 hrs.
	Course covers three general topic areas: environmental assessment and biodiversity (NEPA and ESA), risk management and regulation of toxic substances (TSCA, FIFRA, and SDWA), and international environmental law. (PR: ES 660)
665	Water Resources Management. 1-6 hrs.
000	Course surveys the processes that govern the earth's hydrologic cycle and the human activities which effect that cycle. It seeks to provide an
	integrated science/management/policy approach to water resource issues.
674	Epidemiological Health Research Techniques. 3 hrs.
	An introduction to techniques of epidemiological health research. The primary focus will be health problems in the industrial setting.
675	Brownfields Management. 1-6 hrs.
	Environmental management and development of abandoned, idled or underused industrial or commercial facilities where expansion or redevelopment
	is complicated by real or perceived environmental contamination.
680	These 1.6 hrs
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501 516 524 525 530 560-564	A student completing ES 680 must defend his or her thesis in an oral examination. EXERCISE SCIENCE AND SPORT (ESS) 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. 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.) 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. Sport and Film. 3 hrs. The relationships between sports and feature motion pictures are analyzed in the historical, social, and cultural contexts. Sport Law, 3 hrs. The study of the basic principles of the legal system as they operate in the environment of American sport. 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.
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621	Exercise Physiology I (Cardiorespiratory and Metabolic Adaptations). 3 hrs.
	Topics would include bioenergetics, integration of metabolism, metabolic response to exercise, neuroendocrine control of metabolism during exercise,
	cardiovascular control and adaptation during exercise and respiratory control and adaptation during exercise. (REC: ESS 201 and 345 or equivalent)
623	Advanced Exercise Physiology II (Neuromuscular and Environmental Adaptations). 3 hrs.
	The course is designed to study the neuromuscular and environmental adaptations to both the acute and chronic effects of exercise. Cellular and Molecular Adaptations will be explored. (PR: ESS 621)
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
631-634	and sport from early civilizations to the present. Performance Techniques and Analysis. 3 hrs.
031-034	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.
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
643	well as the development of new programs. (PR: ESS 621) Sport in the Social Process. 3 hrs.
045	An indepth analysis of the processes by which sport evolved as a significant component of modern American life.
644	Cardiovascular Exercise Physiology. 3 hrs.
	Detailed study of the anatomy and physiology of the cardiovascular system and its response to acute and chronic exercise. (PR: ESS 621, ESS 623,
	ESS 670)
645	Respiratory Exercise Physiology. 3 hrs.
	Detailed study of the anatomy and physiology of the respiratory system and its response to acute and chronic exercise. (PR: ESS 621, ESS 623, ESS 670)
646	670) Neuromusclular Exercise Physiology/Plasticity. 3 hrs.
040	This course is a detailed study of the structure and function of the neuromuscular system along with the etiology and functional consequences of
	numerous neuromuscular diseases. (PR: ESS 621, ESS 623, ESS 670)
651	Mechanical Analysis of Motor Skills. 3 hrs.
	Analysis of motor skills through the application of the principles of physics. (REC: ESS 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
654	scientific milieu. Contemporary and Comparative Physical Education. 3 hrs.
034	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.
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 with an emphasis on science.
671	<b>Research Methods in Sport Studies. 3 hrs.</b> This course provides students with a fundamental understanding of research principles, concepts, methods, techniques, and application related to
	sport studies.
674	Sport Finance / Economics. 3 hrs.
	This course will provide students with an understanding of financial and economic principles relevant to the sport industry. The course also provides
	a comprehensive coverage of current economic and financial issues confronting the sport industry.
675	Marketing Management of Sport Industry. 3 hrs.
691	Advanced level of marketing concepts in the sport industry. Thesis. 1-6 hrs.
681 682	Health Promotion, Disease Prevention, and Rehabilitation: Clinical Perspectives. 3 hrs.
002	Examines disorder/disease prevalent in Westernized societies, with special emphasis on the rationale for intervention with exercise, nutrition,
	behavioral, and related strategies. (PR: ESS 621)
683	Cardiovascular Assessment. 3 hrs.
	Considers cardiovascular assessment strategies, including EKG interpretation, related medical profile variables, patient/client/athlete screening
696	and risk stratification. (PR: ESS 621) Reheviour Associate of Wellinger, Disease Rehebilitation, 2 has Lon H
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: ESS 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: ESS 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.
	FAMILY AND CONSUMER SCIENCE (FCS)
501	
501	<b>Maternal and Child Nutrition. 3 hrs.</b> 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.
505	Quantity Food Production. 3 hrs.
507	Basic principles of quantity food selection, preparation, and service. Laboratory application in local food institutions.
	Food Service Systems Management. 3 hrs.
510	Food Service Systems Management. 3 hrs. Administration of food service in institutions.
510	Food Service Systems Management. 3 hrs.

515	Family Relationships. 3 hrs.
516	Relationships in the family during its life cycle, with some consideration of family life in other cultures. <b>Prenatal and Infant Care. 3 hrs.</b>
531	Prenatal and postnatal care for mothers, development of the fetus and care of the infant throughout the first three years. 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.
540	Laboratory participation required. 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	<b>Consumer Education. 3 hrs.</b> Analysis of economic factors related to provision of consumer goods and services; investigation of sources of consumer information; and means of
560	providing economic security for families. 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; 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.
580-583 585-588	Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.
591-594	Workshop. 2-3; 2-3; 2-3; 2-3 hrs.
600	Workshop in selected areas of family and consumer sciences. Credit for not more than two workshops may be counted for the master's degree. Philosophy and Trends in Family and Consumer Sciences. 3 hrs.
601	Major contemporary educational theories and their relationship to trends in the field of family and consumer sciences. (PR or CR: EDF 621) 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.
603	<b>Current Issues in Child Development. 3 hrs.</b> A study of current issues and research in child development. Designed for students with a background in child development seeking updated
	information or more in-depth study.
605	Recent Developments in Clothing. 3 hrs. Survey of recent literature and theory in the field of clothing.
606	<b>Recent Developments in Foods. 3 hrs.</b> Survey of recent literature and theory in the field of foods.
620	Technology in the Hospitality and Tourism Industry. 3 hrs.
	Opportunities, threats, and effects of competing within the hospitality and tourism industry in a digital economy, i.e., one where information technology and e-commerce are the norm.
622	<b>Contemporary Issues and Trends in Hospitality and Tourism. 3 hrs.</b> Developments, issues and problems in <b>the</b> hospitality and tourism industry. Examine current and emerging trends, and developments, and their
623	implications for the hospitality and tourism industry.
	Security and Risk Management in Hospitality and Tourism. 3 hrs. Advanced investigation of security and risk management within the hospitality/tourism/foodservice industries.
625	<b>Hospitality and Tourism Marketing Strategy. 3 hrs.</b> Examination of the multidimensional marketing functions applied to hospitality and tourism organizations.
626	<b>Catering and Event Planning in Hospitality and Tourism. 3 hrs.</b> Theory and application of operation and management principles in the planning, organization, and implementation of on- or off-premise special
<u> </u>	catering events.
627	Food and Nutrition Management in Hospitality and Tourism. 3 hrs. Overview of administrative concepts for directing resources within a variety of food and nutrition services/programs. Use of planning, implemention,
671	and evaluation techniques to measure organizational and personal performance. Internship in Hospitality and Tourism Management, 3 hrs.
661	A work experience in a hospitality and tourism organization/business for a minimum of 150 hours to maximum of 300 hours. 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	<b>Family Resource Management Theory and Research. 3 hrs.</b> Analysis of home management theory and concepts as revealed through current research in the field. (PR: FCS 527)
679 681	Problem Report. 1-3 hrs. 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.
	FINANCE (FIN)
510	Principles of Rusiness Finance, 3 hrs

#### 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 or ACC 510, ECN 253 or ECN 501, MGT 218, and MTH 203 or MGT 500)

FF 1	Piece stil Dispute Applications 2 has
551	Financial Planning Applications. 3 hrs. This course includes client interactions, time value of money, personal financial statements, cash flow and debt management, asset acquisition,
	overview of risk management, investment planning, business ethics, and retirement planning. (PR: ECN 501, ACC 510, MGT 501)
552	Investment Planning. 3 hrs.
	This course provides the student with understanding of the various types of securities traded in financial markets, investment theory and practice,
554	portfolio construction and management, and investment strategies and tactics. (PR: FIN 551) Insurance Planning and Risk Management. 3 hrs.
554	This course introduces risk management and insurance decisions. Topics include insurance for life, health, disability, property and liability risks, as
	well as annuities, group insurance, and long term care. (PR: FIN 551)
556	Income Tax Planning. 3 hrs.
	This course focus on principles and current law and practice of income taxation and its impact on financial planning for individuals, couples and
558	families as investors, employees and business owners. (PR: FIN 551) Estate Planning. 3 hrs.
330	Estate Planning focuses on the efficient conservation and transfer of wealth, consistent with the client's goals such as trusts, wills, probate,
	advanced directives, charitable giving, wealth transfers and related taxes. (PR: FIN 551)
560	Retirement Planning. 3 hrs.
	The retirement planning course is to provide individuals with knowledge of retirement plans such as Social Security, Medicare, Medicaid, defined
580	benefit and defined contribution plans and their regulatory provisions. (PR: FIN 551) 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
625	affect liquidity and profitability. (PR: MGT 601, ACC 613 and full M.B.A. admission or permission of GSM academic advisor) Financial Problems in Business. 3 hrs.
025	Recognizing and solving financial problems through the use of case presentations and/or corporate annual and interim reports. (PR: FIN 620 and
	full M.B.A. admission or permission of GSM academic advisor)
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
	M.B.A. admission or permission of GSM academic advisor)
627	Financial Institutions and Markets. 3 hrs.
	An in-depth study of the flow of funds in 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 M.B.A. admission or permission of GSM academic advisor)
650	Special Topics. 1-3 hrs.
	(PR: Permission of the division head, full M.B.A. admission, and permission of GSM academic advisor)
660	Independent Study. 1-4 hrs.
	Independent study of a specific nature under the supervision of a qualified faculty member. Hours of credit are determined by the magnitude of the project. (PR: FIN 620 and permission of division head or permission of GSM academic advisor)
	FORENSIC SCIENCE (FSC)
600	Cell and Molecular Biology. 3 hrs.
	<b>Cell and Molecular Biology. 3 hrs.</b> A study of the molecular biology of the cell and its organelles, cell interactions, and differentiation.
600 603	<b>Cell and Molecular Biology. 3 hrs.</b> A study of the molecular biology of the cell and its organelles, cell interactions, and differentiation. <b>Genetics-DNA Lab. 1 hr.</b>
	<b>Cell and Molecular Biology. 3 hrs.</b> A study of the molecular biology of the cell and its organelles, cell interactions, and differentiation. <b>Genetics-DNA Lab. 1 hr.</b> Laboratory to be offered in conjunction with FSC 604 Genetics and DNA Technology stressing techniques and methods required for DNA analysis used in forensic case investigations, in CODIS laboratories and in paternity testing.
	<ul> <li>Cell and Molecular Biology. 3 hrs.</li> <li>A study of the molecular biology of the cell and its organelles, cell interactions, and differentiation.</li> <li>Genetics-DNA Lab. 1 hr.</li> <li>Laboratory to be offered in conjunction with FSC 604 Genetics and DNA Technology stressing techniques and methods required for DNA analysis used in forensic case investigations, in CODIS laboratories and in paternity testing.</li> <li>Genetics and DNA Technology. 3 hrs.</li> </ul>
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#### 622 Forensic Analytical Chemistry I. 3 hrs. Introduction to analytical instrumentation used by forensic scientists for analysis of drugs, arson, explosives, and trace evidence. Lab stresses sample handling, instrumental analysis, and data interpretation from simulated crime scenes. 624 **Biochemistry: Forensic Science. 3 hrs.** This comprehensive course in biochemistry focuses on concepts appropriate to forensic science and designed to meet forensic science educational standards at a national level. 626 Forensic Drug Analysis. 2 hrs. Concentration on modern analytical methods used in the isolation and the identification of illicit drugs and their metabolites in biological samples and other forensic evidence. (PR: FSC 622 or permission of instructor) 627 Human Genetics. 3 hrs. Human Genetics serves as an introduction to the study of heritable traits in humans and their molecular basis; basic genetic principles, statistics, and probability; population database analysis; principles of population genetics and laws of Mendelian genetics as they relate to human identification; application of paternity testing and identification of human remains; use of single nucleotide polymorphisms (SNPs) and mtDNA profiling in forensic applications. (PR: FSC 624) 628 Chemical Analysis of Trace Evidence. 2 hrs. An emphasis on chemical analysis techniques appropriate for trace evidence, including paint, inks, fibers, and plastics. Methods include pyrolysis-GCMS, micro-FTIR, chemical microscopy, and capillary electrophoresis. Required for Forensic chemistry emphasis. 629 Advanced DNA Technologies. 2 hrs. This course will provide advanced instruction in DNA technologies to assist in the preparation for a career in a forensic DNA laboratory. (PR: FSC 603 and FSC 604) 630 Forensic Science Internship. 5 hrs. A 10-week internship in a crime lab or other forensic science-related research laboratory. Application of principles and techniques learned during first year of program. (PR: Completion of two semesters in Forensic Science program) 632 Foundations and Fundamentals in Digital Forensics. 3 hrs. This course will provide an overview of the foundations of digital forensics and its component sub-disciplines: computer, audio, and video forensics. The course will be taught as a combination of lectures, laboratory, and practical exercises. 634 Digital Evidence Search and Seizure. 3 hrs. Introduces students to the information required by investigators in the proper procedures for seizing computer systems and related storage devices used in the commission of a crime. Includes special needs of the field examiner and legal issues such as probable cause and evidence preservation peculiar to seizing computer systems. Special Topics. 1-4 hrs. 650-653 Present course material on special areas of research or topics which are not routinely covered in existing courses. 660 Independent Study. 1-4 hrs. Reserved for directed and independent research, problem reports, etc. (PR: Permission) 665 Legal Issues, Court Procedures for Forensic Scientists. 3 hrs. Covers the American legal system with specific emphasis on expert witnessing by forensic scientists. Both the federal and state systems of justice are addressed, plus topics such as the federal rules of evidence and discovery. Frye and Daubert considerations on admissibility of scientific evidence and expert witnessing are discussed. Mock trials provide experience in the courtroom. (PR: Consent of Instructor) 676 Advanced Digital Evidence Detection and Recovery. 2 hrs. This course will provide an overview of the advanced procedures and techniques used by investigators working with digital evidence. The course will be taught as a combination of lectures, laboratory, and practical exercises. 680 Seminar. 1 hr. Faculty, student and guest speaker presentations of topics pertinent to forensic science. 681 Thesis, 1-6 hrs. Research conducted in the laboratories at Marshall University 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 Master of Science degree in the research track. 685 Introduction to Research. 1-6 Hrs. Directed research which can be used to satisfy requirements for a Master of Science 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.) Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. 585-588 **GEOGRAPHY (GEO)** 501 Historical Geography. 3 hrs. Historical study of human settlement patterns, population diffusion, economic development, and the evolution of state boundaries with an emphasis on processes that inform upon contemporary geographic patterns.. 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. 504 Geography of Europe. 3 hrs.

Relationship between human activities and natural environment studied by countries, with attention given to interrelation of countries. **Political Geography. 3 hrs.** 

A systematic and regional survey of world political problems and international relations stressing current geopolitical conflicts.

506	Population Geography. 3 hrs.
	This course introduces students to the key spatial features, characteristics, and patterns of population geography, with an emphasis on international population issues and trends.
507	<b>Geography of SubSaharan Africa</b> An exploration of the geography of Sub-Sahara Africa, its land and people, with a focus on contemporary issues that challenge Africans in the
508	twenty-first century. Geography of South and Middle America. 3 hrs.
	A study of settlement, transportation, manufacturing, agriculture, geopolitics, and natural resources of South and Middle American countries.
509	<b>Geography of North Africa and the Middle East. 3 hrs.</b> A geographical study of agriculture, transportation, manufacturing, settlement, geopolitics, and natural resources of the North Africa and Southwest
510	Asia realm. Urban Geography. 3 hrs.
	Study of city function, patterns, past and current problems confronting the city including planning, zoning, housing, and urban renewal. Medical Geography. 3 hrs.
511	An introduction to medical geography and its applications, including epidemiology, biometeorology, disease diffusion, health care delivery, folk
512	medicine, regional health variations, agromedicine, and rural health issues in Appalachia. Geography of Russia. 3 hrs.
514	Geographical appraisal of cultural, political, and economic aspects of Russia. Methods and Techniques of Regional Planning. 3 hrs.
515	Introductory planning with emphasis on methods, techniques, tools and principles necessary to accomplish objective regional planning. Regional Planning and Development. 3 hrs.
	The philosophy, theories, and principles involved in planning of urban and rural areas.
516	<b>Environmental Land Use Planning. 3 hrs.</b> An examination of the role the natural environment plays in urban and rural land use planning with an emphasis on consequences of land use
517	change and applications of planning techniques. 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.
519	A study of elements of geography most essential for effective teaching of geographic content in elementary education and the social studies. <b>Geography of Gender. 3 hrs.</b>
520	Gender as an essential element in understanding geographic literature; the spatial dimensions and implications of gender and the cultural landscape. Geographic Field Research. 3 hrs.
522	Course focuses on the development of individual research projects based on data collected in the field. Environmental Geography. 3 hrs.
525	Global environmental problems and their causes.
	Climatology. 3 hrs. A study of elements of weather and climate, methods of climatic classification, and distribution and characteristics of world climatic regions.
526	<b>Principles of GIS. 4 hrs.</b> Introduction to Geographic Information Systems (GIS) principles, techniques, and applications for the social and natural sciences with emphasis on
529	foundational geographic principles in a lecture/lab format. Intermediate GIS - Vector Analysis. 3 hrs.
	Introduction to GIS vector analysis, beginning with the vector data model, and including buffering, overlay analysis, geocoding, and network analysis. (PR: GEO 526 or GEO 530 or permission)
530	Intermediate GIS - Raster Analysis. 3 hrs.
	GIS raster analysis, including local, neighborhood, and zonal operations; terrain analysis; building raster databases; distance modeling, and surface interpolation. (PR: GEO 526 or GEO 529 or permission)
531	Analysis of Digital Airborne and Space-Based Imagery. 3 hrs. Scientific study of the earth using images and data captured using satellite- or aircraft-borne sensors, with emphasis on issues of acquisition,
540	photogrammetric interpretation, spatial analysis, and application. (PR: PR: GEO 526 or GEO 529 or GEO 530 or permission) Quantitative Methods in Geography. 3 hrs.
540	Introduction to the application of statistical methods in geographical problems. Attention given to analysis of areal data, area sampling, and spatial
580-584	analysis techniques. Special Topics. 1-4 hrs.
585-588	Selected geography subjects to cover unusual geography topics not in the regular course offerings of the department Independent Study. 1-4 hrs.
607	Economic Geography. 3 hrs. Topics in economic geography, including industrial location, transportation systems, economic development, international trade relationships, and
600	globalism. Geographical Research I. 1-6 hrs.
609	Geographical research methods stressed with special attention given to the development of a viable research proposal.
610-614	<b>World Regions. 3 hrs.</b> In-depth investigation of the cultural, physical, economic, and political aspects of a world region as defined by instructor expertise and interest.
615	<b>Geographic Research II. 3 hrs.</b> Survey of the history, literature, prominent individuals, major concepts and paradigms in geography. The course emphasizes the integration of
617-619	methods of geographic inquiry with each student's research focus and writing. Seminars in Geography. 1-3 hrs.
017-015	Selected geogroaphy subjects/topics not included in the regular course offerings of the department are considered, using a seminar approach to
620	learning. Problems in Environmental Geography. 3 hrs.
631	Presents elements of conservation education in the specific areas of soil, water, and human conservation. Applied Geographic Information Systems Projects. 3 hrs.
679	Use of advanced GIS techniques to solve community-service research problems. Applied Project. 1-3 hrs.
679 681	Appned Project. 1-3 nrs. Thesis. 1-6 hrs.
690	Internship in Geography. 3 hrs. I, II.
	Professional work experience in applied geography with an approved agency.

GEOLOGY (GLY)		
518	Invertebrate Paleontology. 4 hrs. II. Alternate years (odd numbers)	
	Taxonomy, morphology, and paleoecology of body and trace fossils representing the major invertebrate phyla; analysis and interpretation of faunal assemblages; theories on evolution and extinction of species.	
521	Petrology. 4 hrs. I. Alternate years (even numbers)	
	Identification and classification of igneous, sedimentary and metamorphic rocks; their origin and occurrence; their geologic and economic	
	importance. 3 lec-2 lab. (PR: GLY 200, 314 or consent)	
522	Economic Geology. 4 hrs.	
	Origin, distribution and economics of the metallic and nonmetallic ore deposits. 3 lec-2 lab. Course taught on a demand basis only. (REC: GLY 201,	
<b>5</b> 00	314, or equivalent)	
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 & 217 or permission)	
526	Geophysics. 4 hrs.	
	Development of seismic, gravity, magnetism, electrical and thermal methods to study the structure and dynamics of the earth. 3 lec-2 lab. Course	
527	taught on a demand basis only. (PR: GLY 200, PHY 201, MTH 229) Fossil Fuels. 4 hrs. II, Alternate years (even numbers)	
521	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 modeling from a wide range of geological problems. Existing and student-	
1	developed programs will be used. 3 lec-2 lab. (PR: 12 hrs. GLY and MTH 130.)	
551	<b>Principles of Geomorphology. 3 hrs. I., Alternate years (odd numbers).</b> Principles of identification and analysis of the world's superficial features in terms of stratigraphy, structure, processes, tectonics and time. 3 lec.	
	(REC: GLY 200, 210 or equivalent)	
551L	Principles of Geomorphology Laboratory. 1 hr. I., Alternate years (odd numbers).	
	Identification and analysis of landforms from aerial photos and topographic maps.	
	(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	
555L	water resources. 3 lec. (PR: GLY 200; CR: GLY 555L for geology majors) Hydrogeology Laboratory. 1 hr. I, Alternate years (odd numbers)	
0001	A two hour laboratory of practical hydrogeologic problem solving. (PR: GLY 200; CR: GLY 555, required of majors, non-majors elective)	
556	Environmental Geology. 3 hrs. II. Alternate years (even numbers)	
	The interactions of man and the earth, dealing with natural resources, natural hazards, cultural and urban geology and future planning. (PR: GLY	
	200, 210L)	
556L	Environmental Geology Laboratory. 1 hr. II, Alternate years (even numbers)	
557	Current solutions to environmental problems through real life exercises (PR: GLY 200, 210L, 451, 451L; CR 556 for Geology majors). Engineering Geology. 3 hrs. I, alternate years (even numbers).	
551	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 CARE ADMINISTRATION (HCA)		
600	The Health Care System. 3 hrs.	
	This course is designed to provide managers with in-depth knowledge of the current health care system, covering the structure and delivery of care,	
	the providers and payers, and the various players in the system. The internal and external forces impacting the system are discussed. Problems in	
	the health care system are explored and evaluated with respect to the issues of access, cost, and effectiveness. (PR: GSM admission or permimssion	
610	of GSM academic advisor) Health Care Financial Management. 3 hrs. I.	
010	near care rinancial management. 5 ins. 1. Course provides an overview of health care financial management with special emphasis upon the aspects of financial systems in bosnitals	

Course provides an overview of health care financial management, with special emphasis upon the aspects of financial systems in hospitals that differ from typical financial systems. It includes analysis of capital formation, cash flow management and determination of working capital requirements. (PR: HCA 600)

615 Health Care Economics. 3 hrs. II.

The health care industry is unique. Unlike in other markets, the consumer finds it difficult to evaluate quantity, quality, and pricing. Traditional market forces are modified by government, third-party payers, and professional interests. This course applies economic principles to this unique environment. (PR: HCA 600)

#### 620 The Ethical Dimension of Health Care Management. 3 hrs. II.

Emphasis in this course is on the way managers in health care settings incorporate ethical dimensions into their decision-making. It looks at the wide variety of ethical issues faced by these managers, focusing on those related specifically in the decisions they make about their organization, personnel, and services. Specifically covered are issues regarding the allocation of scarce resources, the type and availability of care for special populations, and conflicts of interest. (PR: HCA 600)

# 630 Legal Issues in Health Care Management. 3 hrs. I.

This course provides students with a legal framework to analyze health care organizations and their operations. The federal and state legal systems are reviewed and regulatory programs and their requirements discussed. Topics include: tax exemptions, antitrust laws, corporate liability, provider-patient legal issues (contracts and negligence), patient rights, facilities licensure and accreditation, and reimbursement issues. Court cases, as well as governmental agency rulings and findings, are analyzed for their applications to health care management. (PR: HCA 600)

640	The Health Care Professional. 3 hrs.
	This course presents an overview of various professional and managerial topics relevant to the health care professional. Each offering of the course
	focuses on a particular health profession. Emphasis is on defining the profession, understanding its historical development and evolution, examining
	professional roles, tasks, responsibilities, and accountabilities in current practice, studying the interaction with other professionals, delineating the parameters of the professional in ethical decision-making, and recognizing and responding to challenges faced in contemporary practice and in
	planning for the future. (PR: HCA 600)
650	Comparative Health Systems. 3 hrs.
	A survey of health care provision systems throughout the world. (PR: HCA 600)
651	Health Care Operations Management. 3 hrs. An investigation of the use of operations management techniques and methodologies that are useful in the health care industry. (PR: HCA 600)
652	Health Care Finance. 3 hrs.
	An examination of the various financial systems present within the American health care systems. Special emphasis placed upon the management
	of assets, cost control, and budgeting. (PR: HCA 600)
653	<b>Integrated Health Care Delivery Systems. 3 hrs.</b> An investigation of managed care systems within the United States. Emphasis placed on identifying practices that promote quality care at an
	affordable cost. (PR: HCA 600)
654	Human Resource Management in Health Care. 3 hrs.
	An investigation of the human resource function found within contemporary health care provision systems. Discussion of future challenges facing
655	the function in this turbulent environment. (PR: HCA 600) Health Care Marketing. 3 hrs. II.
	An investigation of the role of marketing in today's health care organizations. Specific topics include market segmentation, consumer behavior,
	promotion, and environmental analysis. (PR: HCA 600)
656	Management of Medical Technology & Information Systems. 3 hrs. I. An investigation of the place technology, primarily hard technology, plays in the formulation of health care policy and strategies. Special emphasis
	placed on the management of medical information systems. (PR: HCA 600)
657	Health Care Law & Public Policy. 3 hrs.
	An examination of the legal, regulatory, and policy-making interactions between government, society, and health care organizations and providers.
658	(PR: HCA 600) Long Term Care. 3 hrs.
000	An examination of the range of health and social services that are needed to compensate for the functional disabilities of people. Review of available
	services and governmental policies and regulations. (PR: HCA 600)
659	Health Care for Rural and Underserved Populations. 3 hrs. An investigation of how health care is provided to rural Americans. Special attention given to the health care systems that provide medical care to
	the peoples of Appalachia. (PR: HCA 600)
671	Health Care Practicum. 1-6 hrs.
	Project-oriented experience in health care operations and organizations. Intended for those students with insufficient experience in the field. (PR:
695	Permission of program director and HCA 600) Field Research in Health Care Management. 3 hrs. S.
	In this course, each student selects an in-depth organizational research project on a particular management problem in a health care organization.
	In this "hands on" project, the student serves as a consultant to the health care organization, conducting research, analyzing data, and making
	recommendations for the solution(s) to the management problem. Projects focus on such topics as strategic planning, productivity, quality assurance, risk management, and joint ventures. Field research projects are selected in conjunction with the program coordinator during the
	semester prior to course enrollment. (PR: Permission of academic advisor)
697	Special Topics in Health Care Management. 3 hrs.
698	The course is designed to allow group study of selected topics of current interest in health care management. (PR: Consent of instructor) Independent Study in Health Care Management. 1-3 hrs.
050	The course is designed to facilitate individual study of selected topics of interest in health care management. (PR: HCA 600 and permission of
	program director)
	HEALTH DROFFEELONE (HD)
60 <b>5</b>	HEALTH PROFESSIONS (HP)
605	Medical Vocabularies and Classification Systems. 3 hrs. Medical Vocabularies and Classification Systems is a one semester course which focuses on learning prefixes, suffixes, root words, and combining
	forms which are the basis of the medical language.
615	Health Quality and Safety. 3 hrs.
	To provide students with principles of major health care quality and safety measurement, as well as practical case studies involved in the health care system.
650	Health Informatics Practicum. 3 hrs.
	Provide an experience to prepare students to work effectively in professional positions, and bridge the learning gained in coursework and the world
	of practice.
=10	HEALTH SCIENCE (HS)
510	<b>Organization and Administration in Athletic Training. 3 hrs</b> . This is a course that investigates current trends in administration and organization in the field of athletic training.
523	Orthopedic Assessment of the Upper Extremity for the Athletic Trainer. 3 hrs.
	Orthopedic evaluation of the neck and upper extremity for the Athletic Trainer.
524	<b>Orthopedic Assessment of the Lower Extremity for the Athletic Trainer. 3 hrs.</b> Orthopedic evaluation techniques of the lower extremity for the Athletic Trainer.
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
<b>F</b> 00	and immediate care of the athlete, and the rehabilitation of the athlete following injury.
526	<b>Curriculum in Health Education. 3 hrs. I.</b> 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.)
	(1 IG 112 201, 200, 201, 700)

540	Health Evaluation for the Athletic Trainer I. 3 hrs.
	A study of common problems and illnesses of athletes and other physically active individuals and the proper methods of evaluating these complaints.
548	<b>Therapeutic Modalities in Athletic Training. 5 hrs.</b> Investigation and analysis of therapeutic modalities including indications, contraindications, biophysics and procedures. Includes a lab. (PR: ESS
	201, 215 & Permission)
549	Therapeutic Exercise in Sports Medicine. 4 hrs.
	Investigation and analysis of current trends in rehabilitation exercise, muscle testing and evaluation. Includes a lab. (PR: ESS 201, 215 &
560-564	Permission) Professional Development (Plus title that identifies content). 1-4; 1-4; 1-4; 1-4; 1-4 hrs.
300-304	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.
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 in Health Education. 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.
591-592 620	Workshop in Health Science. 1-3 hrs. Substance Abuse and the Athlete. 3 hrs.
020	An indepth study of commonly abused substances by athletes as well as current trends in drug testing of athletes. (PR: ESS 621, permission)
623	Medical Aspects in Sports. 3 hrs.
640	Emphasis on the development of skills in recognition of symptoms of illness, injuries and proper procedures of medical care. Health Evaluation for the Athletic Trainer. 3 hrs.
040	An indepth study of common problems and complaints of athletes and the proper method of evaluating those complaints.
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
647	trainer. Athletic Training II. 3 hrs.
041	Professional aspects of trainer-doctor and doctor-athlete relations will be taught and exploration of how to professionally handle injuries and
	cooperation with physicians.
660	Internship. 3-6 hrs.
681	Practical experience in a clinical setting. (PR: ESS 682, 683, 684) Thesis. 1-6 hrs.
	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 in the 20th-21st centuries. 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	<b>Tudor and Stuart England, 1450-1688. 3 hrs.</b> 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	<b>Conquering the Continent: America's Frontier Experience. 3 hrs.</b> 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	U.S. Social and Cultural History. 3 hrs.
=10	A study of the changes and continuities in American Social and Cultural History.
513	<b>History of the Old South, 1492-1860. 3 hrs. Alternate years.</b> 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
515	reconstruction. 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
522	Catholicism and the growth of the Protestant movement, and the influence of the two movements upon each other is stressed. <b>The French Revolution and the Napoleonic Era. 3 hrs.</b>
	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	<b>U.S. Latin American Relations. 3 hrs.</b> 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	<b>U.S. Science and Technology. 3 hrs.</b> A study of the development and impact of science and technology in the U.S.
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	<b>European History 1914 to Present. 3 hrs.</b> 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 and Beyond. 3 hrs. The rise and fall of the Soviet Union, with emphasis on political and economic changes and Soviet foreign policy, and including an examination of the aftermath of the Soviet Union's collapse.
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
532	Indian, the settlement of the West, and the farmers' revolt. 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	<b>The American Experience in Vietnam. 3 hrs.</b> 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	<b>Modern Japan. 3 hrs.</b> Begins with an overview of nineteenth century Japan and stresses the twentieth century rise of Japan to the position of world power.
536	<b>Modern China. 3 hrs.</b> This course will provide an overview of Chinese history in the modern era (1600 to the present), including the major political, cultural, social, and
	intellectual events and trends of this period.
537	Introduction to Public History. 3 hrs. Introduction to the basic theories, ideas, and approaches to the application of historical theory or methods to projects presented to non-student
538	publics; local and economic development applications and projects emphasized. Material Culture and History. 3 hrs.
	The course investigates the rich potential of "things" - objects, landscapes, buildings, household utensils, furniture, foods, works of art, clothing, etc. as sources of insight about American history and culture.
539	Modern China Through Film.
540	Through a combination of films, lectures, readings, discussions, and writings, the course will show how China took its unique path to modernization. <b>West Virginia History. 3 hrs.</b>
541	An interdisciplinary study of the state, its people and its institutions within the national context. <b>Women in Social Movements. 3 hrs.</b>
<b>F</b> 4 9	The course explores factors affecting the emergence, growth, structure, impact of social movements as they attempt to transform social relationships and reshape social values.
543	<b>20th Century U.S. Women's History. 3 hrs.</b> This course explores the lives and experiences of U.S. women in the 20th century, but always with an eye on power.
545	Arab-Israeli Conflict. 3 hrs. This course will examine the historial developments of the modern Arab-Israeli conflict, with emphasis placed on political, socioeconomic, and cultural change and the prospects for peace.
546	The Rise of the Atlantic World, 1400-1800. 3 hrs. Expansion of Western Europe from 1400s to Africa, Latin America and other parts of the Atlantic world.
580-583	Special Topics. 1-4 hrs.
585-588 600	Independent Study. 1-4 hrs. Methodology: Seminar in Historical Methods. 3 hrs.
601	A research and writing seminar in which students are taught and must exhibit the skills and methodologies of practicing research historians. <b>Tudor England 1485-1603. 3 hrs.</b>
	In this course, students will examine in-depth several selected themes in Tudor history through reading, class discussions, examinations, and a research paper.
602	Stuart England, 1603-1714. 3 hrs.
603	An analysis of the Social, Intellectual, Economic, Cultural, and Political History of England in the Stuart Century. 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.
607	A study of the English colonies in America with emphasis on slavery, minorities, and social and economic change. <b>Problems in European History, 1890-1923. 3 hrs.</b> 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,
610	the war itself, the peace settlement and the Russian Revolution and its aftermath. <b>Readings in History. 2-3 hrs.</b>
	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.
025	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.
002	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.
000	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/Local History Seminar, 3 hrs.
	The course examines the field of oral history. Students will apply oral methodology and other primary sources documentation in researching a local
	topic.
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.
640	Seminar in Archives and Special Collections. 3 hrs.
	The Seminar will introduce the student to current practices and procedures used in the creation of archives and manuscript collections through
	extensive hands-on work, including the physical processing of a manuscript collection. The emphasis will be improvement of the student's historical
	research skills.
650-651	Special Topics. 1-4; 1-4 hrs.
	(PR: Permission of Instructor)
677	Thesis Writing Seminar I. 3 hrs.
	A writing seminar in which students present their written work on their M.A. theses to the class members, who will read, analyze and critique each
	submission.
678	Thesis Writing Seminar II. 3 hrs.
	A continuation of HST 677. Students present their written work on their M.A. theses to the class members, who will read, analyze, and critique
	each submission.
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 (HUMN)**

# 530 Technology and the Humanities. 3 hrs. This course surveys the effects of electronic media on the humanities and how they are taught in the postmodern society. Content will subsume both philosophical/theoretical issues and technical matters. 560-63 Staff Development. 1-4 hrs. S/U. Courses and activities designed to meet specific needs of public school personnel. Credit may be used for certificate renewal and salary upgrading if approved but not in degree programs.

600 Introduction to Study in Humanities. 3 hrs. Interdisciplinary core course addresses questions/concepts central to the humanities. Texts from philosophy, history, literature, the arts and the sciences provide insights into selected historical periods. Open to non-degree students.

# 601 Literary Theory and Criticism. 3 hrs.

Core course introduces modern critical approaches, concepts and methods of research and scholarship in the broad field of literature. Open to nondegree students.

602 Historical Studies. 3 hrs.

Core course acquaints students with problems of historical knowledge, changes in the interpretation of history, nature of historical forces, and methods of historical research. Open to non-degree students.

### 603 History and Theory of the Arts. 3 hrs.

Core course provides chronological survey of the arts, emphasizing the social, political and/or religious motives that underlie artistic production. Emphasis on theories of modern art. Open to non-degree students.

604 Expository Writing for Research. 3 hrs. This core writing course develops proficiency in writing for research. Note: a degree student may demonstrate competency through an alternative assessment to have the requirement waived. Open to nondegree students.

- 605 Western Traditions and Contemporary Cultures. 3 hrs. Using primary materials from different cultural periods,
- Using primary materials from different cultural periods, as well as contemporary critical analyses, this core course explores epistemological questions that underlie conflicts between cultures. Open to non-degree students.
- 650 Selected Topics. 1-9 hrs.
- 680 Independent Research Symposium. (formerly 701), 3 hrs.
- Prerequisite: 24 credit hours, required courses, and comprehensive examination. A pro-seminar required of all Humanities degree students who are beginning the thesis or final project. S-U grade.
- **681** Independent Research Symposium. (formerly 702), 3 hrs. Prerequisite: Humanities 680. A continuation of the pro-seminar for students electing the thesis option. The student will produce a thesis suitable for submission to a committee. S-U grade.

# HUMANITIES: ARTS AND SOCIETY (A & S)

- 500 Study of Periods and Movements in Western Art and Music. 3 hrs. The course relates major periods, schools, and movements to the culture of the place and time. May be repeated for a maximum of 6 hours.
- 501 Studies in Non-Western Art and Music. 3 hrs. Studies emphasizing non-Western art or music (e.g., Chinese art; art of the Middle East). May be repeated for a maximum of 6 hours.
   510 Comparative Arts. 3 hrs.
  - Study of artistic movements and specific stylistic features in art, music and literature. May be repeated for a maximum of 6 hours.

550	Sunrise Internship. 3 hrs. A specially designed project under the guidance of specialists at Sunrise Museums (requires special permission from the program director and Sunrise Museums).
560	Film Art and the Popular Media (formerly Media 560). 3 hrs. A consideration of films as the successor to earlier popular literatures. Relevant aspects of media history and techniques will be examined.
600	Selected Topics in Arts and Society. 1-6 hrs.
	Selected topics in arts and society. The specific topic will be announced in the schedule of classes. Students may take up to nine hours in selected topics.
620	Selected Topics in Decorative Arts. 1-6 hrs. Selected topics in history and practices of decorative arts (e.g., interior design, furniture styles, architecture).
	HUMANITIES: CULTURAL STUDIES (CULS)
500	Studies in Thought and Culture. 3 hrs. Basic concepts and cultural expressions in words, principally of area or period studies, such as classical Western, medieval Western, modern
530	European and American. Fundamental Approaches to Communication Criticism. 3 hrs.
330	Course examines the theoretical approaches to criticism across the broad range of media, with focus on the philosophy behind each and on their various applications.
540	<b>World Religions. 3 hrs.</b> Study of several religions as they developed within their individual times and cultures.
550	Ethics. 3 hrs.
500	A critical examination of ethical theories as seen in a detailed examination of several works. Theories may include naturalism, intuitionism, non- cognitivism, utilitarianism, and natural law.
560	<b>History of Ideas. 3 hrs.</b> A study of the efforts of philosophers to construct general conceptions of the world. Recent approaches in the investigation of ontology and cosmology will be examined.
600	Selected Topics in Cultural Studies. 1-6 hrs. Selected topics in an area of cultural studies. The specific topic will be announced in the schedule of classes. Students may take up to nine hours
	in selected topics.
610	Seminar in Appalachian Culture. 3 hrs. Exploration of selected aspects of culture (e.g., art, music, folklore, history, literature), emphasizing regional culture from an interdisciplinary
	perspective.
611	Applachian Studies: Themes and Voices. 3 hrs.
	This interdisciplinary course orients students to the significant issues and research in Appalachian studies. Important political, social, and cultural issues will be considered. Research areas are introduced. (This core course in the Graduate Certificate in Appalachian Studies may be taken by
	degree students in Humanities.)
612	<b>Time and Place in Appalachia. 3 hrs.</b> This interdisciplinary course orients students to the importance of geography, topography, and geology to the history and development of the
	Appalchian region. (This core course in the Graduate Certificate in Appalachian Studies may be taken by degree students in Humanities.)
620	Women, Men, and Cultural Change. 3 hrs. A study of gender differences from sociological and philosophical perspectives. Topical areas covered include communications, law, literature,
	popular culture, ethics, and business.
650	Classical Foundations in Communication Studies. 3 hrs. Course surveys major contributions to rhetorical theory during the classical period and the development of rhetorical criticism in the centuries
	since. Philosophers/writers will include Plato, Aristotle, Cicero and Quintilian.
652	Communication and Social Movements. 3 hrs. Course examines the role of communication in successful social movements. Contemporary reform movements are analyzed to determine
	communication strategies, organizational issues, leadership concerns and rhetorical focus.
653	Media and the Political Process. 3 hrs. An introduction to the study of political rhetoric, the course relates rhetorical theory to political communication and considers the impact of
	political communication in government, the electoral process, and society.
	HUMANITIES: HISTORICAL STUDIES (HIST)
580	Ethnic History of West Virginia. 3 hrs.
	This course focuses on the contributions that individuals and groups with diverse ethnic backgrounds have made to the economic, social, and cultural history of the state.
585	Coal Mine Life, Work and Culture in West Virginia. 3 hrs.
	This course provides students with a better understanding of the continuing economic, political, environmental and cultural impact which the extraction of coal has had on West Virginia.
600	Selected Topics in Historical Studies. 1-6 hrs.
601	Selected topics in history. The specific topic will be announced in the schedule of classes. Students may take up to nine hours in selected topics. <b>Historic Preservation. 3 hrs.</b>
	Course broadens historical awareness and provides practical applications of historical knowledge. It covers the built environment and focuses on
620	the history, processes and legal basis of the historic preservation movement. <b>Civil War and Reconstruction. 3 hrs.</b>
010	This course examines the complex causes and lasting effects of the American Civil War. Issues such as slavery, sectionalism, emancipation and
	Reconstruction will receive attention.
HUMANITIES: LITERARY STUDIES (LITS)	
510	<b>Comparative Approaches to Literature. 3 hrs.</b> Exploration of literature via literary movements, themes, genres, or relationship to other disciplines. Specific works will be read and discussed as
	examples of the announced approach.
520	Creative Writing and Practical Criticism. 3 hrs.
	Exploration of the possibilities for communication and expression in contemporary writing with emphasis on comprehension of structure, technique and self-criticism of the writing experience.

 and self-criticism of the writing experience.
 522 Selected Topics in Writing. (formerly Media 522), 3 hrs. The study of selected topics in writing (e.g., the expository essay, screen-writing, techniques of editing, etc.)

#### 540 Studies in Mythology/Folklore. 1-6 hrs.

Selected topics in mythology and folklore (e.g., folk drama, folk tale, folk art). May be repeated for a maximum of 6 hours. Literature for Teachers. 3 hrs.

Study and appreciation of selected works with special reference to the high school curriculum.

- 600 Selected Topics in Literary Studies. 1-9 hrs.
- 615 Modern Southern Literature. 3 hrs.

Course surveys important figures in Southern literature since the Southern Literary Renaissance of the 1920s and the Agrarian and Fugitive Movements.

625 Updating Shakespeare: Text, Stage, and Film. 3 hrs. Focusing on selected Shakespearean plays, this course considers recent critical interpretations and explores how these have influenced stage and film productions. Contemporary adaptations of the plays will also be considered.

636 Literature and Society in Late 18th C. England. 3 hrs.

This course examines biographies, social, political and scientific writings, literary texts and the arts from 1750-1800 to understand English culture and the eighteenth-century world.

660 Modern Irish Novel. 3 hrs. This course examines the subject matter, techniques, and critical background of the modern Anglo-Irish novel. Students will study representative examples by major novelists from the Republic and Northern Ireland.

#### 662 Twentieth-Century Irish Drama. 3 hrs.

From the founding of the Abbey Theatre to the present, this course traces the development of Irish drama as art form and cultural artifact. **Contemporary World Fiction. 3 hrs.** 

Contemporary works of shorter fiction from around the world offer opportunities to apply cultural critiques and comparative literary perspectives, while considering the different national and cultural traditions represented.

### HUMANITIES: STUDIO ART (ARTS)

500 Selected Topics in Studio Arts. 1-6 hrs.

# HUMAN RESOURCE MANAGEMENT (HRM)

#### 600 Development of Labor Relations. 3 hrs. I.

An historical survey of the organized labor movement in the United States and review of legislation affecting the American worker. Attention is given to the industrial relations system of the United States as it relates to those of Western Europe and other nations. (PR: GSM admission or permission of GSM academic advisor)

#### 605 Human Resource Economics. 3 hrs. I.

Economic issues in the employment and compensation of labor. Topics emphasized include labor force composition and growth, structure and functioning of labor markets, unemployment, wage theories, wage levels and structures, the economic influence of unions, income distribution, and human capital models. (PR: ECN 501 plus GSM admission)

#### 610 Collective Bargaining, Negotiation and Dispute Resolution. 3 hrs. I.

A comprehensive survey of labor and management relationships with special emphasis given to philosophy, structure, and the processes of collective bargaining, negotiations and dispute resolution in both union and nonunion settings. Arbitration, fact finding and mediation are also examined. (PR: HRM 600)

#### 615 Arbitration and Grievance Procedures. 3 hrs.

A study of grievance procedures and arbitration as formalized in labormanagement relations, including an analysis of principles and practices of complaint handling, review of concepts and methodology in such grievance handling review of the role of arbitration as a dispute resolution mechanism, utilization of factfinding and mediation as alternate mechanisms, the preparation and handling of materials in briefs or oral presentations, and the function or role of the arbitrator; impartial chairman, umpire, or similar neutral. (PR: HRM 600)

#### 625 Human Resource Information Systems and Knowledge Management. 3 hrs. The development, use, and impact of Human Resource Information Systems and the management of organizational knowledge including knowledge

The development, use, and impact of Human Resource Information Systems and the management of organizational knowledge including knowledge management systems, procedures, policies, and other issues.

#### 630 Employment Law. 3 hrs.

A survey and analysis of the labor relations law; examination of the extent to which the law regulates and protects concerted action by employees in the labor market; considerations and analysis of the legal framework within which collective bargaining occurs; and analysis of major aspects of employer employee law, such as wrongful discharge, discrimination, and safety and health law. (PR: HRM 600)

#### 640 Structural Issues in Union Management Relations. 3 hrs.

A study of the organizing structure found in various types of unions, their operating procedures, governing bodies, and the interrelationships existing at the local, international, and federation levels. Review of the dual role of unions as both societal institutions and employee agents. Discussion of trade union philosophy from early beginnings to the present. Consideration is given to the different philosophical, political, and structural characteristics of American unions and European/Asian unions. (PR: HRM 600 and GSM admission)

#### 650 Industrial Psychology. 3 hrs.

Survey of the applications of psychological principles and of research methodologies to the various human problems in industry, such as personnel selection and appraisal; the organizational and social context of human work; the job and work situation; human errors, accidents, and safety; and the psychological aspects of consumer behavior. (PR: GSM admission)

#### 660 Compensation and Benefits. 3 hrs. S.

The development and administration of wage and salary programs, and an analysis of both private and public health, welfare and pension plans. Topics investigated include motivation theory, factors influencing compensation levels, forms of compensation, including incentive plans and fringe benefits, a critical examination of financing, administration, and general effectiveness of the plans, special issues of managerial compensation, comparable worth, special and related issues. (PR: MGT 620 and GSM admission)

#### 670 Personnel Selection and Testing. 3 hrs.

A study of the personnel employment and selection processes. Emphasis is placed on the rationale for selection and placement; the procedures and problems in recruitment and selection; and the use of tests, interviews, and other selection devices. Special attention is given to the criterion problem and legislation and/or governmental regulations affecting selection procedures. (PR: GSM admission)

# 675 Human Resource Development and Training. 3 hrs.

This course teaches students how to develop management training modules and materials. Students also learn and use advanced techniques in training design and group facilitation. (PR: GSM admission)

# 680 Labor and Employee Relations in Public Employment. 3 hrs.

An examination of the development, practices and extent of collective bargaining between federal, state, and local governments and their employees. Emphasis is on the public issues related to sovereignty, unit determinations, impact on budgetary and financing processes, representation procedures, unfair practices, scope of bargaining, impasse resolution, and the strike. Some attention is devoted to the legal and ethical problems inherent in these issues. (PR: HRM 600)

697	Special Topics in Industrial Relations. 3 hrs. Selected topics of current interest in industrial relations. (PR: HRM 600 and permission of program director)
698	Independent Study. 1-4 hrs.
	Independent study of a specific nature under the supervision of a qualified faculty member. Hours of credit are determined by the magnitude of the
	project. (PR: Permission of division head or GSM academic advisor)
	INFORMATION SYSTEMS (IS)
580-83	<b>Special Topics. 1-4 hrs.</b> Occasional offerings of current topics in information systems, providing important supplementary material for participating students.
585-88	Independent Study. 1-4 hrs.
	An approved study of special interest concerning information systems that is appropriate for the student's program of study. Carried out under the
600	supervision of a faculty member. Management Information Systems. 3 hrs.
000	The course examines personal, work group, and enterprise information systems with respect to their value, their components, and the processes
	of developing them.
603	<b>Programming for Artificial Intelligence. 3 hrs.</b> An introduction to programming for artificial intelligence applications using Prolog.
605	Systems Analysis Techniques. 3 hrs.
	Introduction to information systems from system implementor's viewpoint; information systems life cycle; techniques of analysis; data dictionaries and data flow diagrams; computer-oriented system description. (PR: Admission to program)
610	Systems Design. 3 hrs.
	Physical design of information systems; hardware selection; software design, database considerations; program development; software structuring
615	techniques; cost/ performance trade-offs; system implementation; evaluation and optimization techniques. (PR: IS 605) System Simulation. 3 hrs.
	An introduction to dscrete-event computer modeling and simulation. Probability distributions, model verification and validation, input data
618	collection, output analysis. Simulation languages and software. (PR: programming capability and quantitative skills) Computer Applications in Engineering and Science I. 3 hrs.
010	Computer Applications in Engineering and science 1.5 ms. Computational and algorithmic methods in engineering and science, optimization and numerical analytic techniques including gradient and search
220	methods, linear programming, simulation, and data base mechanics. (PR: Admission to the program)
620	Introduction to Operating Systems. 3 hrs. General principles of managing jobs, processes and storage (real, virtual, auxiliary) in multiprogramming operating systems; interconnection and
	management of processors in multi-processing and distributed computing system configurations; operating systems comparison. (PR: IS 621 and IS
621	630, or consent) Information Structures I. 3 hrs.
021	Representation and manipulation of numeric and non-numeric information, linear lists, strings, multilinked structures; sorting and searching;
	storage management; data structures in programming languages. Relevant aspects of discrete mathematics. (PR: IS 510 or equivalent)
622	Information Structures II. 3 hrs. A continuation of IS 621. Tree, graph, and set structures; file structures for secondary storage; aspects of discrete mathematics. (PR: IS 621)
623	Database Management. 3 hrs.
	Review of information structures and of relationships among data elements and objects. Relational database theory; design and organization of
624	databases, retrieval structures, and query mechanisms. (Prerequisite: IS 622 or consent) Data Warehousing. 3 hrs.
	A hands-on introduction to the concepts and techniques of data warehousing and data mining. (PR: IS 623 or instructor's permission)
625	Software Engineering. 3 hrs. The process of developing complex software products. Includes the software life cycle, methods and tools for life cycle phases. Application of
	concepts, methods, and tools in a class project. (PR: IS 510 or permission)
630	Computer Architecture and Assembly Language. 3 hrs.
631	An introduction to the composition and operation of electronic digital computers and to assembly language programming. (PR: IS 510 or equivalent) Information Security. 3 hrs.
	This course provides foundation knowledge in information security, including protecting information assets, risk mitigation strategies, response to
635	security incidents, and designing secure systems. (PR: IS 600, 620, 656, 610) Computer Graphics. 3 hrs.
035	An introduction to the areas of computer graphics that are necessary to understand, evaluate, and develop graphics applications. (PR: Admission
<i>c t</i> 0	to program)
640	<b>Programming Languages. 3 hrs.</b> Definition of program environment, program sequence and control, subroutines and other secondary sequences; statement structures, parsing,
	grammars, etc.; classes of programming languages. (PR: IS 622 or consent)
645	Geographic Information Systems. 3 hrs. Covers the elements of GIS hardware, software, data and infrastructure needs. Input data issues; data types, sources, error, preprocessing,
	manipulation and analysis, GIS tools and applications. (PR: Consent)
646	Computer Systems Security. 3 hrs.
	This course is designed to provide the technical and analytical skills to implement computer security. Students review how to manage computer security, current security technologies, and incident response. (PR: IS 656 and instructor permission)
647	IT Disaster Planning & Recovery. 3 hrs.
	This course provides the skills necessary to manage IT disaster recovery planning. The course focuses on the protection of information. Students will analyze risk, design a plan and explore available technologies.(PR: instructor permission)
650-653	Special Topics. 1-4 hrs.
0 <b>77</b>	Occasional offerings of current topics in information systems, providing important supplementary material for participating students.
655	Multimedia and Electronic Information Dissemination. 3 hrs. Components of multimedia, such as data, voice, pictures, animations, and videos, and their production, manipulation, dissemination processes.
	Technologies, processes, and services for electronic dissemination. Applications and current trends. (PR: TM 660 or permission)
656	<b>Communication and Network Technologies. 3 hrs.</b> Different transmission media, digital communications, telecommunications services, types of networks and topologies, network protocols,
	components, and applications. (PR: IS 622, or TM 660, or permission)
660	Models of Computation. 3 hrs.
	Switching algebra and relationship to computers; finite automata; Turing machines; recursion; computability and unsolvability. (PR: IS 622, math maturity)

#### 670 Language Translators and Concepts. 3 hrs.

Formal language concepts, syntactic analysis; types of translators; detailed review of assemblers, interpreters, and compilers, and techniques of their construction. (PR: IS 622)

680 Social Issues in Information Systems. 3 hrs.

Aspects of the interaction of computer systems and society including such topics as system security, respect of privacy, changing job requirements, ergonomics, and moral and ethical considerations. (PR: completion of core, or consent of instructor)

# 685-88 Independent Study. 1-4 hrs.

An approved study of special interest concerning information systems that is appropriate for the student's program of study. Carried out under the supervision of a faculty member.

#### 690 Principles of Artificial Intelligence. 3 hrs.

A survey of the fields of artificial intelligence and expert systems. Students will work together designing and implementing a project. (PR: Permission)
 **1 Image Processing for Forensics. 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; enhancement of images and video. (PR: Permission of instructor) **95 Expert Systems. 3 hrs.** 

# 695 Expert Systems. 3 hrs. A review of expert systems techniques and applications. Participants will develop small expert systems using several different personal computer expert systems development programs (shells).

#### The following courses do not count for credit toward the master's degree:

500 Computer Systems and Structured Programming I. 3 hrs.

Introduction to programming; survey of computer information systems. (PR: Facility with algebra)

501 Introduction to Programming Languages. 3 hrs. An introduction to a high level language such as BASIC, C, COBOL, FORTRAN, LOGO and PASCAL. The course assumes a knowledge of at least one other high level language.

- 510 Computer Systems & Structured Programming II. 3 hrs. A continuation of IS 500. Topics include algorithm development, manipulation of arrays and an introduction to dynamic data structures. (PR: IS 500 or consent.
- 551 Computer Programming in Education. 3 hrs.
- Programming with educational applications. S-U grade.
- 565 Computers in Management. 3 hrs.

Basic computer concepts, equipment, and use of applications programs (word processor, spreadsheet, data base).

#### INSTRUCTIONAL TECHNOLOGY AND LIBRARY SCIENCE (ITL)

Certification endorsement program for those with teaching certification

#### 501 Libraries and the Learning Process. 3 hrs.

The role of the school library in the learning process through instruction collaboration, and curriculum support. Study of information literacy, learning styles, and models and assessment of learning outcomes.

#### 502 Library Materials for Adolescents. 3 hrs.

Addresses the selection and promotion of library materials in support of a school curriculum and issues of service, diversity and balance in the school library collection.

### 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.

#### 580-583 Special Topics. 1-4 hrs.

585-588 Independent Study. 1-4 hrs.

#### 622 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 also be addressed.

#### 625 Library Organization and Administration. 3 hrs.

Principles of administration for elementary and secondary school library media centers, 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.

631 Technology and the Library. 3 hrs.

An introduction to the function, management, and the issues of computer and non-computer technology in the library. Students learn to use technology as an educational tool in the classroom.

#### 650 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.

# JOURNALISM AND MASS COMMUNICATIONS (JMC)

# 500 Photojournalism. 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. 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.

#### 509 Public Relations Research Methods. 3 hrs.

The course is designed to provide hands-on experience in collecting, interpreting, evaluating and reporting research valued in the field of public relations. Included: lectures, readings, discussions, and projects.

#### 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.

514	
014	Reporting Public Affairs. 3 hrs. II.
	Instruction in reporting local, state and federal government; politics, finance and labor; social and environmental issues and other matters, with
	emphasis on background and interpretation. Course includes field trips and guest speakers.
515	Advertising Strategy and Execution. 3 hrs.
	Analyzing advertising problems in a case-study approach, proposing a strategic solution, and implementing the strategy. Students must write and
	produce advertisements for a variety of media.
525	Advertising Campaigns. 3 hrs. II.
010	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.
<b>E</b> 90	
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 use 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.
001	Development of the elements necessary for the production of detailed video projects. Students study the creation and production of public affairs,
505	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.
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.
333	Applying the four-step public relations process to an organization's program or campaign. Includes execution of public opinion research and
= 40	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
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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 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.
004	Problems in the broadcast field on varied subjects which concern the industry.
641	Web/Online Strategies for Journalism and Mass Communications. 3 hrs.
	A seminar that anlyzes Web strategies in news and strategic communications contexts. Students will examine online media trends; content
650-651	development; and legal and ethical issues. 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 dean)
	LATIN (LAT)
501	Cicero: Speeches. 3 hrs.
	A close reading in Latin of a selection of the political and/or court speeches of Cicero with attention paid to cultural and literary contexts, as well
	a modern scholarship.
503	Roman Comedy. 3 hrs.
504	(PR: 6 hours of Latin literature numbered 304 or above or equivalent) Roman Elegy: Propertius and Tibullus. 3 hrs.
001	Close readings in Latin of selections from elegies of Propertius and Tibullus. (PR: 6 hours of Latin literature numbered 304 or above or equivalent)
505	Readings in Vergil. 3 hrs.
	Introduction to the poetry of Vergil, especially Vergil's Aeneid, and to to the culture and ideology of the Augustan principate. (PR: 6 hours of Latin literature numbered 303 or above, or equivalent)
506	Horace: Odes, Epodes, Epistles. 3 hrs.
000	A close reading in Latin of selections from Horace's non-satirical poetry, with special attention to its literary context. (PR: 6 hours of Latin literature
	numbered 303 or above, or equivalent)
507	Livy's History of Rome. 3 hrs.
	A close reading in Latin of selections from Livy's history poetry, with special attention to its literary and cultural contexts. (PR: 6 hours of Latin literature numbered 303 or above, or equivalent)
509	Roman Satire: Horace, Martial, Juvenal. 3 hrs.
	Close readings in Latin of selections from the satires of Horace and Juvenal and the epigrams of Martial. (PR: 6 hours of Latin literature numbered
510	304 or above or equivalent) Tacitus (Selections From): Annals, Agricola. 3 hrs.
510	(PR: 6 hours of Latin 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)
585-588 625	Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. History and Development of the Latin Language. 3 hrs.
025	This course examines the linguistic, geographic, cultural and material concerns that influenced the development of the Latin language.
640	Advanced Prose Composition. 3 hrs.
	A close study of advanced Latin grammar and style through composition in Latin.
660-665	<b>Special Author in Latin Literature. 3 hrs.</b> A detailed study of Latin of a single author. Special attention will be given to style, genre, literacy and cultural contexts, and study of secondary
	sources on the author.
681	Thesis. 1- 6 hrs.
	Students will develop an extensive body of knowledge on a particular topic, author, or issue. This knowledge will cover primary and secondary sources, and secondary sources will include current theoretical approaches. Students will synthesize this knowledge ina comprehensive paper, the development of which will include drafting, revision, redrafting, final copy and
	presentation. Students will work with a thesis director and a committee throughout the process. (PR: Instructor Permission)
682-683	Special Topics in Latin Literature. 1-4 hrs.
	These courses are designed to provide instruction to students in Latin authors or topics that are not part of the regular curriculum. (PR: Instructor
685-688	Permission) Independent Study in Latin Literature. 1-4 hrs.
000-000	These courses are designed to provide instruction to students in Latin authors or topics that are not part of our regular curriculum. (PR: Instructor
	Permission)
LEADERSHIP STUDIES (LS)	
500	Introduction to School Leadership. 3 hrs.
510	Examination of fundamental purposes, functions, and structure of public schools. <b>The Principalship. 3 hrs.</b>
	The Principalship is a study of school management as it relates to ethical behavior, and to support services, information systems, fiscal matters, and
	facility utilization and maintenance.
515	Instructional Leadership. 3 hrs.
	This course is designed to develop skills in instructional leadership, including instructional supervision, instructional strategies, program development, instructional evaluation, and human relations.
520	Administration of Elementary, Middle and Secondary Schools. 3 hrs.
	This course addresses the concerns of the school leader, including instruction, learning, communication, discipline, parental involvement,
	instructional organization, climate, facilities, professional development, and personnel practices. Emphasis is placed on the physical, social/ emotional, and cognitive/intellectual characteristics of children and the implications for developmentally appropriate school administration.
	emotional, and cognitive/ intenettual characteristics of children and the implications for developmentally appropriate school administration.

530	Human Relations. 3 hrs.
550	This course assesses and develops students' knowledge and skills in interpersonal relations and ethical practices. It provides structured experiences
	in group processes, verbal and non-verbal communications, leadership styles, and team building.
532	Human Relations in the Public Sector. 3 hrs.
	This course is designed to help prospective leaders in the public sector establish and maintain positive interpersonal relationships with their
	constituents.
535	Technology and the Classroom. 3 hrs.
	This course is designed to examine the effects of technology, both pedagogical and practical, on the educational process.
550	Schools as Systems. 3 hrs.
	This course assesses and develops students' knowledge and skills in change strategies, school cultures, systems theory, and understanding of the school in relation to other systems, agencies and organizations.
561-563	Professional Development. 1-4 hrs.
001000	These courses and activities are designed to meet the specific in-service needs of public school administrators. Credit in these courses may be used
	for certificate renewal and salary upgrading but not in degree programs.
580	Special Topics in Leadership. 1-9 hrs.
	To provide the master's level student an opportunity to examine selected issues in leadership and to apply their findings to the field of study.
585-588	Independent Study 1-4 hrs.
C00	By arrangement only.
600	School Personnel Administration 3 hrs. This course offers an examination of personnel functions including recruitment, selection, orientation, evaluation, and retention with particular
	emphasis on staff development.
606	Planning, Research and Evaluation for School Leaders. 3 hrs.
	This course is designed to avail potential school administrators with an understanding of planning strategies, academic research, action research,
	and program evaluation methods, with the intent of their being able to write a cogent, data-based school improvement plan.
610	Leadership for School Improvement. 3 hrs.
	Leadership preparation for developing and implementing a shared vision and strategic plans focused on teaching and learning, implementing
	change, applying leadership theory and acting with understanding of society's influences.
612	Education Technology for Administrators. 3 hrs. This course provides the requisite knowledge and skill for effective use of educational technology in instruction leadership including leadership and
	vision; learning and teaching; productivity and professional practice; support, management and operations; assessment and evaluation; and social,
	legal, and ethical issues.
615	Leadership in the Public Sector. 3 hrs.
	This course will enable potential leaders in the public sector to define and evaluate personal and organizational goals and to develop strategies to
	achieve shared goals.
616	Governance of Higher Education. 3 hrs.
617	This course is designed to develop an understanding of the structure of governance of multi-campus public higher education systems.
617	Student Affairs Administration in Higher Education. 3 hrs. This course surveys the purpose and functions of student personnel administration in higher educational institutions and the administrative
	procedures developed to accomplish these purposes.
618	History of American Higher Education. 3 hrs.
	This course will present a historical overview of the factors that influence the development of higher education in America.
625	Human Resources Management. 3 hrs.
<u></u>	This course develops knowledge of the major functions and tasks necessary for the development of human resources.
626	<b>Institutional Advancement. 3 hrs.</b> This course will require students to understand the broad area of institutional advancement, including major campaigns, donor research, donor
	recognition programs, restricted gifts, etc.
630	School and the Community. 3 hrs.
	This course provides students the opportunity to study the concept of community, to examine relationship patterns, to explore the possibilities for
	combining the resources of the school and community in the interest of school improvement, and to evaluate communication strategies designed
	to enhance the school-community relationship.
645	Community Relations in the Public Sector. 3 hrs.
	This course provides students the opportunity to study the concept of community, to examine relationship patterns, to explore the possibilities for
	combining the resources of the agency/institution and community in the interest of achieving the unit's mission and to evaluate communication strategies designed to enhance the relationship.
646	Administration of Community and Technical Colleges. 3 hrs.
	This course provides an opportunity for students to examine a specific institutional type and explore its developmental and functional relationship
	within the total framework of higher education.
647	Adult and Continuing Education Administration. 3 hrs.
	This course develops an understanding of the principles, concepts, and processes involved in planning learning experiences for adults within the
655	framework of higher education. Externship. 1-9 hrs.
055	This is a field-based course designed for practicing professionals. (PR: Consent)
675	Legal and Policy Issues. 3 hrs.
	This course examines the principal's role and responsibility related to law and administrative policy.
685	Internship: Portfolio Assessment. 3 hrs.
	This course provides training and assessment experiences for students seeking initial certification as a school principal. The student's degree
<b>CO1</b>	portfolio and capstone assessment will be completed. (PR: Completion of degree/certification courses and consent)
691	<b>The Attendance Director. 3 hrs.</b> This course is designed to develop the skills needed for the school attendance director to manage attendance programs, policies, and programs.
692	Inis course is designed to develop the skills needed for the school attendance director to manage attendance programs, policies, and programs. Internship: School Social Services. 3 hrs.
	This course will require school social services of this.
	skills required for managing school social services and student attendance programs.
693	School Law for Support Personnel. 3 hrs.
	This course provides the student with a working knowledge of school law and other legal matters as they pertain to the attendance director. The
	focus of this course is on those laws dealing with mandatory school attendance and juvenile matters. (PR: Admission into the Social Services/
	Attendance program)

700	Superintendency. 3 hrs.
703	This course examines the roles, relationships, behaviors and competencies which characterize school superintendents and their staffs. <b>Research Design. 3 hrs.</b>
703	The purpose of this doctoral research methods course is to prepare College of Education doctoral students to design and carry out research at the doctoral level.
705	Administrative Theory. 3 hrs.
707	This course analyzes administrative theories and their application to organizational leadership and management. <b>Ethical Theories. 3 hrs.</b>
	The course focuses on the primary ethical theories and the ethical reasoning processes which are representative of each, providing students opportunities to analyze decisions against existing ethical models and reinforce or reform those decisions in light of moral principles.
710	<b>Principles of Leadership. 3 hrs.</b> This course is a study of the characteristics and behaviors of leaders. Emphasis is on the development of understandings and abilities which will work in different situations.
714	Administration and Organization of Higher Education. 3 hrs.
719	This course is a survey of higher education with attention to administrative functions at the campus level. Introduction to Doctoral Studies. 1 hr.
110	This course is designed to introduce students to the tasks and processes involved in the completion of the doctoral requirements. (PR: Admission to the Doctoral Program)
720	Public School Finance. 3 hrs.
	This courses examines concepts in the financing and economics of public education. (PR: Principal or supervisor certificate or consent)
724	Organizational Analysis. 3 hrs.
	This course is an interdisciplinary approach to the study of organizational structure, relationships, and functions focusing on problems and alternatives for solving them.
725	Higher Education Finance 3 hrs.
730	This course examines basic concepts in the financing and economics of higher education. Facility Planning and Management. 3 hrs.
150	This course teaches the systematic collection and utilization of data in planning for educational facilities. (PR: Principal or supervisor certificate or
740	consent) Public School Law. 3 hrs.
740	This course presents the effect of case, statutory, and constitutional law as adjudicated in state and federal courts on public school operation. (PR:
	Principal or supervisor certificate or consent)
745	<b>Higher Education Law. 3 hrs.</b> This course presents the effect of case, statutory, and constitutional law as adjudicated in state and federal courts on higher education operation.
755	Internship: Administration in Higher Education 3 hrs.
756	This course provides a field experience in higher education administration. (PR: Consent) Current Issues in Higher Education. 3 hrs.
	This course focuses on current and emerging problems of higher education. It deals with both societal and internal factors which impinge on the administration of colleges and universities.
760	<b>Politics of Education. 3 hrs.</b> This course explores the social process of governance in the public schools including higher education. The milieu of federal, state, and local inputs
	will be explored.
762	<b>The Politics of Higher Education. 3 hrs.</b> This course is designed to develop an understanding of the complex internal and external forces and the political processes that affect higher
764	education institutions. Advanced Research I. 3 hrs.
	This course will develop knowledge about and skills in using quantitative and qualitative methods in educational research. It will further prepare doctoral candidates for comprehensive exams as well as dissertation research.
765	Advanced Research II in Leadership Studies. 3 hrs. This is an advanced research course directed toward the preparation of a thesis or dissertation. (PR: Consent)
770	Practicum. 3 hrs.
771-772	This is a highly individualized cooperative educational administration experience between the college and another public agency. (PR: Consent) School District Leadership 3-6 hrs.
775	This is an individualized cooperative field experience in district level school administration. (PR: Consent) Seminar. 3 hrs.
776	This course is a concentrated analysis of current problems in educational administration. (PR: Consent) Computer Analysis in Leadership Studies Research. 3 hrs.
110	This course provides the development of skills and competencies in data analysis and management. It is designed for doctoral students in the data analysis stage of dissertation preparation. (PR Consent)
780	Special Topics. 1-12 hrs.
787	This course requires study, reading and research in an approved area of education and supervision. (PR: Consent) Contemporary First Amendment Issues in Education. 3 hrs.
101	This course will examine contemporary first amendment issues as they relate to education in public education and higher education. (PR: Admission to Ed.S or Ed.D. program)
797	Doctoral Research. 1-12 hrs.
	Dissertation research is the purpose of this course. (PR: Consent)
	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: GSM 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.

#### $\mathbf{502}$ Research Methods. 3 hrs. This course provides the student with the necessary knowledge to perform business research. Emphasis is placed on applicable research techniques. In addition, several statistical techniques are covered including multiple regression and analysis of variance. (PR: MGT 500) 520 **Operations Management. 3 hrs.** An examination of the design and operation of systems for the creation of goods and services in both manufacturing and non-manufacturing organizations. Emphasis is placed upon the application of quantitative and conceptual decision tools for the planning and control of production systems. (PR: MGT 500 or MTH 203 and MGT 218; and MGT 320 or MKT 511; and ECN 253 or ECN 501) 601 Quantitative Methods for Business. 3 hrs. The use of quantitative methods for managerial decision making. A review of basic calculus and statistics as required in business. Other topics include decision analysis, linear programming, and queuing. (PR: M.B.A. admission) 620 Human Resource Management. 3 hrs. The study of policies, methods, and techniques utilized in personnel management and human relations. Specific attention is given to problems of recruitment, selection, compensation, motivation, communications, training, service and benefit programs, performance evaluation, safety, discipline, business ethics, and community relations. (PR: GSM admission or permission of GSM academic advisor) 630 Management and Supervisory Skills Development. 3 hrs. An analysis and application of personal and organizational skills associated with the effective management of both public and private sector organizations. Skills to be developed or refined include time management, decision making, delegation, stress management, oral and written communication, team-building and others. Applied exercises, case studies, simulation, role play, films, and other learning methods are emphasized. (PR: MGT 672) 650-651 Special Topics. 1-3; 1-3 hrs. (PR: Permission of the division head and full M.B.A. admission or permission of GSM academic advisor) 660 Independent Study. 1-4 hrs. Independent study of a specific nature under the supervision of a qualified faculty member. Hours of credit are determined by the magnitude of the project. (PR: permission of division head or GSM academic advisor) 672 Organizational Behavior. 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 organizational behavior and theory. (PR: GSM admission and MKT 511) 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, and role of government in manpower administration. (PR: GSM admission) 674 Production/Operations Management. 3 hrs. A study of operations management methods used in production, manufacturing, services, and other business operations. Includes project management, capacity planning, and transportation problems. (PR: Permsion of GSM academic advisor and MGT 500) Problems in Labor-Management Relations. 3 hrs. 675 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. (PR: GSM admission) 676 Organization Theory and Design. 3 hrs. An analysis of organizational systems and subsystems incorporating traditional, behavioral, and situational approaches to organizational and work unit design. Emphasizes environmental interface and interdependencies as functions of internal systems phenomena (PR: M.B.A. admission) 680 Entrepreneurship. 3 hrs. The management of small business emphasizes how they are started and financed, how they produce and market their products and services and how they manage their human resources. (PR: GSM Admission) 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: GSM admission) 696 Administrative Policy and Strategy. 3 hrs. Capstone graduate business course for Master of Science students (Human Resource Management and Health Care Administration). Emphasis on policy and strategy issues in a service and/or public setting instead of within a "for-profit" environment. (PR: Permission of GSM assistant director) 699 Business Policy and Strategy. 3 hrs. The study of administrative decision making under conditions of uncertainty. Policy construction at top administrative levels with emphasis on strategy and ethics with consideration of major functions of the business organization. (PR: Permission of GSM academic advisor) **MANAGEMENT INFORMATION SYSTEMS (MIS)** 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: GSM admission) Healthcare Communications Technology and Telematics. 3 hrs. 680 A presentation and analysis of the primary and emerging technological means of communication, collaboration, and information search and retrieval within the healthcare and medical fields. **MARKETING (MKT)** 511 Marketing and Management. 3 hrs.

A comprehensive survey of the fundamental principles of management and marketing applicable to all organizations. Provides the student with a basis for analyzing appropriate situations in a management/marketing framework.

#### 580-581 Special Topics. 1-4; 1-4 hrs.

625 Marketing Strategy for Hospitality and Tourism. 3 hrs.

Examination of marketing principles and the unique aspects of services marketing for the purpose of strategic decision making, marketing management and developing market plans in the tourism and hospitality industry.

650-651 Special Topics. 1-3; 1-3 hrs.

(PR: Permission of the division head and full M.B.A. admission)

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

Independent study of a specific nature under the supervision of a qualified faculty member. Hours of credit are determined by the magnitude of the project. (PR: MKT 682 and permission of division head and academic advisor)

682	Advanced Marketing Management. 3 hrs.
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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: M.B.A. admission or permission of
	GSM academic advisor)
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)
685	Marketing Problems. 3 hrs.
	Determination of the marketing mix within the framework of the problem-solving and decision-making process. (PR: MKT 682)
687	Seminar in Marketing. 3 hrs.
699	An advanced study of basic concepts of current problems in Marketing. Seminar discussions and research projects. (PR: MKT 682)
688	Advanced Transportation. 3 hrs. Current national transportation problems and a review of the various modes including history of the modes. (PR: MKT 682)
689	Advanced Physical Distribution. 3 hrs.
	A 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)
500	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 a 5-Adult (or 5-12) mathematics specialization. May not be used for any degree offered by the Department of
	Mathematics.
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 a 5-Adult (or 5-12) mathematics specialization. May not be used for any degree
	offered by the Department of Mathematics.
518	Biostatistics. 3 hrs.
	Statistical skills for biological/biomedical research, with emphasis on applications. Experimental design/survey sampling, estimation/hypothesis
	testing procedures, regression, ANOVA, multiple comparisons. Implementation using statistical software such as SAS, BMDP. May not be used for any degree offered by the Department of Mathematics.
519	Forensic Statistics. 3 hrs.
	Basic theory of probability and statistics, adds from Bayes' Theorem for transfer evidence, likelihood ratio, population and statistical genetics,
	statistical issues in paternity testing and mixtures, and presenting evidence. May not be used for any degree offered by the Department of
527	Mathematics. (PR: Admission to M.S. program in Forensic Science, or permission) Advanced Calculus I. 3 hrs.
521	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.
528	Advanced Calculus II. 3 hrs.
	A rigorous development of algebra and topology of Euclidean spaces, differentiability and integrability of functions of several variables. (PR: MTH 527)
545	Probability and Statistics I. 3 hrs.
	Probability spaces, conditional probability, and applications. Random variables, distributions, expectations, and moments.
546	Probability and Statistics II. 3 hrs.
548	Parametric statistics: sampling methods, estimation of parameters, tests of hypotheses. Regression, analysis of variance. (PR: MTH 545) Modern Geometries. 3 hrs. I.
340	Finite geometries, basic background material for the modern development of Euclidean Geometry, other geometries.
549	Projective Geometry. 3 hrs.
	Projective geometry using both synthetic and algebraic methods. (PR: MTH 300)
550	<b>Modern Algebra I. 3 hrs.</b> Structure of the abstract mathematical systems; fields, rings groups, with illustrations and applications from number theory.
552	Modern Algebra II. 3 hrs.
	Continuation of MTH 550. (PR: MTH 550)
580-583	Special Topics in Mathematics. 1-4; 1-4; 1-4; 1-4 hrs.
585-588	Courses on special topics not listed among the current course offerings. (PR: Permission) Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.
303-300	(PR: Permission)
589	Seminar for Teaching Assistants. 1 hr.
	An introduction to techniques of teaching mathematics with emphasis on lower-level mathematics courses. (PR: Assignment to teach mathematics
610	as a teaching assistant; CR/NC) Advanced Modern Algebra. 3 hrs.
010	Advanced topics in algebraic structures, applications, and related topics beyond a first-year course in modern algebra. (PR: MTH 552)
613	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
615	areas of application and will use a wide range of undergraduate mathematics. Partial Differential Equations. 3 hrs.
015	Elementary partial differential equations. Heat equation, LaPlace's equation, separation of variables, Fourier series, vibrating strings, eigenvalue
	problems, finite differences, Bessel functions, Legendre polynomials.
616	Advanced Differential Equations. 3 hrs.
	Differential equations are studied qualitatively. Topics include the existence and uniqueness of solutions and the behavior of solutions including the stability of nonlinear systems, periodic solutions, and approximation using perturbation methods.
630	Topology I. 3 hrs.
-	First course in topic of topology. Basics of point-set topology: metric and topological spaces, continuity, connectedness, compactness, products,
<b>601</b>	quotients. Surfaces and simplicial complexes, Euler characteristics.
631	<b>Topology II. 3 hrs.</b> First course in algebraic topology. Homotopy, fundamental group, simplicial homology. (PR: MTH 630 and MTH 550)
632	Advanced Topology. 3 hrs.
	Advanced tonics in tonology applications, and related tonics beyond a first year course in tonology (PR: MTH 631)

Advanced topics in topology, applications, and related topics beyond a first year course in topology. (PR: MTH 631)

635	Graph Theory and Combinatorics. 3 hrs. The course is designed to introduce students in mathematical sciences to the theorems, techniques and applications of graph theory and
640	combinatorics. (PR: Permission) Complex Variables I. 3 hrs.
641	Complex numbers, analytic functions, properties of elementary functions, integrals, series, residues and poles, conformal mapping. <b>Complex Variables II. 3 hrs.</b> Continuation of MTH 640. (PR: MTH 640)
642	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 643)
643	Numerical Analysis. 3 hrs. The theory and technique of numerical computation involving the difference calculus, the summation calculus, interpolation methods, solutions of equations, and methods of solution of ordinary differential equations.
650	Real Variables I. 3 hrs. A study of measure and integration and related topics. (PR: MTH 528)
651	Real Variables II. 3 hrs. Continuation of MTH 650. (PR: MTH 650)
655	Number Theory. 3 hrs. A survey of some basic properties of the integers: divisibility (prime numbers, factorization, perfect numbers), congruences (modular arithmetic, linear and quadratic congruences, the Chinese Remainder Theorem), and Diophantine equations.
660	Stochastic Processes. 3 hrs. Theory and applications of Markov chains. (PR: MTH 545)
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 546)
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 545; REC: MTH 546)
663	<b>Time Series Forecasting. 3 hrs.</b> 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.
667	Numerical Partial Differential Equations. 3 hrs. Finite difference methods for elliptic, parabolic, and hyperbolic PDEs. Study of properties such as consistency, convergence, and stability. Computer implementation.
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: Permission)
681 690-693	Thesis. 1-6 hrs. Special Topics. 1-4 hrs.
	MICROBIOLOGY, IMMUNOLOGY AND MOLECULAR GENETICS (MCB)
620	Principles of Medical Microbiology. 6 hrs. I. The study of microorganisms, immunobiology, immunologic diseases, host resistance and the means by which diseases are produced and prevented.
620 622	Principles of Medical Microbiology. 6 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) Current Topics in Molecular Biology. 1 hr. Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component.
	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or</li> </ul>
622	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component.</li> <li>Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> </ul>
622 631 632 642	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology II. 3 hrs.</li> <li>This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.</li> </ul>
622 631 632	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology II. 3 hrs.</li> <li>This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of</li> </ul>
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622 631 632 642 643	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology II. 3 hrs.</li> <li>This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.</li> <li>Principles of Immunology. 3 hrs. I.</li> <li>Basic principles of the immune response system of humans and related mammals. Concepts of B &amp; T cell function and interrelationships emphasized. (PR: Cellular and Molecular Biology)</li> <li>Molecular Aspects of Pathogenesis. 3 hrs.</li> <li>An in depth study of molecular mechanisms of bacterial, viral, and immunemediated disease processes. Course Requirements: BMS 600 and BIC</li> </ul>
622 631 632 642 643 648 660	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.</li> <li>Principles of Immunology. 3 hrs. I.</li> <li>Basic principles of the immune response system of humans and related mammals. Concepts of B &amp; T cell function and interrelationships emphasized. (PR: Cellular and Molecular Biology)</li> <li>Molecular Aspects of Pathogenesis. 3 hrs.</li> <li>An in depth study of molecular mechanisms of bacterial, viral, and immunemediated disease processes. Course Requirements: BMS 600 and BIC 620</li> <li>Diagnostic Virology. 3 hrs., II.</li> <li>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)</li> </ul>
622 631 632 642 643 648 660 510	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>Graduate Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.</li> <li>Principles of Immunology. 3 hrs. I.</li> <li>Basic principles of Immunology. 3 hrs. I.</li> <li>Basic principles of Handoneology. 3 hrs. I.</li> <li>An advanced treatment of microbiology in the manas and related mammals. Concepts of B &amp; T cell function and interrelationships emphasized. (PR: Cellular and Molecular Biology)</li> <li>Molecular Aspects of Pathogenesis. 3 hrs.</li> <li>An in depth study of molecular mechanisms of bacterial, viral, and immunemediated disease processes. Course Requirements: BMS 600 and BIC 620</li> <li>Diagnotic Virology. 3 hrs., II.</li> <li>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.</li></ul>
<ul> <li>622</li> <li>631</li> <li>632</li> <li>642</li> <li>643</li> <li>648</li> <li>660</li> <li>510</li> <li>511</li> </ul>	<ul> <li>Principles of Medical Microbiology. 6 hrs. I.</li> <li>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)</li> <li>Current Topics in Molecular Biology. 1 hr.</li> <li>Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research.</li> <li>Medical Microbiology I. 3 hrs.</li> <li>This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology I (Physiology/Genetics). 4 hrs. II.</li> <li>An advanced treatment of microbiology with emphasis on the molecular aspects of anatomy, taxonomy, and physiology and genetics of microorganisms.</li> <li>Principles of Immunology. 3 hrs. I.</li> <li>Basic principles of the immune response system of humans and related mammals. Concepts of B &amp; T cell function and interrelationships emphasized. (PR: Clefful and Molecular Biology)</li> <li>Molecular Aspects of Pathogenesis. 3 hrs.</li> <li>An in depth study of molecular mechanisms of bacterial, viral, and immunemediated disease processes. Course Requirements: BMS 600 and BIC 620</li> <li>Diagnostic Virology. 3 hrs. II.</li> <li>A comprehensive survey of methodologies used to detect and characterize viral specific antibiodies and antigens and the status of cellular immunity in virus infected hosts. (PR: MCB 620)</li> <li>MINE SAFETY (MSF)</li> <li>Survey of Mining. 3 hrs.</li> <li>An overview of mining to provide the participant with a general understanding of mining history, development systems terminology, procedures, methods and safety and health activitites.</li> <li>Mine Safety Program Analysis. 3 hs.</li></ul>
622 631 632 642 643 648 660 510	<ul> <li>Principles of Medical Microbiology. 6 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)</li> <li>Current Topics in Molecular Biology. 1 hr. Critical discussion of current literature/concepts. Participants present published research papers on topic(s) with a molecular biology component. Presentations are followed by discussion/evaluation of the contribution of the research. Medical Microbiology I. 3 hrs. This course will present the major aspects of the field of microbiology with emphasis on selected pathogenic organisms. (PR: BMS 600 or equivalent)</li> <li>Medical Microbiology II. 3 hrs. This course will present a continuation of the major aspects of the field of medical microbiology with emphasis on the major pathogenic organisms. (PR: BMS 600 and MCB 631)</li> <li>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. Principles of Immunology. 3 hrs. I. Basic principles of the immune response system of humans and related mammals. Concepts of B &amp; T cell function and interrelationships emphasized. (PR: Celluar and Molecular Biology) 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 Diagnostic Virology. 3 hrs. I. 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)</li> <li>MINE SAFETY (MSF) Survey of Mining. 3 hrs. Mine Safety Program Analysis. 3 hrs. </li> </ul>

514	Hazard Control in Mining. 3 hrs.
E95	A study of how to recognize accident potential throughout the mining industry. Statistics/Biostatistics, Epidemiology and Industrial Hygiene. 3 hrs.
525	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
F07	of airborne particles. Special topics: sampling and evaluating airborne asbestos dust. (PR: Module #1 of the Advanced Industrial Hygiene Program)
527	<b>Physical and Biological Health Hazards in Mining and Milling Operations. 3 hrs.</b> Physical hazards: heat, noise and radiation. Biological hazards: atmospheric transport of microorganisms that cause 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	A study of the analytical tools used in the recognition, evaluation and control of exposure to nazards in the Pinning Industry. 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.
625	A study of the operation of hoisting haulage equipment used in the mining industry. Philosophical Concepts of Mine Safety and Health. 3 hrs.
023	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.
020	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.
635	A study of the principles, techniques and procedures of investigations of mine accidents including attendance in court and report writing. Sampling, Industrial Ventilation, and Respiratory Protective Equipment for Mining and Milling Operations. 3 hrs.
000	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
637	analysis of the samples. (PR: Module ?1 of the Advanced Industrial Hygiene Program) Stress and its Impact on Safety and Health in Mining. 3 hrs.
057	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.
690-692	Individual research on a specific problem of concern to the student and of significance to mine safety. <b>Seminar, 1-4 hrs.</b>
050-054	
	MUSIC (MUS)
505	Music Technology Review. 3 hrs.
000	Review of music software and DAW hardware for classroom instruction, assisted practice, notation, MIDI and recording.
510	Introduction to World Music. 3 hrs.
	This course will survey native musics of Africa, Asia, and the Americas as an aspect of culture. No formal background in music is required, as
F11	students will learn techniques for listening and articulating responses to music.
511	<b>Orff-Schulwerk. 3 hrs.</b> Experiences in Orff-Schulwerk include use of poetry, rhymes, games, songs, and dances in teaching music. Singing, movement, and instrument
	playing and the spoken word are the primary learning tools. (PR: Graduate standing and one course in elementary music methods)
520	Principal Ensemble. 1 hr.
	Chamber Choir, Chorus, Orchestra, Symphonic Band, Wind Symphony, 12:00 Jazz Ensemble; Audition may be required. May be repeated for credit
521	Secondary Ensemble. 1 hr.
	Selected chamber and small ensembles, such as Guitar Ensemble, Brass Quintet, String Ensemble. Audition may be required. May be repeated for credit.
526	American Music and Its Influences. 3 hrs.
	Musical and cultural influences of European, West Africa, Caribbean, and Native American societies on United States music from 1650-1920.
	Specific application to concert music. (PR: Graduate standing or permission of instructor)
532	Electronic Music Composition. 2 hrs.
	The theory and practice of electronic media used for musical composition. History, Synthesis, and Digital Audio processing will be emphasized. (PR: Graduate standing in music)
540	Graduate Standing in Indisc) Graduate Theory Review. 3 hrs.
	Review of undergraduate music theory for entering graduate students who are deficient or wish to review music theory skills.
550	Teview of undergraduate maste theory for entering graduate statement who are denoted of which to review maste theory shints.
330	Guitar Literature. 2 hrs.
550	<b>Guitar Literature. 2 hrs.</b> A survey of the literature for guitar from c. 1400 to the twentieth century; to expose the guitarist to many of the important composers and their
	<b>Guitar Literature. 2 hrs.</b> A survey of the literature for guitar from c. 1400 to the twentieth century; to expose the guitarist to many of the important composers and their works.
551	<b>Guitar Literature. 2 hrs.</b> A survey of the literature for guitar from c. 1400 to the twentieth century; to expose the guitarist to many of the important composers and their
	Guitar Literature. 2 hrs. A survey of the literature for guitar from c. 1400 to the twentieth century; to expose the guitarist to many of the important composers and their works. Guitar Pedagogy. 2 hrs.

570	Music Production Practicum. 1 hr.
579a-d	Specialized practical training in aspects of performance production, preparation, and execution. May be repeated once. Graduate Class Piano. 1 hr.
	Class instruction progressing from beginner to advanced. Development of literature and skills needed to pass the prano proficiency exam. (PR: Permission)
580-583 585-588	Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.
591-594	Workshop. 1-4; 1-4; 1-4; 1-4 hrs.
601	Orchestral Literature. 3 hrs.
602	A survey of orchestral literature from the 17th century to the present. Band and Wind Ensemble Literature. 2 hrs.
	A comprehensive survey of the literature for concert band and wind ensemble.
604a	<b>Keyboard Literature. 2 hrs.</b> 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,
604c	quintet, and various other combinations. Song Literature. 2 hrs.
	The song literature of Western Europe and America, also including contemporary material from other countries; interpretation, song study,
604d	program building, languages, and interpretation of accompaniments. For singers and accompanists. Choral Literature. 2 hrs.
	A comprehensive study of the forms and styles of Choral Composition from Renaissance to present day.
604f	<b>Percussion Literature. 2 hrs.</b> A survey of instructional and performance literature for solo brass instruments and brass ensembles.
604g	String Literature. 2 hrs.
604h	A survey of instructional and performance literature for solo violin, viola, cello, bass, guitar, and string ensembles. Woodwind Literature. 2 hrs.
	A survey of instructional and performance literature for flute, oboe, clarinet, bassoon and/or saxophone in both solo and ensemble settings.
604i	<b>Brass Literature. 2 hrs.</b> A survey of instructional and performance literature for solo brass instruments and brass ensembles.
610	History and Philosophy of Music Education. 3 hrs.
611	Historical study and philosophical analysis of objectives, rationales and justifications for the study of music in the public schools.
611	<b>Music Psychology and Learning Theory. 3 hrs.</b> Theories of learning, neuromuscular, and psychological processes applied to musical development, and their applications to teaching, performance
	and curriculum development.
612	<b>Projects and Problems in Music. 3 hrs.</b> Detailed investigation of problems and/or projects in the student's area of specialization.
614	Seminar in Teaching Music Appreciation. 2 hrs.
	Methods and materials for teaching music appreciation. Required of all graduate assistants teaching MUS 142, Music Appreciation. May be repeated for credit.
615	Advanced Techniques for Marching Band. 3 hrs.
	Advanced methods, materials, and techniques for training and administering a marching band program, including show planning, drill writing, arranging, and administration.
616	Music Curriculum and Administration. 3 hrs.
617	Study of the organization of the school music program including budget, scheduling, organization and curriculum design. Seminar in Music Education. 3 hrs.
017	Specialized study of advanced concepts and current problems in music education.
618a	Administration of Instrumental Music. 3 hrs.
618b	The planning and operation of the instrumental program and the details of programming the work in a school system. Administration of Choral Music. 3 hrs.
	A study of the organization of choral music programs including; recruitment, auditions, scheduling, rehearsal arrangement, programming, touring,
619a	and budget. Seminar in Vocal Pedagogy. 2 hrs.
	A study of the techniques of singing and their application to private and class instruction. Emphasis placed upon diagnosis of problems, and
619b	teaching under supervision. 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 Techniques and Materials. 3 hrs. Advanced study of the methods and materials of instrumental music instruction at all levels
620b	Choral Techniques and Materials. 3 hrs.
621	Advanced study of the methods and materials of choral music instruction. Music Research Methods. 3 hrs.
021	Introduction to bibliographic sources, historical, analytical and empirical research methods applied to music and music education.
622	Styles and Analysis. 3 hrs. Identification of structural principles and compositional idioms characteristic of historical eras and representative composers from the Ars Antiqua
	to the present day.
629	Choral Conducting and Interpretation. 3 hrs.
	Advanced study in literature, conducting techniques, score preparation and analysis, interpretation, rehearsal planning and execution for the choral ensemble. May be repeated for credit three times.
630	Instrumental Conducting and Interpretation. 3 hrs.
	Advanced study in conducting techniques, score preparation and analysis, interpretation, rehearsal planning and instrumental ensemble literature. May be repeated for credit three times.
640a	Music Theory. 3 hrs.
640b	Analytical and writing techniques of 19th and 20th Century music. 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	Due ondrives and Techniques for Flow entry. Music (Condes K.C.) 2 has
042	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.
645	Original Composition. 2 hrs.
645 646	Advanced Choral Arranging. 3 hrs.
040	
	Techniques of choral composition and arranging with emphasis on the mixed choir. Arrangements and original works sung by choral groups and
647	conducted by students. Advanced Band Arranging, 3 hrs.
047	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. 3 hrs.
040	Scoring compositions from other media for modern orchestras of various sizes.
649	Advanced Jazz Arranging. 3 hrs.
045	Advanced study of jazz arranging for combo through big band instrumentation.
650	Music of the Middle Ages. 3 hrs.
050	The historical and stylistic study of music of the Middle Ages, ca. 600 to ca. 1400.
651	Music of the Renaissance. 3 hrs.
051	The historical and stylistic study of music of the Renaissance, ca. 1400 to ca. 1600.
652	Music of the Baroque Era. 3 hrs.
002	The historical and stylistic study of music of the Baroque Era, ca. 1600 to ca. 1750.
653	Music of the Classical Era. 3 hrs.
000	The historical and stylistic study of music of the Classical Era, ca. 1720 to ca. 1820.
654	Music of the Romantic Era. 3 hrs.
001	The historical and stylistic study of music of the Romantic Era, ca. 1800 to ca. 1900.
655	Music ca. 1900 to the Present. 3 hrs.
	The historical and stylistic study of music ca. 1900 to the present.
656	Seminar in Performance Practice. 2 hrs.
	Students will prepare and perform music from a selected style period using editorial methods and research as appropriate to the chosen period.
	May be repeated for credit.
670	Current Trends in Music Education (PreK-5). 3 hrs.
	Methods and materials that engage children in musical learning experiences from an infancy through grade 5, including curriculum development,
	designing age-appropriate activities; study of current research in music learning.
675	Music in Early Childhood (Birth to Age 5). 3 hrs.
	Methods and materials for music learning in earliest childhood to include developmentally appropriate curriculum and activities, ways that babies
	and toddlers learn, and current trends in early childhood music education.
679	Problem Report. 1-3 hrs.
681	Thesis. 1-6 hrs.
	Applied Music
680	Saxophone. 1-2 hrs.
682	Flute. 1-2 hrs.
683	Oboe. 1-2 hrs.
684	Clarinet. 1-2 hrs.
685 685	Bassoon. 1-2 hrs.
686 687	French Horn. 1-2 hrs.
687 688	Trumpet. 1-2 hrs. Trombone. 1-2 hrs.
689	Euphonium. 1-2 hrs.
690	Tuba. 1-2 hrs.
691	Violin. 1-2 hrs.
692	Viola, 12 hrs.
693	Cello. 1-2 hrs.
694	String Bass. 1-2 hrs.
695	Piano. 1-2 hrs.
696	Voice. 1-2 hrs.
697	Organ. 1-2 hrs.
698 600	Percussion. 1-2 hrs.
699	Guitar. 1-2 hrs.

# NURSING (NUR)

NURSING (NUR)	
580-584	Graduate nursing courses are open only to those students admitted to the nursing program. 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.
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.
010	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.
619	
019	Practicum: Teaching in Nursing. 3 hrs.
<b>COO</b>	Guided experience in didactic teaching of nursing clinical teaching, supervision and evaluation of students.
620	Advanced Pathophysiology I. 2 hrs.
	Advanced knowledge of body systems altered by disease and/or injury. The body systems or diseases studied will include: cell, cardiovascular,
	pulmonary, digestive, musculoskeletal, neurologic and reproductive across the lifespan. (PR: Permission of instructor)
621	Advanced Pathophysiology II. 2 hrs.
	Advanced knowledge of body systems altered by disease and/or injury including hematologic genes, immunity, cancer, endocrine, renal, urologic,
	and integumentary across the lifespan. (PR: NUR 620)
622	Advanced Physical Assessment. 5 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 Practice I. 5 hrs.
	Provides advanced knowledge and nursing management of common and acute selflimiting 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 Practice II. 5 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 - Administration. 3 hrs.
002	Focus is upon the role of the school nurse and family nurse practitioner in the school system. (PR: NUR 602, NUR 604 or permission)
634	School Nurse - School-Aged Children. 3 hrs.
034	Focus is upon the role of the school nurse and family nurse practitioner practitioner in providing care to the school-aged children. (PR: NUR 632
	or concurrent or permission)
642	Organizational Dynamics in Nursing. 3 hrs.
044	
C 4 4	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.
<i>c k c</i>	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)
663	Advanced Pharmacology I. 2 hrs.
	Focus on the science of drugs and the application to patient care across the lifespan. Principles of pharmacology covered include infectious diseases,
	fluids and electrolytes, peripheral nervous and cardiovascular systems. (PR: instructor permission)
664	Advanced Pharmacology II. 2 hrs.
	Focus is on the science of drugs and application to patient care across the lifespan. Drugs affecting the blood, respiratory, gastrointestinal, central
	nervous and endocrine systems. Anti-inflammatory, anti-allergic and immunologic drugs. (PR: NUR 663)
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.
	PARK RESOURCES AND LEISURE SERVICES (PLS)
500	Leisure and Aging. 3 hrs.
	A course presenting an overview of leisure services for the elderly. Topics include research results, theories, and modern day trends. A wellness
	model will be included.
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.

#### 550 Introduction to Off-Highway Vehicle Recreation. 3 hrs.

- A course designed to integrate off-highway vehicle recreation concepts, experiences, research trends, supply and demands, and management issues. **551** Planning, Design, and Construction of Off-Highway Vehicle Trail System. 3 hrs.
- Planning methodologies typically used by federal, state, and local governments. Includes assessment of resource and social value conflicts and partnership creation.

#### 552 Construction of OHV Trail Systems. 3 hrs.

A course designed to instruct students in contemporary methods and techniques of constructing OHV trails and related facilities.

#### 553 Operation and Management of OHV Trail Systems. 3 hrs.

Diagnosis of OHV problems and development of solutions based upon recognized trail standards and typical resource impacts.

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)

# 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. 8 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)

#### 621 Medical Pharmacology I. 6 hrs.

This course will encompass the core pharmacology concepts as well as drugs used in the treatment of infectious diseases, cancer, hematological matters, nervous system agents and cardiovascular drugs. (PR: BMS 600 or equivalent; REC: PHS 629 desirable)

#### 622 Medical Pharmacology II. 2 hrs.

This course will encompass the core pharmacology concepts as well as drugs used in the treatment of pulmonary, gastrointestinal, endocrine, renal and musculoskeletal diseases, drugs specific for men's and women's health, dermatological agents and toxicology. (PR: BMS 600 or equivalent; REC: PHS 629 desirable)

#### 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.

An in-depth presentation of pharmacological aspects of cardiovascular and pulmonary systems. Current knowledge, principles and methods used in cardiopulmonary research will be discussed. (PR: PMC 620 or PMC 643; consent of instructor)

#### 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: consent of instructor; PMC 610 or PMC 621 highly recommended)

655	<b>Toxicology Reviews. 1 hr.</b> This course will provide a presentation and discussion of current literature in the area of toxicology. Fundamental principles and new discoveries		
676-677	<ul> <li>will be emphasized.</li> <li>7 Special Topics. 1-4 hrs.</li> <li>Material on special areas of research of topics which are not routinely covered in existing courses.</li> </ul>		
	PHILOSOPHY (PHL)		
500	<b>Ancient Philosophy. 3 hrs.</b> Advanced study of major philosophers drawn from the ancient Greek and Roman period.		
501	Modern Philosophy. 3 hrs. Advanced study of major movements in philosophy from the 17th century on, including movements such as rationalism, empiricism, idealism, and existentialism.		
520	Metaphysics. 3 hrs. A study of what Aristotle called "first philosophy" or the study of being, later called metaphysics.		
521	Philosophy of Knowledge. 3 hrs.		
551	Advanced study of the nature and possibility of knowledge. <b>Philosophy of History and Culture. 3 hrs.</b> 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.		
555 560	Philosophy of Religion. 3 hrs. Theories of the nature and functions of religion, including the meaning of religious language and problems of belief. Philosophy of Politics and Power. 3 hrs.		
563	Advanced study of the significance or the place in human reality of political organization, negotiation, strategy, and power. 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.		
570	Philosophy of Logic. 3 hrs.		
	Advanced study of the nature of logic; whether logic is possible at all, how far it applies, and wether and how there can be conflicting logics.		
580-583 585-588	Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.		
598	Directed Readings in Philosophy. 3 hrs. I, or II.		
599	Advanced research adaptable to the needs of students. Regular consultations with the chairman and staff. <b>Humanities Seminar. 3 hr</b> s.		
	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		
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## **505 Optics Laboratory. 2 hrs.** A course in optical experiments encompassing geometrical and physical optics. This course is to be taken with Physics 304.

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	
521	Physics 314. <b>Modern Physics Laboratory. 2 hrs.</b> Laboratory exercises on modern physics topics encompassing both experiments of historic significance and current applications. To be taken with Physics 320, or equivalent.	
525	Solid State Physics. 3 hrs. The purpose of the course is to provide a broad introduction to the structures and physical properties of solids, which are of extraordinary importance in the modern world.	
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)	
543	Quantum Mechanics II. 3 hrs. This is the second part of a two-semester introduction to quantum mechanics. Emphasis is on application of quantum theory including approximation techniques and the study of more realistic quantum systems. (PR: PHY 442/542)	
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	<b>Mechanics for Teachers. 4 hrs.</b> 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 hrs.	
585-588 600	Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. Electricity and Magnetism I. 3 hrs.	
608	A study of electroplatics and associated boundary-value problems, electric multipoles and macroscopic media, dielectrics, magnetostatics, time- varying fields, Maxwell equations and conservation laws, plane electromagnetic waves and wave propagation. Statistical Mechanics. 3 hrs.	
	The course introduces thermodynamics and statistical mechanics to graduate students of physics and other science and engineering disciplines as two complimentary approaches to study physical properties of systems in equilibrium. (PR: Permission of instructor)	
610	Special and General Relativity. 3 hrs. General relativity, the classical theory of one of the four fundamental forces, is not a standard course offerING. This course of Special and General Relativity intends to fill this gap by introducing the key concepts that lead to a revolution in our understanding of space and time. The students will learn about spacetime curvature, metrics, geodesics, black holes, gravitational waves and cosmology. (PR: Permission of instructor)	
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)	
620	<b>Modern Astrophysics I. 3 hrs.</b> Modern astrophysics is firmly grounded in the fundamental principles of physics and will offer students the opportunity to use the physics they have learned in understanding the nature of the universe. This course provides a graduate-level introduction to astrophysics, focusing on stellar	
625	structure and evolution. (PR: Permission of instructor) <b>Condensed Matter Physics. 3 hrs.</b> This course studies complex phenomena that occur in solids and quantum liquids, and exposes the students to some theoretical tools used to describe the heating the heating heating the students are appreciated on the students of the students of the students are appreciated on the students of the students of the students are appreciated on the students of the students	
630	describe the basic interactions behind these phenomena. (PR: Permission of instructor) <b>Classical Mechanics. 3 hrs.</b> Study of variational principles and Lagrange's equations, the two-body central force problem, the kinematics and dynamics of rigid-body motion, Hamilton's equations of motion, canonical transformations, Hamilton-Jacobi theory, and small oscillations.	
6 <b>31-632</b>	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. (PR: PHY 203, 204 or PHY 213, 204 or equivalent)	
661-662 682	Special Topics. 1-3; 1-3 hrs. Thesis Research. 1-6 hrs. I, II, S. (PR: Graduate status and approval of advisor)	
	PHYSIOLOGY (PHS)	
626	Neurophysiology I: Neuron Function and Introduction to Neural Systems. 1 hr.	
	To study and understand the basic functional principles of the cells of the nervous system, and organization of cells into functional systems. (PR:	

To study and understand the basic functional principles of the cells of the nervous system, and organization of cells into functional systems. (PR: BMS 600 or permission of instructor)

 627 Neurophysiology II: Neuronal Systems. 1 hr. To study and understand the major functional systems of the brain. (PR: PHS 626)

628	Mammalian Nauganhusialagu 9 hus		
628 629	Mammalian Neurophysiology. 2 hrs. This course is a basic introductory, survey course covering neurophysiology from subcellular level to behavioral level. (PR: Consent of instructor) Mammalian Physiology. 6 hrs. II.		
025	A study of mammalian systems including pulmonary, renal, cardiovascular, gastrointestinal, endocrine and reproductive systems. Emphasis will be placed on homeostatic mechanisms and on experimental approaches to physiology. (PR: PHS 628 or PHS 626, PHS 627)		
630	<b>Experimental Physiology. 1 hr. II.</b> 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	<b>Physiology of Sleep. 1 hr.</b> Detailed examination of changes in EEG, EMG, cardiorespiratory function and ocular motility during sleep. (PR: PHS 628 or PHS 626, PHS 627; PHS 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)		
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	<b>Recent Advances in Physiology. 1 hr., I., II.</b> 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)		
661	<b>Endocrinology. 3 hrs.</b> 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	<b>Special Topics. 1-4 hrs.</b> 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.		
	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. Asian Politics. 3 hrs.		
507 508	Study of such nations as India, China, Japan, and Korea in the contemporary setting. 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	Politics of Russia and the Former Soviet Union. 3 hrs. The study of the politics of Russia and the former Soviet Union.		
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.		
512	International Political Economy. 3 hrs. This course will examine the evolution and structure of the global economic system with emphasis on the development of the Liberal International		
515	Economic Order.		
	International Law. 3 hrs.		
516	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. Politics of Development. 3 hrs.		
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517 518 519	<ul> <li>International Law. 3 hrs.</li> <li>Study of theories, origins, sources, development, present state, and trends of international law as a factor in various aspects of international politics.</li> <li>Politics of Development. 3 hrs.</li> <li>A survey of major theories of development and modernization and issues confronting developing nations around the world.</li> <li>Homeland Security and Civil Liberties. 3 hrs.</li> <li>An examination of the policy issues involved in protecting the U.S. homeland from terrorist and other threats, with special attention to the impact such policies have on individual liberties.</li> <li>American Political Thought II. 3 hrs.</li> <li>This course is a detailed examination of the philosophical and historical roots of American politics from Reconstruction through the present with emphasis on original texts.</li> <li>Women and Political Thought. 3 hrs.</li> <li>This course examines how women were conceptualized in the history of political philosophy and how women then began conceptualizing themselves and their relation to politics.</li> <li>Current World or Regional Issues. 3 hrs.</li> </ul>		
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522	African Political Systems. 3 hrs.	
-00	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	<b>Comparative Foreign Policy. 3 hrs</b> . Application of the comparative method to foreign policy decision-making and outputs. Comparisons within or between geographic regions.	
525	Ancient Medieval Political Thought. 3 hrs. Selective study of classics of Western political theory from earliest times through the 15th century, such as that of Plato, Aristotle, the Romans,	
526	Augustine, and Aquinas. Medeen Political Thought 3 hrs	
520	Modern Political Thought. 3 hrs. Selective study of classics of Western political theory from the 16th century through the 19th century, such as that of Machiavelli, Bodin, Hob	
527	Locke, Rousseau, Hume, Burke, Mill, and Marx. Shapers and Definers. 3 hrs.	
541	A study of political leaders who have shaped and defined the American constitutional tradition.	
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	<b>The Politics of Conflict and Revolution. 3 hrs.</b> Study of major theories of conflict and revolution with emphasis on cross-national explanations and outcomes.	
530	Political Ideologies. 3 hrs.	
	This course examines modern political ideologies including Liberalism, Conservatism, Anarchism, Socialism, Fascism, Feminism, and Environmentalism with emphasis on the original texts.	
531	Politics of Global Terrorism. 3 hrs.	
	An examination of terrorism globally, both in its development and its current manifestations, with attention to its attractions, the difficulties of confronting it, and its implications for democratic society.	
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.	
541	American Politics in Film. 3 hrs. This course examines the way the American people view their political leaders and institutions through the use of film, with a critical eye towards	
	the ebb and flow of public approval or disapproval.	
542	<b>Politics and Welfare. 3 hrs.</b> A comparative course examining the political institutional methods states use to assist citizens who are poor, primarily women and children. It also	
	addresses behavioral concerns that shape welfare policy.	
544	<b>Dictatorship and Democracy. 3 hrs.</b> An investigation of the strengths of democracies relative to dictatorships with regard to such dimensions as economic growth, income equality,	
	health and welfare of citizens and war reduction.	
546	<b>Politics in History. 3 hrs.</b> A study of politics as an order-shattering, order-restructuring force during some of America's most transformative moments.	
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	<b>Civil Rights and Liberties. 3 hrs.</b> 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	<b>Urban Problems and Public Policy. 3 hrs</b> . Study of policy problems of metropolitan areas in terms of structures, alternatives, and outcomes.	
580-583	Selected Topics. 1-4; 1-4; 1-4 hrs.	
584	To offer a course on some special topic which is not adequately treated in the regular course offerings. 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 amplyical political inquiry elements of good research design measurement theory, writing and critiquing	
	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	<b>Readings in Political Science. 2-3 hrs.</b> 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.	

606 609	Seminar in Judicial Politics. 3 hrs. Seminar in International Relations Theory. 3 hrs.
611	Seminar in the American Legislative Process. 3 hrs.
612 614	Seminar in the American Executive Process. Seminar in Comparative Politics. 3 hrs.
616	Public Administration Scope and Practice. 3 hrs. Orientation to the field Public Administration, ethics, professional standards and skills. Review of foundations, theories, and scope. Study of public management heritage and current trends and issues.
618	Seminar in Public Administration. 3 hrs.
620	<b>Comparative Public Administration. 3 hrs.</b> This course will serve as an introduction to the comparative study of public administration. Students will be introduced to several key areas of
	comparative administration research, including different methods used for analysis.
621	<b>Urban Administration. 3 hrs.</b> Principles and methods of urban administration in the U.S.
622	Constitutions. 3 hrs.
	A study of constitutions, their duration, distribution of power, contribution to a stable government and the rule of law. While the course is
629	comparative, major emphasis is on the United States. Seminar in Political Thought. 3 hrs.
648	Seminar in State Government and Politics. 3 hrs.
650-651	West Virginia government and political problems will receive special attention although other states may be considered. <b>Seminar. 3-6 hrs.</b>
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.
680	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.) <b>Master's Essay. 3 hrs.</b>
681	Thesis. 1-6 hrs.
	PSYCHOLOGY (PSY)
503	<b>Applied Social Psychology. 3 hrs.</b> Examination of the applications of social psychological methods, theories, principles and research findings to the understanding of social problems.
506	Psychometrics. 3 hrs.
508	Mental test theory and applications. Abnormal Psychology. 3 hrs.
	Study of the nature, causes and treatment of maladaptive human behavior.
515	<b>Child Psychology. 3</b> hrs. Introduction to child development with major emphasis on normal growth and development. Specific topics include theories of child development
	and the biological, mental, emotional, social and cognitive growth and development of children.
516	<b>Psychology of Learning.</b> 3 hrs. Critical study of the major theories of learning and related research.
517	Intermediate Behavioral Statistics. 3 hrs.
E10	An intermediate level presentation of descriptive and inferential statistics as applied in behavioral research.
518	<b>Psychology of Personnel. 3 hrs.</b> Psychological principles and methods applied to functions in personnel administration.
519	<b>Theories of Personality. 3 hrs.</b> Discussion of theories of personality with attention given to major philosophies of science research and methodological problems in personality
	theory and research.
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.
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.
533	An introduction to computer applications in psychology, emphasizing data collection, management, organization, analysis and reporting. Current Models of Psychotherapy. 3 hrs.
	Introduction to theoretical models and related therapeutic strategies which influence the practice of modern psychotherapy.
540	<b>Physiological Psychology. 3 hrs.</b> The relationships between physiological functions and biochemical processes and behavior.
543	Health Psychology. 3 hrs.
	Introduction to the contribution of psychology to the promotion and maintenance of health and the prevention and treatment of illness. (PR: PSY 201 & 323)
560	History and Systems of Psychology. 3 hrs.
565	Overview of Psychology from historical perspective. (REC: 12 hours of psychology or equivalent) Love, Intimacy, and Attachment. 3 hrs.
303	Examination of how childhood attachments, bonds, and relationships, affect and influence adult perspectives on love, expectations, intimacy,
575	fidelity, and commitment. Race, Culture, and Developmental Processes. 3 hrs.
515	Examine the roles that race, ethnicity, and culture play in the physical, cognitive, intellectual, and social developmental processes of people of color.
580-583 600	Special Topics. 1-4; 1-4; 1-4; 1-4 hours. Teaching of Peurbalagy 3 hrs
600	<b>Teaching of Psychology. 3 hrs.</b> A course designed to train psychology graduate students to teach a course in introductory psychology. (PR: Graduate status in Psychology and a
60 <b>5</b>	minimum of 9 hours Psychology Graduate credit)
605	<b>Ethical, Legal, and Professional Issues in Psychology.</b> Introduction to ethical standards and issues, laws which influence psychological practice, and current challenges facing psychology as a profession.

606	Advanced Social Psychology. 3 hrs.
	Advanced study of selected topics in social psychology.
608	<b>Differential Diagnosis and Treatment Planning. 3 hrs.</b> A course using the instruments and techniques of psychological clinical assessment to explore psychopathology with an emphasis on differential
	diagnosis and treatment planning. Students will become competent in the use of the diagnostic and statistical manual for classification of mental
	disorders and will be able to translate linguistic data into the goals and objectives of a treatment plan.
610	Assessment of Adults. 3 hrs.
	Principles and methods of psychological assessment for adults. Key issues in test construction, and training in report writing. (PR: Admission to
611	Clinical Psychology area of emphasis or to Psy.D. program; CR: PSY 620) Assessment of Children. 3 hrs.
611	Principles and methods of psychological assessment for children. Key issues in test construction, and training in report writing. (PR: PSY 610;
	CR: PSY 621)
615	Advanced Developmental Psychology. 3 hrs.
	Psychological development from conception with a focus on major developmental principles, issues, and concepts. An introduction to conducting
	research with developmental topics and experience in applying basic developmental principles to work situations will be provided. (PR: PSY 515
616	or equivalent with permission of instructor) Human Memory and Information Processing. 3 hrs.
010	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
619	account in interventions. (PR: Graduate status) Psychotherapy with Children. 3 hrs.
015	Discussion and analysis of the major theories of psychotherapy with children including psychoanalytic, client-centered, existential, and behavioral
	theories. Students will be expected to participate in an experiential component. (PR: admission to Clinical Psychology area of Emphasis, School
	Psychology program, or Psy.D. program or permission)
620	Assessment of Adults Practicum. 1 hr.
	Students will be expected to administer, score, interpret and write reports for a battery of tests used with adults. Must be taken concurrently with PSY 610.
621	Assessment of Children Practicum. 1 hr.
	Students will be expected to administer, score, interpret and write reports for a battery of tests used with children. Must be taken concurrently
	with PSY 611.
623	<b>Experimental Design. 3 hrs.</b> 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: either PSY 623 or PSY
697	652) Social Baushelesiael Bases of Crowney, 2 hre
627	<b>Social Psychological Bases of Groups. 3 hrs.</b> Examination of the dynamics of groups such as size, cohesion, leadership, norms and communication channels and their effects on the individual
	members; consideration of the impact of groups on the larger social structure.
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. (PR: PSY 533 or equivalent, or permission; admission to clinical psychology area of emphasis)
633	Individual Psychotherapy and Interviewing. 3 hrs.
	An introduction to the basic skills and techniques used in treating various forms of psychopathology. (PR: Admission to Clinical Psychology area
001	of emphasis or Psy.D. program)
634	<b>Group Therapy. 3 hrs.</b> Different types of group psychotherapy as appropriate for various forms of psychopathology. (PR: Admission to Clinical Psychology area of
	emphasis or Psy.D. program; PSY 633)
635	Child and Family Diagnosis and Therapy. 3 hrs.
	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. (PR: Admission to clinical psychology area of emphasis, Psy.D. program, 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)
651	Advanced Nonparametric Statistics. 3 hrs.
	An advanced survey of distribution-free statistical methods; dichotomous observations, one-sample tests, two sample tests for both independent and dependent observations, k-sample tests for both independent and dependent observations, ordinal correlational techniques, and relational
	measures. This course emphasizes both the theoretical constructs of distribution-free statistics and their application. Computer application of
	these techniques is stressed. (PR: PSY 517)
652	Advanced Regression Techniques. 3 hrs.
	Survey course of the theoretical development and application of multiple regression, advanced univariate correlational techniques, covariant analysis, and an introductory factor analysis. The course emphasis is on the application of these techniques to research and data analysis within
	the student's professional setting. Students will be expected to design and solve problems using computer-based models. (PR: PSY 517)
654	Single Subject Analysis. 3 hrs.
	Statistical analysis of small group designs as might be found in clinical and field situations. Emphasis will be on time series analysis and computer
656 657	simulation of single subject and small group behaviors. (PR: PSY 517)
656-657	<b>Research in Psychology.</b> 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)
670-671	Clinical Practicum. 1-3; 1-3 hrs.
679	Supervised application of principles of therapy and evaluation in a clinical setting. CR/NR grading. (PR: PSY 611, 633 and consent of instructor)
672	<b>Cognitive Psychology.</b> 3 hrs. Theory and research findings in the process of learning/memory, attention, problem solving, decision making, concept formation and perception.
	Emphasis will be on the perceptual aspects of cognitive processes as they apply to psychological practices.

674	Biological Bases of Behavior. 3 hrs.
	A course designed to provide an understanding of the psychophysiological functions of the human organism as an operating entity in the
	environment. The areas to be covered include the basic characteristics of the nervous system and the internal physiological and biochemical
	environment; various models of genetic aberrations, stress, drugs and other physiological anatomical factors and their observed effects on behavior.
	Data will be drawn from experimental work on both human and infrahuman organisms. Both theoretical and applied aspects will be considered.
	(PR: 6 credit hours in biology or psychology)
675-679	Practicum in Teaching of Psychology. 1-3 hrs. CR/NC.
	Supervised teaching experience in introductory psychology, including development of lectures, classroom demonstrations, quizzes, tests, extra-
	credit activities and syllabi.
679	Testing in Industrial/Organizational Psychology. 3 hrs.
	An in-depth study of psychological and educational test theory and application. Emphasis is on classical test theory, constructs, and validation,
	including sources of variance in test scores and prediction of individual performance. Students will be expected to design, construct, and establish
	reliability and validity on a test as a class project.
680	Clinical Internship. 1-6 hrs. CR/NC.
000	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: completion of required clinical practicum sequence)
681	Thesis. 1-6 hrs. CR/NC.
683	Internship in Industrial-Organizational Psychology. 3 hrs. CR/NC.
005	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. CR/NC grading. (PR: Advanced standing and
	admission into the I/O degree program)
685-686	Independent Study. 3 hrs.
690-695	Seminar. 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 instructor)
706	Integrated Assessment I. 3 hrs.
	Integrated, battery-based assessment of adults with emphases on test selection and construction, validity, reliability, special populations, cultural
	and individual differences, and preparation of professional reports. (PR: Admission to Psy.D. program; CR: PSY 707)
707	Integrated Assessment Practicum I . 1 hr.
	Instrument administration for the psychological assessment of adults; includes multiple diagnostic procedures. (PR: Admission to PsyD Program,
	CR: PSY 706)
708	Integrated Assessment II. 3 hrs.
	Integrated, battery-based assessment of children with emphases on test selection and construction, validity, reliability, special populations, cultural
	and individual differences, and preparation of professional reports. (PR: Admission to Psy.D. program, Psy 706 and Psy 707; CR: PSY 709)
709	Integrated Assessment Practicum II . 1 hr.
	Instrument administration for the psychological assessment of children; includes multiple diagnostic procedures.(PR: Admission to Psy.D. program,
	PSY 706 and PSY 707; CR: PSY 708)
710	Advanced Psychological Assessment. 3 hrs.
	This course will offer coverage in advanced topics in psychological assessment. This topics will include geriatric assessment, assessment of addictions,
	neuropsychological screening, forensic assessment, and cross-cultural assessment issues. (PR: Admission to Psy.D. program or permission of
	instructor)
712	Geropsychology. 3 hrs.
112	An examination of normal and abnormal processes of aging, including common social, cognitive, health and psychopathological problems, will be
	studied. Issues of community resources, assessment, and therapy will be discussed. (PR: Admission to Psy.D. program or permission of instructor)
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713-714	Advanced Assessment Practicum. 1-3 hrs.
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713-714 717	Advanced Assessment Practicum. 1-3 hrs. This experience is designed to increase proficiency in psychological assessment through client experience. Students are supervised by a licensed psychologist in the campus training clinic. Advanced Quantitative Analysis. 3 hrs.
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#### 764 Advanced Studies in Human Sexuality. 3 hrs.

An examination of the knowledge and theory which explain important areas of sexual behavior. Topics emphasize sexual orientation, sexual dysfunctions, gender identity, paraphilias, and compulsive and coercive behaviors. (PR: Admission to Psy.D. program or permission of instructor) **769 Practicum in Clinical Psychology. 3 hrs.** 

Supervised application of principles of therapy and evaluation in a clinical setting. (PR: Admission to Psy.D. program)

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770-71 Advanced Practicum in Clinical Psychology. 3 hrs.
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Students provide supervised clinical services at an approved field site. (PR: Admission to Psy.D. program)

772-773 Rural Practicum I & II. 3 hrs.

Supervised two-semester sequence providing field experience in rural mental health settings. (PR: Admission to Psy.D. program)

#### 780-783 Pre-Doctoral Internship. 1-9 hrs.

This is the final, capstone clinical training experience completed by students in the doctoral program in clinical psychology (Psy.D.). Students must complete the equivalent of a full-time, full year clinical placement at a site that is APA/APPIC accredited or has been approved by the clinical faculty. (PR: Completion of all coursework in the PsyD program; successfully pass doctoral comprehensive; approval of faculty)

#### 790-96 Seminar in Clinical Psychology. 1 hr.

Seminars on current topics and issues of interest to clinical psychologists. Topics will change for each semester. Psy.D. program students are required to enroll for six semesters of seminars; check with advisor for details. (PR: Admission to Psy.D. program)
 Doctoral Research. 1-9 hrs.

#### Doctoral research project under the supervision of research committee and chair. (PR: Permission of program coordinator)

## **QUALITY ASSURANCE (QA)**

#### 635 Quality Control. 3 hrs.

Application of statistical methods to quality control: process control charts and acceptance sampling plans by variables and by attributes. Process improvement techniques.

#### 636 Reliability Estimation and Analysis. 3 hrs.

Failure models and distributions, graphical methods of goodness-of-fit and parameter estimation, reliability measures for components and systems, fault trees, accelerated life testing, and censoring mechanisms.

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

Special topics in quality assurance. (PR: Consent)

676 Quality Assurance. 3 hrs. Provides a technical overview of quality assurance and managerial implications. Management of total quality systems will be stressed. Concepts from statistical process control will be introduced. Quality costs and audits.

## **RELIGIOUS STUDIES (RST)**

#### 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 TECHNOLOGY (SFT)

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.

- 505 Introduction to Occupational Safety and Health. CR/NC. 1 hr.
- Introduces students to the basic principles and emerging trends in the safety and health discipline. (All students [except safety majors] will be required to enroll.)
- 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: SFT 235 and 385) 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.

## 540 Industrial Fire Protection. 3 hr.

An introductory course that explores the relationship between engineering and fire prevention. Topics include: water supplies, sprinkler systems, behavior of fire and materials, fire protection, fire extinguishers, and other systems.

- **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.
- 553 International Safety and Health. 3 hrs.
- The course covers the impact of globalization on worldwide safety and health programs, and a wide variety of safety and health programs for various countries and multi-national organizations.
- 554 Industrial Hygiene I. 3 hrs.
- Environmental protection as related to industrial settings. Air/water quality, noise and chemical pollution and hazardous material control.

554L Industrial Environmental Auditing/Programming. 2 hrs. Concerns development of an industrial environmental protection program for a small plant, including workplace experience in sampling/ measurement of contaminants. (PR: SFT 454, or 554 or 647)

558 Hospital Safety. 3 hrs.

The course covers the various aspects of safety and health in professional health care services.

#### 560 Fundamentals of Ergonomics. 3 hrs.

Introduction to ergonomics with discussion of ergonomic issues in relevant office, industrial, and service work. Emphasis on anticipation, recognition, evaluation, and control of ergonomic stressors.

## 565 Incident Investigation Techniques. 3 hrs.

An introductory course in 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.

580-583	Special Topics. 1-4 hrs.		
585-588	Occasional offerings of current topics in safety, providing important supplementary material for participating students. Independent Study. 1-4 hrs.		
000 000	An approved study of special interest that is appropriate for the student's program of study concerning safety. Carried out under the supervision of		
589	a faculty member. (PR: Permission) Process Safety Management. 3 hrs.		
	A study of the latest industrial safety information which will assist the student in designing a program to reduce or eliminate all incident		
591-594	downgrade the system. (PR: SFT 565) Workshop. 1-4 hrs.		
597	<b>Occupational Safety and Health Program Development. 3 hrs.</b> Safety functions in industry. Principles of organization and application of safety programs. Prevention, correction, and control methods are outlined		
	and evaluated.		
599	<b>Occupational Safety Program Management. 3 hrs.</b> 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	<b>Safety in Transportation. 3 hrs.</b> Concerned with safe, efficient movement of people and goods. Involves highway, air, water, pipeline, and rails.		
6 <b>06</b>	Field Experience for the Safety Specialist. 3 hrs.		
610	Concerned with the visitation and evaluation of the safety program of various agencies in the region. Philosophical and Psychological Concepts of Occupational Safety and Health. 3 hrs. An analysis of the educational philosophies and the		
630	application of these philosophies to occupational safety. A study of the effect of occupational safety on modern living. <b>Current Literature and Research in Occupational Safety and Health. 3 hrs.</b> An analysis and study of selected works of national and international		
	authors concerning significant works in Occupational Safety.		
645	<b>Safety Engineering and Equipment Design. 3 hrs.</b> The design and engineering of facilities and equipment to meet the physical needs of the human as well as enhancing production.		
647	Industrial Hygiene II. 3 hrs.		
647L	Concerned with environmental health and safety hazards that arise out of or occur during work of employees. Quantitative Industrial Hygiene Lab. 3 hrs.		
C 4 9	A laboratory course designed to complement Industrial Hygiene. (CR: SFT 647) Industrial Ventilation. 3 hrs.		
648	The course will cover the techniques of development, design, maintenance, and trouble shooting of industrial ventilation systems. Also the types		
649	of ventilation systems used for different types of toxic materials. (PR: SFT 647 or SFT 554 or permission) Biophysical Hazards and Monitoring. 3 hrs.		
045	The course will cover sources of biological and physical hazards for various industries and occupations. Hazard controls and preventive techniques		
650	will also be covered. Internship for the Safety Specialist. 3-12 hrs. CR/NC.		
	Supervised experience on the job site. Involves the student working under safety personnel and analyzing and writing of experiences. (Permission)		
651	<b>Toxicology and Epidemiology. 3 hrs.</b> The course will emphasize the principles of toxicology, dose-response relationships, xenotoxins, the distribution of toxins, and the storage of toxins.		
652	(PR: SFT 554 or SFT 647) Industrial Noise and Vibration. 3 hrs.		
	A study of the physical characteristics of noise and vibration, and its effects on the human body. (PR: SFT 554 or SFT 647)		
660	Applied Ergonomics and Human Factors Engineering. 3 hrs. A study of how humans interact with the work environment, focusing on human capabilities and limitations, repetitive motion disorders, the		
661	human-machine interface and workspace design.		
661	Advanced Occupational Ergonomics. 3 hrs. The study and application of occupational ergonomics to the design and evaluation of various work environments. (PR: SFT 660)		
662	Methods in Work Analysis. 3 hrs. To study, utilize, and critique several existing ergonomic analysis methods for specific intended purpose, and provide directions for new		
	methodologies. (PR: SFT 660)		
663	Work Environment Issues. 3 hrs. An examination of the aspects of the work environment that can affect health: time pressure, machine pacing, control, etc. The recognition,		
660	measurement, and control of these factors will be discussed.		
669	<b>Traffic Safety Management. 3 hrs.</b> Concerned with the total Traffic Safety Management Program, including vehicle registration, driver licensing, motorcycle driver education, and		
679	motor vehicle registration. Problem Report. 1-3 hrs. (Permission)		
681	Thesis. 1-6 hrs.		
690-692	Seminar. 1-4 hrs.		
	SCHOOL PSYCHOLOGY (SPSY)		
523	<b>Independent Research. 1-3 hrs.</b> Coursework designed to provide the student with the opportunity to work with a School Psychology program professor on a research on a research		
	problem mutually agreed upon in terms of a specific plan of study.		
601	<b>Professional Competence I: Schools. 3 hrs.</b> Introduction to the roles and functions of school pupil personnel professionals, models of operation, problems, issues, and techniques. The		
	organization and administration of school systems and philosophy of education are considered. Students may be expected to spend a minimum of		
603	one-half day a week observing in a local school. Professional Competence II: Professional School Psychology. 3 hrs.		
-	Examination of current professional issues, theoretical model and research related to delivery of school-based psychological services. Examination		
606	of the variety of methodologies and strategies for children of diverse backgrounds and exceptionalities. (PR: SPSY 601 or concurrently with 601). Adolescent Substance Abuse. 3 hrs.		
	Substance abuse is a pervasive problem within our society. Mental health professionals and educators require knowledge and skills in adolescent substance abuse prevention, intervention, and treatment to address this problem.		
616	Typical and Atypical Child Development. 3 hrs.		
	Psychological development from conception with a focus on major developmental principles, issues, and concepts. An introduction to conducting research with developmental topics and experience in applying basic developmental principles to work situations will be provided.		
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- 617 Indirect Service Delivery I: School Consultation. 3 hrs.
- This course is an introduction to the theory and practice of consultation and will prepare students to serve as consultants within public schools. **618 Direct Service Delivery I: Instruction Methods and Behavior Modification. 3 hrs.**
- This course teaches the application of behavior modification principles to the classroom setting as well as the modification of instruction to meet the needs of atypical learners.
- 619 Direct Service Delivery I: Individual and Group Counseling. 3 hrs.
- This course is a direct interventions course focusing on individual and group therapy for children. (PR: SPSY 616 or PSY 615)
- 620 Indirect Service Delivery II: Primary Prevention. 3 hrs.

This course is an introduction to the science and practice of primary prevention.

- 621 Data-Based Decision Making I. 3 hrs. This course is a beginning problem-solving course designed to provide students with a variety of assessment methods they can use to start constructing their professional "tool kits."
- 622 Data-Based Decision Making II. 3 hrs.

This course is an intermediate problem-solving course designed to provide students with a variety of assessment measures to add to their professional "tool kits."

#### 624 Data-Based Decision Making III. 3 hrs.

This course is an advanced problem-solving course designed to provide students with a variety of assessment methods to add to their professional "tool kits."

674 Biological Bases of School Psychology. 3 hrs.

SPSY 674 is a 3-credit interactive and reading intensive course that uses both live class meetings and the WebCT format to present information on the biological foundations of school psychology.

#### 675 Survey of Psychological Foundations of School Psychology. 3 hrs.

PSY 675 is a reading and writing-intensive course that presents information on the psychological foundations of school psychology.

#### 700 Special Topics. 1-6 hrs.

Courses in specialized areas of school psychology on issues in the practice of school psychology.

738 School Psychology Practicum I. 3 hrs. CR/NC.

The initial practicum in school psychology is designed to provide a structured, experiential link between early coursework and practical experience.
 School Psychology Practicum II. 3 hrs. CR/NC.

- The second practicum in school psychology is designed to provide a structured, experiential link between intermediate coursework and practical experience.
- 740 School Psychology Practicum III. 3 hrs. CR/NC.

Assessment behavior management and consultation experiences in a school setting, supervised by a certified school psychologist for 2 days per week. (PR: SPSY 624 and SPSY 739)

745 Internship in School Psychology. 1-12 hrs. CR/NC.

Students may apply for permission to enroll for this course with the Coordinator of Field-Based Experiences. Students must request internship from the program faculty at least one semester in advance of their starting dates. The internship requires full-time experience for one school year or one half-time experience for two consecutive school years (minimum of 1200 clock hours). Each 1 hour credit requires 100 clock hours. The internship in School Psychology requires a contractual agreement between the school system, the university, and the student that outlines the responsibilities of each party. Students will be expected to assume the roles and responsibilities of functioning school psychologists in a school. (PR: SPSY 740)

#### 750 Ed.S. Thesis Research. 3 hrs.

Development and defense of a research proposal examining a specific hypothesis in School Psychology. Analysis of data, written presentation in thesis form, and public defense are required. (PR: 3 credit hours of 600-level statistics and approved prospectus)

#### 751 Program Evaluation. 3 hrs.

The course is designed to provide students with the fundamental skills to develop and implement evaluations of educational programs in the classroom, school, county or state. (PR: PSY 517 and SPSY 623)

#### SOCIOLOGY (SOC)

#### 501 Population and Human Ecology. 3 hrs. The course focuses on population and its

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.

#### 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)

#### 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 Sociology of Work. 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.

#### **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)		
550	Sociology of Religion. 3 hrs.		
552	An investigation into the nature of religion as a social phenomenon. (PR: SOC 200 or permission) 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		
555	or permission) 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	<b>Complex Organizations. 3 hrs.</b> 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.		
600	Study of topics not covered in regularly scheduled courses. (PR: Graduate majors, SOC 200 or permission) Classical Sociological Theory. 3 hrs.		
000	An examination of the development of sociological theory, from its Enlightenment roots through its growth in the nineteenth and twentieth		
601	centuries, including the works of Comte, Spencer, Marx, Durkheim, Weber, and Simmel. Contemporary Sociological Theory. 3 hrs.		
	Advanced introduction to major theoretical developments and issues of significance in contemporary sociological theory, examining various		
602	theoretical perspectives at different levels of analysis and from different viewpoints. (PR:SOC 610) Contemporary Social Change. 3 hrs.		
602 604	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)		
605	<b>Qualitative Research Methods and Analysis. 3 hrs.</b> Seminar in qualitative research methods and analysis. Topics covered include coding, using qualitative software, generating theory, participating		
	observation, intensive interview, internet inquiry, focus groups, documents, and content analysis.(PR: SOC 344, 345 or equivalent)		
606	<b>Quantitative Research Methods and Analysis. 3 hrs.</b> An introduction to quantitative research methods, statistics, and the software SPSS at an intermediate to advanced level with the main focus on		
	developing working knowledge of the methods discussed.(PR: SOC 345 or equivalent)		
609	Professional Development. 3 hrs. Career preparation for teaching, research, and non-academic settings		
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	<b>Feminist Social Theory. 3 hrs.</b> 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.)		
685-688	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)		
505	SPANISH (SPN)		
505	<b>Pedagogy and Instructional Experience in the Middle School. 3 hrs.</b> Students plan and deliver beginning Spanish instruction to middle school students.		
506	<b>Composition, Conversation, and Introduction to Hispanic Literature. 3 hrs.</b> Continuing supervision of students' teaching experiences. Continued attention to advanced grammar concepts, composition and conversation, and		
	reading proficiency with an emphasis on the introduction of Hispanic literature.		
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,		
561	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.		
580-583	(PR: SPN 204 or equivalent) 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)		

507	Foreign LanguageTeaching Methodology. 3 hrs.	
	Introduction to the communicative approach to language teaching. Presentations and practice in the creation of lesson plans using in-class	
	technologies and computer assisted language learning materials. Course taught in English. Required for teaching assistants. Does not count toward	
	degree.	
511	Literature I: Pre Modern Latin American Literatures. 3 hrs.	
	A study of representative Latin American literary works from the Pre-Colonial and Colonial periods and the 19th Century. Course taught in Spanish.	
512	Literature II: Contemporary Latin American Literatures. 3 hrs.	
512	A study of a selection of Latin American authors and works representative of the major literary movements in Latin America, from Modernism to	
<b>F1</b> 9	present. Course taught in Spanish	
513	Literature III: Literary Genres and Non Can. Issues in Latin America 3 hrs.	
	Study of poetry, fiction, drama, essays, etc. in Latin America. At the discretion of the instructor literary genres will be crossed with approaches such	
	as gender, race, religion, ethnicity, etc. Course taught in Spanish.	
514	Literature I: Medvl., Rnsscn., Golden Cent. Literature. 3 hrs.	
	Study of the representative Spanish authors and literary works and the major intellectual movements in peninsular literature from Medieval times to Spain 's Colden century. Course taugh	
	in Spanish.	
515	Literature II: 18 <sup>th</sup> and 19 <sup>th</sup> Centuries. 3 hrs.	
	Study of the representative Spanish authors and literary works and the major intellectual movements in peninsular literature during the 18th and	
	19 <sup>th</sup> Centuries. Course taught in Spanish.	
516	Literature III: Contemporary Spanish Literature. 3 hrs.	
010	Study of the representative authors and literary works and the major intellectual movements in peninsular literature from the Generation of 1898	
	to the present. Course taught in Spanish.	
533	Intensive Grammar Review. 3 hrs.	
555	This course will review and expand specific, advanced Spanish language structural points. It will include daily intensive practice in the four linguistic	
<b>595</b>	skills. Course taught in Spanish. (PR: SPN 315/316 or SPN 323/324 or permission)	
535	Contemporary Latin American Culture. 3 hrs.	
	The course provides an overview of contemporary Latin American cultures. It deals with political changes, artistic movements and issues of public	
	interest during the 20 <sup>th</sup> Century. Course taught in Spanish.	
536	Culture and Society in Contemporary Spain. 3 hrs.	
	Course based on origins of issues confronting contemporary Spain: the war's aftermath, transition to democracy and modernization, the European	
	Union, terrorism, regional autonomy, feminism, sexual identity. Course taught in Spanish.	
544	Bilingual Contrastive Grammar. 3 hrs.	
	This course will compare Spanish and English grammatical structures. It will be taught in both languages to demonstrate the similarities, the	
	differences, and intertwining relationship between them. (PR: SPN 315/316 or SPN 323/324 or permission)	
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)	
611	Latin American Poetry: Resistance through Verse. 3 hrs.	
011	Course introduces students to Latin American poetry within framework of gender/genre and linguistic subversions of canonical and linguistic	
	codes in traditionalist Western aesthetics of poerry. Course taught in Spanish. (PR: SPN 656 and graduate status).	
612	Spanish-American Romanticism. 3 hrs.	
012	Leading writers and trends in thought and versification of the romantic period. (PR: 6 hours of literature numbered 318 or above or equivalent)	
613	Texts and Intertextualities in 20 <sup>th</sup> Century Latin America. 3 hrs.	
015	Overview of the various ways in which literary and non-literary Latin American texts have interacted during the 20 <sup>th</sup> century. Course taught in	
614	Spanish. (PR: SPN 656 and graduate status).	
614	Themes and Styles in Spanish Poetry. 3 hrs.	
	Survey of Spanish poetry with emphasis on the cultural and intellectual contexts in which it is produced. Poetics. Course taught in Spanish. (PR:	
	SPN 656 and graduate status).	
615	Latin American Theater: Plays, Performance and Politics. 3 hrs.	
	Course introduces students to Latin American theater within framework of literary and discursive subversion theater and realism. Course taught	
	in Spanish. (PR: SPN 656 and graduate status).	
616	Traditional and Innovative Forms in Spanish Prose. 3 hrs.	
	Development of Spanish prose. Reading of selected works by important authors. Comparison and contrast of different types of discourses. Discourse	
	analysis and interpretation. Course taught in Spanish. (PR: SPN 656 and graduate status).	
618	Society and Literature: Spanish Theater. 3 hrs.	
	Application of dramatic theories to samples of Spanish theater. Emphasis will be placed on the cultural contexts of the plays read. Course taught	
	in Spanish. (PR: SPN 656 and graduate status).	
620	Spanish Romanticism. 3 hrs.	
	The trends and characteristics of the romantic period in the writings of its leading exponents in lyric poetry, nondramatic prose, and the theatre. (PR: 6 hours of literature numbered 318 or	
	above or equivalent)	
625	Spanish Literature of the Twentieth Century. 3 hrs.	
010	Emphasis on prose, poetry and the theatre since 1936, including writers in exile. (PR: 6 hours of literature numbered 318 or above or equivalent)	
650-653	Independent Study. 1-4 hrs.	
000-000	Independent study. 1-4 hrs. Independent research in selected areas of Spanish or Spanish American Literature that are not available in other courses.	
655		
655	Introduction to Spanish Linguistics. 3 hrs.	
	General Survey of Spanish linguistics, both theoretical (phonetics, phonology, syntax, and semantics) and applied (pragmatics, discourse analysis,	
050	sociolinguistics and bilingualism). Course taught in Spanish. (PR: SPN 533 or SPN 544 and graduate status)	
656	Critical Theory for Spanish/Latin American Literature. 3 hrs.	
	Study of the major trends in literary theory and criticism in the 20 <sup>th</sup> century. Practical application of the theories to various kinds of texts written	
	in Spanish. Course taught in Spanish. (PR: graduate status)	
679	Problem Report. 1-3 hrs. (PR: Permission)	
681	Thesis. 1-6 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)

## SPORT ADMINISTRATION

(See Exercise Science and Sport)

## **TECHNOLOGY AND ENGINEERING (TE)**

580-83	Special Topics. 1-4 hrs.		
	Occasional offerings of current topics in technology and engineering, providing important supplementary material for participating students.		
585-88			
	An approved study of special interest concerning technology and engineering that is appropriate for the student's program of study. Carried o under the supervision of a faculty member.		
600	Orientation to CITE Graduate Study. 0 hrs.		
000	Orientation course covering skills such as technical communication, quantitative reasoning, research methods, ethics and professionalism,		
	teamwork, and discipline-specific information.		
650-53	Special Topics. 1-4 hrs.		
	Occasional offerings of current topics in technology and engineering, providing important supplementary material for participating students.		
685-88	Independent Study. 1-4 hrs.		
	An approved study of special interest concerning technology and engineering that is appropriate for the student's program of study. Carried out		
	under the supervision of a faculty member.		
698	Comprehensive Project Formulation. 3 hrs. S/U.		
	Comprehensive project proposal is developed and approved, and work begun under supervision. Technical report writing, oral presentations, and		
699	communication skills. (PR: EM 660 and have completed min. 18 hours toward degree) Comprehensive Project. 3 hrs. S/U.		
055	Completion of comprehensive project under the supervision of a faculty member. Includes final written submittal and public oral presentation. (PR:		
	TE 698 and have completed minimum 27 hours toward degree)		
	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	Technology and Innovation Management. 3 hrs.		
	Provides a comprehensive introduction to technology and innovation management. Considers issues relating to international markets, innovation,		
	and rapidly changing technology. Also covers effective organizational and managerial approach to technology. (PR: Full Admission to TM program,		
C10	or permission of TM Program Director)		
612	<b>Economic and Financial Analysis for Technology Management. 3 hrs.</b> Tools and techniques for financial analysis, cost estimation, budgeting, and control, for technology-oriented projects and organizations. Includes		
	financial statements, economic analysis, cost estimation, budgeting, and control, for technology-oriented projects and organizations. Includes		
615	Information Technology Strategies. 3 hrs.		
	This course provides sound principles for managing information technology-computers and telecommunication systems - as well as the processes		
	and procedures for applying the principles. (PR: CITE majors only or permission)		
620	Technology Planning. 3 hrs.		
	Methods of technology planning, strategic management, and forecasting for use in technology intensive organizations are discussed, including		
	technology life cycles and strategies for commercializing products.		
630	Quality and Productivity Methods. 3 hrs.		
	Study of quality and productivity improvement methods with emphasis on applications to knowledge worker organizations. Examines total quality management, and personal and organizational productivity improvement processes. (PR: CITE majors only or permission)		
640	Intelligent Transportation Systems. 3 hrs.		
010	Overview of transportation telemetrics and introduction to intelligent transportation systems. Communications and computing technologies in		
	transportation. Overview of issues: traffic safety, public transportation.		
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)		
660	Computing and Information Systems Technologies. 3 hrs.		
	Provides a broad understanding of computing and information systems technologies with emphasis on development, current trends, strategic and tactical management, and legal and regulatory issues. (PR: TM 615 concurrent.)		
664	Health Informatics. 3 hrs.		
001	Introduction of various aspects of medical informatics, including medical literature search and retrieval, management and analysis of data, modeling		
	and simulation, data communications, on-line databases, and clinical decision analysis. (PR: TM 615)		
667	Modern Manufacturing Concepts. 3 hrs.		
	The course covers modern manufacturing concepts, analysis, and tools such as Just-In-Time, MRP systems, Lean Manufacturing, inventory		
	management, total quality manufacturing, factory physics, and operating and control philosophies. (PR: TM 610 concurrent)		
668	Computer Integrated Manufacturing. 3 hrs.		
	The course covers computer-aided design, computer-aided manufacturing, and computerized process support tools for increasing productivity in		
685-688	manufacturing. Independent Study. 1-4 hrs.		
000-000	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 Capstone Project. 3 hrs. S/U.

An individualized technology management capstone project, which will be planned and carried under the supervision of a faculty member.

#### **THEATRE (THE)**

Playwriting. 3 hrs. 510 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) Theatre History since 1660. 3 hrs. 541 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 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 chair)



## The Faculty

*Visit the Marshall University Graduate Council's website (www.marshall.edu/graduate-council) for additional information on graduate faculty membership such as levels and expiration dates.* 

## ACCOUNTANCY AND LEGAL ENVIRONMENT

#### Professor

**Cal Kent,** B.A. 1963, Baylor University; M.A. 1965, Ph.D. 1967, University of Missouri *Associate Professors* 

Bruce Conrad, B.S. 1970, Baldwin-Wallace College; M.B.A. 1973, SUNY at Buffalo

**Charles Stivason**, B.S./B.A. 1981, Clarion University of Pennsylvania; M.A. 1989, George Mason University; M.A. 1991, Arizona State University; Ph.D. 1998, Virginia Polytechnic Institute and State University

Jean Price, B.S. 1984, University of Louisville; M.B.A. 1988, Ph.D. 1992, Indiana University

Assistant Professor

Ray Keener, B.S./B.A. 1979, J.D. 1982, West Virginia University; L.L.M., 1990, Georgetown University

**T. Maurice Lockridge,** B.B.A. 1973, Chicago State University; M.B.A. 1993, Memphis State University; Ph.D. 2004, University of Memphis

## ADULT AND TECHNICAL EDUCATION

#### Professor

LeVene A. Olson, B.S. 1966, Ed.D. 1971, Georgia Laura Wyant, B.A. 1982, M.S. 1988, Marshall; Ph.D., 1995, Ohio State

## ADVANCED EDUCATIONAL STUDIES

#### Professor

Robert Bickel, B.A. 1971, M.A. 1972, Penn State; Ph. D. 1986, Florida State Linda Spatig, B.S. 1971, Barton College; M.Ed. 1974, Western Washington State; Ed.D. 1986, Houston

## ANATOMY AND PATHOLOGY

#### Professor

Sasha Zill, B. A. 1966, Columbia University; Ph. D. 1979, University of Colorado

Associate Professor

Laura Richardson, B.A. 1972, Newton College of the Sacred Heart; M.S. 1979, U. of Virginia; Ph.D. 1993, Georgetown Ruu-Tong Wang, B.S. 1968, Fu Jen University (Taiwan); M.S. 1973, Southern Illinois; Ph.D. 1976, Southern Illinois Assistant Professor

Magdalena Muchlinski, B.A. 1999, California-Berkeley; M.A. 2002, Ph.D. 2008, U. of Texas-Austin Maria Serrat, B.A. 1999, Miami U.; M.A. 2002, Ph.D. 2007, Kent State John Wilkinson, B.A. 1984, M.A. 1984, Simon's Rock Early College; Ph.D. 1996, Boston U.

## APPLIED SCIENCE AND TECHNOLOGY

#### Professor

**D. Scott Simonton,** B.S. 1991, West Virginia Institute of Technology; M.S. 1997, Marshall; Ph.D. 2002, University of New Mexico

D. Allan Stern, B.Ed. 1971, Hawaii; M.Ed. 1972, Miami; Ed.D. 1977, Texas A&M

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#### Professor

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### **ENGINEERING AND COMPUTER SCIENCE (Weisberg Division)**

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- Anthony Viola, B.A. 1994, East Stroudsburg University; M.A. 1998, University of North Dakota; Ph.D. 2003, Ohio University
- John Young, A.B. 1990, Princeton; M.A. 1992, Ph.D. 1998, Northwestern

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- Kelli Prejean, B.A. 1998, Nicholls State University; M.A. 2001, University of Southern Mississippi; Ph.D. 2005, University of Louisville
- Jill Treftz, B.A. 2001, College of Wooster; M.A. 2003, Ph.D. 2009, Penn State
- Jun Zhao, B.A. 1993, Huazhong Normal University (China), M.A. 2000, York University (Canada); Ph. D. 2007, University of Arizona

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#### Professor

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#### FINANCE AND ECONOMICS

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Justin Godby, B.A. 2003, M.S. 2005, Marshall.
Clark Jaw, B.A. 2003, M.S. 2006, Central Michigan U.; M.S. 2007, Marshall
Matthew Roe, B.S. 2003, M.S. 2006, Central Michigan U.; M.S. 2007, Marshall
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### GEOGRAPHY

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## **GEOLOGY**

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## HISTORY

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## HUMANITIES

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## JOURNALISM AND MASS COMMUNICATIONS

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### **LEADERSHIP STUDIES**

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#### Professor

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#### Professor

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#### Professor

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Michael Norton, B.S. 1977, Louisiana State-Shreveport; Ph.D. 1982, Arizona State

#### PHILOSOPHY

#### Professor

Jeremy Barris, B.A. 1980, Rhodes University; B.A.1981, M.A. 1983, University of Cape Town; M.A. 1984, Duquesne; Ph.D. 1990 SUNY-Stony Brook

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#### Professor

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#### Professor

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#### Professor

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Wendy Williams, B.A. 1997, Swarthmore College; M.A. 1999, U. of Florida; Ph.D. 2005, U. of California

## Assistant Professor

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## **READING EDUCATION**

#### Professor

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### **RELIGIOUS STUDIES**

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#### Professor

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## SPECIAL EDUCATION

#### Professor

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Assistant Professor

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# **University Calendar**

## Marshall University Academic Calendar for 2010-2011

## FIRST SEMESTER 2010-2011

August 16, Monday – August 20, Friday	
August 18	
August 19	Marshall Week of Welcome and UNI 100 Begin
August 21, Saturday, 9 a.m	
August 23, Monday, 8 a.m	First Day of Classes
August 23, Monday – August 27, Friday	Late Registration and Add/Drop (Schedule Adjustment)
August 27, Friday	Last Day to Add Classes (Withdrawals Only After This Date)
August 30, Monday	
September 4, Saturday – September 6, Monday .	
September 6, Monday	Labor Day Holiday – University Closed
September 17, Friday	Application for December Graduation Due in Academic Dean's Office
September 24, Friday	Last Day to Drop 1st 8 Weeks Courses
October 4, Monday	
October 12, Tuesday	Mid-Semester, 1st 8 Weeks Courses End
October 13, Wednesday	
October 25, Monday	Students should schedule appointments with advisors to prepare for advance registration
	(Required for students who have mandatory advising holds)
October 29, Friday	Last Day to Drop a Full Semester Individual Course
November 1, Monday	
November 1, Monday - December 7, Tuesday	
November 8, Monday - November 19, Friday	Advance Registration for Spring Semester for Currently Enrolled Students
November 12, Friday	Last Day to Drop 2nd 8 Weeks Courses
November 19, Friday	Last Day for Defense of Dissertation
November 20, Saturday, Noon	
November 22, Monday - December 22, Tuesday .	Advance Registration for Spring Semester Open
o All Admitted/Re-Admitted Students	
November 22, Monday - November 27, Saturday.	
November 25, Thursday – November 28, Sunday	University Computer Services Unavailable
November 25, Thursday	
November 26, Friday	University Holiday – University Closed
November 28, Sunday, Noon	
November 29, Monday	
December 1, Wednesday – December 7, Tuesday	"Dead Week"
December 3, Friday	Last Possible Date for Thesis/Dissertation Defense
December 4, Saturday	Commencement for December Graduation
	Last Class Day and Last Day to Completely Withdraw for Fall Semester
December 8, Wednesday	Study Day – Exams for Wednesday Classes 3 p.m. and After Will Be Held
December 9, Thursday	
December 9, Thursday	Approved Thesis/Dissertation Must Be Submitted Electronically
	and all Paperwork/Checks Must Be In Graduate College Office

December 10, Friday	Exam Day
December 11, Saturday	Exam Day for Saturday Classes (and some common finals)
December 13, Monday	Exam Day
December 14, Tuesday	Exam Day - Fall Semester Closes - Official Graduation Date For Fall Semester
December 15, Wednesday, Noon	
December 16, Thursday, Noon	Deadline for Submitting Final Set of Grades
December 23, Thursday - December 26, Sunday	Advance Registration/Schedule Adjustment for Spring Semester is Suspended
December 23, Thursday - December 31, 2010, Friday	University Closed
December 27, Monday - December 29, Wednesday	Student Service Offices Open 10:00 a.m 4:00 p.m.
	(Admissions, Advising at Registrar Office only, Bursar, Financial Aid, Registrar)

## SECOND SEMESTER 2010-2011

January 3, 2011, Monday	
January 3, Monday – January 7, Friday	
January 9, Sunday, 9 a.m.	
January 10, Monday	First Day of Classes
January 10, Monday – January 14, Friday	Late Registration and Add/Drop (Schedule Adjustment)
January 14, Friday	Last Day to Add Classes (Withdrawals Only After This Date)
	Martin Luther King, Jr. Holiday – University Closed
January 18, Tuesday	
February 4, Friday	Application for May Graduation Due in Academic Dean's Office
February 11, Friday	Last Day to Drop 1st 8 Weeks Courses
	Mid-Semester, 1st 8 Weeks Courses End
March 3, Thursday	
	Deadline for Submitting Freshmen Mid Term Grades
March 14, Monday	
	Last Day to Drop a Full Semester Individual Course
March 20, Sunday - March 27, Sunday	Spring Break – Classes Dismissed
March 21, Monday - April 29, Friday	
	Classes Resume
March 28, Monday	Students should schedule appointments with advisors to prepare for advance registration
	(Required for students who have mandatory advising holds)
	Advance Registration For Summer Session for Currently Enrolled Students
	Advance Registration for Summer Session Open to All Admitted/Re-admitted Students
April 6, Wednesday	Assessment Day – Classes Cancelled for University-Wide Assessment Activities.
	Students obtain list of activities from department chair. Undecided students should go
	to their college office for a list. (Evening Classes 4:00 p.m. or Later Will Meet)
	Last Day to Drop 2nd 8 Weeks Courses
	Advance Registration Fall Semester for Currently Enrolled Students
	Last Day for Defense of Dissertation
April 25, Monday	Last Possible Date for Thesis/Dissertation Defense
April 25, Monday – May 6, Friday	$Advance \ Registration \ for \ Fall \ Semester \ Open \ to \ All \ Admitted/Re-Admitted \ Students$
	Except First-Time Fall Undergraduates
	Last Class Day and Last Day to Completely Withdraw For Spring Semester
	Exam Day
	Exam Day
	Study Day – Exams for Wednesday Classes 3 p.m. and After Will Be Held
	Exam Day
May 5, Thursday	Approved Thesis/Dissertation Must Be Submitted Electronically And All Paperwork/Checks
	Must Be in Graduate College Office
May 6, Friday	Exam Day

May 7, Saturday - May 8, Sunday	Advance Registration/Schedule Adjustment for Fall Semester is Suspended
May 7, Saturday	
May 9, Monday	
	for All Students Except First-Time Fall Undergraduates
May 10, Tuesday, Noon	Deadline for Submitting Final Set of Grades
May 28, Saturday - May 30, Monday	University Computer Services Unavailable
May 30, Monday	
July 4, Monday	



## Index

Click on page number to visit link.

## A

Academic Common Market 49 Academic Dishonesty 49 Academic Dismissal 51 Academic Probation 51 Academic Rights and Responsibilities of Students 52 Accountancy 79 Accounting courses 195 Admission 15 Checklist 16 Classification 16 Deadlines 16 International Students 20 Residency Classification 18 Adult and Technical Education 87 courses 195 Minor 90 Advising 60 Affirmative Action Policy Statement 37 American National, State, and Local Politics 141. See Political Science Anatomy, Cell and Neurobiology courses 198 Anthropology 153. See also Sociology courses 199 Minor 153 Appalachian Studies 138 Application for Graduation 60 Applied Linguistics 134 Applied Music Courses 249 Area of Emphasis 60 Changing 61 Areas of Emphasis Adult Education 87 Anthropology 153 Athletic Training 118 Autism 99 Cancer Biology 185 Cardiac Rehabilitation 118 Cardiovascular Disease, Obesity, and Diabetes 185 Chemistry (in Physical and Applied Science) 158 Clinical Psychology 144 Computer Forensics 190 Correctional Counseling 161 Crime Scene Investigation 191 Deaf and Hard of Hearing 179 Early Childhood Education 169 Educational Computing 169 Educational Leadership 171 Elementary Science Education 170 Engineering Management 121 Environmental Engineering 122 Environmental Management 128 Exercise Physiology 119

Family Nurse Practitioner 114 Forensic Chemistry 190 Forensic DNA Analysis 190 Geobiophysical Modeling 158 Geology 158 Gifted 99 Individualized Plan of Study in Education 170 Information Security 128 Information Technology 128 Instructional Processes and Strategies 170 Integrative Physiology 119 Interdisciplinary Studies in Adult and Technical Education 88 Justice Leadership 172 Leadership Specialist 172 Literacy, Language, and Learning 170 Manufacturing Systems 129 Marriage, Couple and Family Counseling 162 Mathematics (in Physical and Applied Science) 158 Mathematics through Algebra I 170 Mental Health Counseling 92, 161 Middle Childhood Education 170 Mine Safetv 127 Molecular Mechanisms of Pathogens 185 Multicategorical Special Education 99, 179 Music Composition 109 Music Education 107 Music History/Literature 108 Music Performance 109 Neuroscience and Developmental Biology 185 Nurse-Midwifery 115 Nursing Administration 114 Nursing Education 115 Occupational Safety and Health 126 Physics 158 Preschool Special Education 100 Recreation and Physical Activity 120 School Counseling 92, 162 School Library Media Specialist 170 Sport Management 120 Teaching English as a Second Language 170 Teaching Visually Impaired 179 Toxicology and Environmental Health Sciences 185 Training and Development 88 Transportation and Infrastructure Engineering 122 Transportation Systems and Technologies 129 Watershed Resource Science 156 Art 105 Art and Design courses 199 Arts and Society courses 235 Athletic Training 118 Attendance. See Class Attendance Policy Autism 99

## B

Behavioral Statistics
Graduate Certificate 145
Biochemistry and Molecular Biology courses 200
Biological Sciences 155 courses 201
Biomedical Sciences 185, 186 courses 202
Bookstores 40
Business Administration (M.B.A.) 80 3+2 Program 83 Executive 83 India 83
Business Foundations 82

## С

Cancer Biology. See Biomedical Sciences Cardiac Rehabilitation 118 Cardiovascular Disease, Obesity, and Diabetes. See Biomedical Sciences Career Services Center 40 Cell Differentiation and Development Center 12 Center for Business and Economic Research 12 Center for Environmental, Geotechnical and Applied Sciences 12 Center for the Study of Ethnicity and Gender in Appalachia 13 Certificate Programs 61 Cheating. See Academic Dishonesty **Chemical Engineering** courses 203 Chemistry 156 courses 203 Child Development Academy 41 **Civil Engineering** courses 204 Class Attendance Policy 61 Classics courses 204 Clinical Psychology 144 Closings and Delays 38 Commencement and Graduation 61. See also Application for Graduation Communication Disorders 110 courses 205 Communication Studies 130 courses 206 Community and Technical College Studies 89 Comprehensive Assessment 61 Doctoral degrees 62 Master's and Ed.S. Degrees 62 Computer Forensics 190 **Computer Science** courses 207 Continuing Education for Teachers 68 Control Systems courses 207 Copyright Compliance 37 Correctional Counseling 161 Counseling 90, 160 courses 208 Ed.S. Program 164 M.A. Program 91, 160 Counseling Center 41 Course Load 63 Course Numbering 63 Courses of Instruction Accounting 195 Adult and Technical Education 195 Anatomy, Cell and Neurobiology 198

Anthropology 199 Art and Design 199 Arts and Society 235 Biochemistry and Molecular Biology 200 **Biological Sciences** 201 **Biomedical Sciences** 202 Chemical Engineering 203 Chemistry 203 Civil Engineering 204 Classics 204 Communication Disorders 205 Communication Studies 206 Computer Science 207 Control Systems 207 Counseling 208 Criminal Justice 210 Cultural Studies 236 Curriculum and Instruction 211 Deaf and Hard of Hearing 213 Dietetics 218 Economics 218 Educational Computing 213 Educational Foundations 219 Electrical Engineering 220 Engineering 220 Engineering Management 220 English 221 English as a Second Language 214 Environmental Engineering 223 Environmental Science 224 Exercise Science and Sport 225 Family and Consumer Science 226 Finance 227 Forensic Science 228 French 229 Geography 229 Geology 231 Health Care Administration 231 Health Science 232 Historical Studies 236 History 233 Humanities 235 Human Resource Management 237 Information Systems 238 Instructional Technology and Library Science 239 Journalism and Mass Communications 239 Latin 241 Leadership Studies 241 Legal Environment 244 Literary Studies 236 Management 243 Management Information Systems 244 Marketing 244 Math Education 214 Mathematics 245 Microbiology, Immunology, and Molecular Genetics 246 Mine Safety 246 Music 247 Nursing 249 Park Resources and Leisure Services 250 Pathology 251 Pharmacology 251 Philosophy 252 Physical Science 252 Physics 252 Physiology 253 Political Science 254 Psychology 256 Quality Assurance 259 Reading Education 215

**Religious Studies** 259 Safety Technology 259 School Psychology 260 Science Education 216 Sociology 261 Spanish 262 Special Education 216 Studio Art 237 Technology and Engineering 264 Technology Management 264 Theatre 265 Visual Impairments 218 Creative Writing 134 Credit Hour 63 Crime Scene Investigation 191 Criminal Justice 130 courses 210 **Cultural Studies** courses 236 Curriculum and Instruction courses 211 Ed.D. Program 166 Ed.S. Program 165

## D

Deaf and Hard of Hearing courses 213 Degree Programs 76 Changing 61 Degrees 63 Dietetics 111 courses 218 Disability Services 41 Dismissal from Program 63 Doctoral Degrees 64 Doctoral Programs Curriculum and Instruction 166 Management Practice in Nurse Anesthesia (DMPNA) 86 Domestic Violence Counseling 163 Dropping Courses 64. See also Schedule Adjustment Dual Degrees 64

## Ε

Early Childhood Education 96, 167 Economics courses 218 Educational Computing 169 courses 213 **Educational Foundations** courses 219 Educational Leadership 171 Ed.D. Requirements 173 Education, Early Childhood 167 Graduate Certificate 169 Education, Elementary 168 Education Records 37 Education, Secondary 93, 169 Education Specialist 65 Electrical Engineering courses 220 Elementary Education 168 Elementary Science Education 170 Emergency Closings and Delays 38 Employment. See Graduate Student Employment Engineering 121 courses 220

Engineering Management 121 courses 220 English 133 courses 221 English as a Second Language. See also Teaching English as a Second Language courses 214 Environmental Engineering 122. See also Engineering courses 223 Environmental Management. See Technology Management Environmental Management Incubator 13 Environmental Science 123 courses 224 Minor 124 ESL. See Teaching English as a Second Language Executive M.B.A 83 Exercise Physiology 119 Exercise Science 118 Exercise Science and Sport courses 225

## F

Family and Consumer Science courses 226 Family Literacy 176 Family Nurse Practitioner 116 Fees. See Tuition and Fees Final Grades 65 Finance courses 227 Financial Assistance Application Process 28 Eligibility Determination 28 Notification and Disbursement 33 Types of Aid 33 Forensic Chemistry 190 Forensic DNA Analysis 190 Forensic Science 189 Admission Policy 191 courses 228 French courses 229

## G

Geography 134 courses 229 Minor 135 Geology. See Physical and Applied Sciences courses 231 Geospatial Information Science 136 Gifted 99 Grade Information and Regulations 65 Grades. See also Grade Information and Regulations Final 65 Incomplete 67 Graduate Assistantships 66 Graduate Certificates Appalachian Studies 138 Applied Linguistics 134 Behavioral Statistics 145 Creative Writing 134 Dietetics Internship 111 Domestic Violence Counseling 163 Early Childhood Education 169 Educational Computing 169 Elementary Science Education 170 Family Literacy 176 Family Nurse Practitioner (post-master's) 114 (continued)

Geospatial Information Science 136 Information Security 129 Latin 140 Management Foundations 83 Marriage, Couple and Family Therapy 164 Mathematics through Algebra I 170 Medieval and Renaissance Studies 134 Middle Childhood Education 170 Nursing Administration (post-master's) 116 Nursing Education (post-master's) 116 Post -Baccalaureate in Teaching 182 Reading Education 176 Reading Specialist (post-master's) 175 School Library Media Specialist 170 School Principalship (post-master's) 173 Social Service and Attendance 174 Teaching English as a Second Language 170 Technology Management 128 Women's Studies 139 Graduate Student Council 41 Graduate Student Employment 66 Graduation. See Commencement and Graduation Requirements for Master's Degrees 66 Graduation, Application for 60

## Η

Health Care Administration 84 courses 231 Health Informatics 111 Health Science courses 232 Health Service. See Student Health Service Higher Education Administration 173 Higher Education for Learning Problems (H.E.L.P.) 41 Historical Studies courses 236 History 136 courses 233 Minor 137 Housing 24 Room and Board 24 Housing and Residence Life 42 Humanities 137 courses 235 Human Resource Management 85 courses 237

## I

Incomplete Grades 67 Independent Study 67 Information Security. See also Technology Management Graduate Certificate 129 Information Systems 124 courses 238 Information Technology. See Technology Management Inservice Teacher Restriction 68 Instructional Processes and Strategies 96, 170 Instructional Technology and Library Science courses 239 Integrated Bachelor's and Master's Degrees 68 Integrative Physiology 119 International/Comparative Politics 141. See Political Science International Students Admission 20 Internships 68

## J

John Deaver Drinko Academy 13 Journalism 192 Journalism and Mass Communications courses 239 Judicial Affairs 42 Justice Leadership 172

## L

Latin 139 courses 241 Graduate Certificate 140 Leadership Specialist 172 Leadership Studies courses 241 Doctoral Program. See Educational Leadership Ed.S. Program 173 M.A. Program 171 Legal Environment courses 243 Liability 38 Linguistics. See Applied Linguistics Literacy, Language, and Learning 96, 170 Literary Studies courses 236

## M

Major 68 Management courses 243 Management Information Systems courses 244 Management Practice in Nurse Anesthesia 86 Manufacturing Systems. See Technology Management Marketing courses 244 Marriage, Couple and Family Therapy Graduate Certificate 164 Marriage, Couple & Family Counseling 162 Marshall Institute for Interdisciplinary Research 13 Marshall Recreation Center. See Recreation Marshall University Nutrition and Cancer Center 13 Master of Arts in Teaching 101, 102, 181, 182 Math Education courses 214 Mathematics 157 courses 245 Minor 158 Mathematics through Algebra I 170 Medical Sciences. See Biomedical Sciences Medical Withdrawal 68. See also Dropping Courses and Completely Withdrawing from the University Medieval and Renaissance Studies 134 Mental Health Counseling 92, 161 Microbiology, Immunology, and Molecular Genetics courses 246 Middle Childhood Education 96, 170 Mine Safety 127 courses 246 Minor 69 Minors Adult and Technical Education 90 Anthropology 153 Criminal Justice 132 Environmental Science 123 Geobiophysical Science 159 Geography 135

History 137 Mathematics 158 Sociology 153 Sport Studies 120 Molecular Mechanisms of Pathogens. *See* Biomedical Sciences Multicultural Affairs 42 Multiple Degrees 69 MUOnline 42 Music 106 courses 247 Music Composition 109 Music Education 107 Music History/Literature 108 Music Performance 109

#### N

Neuroscience and Developmental Biology. See Biomedical Sciences Nick J. Rahall II Appalachian Transportation Institute 13 Non-Degree Students 69 Nurse-Midwifery 115 Nursing 112 courses 249 Nursing Administration 114 Nursing Education 115

## 0

Occupational Safety and Health 126 Online Courses 70. *See also* Technology-Enhanced Courses; *See also* MUOnline Outreach and Continuing Studies 42

## P

Park Resources and Leisure Services courses 250 Pathology courses 251 Pharmacology courses 251 Philosophy courses 252 Philosophy Minor 140 Physical and Applied Science 158 Physical Science courses 252 Physics courses 252 Physiology courses 253 Plagiarism 70. See also Academic Dishonesty Plan of Study 70 Policies Emergency Closings and Delays 38 Svllabi 72 **Policy Statements** Sexual Harassment 38 Political Science courses 254 Program Requirements 140 Political Theory 141. See Political Science Post -Baccalaureate Teacher Certificate Program 182 Practicum 70 Prerequisites 70 Preschool Special Education 99 Probation. See Academic Probation Professional Development Programs for Teachers 169 Psychology courses 256 M.A. Degree 142 Psy.D. Program 145 Psychology Clinic 43 Public Administration/Urban Studies 141 Public School Administration 173

## Q

Quality Assurance courses 259

## R

Reading Education 96, 98 courses 215 Ed.S. Program Requirements 175 M.A. Program Requirements 174 Reading Specialist (Post Master's) 98, 175 Readmission. See Time Limitation Recreation 43 Refund of Tuition and Fees 27-36 **Religious Studies** courses 259 Research 14 Animal and Human Subjects 14 Hazardous Substances 14 Policy Statement on Integrity 14 Research Centers 12 Residence Halls. See Housing and Residence Life Residency Classification 18 Revalidation of Coursework. See Time Limitation Robert C. Byrd Center for Rural Health Resources 13 Robert C. Byrd Institute for Advanced Flexible Manufacturing 13 Room and Board 24

## S

Safety 126 Safety Technology courses 259 Schedule Adjustment 71 Scholarships. See also Financial Assistance School Counseling 92, 162 School Library Media Specialist 170 School Principalship Licensure 173 School Psychology courses 260 Program Requirements 177 School Superintendent Licensure 174 Science Education courses 216 Secondary Education 169 Second Master's Degree. See Dual Degrees; See Multiple Degrees Semester Hour. See Credit Hour Seminar 71 Seniors in Graduate Courses. See Undergraduate Enrollment in Graduate Courses Sexual Harassment Policy Statement 38 Social Service and Attendance 174 Sociology 151 courses 261 Minor 153 Spanish 153 courses 262 Special Education courses 216 Program Requirements 178

(continued)

Special Education, Multi-Categorical 99 Special Topics 71 Speech and Hearing Center 44 Sport Administration Program Requirements 119 Staff Development. *See also* Inservice Teacher Restriction Admission 17 Courses 71 Student Health Service 44 Students with Disabilities 44. *See also* Disability Services Studio Art courses 237 Supervisor of Instruction 174 Syllabus Policy 72

## Т

Teaching. See Master of Arts in Teaching Teaching English as a Second Language 170 Technology-Enhanced Courses 72. See also MUOnline Technology Management 127 courses 264 Techology and Engineering courses 264 Testing Center 44 Theatre courses 265 Thesis 72 Three-Plus-Two Programs. See Integrated Bachelor's and Master's **Degree Programs** Time Limitation 73 Toxicology and Environmental Health Sciences. See Biomedical Sciences Training and Development 88 Transcript 74 Transfer of Graduate Credits 74 Transient Students 74 Transportation and Infrastructure Engineering 122. See Engineering Transportation Systems and Technology. See Technology Management Tuition and Fees Payment of 25 Program-Specific Fees 23 Refund Procedures 27 Room and Board 24 Special Fees 23 Undergraduate 22 Withdrawal/Reinstatement for Non-Payment 26 Tuition Waiver Scholarship 74

## U

Undergraduate Students in Graduate Courses 74

## V

Visual Impairments courses 218 Visually Impaired 99

## W

Watershed Resource Science 156
West Virginia Autism Training Center 13
West Virginia IDeA Network of Biomedical Research Excellence 13
West Virginia Prevention Resource Center 13
Withdrawing from the University 64. See also Medical Withdrawal
Women's Studies 139
Workshops 75
Writing Center 44