2018

General Undergraduate Catalog, 2018-2019

Marshall University

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GENERAL UNDERGRADUATE CATALOG

2018-2019

Huntington, West Virginia

Susan Tams, M.B.A., Ed.D.
Editor

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

About This Catalog

The Marshall University Undergraduate Catalog fulfills two primary functions:

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

2. The Catalog contains the specific requirements for all degrees and certificates awarded by the University. These are 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.

Disclaimer

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

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Contact Directory

For specific information about academic or student services at Marshall University, the following telephone numbers are provided. All are in area code 304.

Academic

Academic Affairs 696-6690
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College of Arts and Media 696-6433
College of Business 696-2314
College of Education 696-3130
College of Health Professions 696-6750
College of Information Technology and Engineering 696-5453
College of Liberal Arts 696-2350
College of Science 696-2372
Center for Teaching and Learning 696-2206
University College 696-3169
Graduate College (Huntington) 696-6606
Graduate College (S. Chas.) 746-2500
Honors College 696-5421
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Department/Division

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Student Services

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African American Students' Programs, Center for 696-6705
Alumni Affairs 696-3134
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Athletic Ticket Office 696-4373
Attorney for Students 696-2285
Bookstore 696-3622
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Campus Christian Center 696-2444
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South Charleston 746-1969
Toll-Free 1-877-689-8638
Counseling Services 696-3111
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Drinko Academy 696-3183

Environmental, Geotechnical and Applied Sciences, Center for 696-4748
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MUOnLine 696-2970
Orientation 696-2354
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Registrar 696-6410
Speech and Hearing Center 696-3641
Student Activities 696-6770
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Student Financial Assistance 696-3162
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Student Resource Center 696-5810
Student Support Services 696-3164
Study Abroad 696-6265
Substance Abuse Education Program 696-3111
Technology Outreach Center 696-3325
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Testing Center 696-2604
Tutoring Office 696-6622
University College 696-3169
Women's Center 696-3338
Writing Center 696-2405

Campuses and Centers
Mid-Ohio Valley Center 674-7200
South Charleston Campus 746-2500
Teays Valley Regional Center 757-7223

Toll-Free Number and Website

Toll-free telephone number:	1-800-642-3499 Undergraduate Office of Admissions
Website:	*www.marshall.edu*

About Marshall University

Dr. Jerome A. Gilbert, President

Dr. Ronald G. Area, Chief Executive Officer of the Marshall University Foundation, Inc., and Senior Vice President for Development

Dr. Jaime Taylor, Provost and Senior Vice President for Academic Affairs

Mr. F. Layton Cottrill, Jr., Senior Vice President for Executive Affairs and General Counsel

Mr. Mark Robinson, Senior Vice President for Finance

Ms. Brandi Jacobs-Jones, Senior Vice President for Operations

Ms. Ginny Painter, Senior Vice President for Communications and Marketing

Mr. Maurice Cooley, Associate Vice President for Intercultural Affairs

Dr. Joseph Shapiro, Dean, Joan C. Edwards School of Medicine

Dr. John Maher, Vice President for Research

Mr. Lance West, Vice President for Major Gifts

Ms. Charlotte Weber, Vice President for Federal Programs

Marshall University offers programs which encourage individual growth through the attainment of scholarship, acquisition of skills, and development of personality.

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

The university provides students with opportunities to understand and 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.

Marshall also recognizes an obligation to the state and community by offering evening, off-campus, and Internet classes, as well as lectures, artistic 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 life-long 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.

MARSHALL UNIVERSITY 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.

UNDERGRADUATE ASSESSMENT AT MARSHALL UNIVERSITY

Marshall University has an ongoing assessment program that is firmly rooted in the university's mission. The assessment initiative grew from both faculty and administration concern for institutional quality and accountability. The assessment process provides the institution, colleges, and programs with information regarding institutional effectiveness. All segments of the university community—faculty, staff, administration and students—are to be actively involved in this process. Of central importance in the process is the assessment of student learning in the major and in general education, directed by the University Assessment Committee and the Associate Vice President of Assessment and Quality Initiatives.

THE MARSHALL CREED

Inspired by the example of John Marshall, we the students, faculty, staff, and administrators of Marshall University, pledge to pursue the development of our intellects and the expansion of knowledge, and to devote ourselves to defending individual rights and exercising civic responsibility. We strive to exemplify in our own lives the core values of John Marshall's character: independence, initiative, achievement, ethical integrity, and commitment to community through association and service. As Marshall University, we form a community that promotes educational goals and that allows individuals maximum opportunity to pursue those goals.

We are:

- **An Educational Community** in which all members work together to promote and strengthen teaching and learning;
- **An Open Community** uncompromisingly protecting freedom of thought, belief and expression;
- **A Civil Community** treating all individuals and groups with consideration, decency, and respect, and expressing disagreements in rational ways;
- **A Responsible Community** accepting obligations and following behavioral guidelines designed to support the common good;
- **A Safe Community** respecting each other's rights, privacy and property;
- **A Well Community** respecting and promoting physical and emotional health;
- **An Ethical Community** reflecting honesty, integrity and fairness in both academic and extracurricular activities;
- **A Pluralistic Community** celebrating and learning from our diversity;
- **A Socially Conscious Community** acting as citizens of the world and seeking to contribute to the betterment of people and their environments;
- **A Judicious Community** remaining alert to the threats posed by hatred, intolerance and other injustices and ever-prepared to correct them.

STATEMENT OF PROFESSIONAL ETHICS FOR ALL EMPLOYEES

The faculty, staff, and administrators of Marshall University share a commitment to professional ethics as an obligation to our students, to the citizens of the state of West Virginia, and to each other as colleagues. To this end, we endorse the "Statement on Professional Ethics" of the American Association of University Professors, the "Ethical Practices for College Presidents" statement of the American Association of State Colleges and Universities, the "Statement on Government of Colleges and Universities," a joint statement of the American Association of University Professors, the American Council on Education, and the Association of Governing Boards of Universities and Colleges, and the "Ethics Act" of the West Virginia Ethics Commission. All of these documents may be found online at *www.marshall.edu.*

All employees should strive to adhere to the following guiding principles derived from the above documents. This is not intended as a complete listing of standards included in those documents.

- Honesty and Trustworthiness in all professional dealings with others;
- Fairness and Equity, requiring that one does not discriminate or harass others;
- Respect for the opinions, needs, goals, and responsibilities of others;
- Full and open communication between and among colleagues, students, staff, and administrators;
- Impartiality in all professional decision making;
- Keeping primary the interests of both students and the institution;
- Acceptance and fulfillment of responsibility in the shared governance of the university;
- Integrity in all interactions with others;
- Confidentiality of information where appropriate;
- Adherence to the ethical standards of one's discipline or field.

All employees are duty bound to maintain these ethical standards as well as to call attention to situations where these standards may have been violated. The state and the institution provide administrative procedures for the filing and investigation of ethical complaints. However, in case an employee does not feel that he/she was treated properly in attempts to point out a potential ethical violation he/she may file a statutory grievance. The grievance process is governed by West Virginia State Code §6C-2. This is the only grievance process and is to be used when necessary by all employees - both faculty and staff.

HISTORY

The Beginning

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. According to tradition, 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. They chose one and one-quarter acres of land in an area called Maple Grove where 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 $40.00 was paid for the site.

The Academy and the College

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

The University

Marshall was granted university status in 1961. The university now functions through these academic units: the College of Arts and Media, the College of Business, the College of Education and Professional Development, the College of Information Technology and Engineering, the College of Liberal Arts, the College of Health Professions, the Honors College, the College of Science, the School of Pharmacy, University College, the Graduate College, and the School of Medicine.

ACCREDITATIONS

- **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, *www.ncahigherlearningcommission.org*) accredits Marshall University as an institution of higher learning.
- **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 College of Business.
- **AACSB International – The Association to Advance Collegiate Schools of Business** accredits accounting degree programs of the College of Business
- **ABET - Engineering Accreditation Commission of the Accrediting Board for Engineering and Technology** (111 Market Place, Suite 1050, Baltimore, MD 21202; telephone 410-347-7700) accredits the general engineering (BSE) undergraduate program.
- **American Chemical Society** certifies the Department of Chemistry.
- **American Psychological Association** accredits the Doctor of Psychology degree program.
- **Accreditation Council for Education in Nutrition and Dietetics (ACEND)** accredits the Didactic Program in Dietetics.
- **Accrediting Council on Education in Journalism and Mass Communications** (University of Kansas School of Journalism, Stauffer-Flint Hall, Lawrence, KS 66045; telephone 913-864-3986) accredits the W. Page Pitt School of Journalism & Mass Communications.
- **Commission on Accreditation of Athletic Training Education** (6850 Austin Center Blvd., Suite 100, Austin, TX 78731; telephone 512-733-9700) accredits the Athletic Training 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.
- **Council on Accreditation of Allied Health Education Programs** (35 East Wacker Drive, Suite 1970, Chicago, IL 60610; telephone 312-553-9355) and the **American Society of Cytology** accredit the Cytotechnology program.
- **Council on Social Work Education** (1600 Duke Street, Alexandria VA 22314; telephone 703-683-8080) accredits the Social Work 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.

(continued)

- **National Accrediting Agency for Clinical Laboratory Sciences** (5600 N. River Road, Suite 720, Rosemont, IL 60018-5119) accredits the Medical Laboratory Science program and the Medical Laboratory Technician program.
- **National Association of Schools of Music** (11250 Roger Bacon Drive, Reston, VA 22090; 703-437-0700) accredits the music program.
- **National Council for Accreditation of Teacher Education** and the **West Virginia State Department of Education** accredit the teacher education program.
- **Accreditation Commission for Education in Nursing, Inc.** (3343 Peachtree Road N.E., Suite 850; Atlanta, GA 30326. 404-975-5000) accredits programs for the Associate in Science in Nursing, the Bachelor of Science in Nursing and the Master of Science in Nursing.
- **Applied Science Accreditation Commission of the Accrediting Board for Engineering and Technology** (111 Market Place, Suite 1050, Baltimore, MD 21202; telephone 410-347-7700) accredits the Safety Technology undergraduate 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.

MEMBERSHIPS IN MAJOR ORGANIZATIONS

- **AACSB/International Association to Advance Collegiate Schools of Business**
- **American Association for Affirmative Action**
- **Association of American Colleges and Universities**
- **American Association of Colleges for Teacher Education**
- **American Association of Family & Consumer Sciences**
- **American Association of State Colleges and Universities**
- **American Council on Education**
- **American Library Association**
- **Association of American Medical Colleges**
- **Association of Departments of English, MLA**
- **Association of Schools of Journalism and Mass Communication**
- **Council of Colleges of Arts and Sciences**
- **The Honor Society of Phi Kappa Phi**
- **International Council of Fine Arts Deans**
- **NACUBO-SACUBO**
- **National Association of Fellowships Advisors**
- **National Collegiate Athletic Association**
- **National Collegiate Honors Council**
- **Founding Member of the Ohio River Basin Consortium for Research and Education**
- **Southern Council on Collegiate Education for Nursing**
- **Teacher Education Council of State Colleges & Universities**

THE FACULTY

There are more than 700 full-time faculty at Marshall University, and of them, 85 percent hold the highest degree in their fields of specialization. The faculty's first commitment is to teaching. The second responsibility is to advancing scholarly and creative work, and service is the third area of professional obligation. Each year Marshall University honors its faculty by recognizing outstanding teaching, notable scholarship, and distinguished service.

In the words of a Marshall undergraduate, "The professors here are concerned with helping the student. If you make the effort to approach them, they are willing to go to great lengths to assist you."

Faculty are identified in the departmental sections of this catalog and in the faculty listing.

THE CAMPUSES

The Huntington campus of Marshall University encompasses about 90 acres. It is bounded on the north by Third Avenue, on the south by Fifth Avenue, on the west by Hal Greer Boulevard, and on the east by Twentieth Street. 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.

Huntington is a safe, picturesque city with hospitals, libraries, restaurants, a renowned museum, a city-wide park, and nearby factories for making hand-blown glass. Concerts and theatrical productions take place in outdoor amphitheaters located in the park and along the riverfront.

A strong "town-gown" relationship benefits both the Huntington community and Marshall University, and is particularly evident in the mutual support of cultural activities and community support of the university's athletic events.

The South Charleston campus of Marshall University lies 46 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 university takes great pride in its continuing efforts to maintain a barrier-free campus for individuals with physical limitations.

HUNTINGTON CAMPUS

Arthur Weisberg Family Applied Engineering Complex, located on Third Avenue on the north side of campus, was completed in spring of 2015. It was named in honor of Arthur Weisberg and his family, who have been strong supporters of engineering and computer science at Marshall. The facility houses administration, offices, classrooms and state-of-the-art laboratories of the College of Information Technology and Engineering, which is organized into the Weisberg Division of Computer Science, the Weisberg Division of Engineering, and the Division of Applied Science and Technology. In addition the Weisberg Applied Engineering Complex includes laboratories and offices for the Marshall Institute for Interdisciplinary Research, College of Science and Marshall University Research Corporation.

Arthur Weisberg Family Engineering Laboratories was completed in August of 2009. It was named in honor of Arthur Weisberg and his family, who have been strong supporters of engineering and computer science at Marshall. A variety of engineering laboratories are housed in this building.

Birke Gallery, located on the first floor of Smith Hall at the northwest corner of campus, was named to honor the family of Helen Birke, a former Huntington patroness of the arts. The facility was enlarged in 1993. Directed by the School of Art and Design, the Birke Gallery mounts exhibits of student and professional art works for the benefit of art students, the campus at large and the entire community.

Buskirk Hall, a six-story women's residence hall with double and single rooms and a capacity of approximately 193 women, is on the east side of the inner campus. Opened in 1965 as West Hall, it was renamed in 1976 to honor Lillian Helms Buskirk, who was Dean of Women from 1941 until 1970. This residence hall houses Business and Science Living Learning Communities, the First Year Residential Experience, and a designated Quiet Floor. Buskirk Hall is also ADA accessible for students.

Cam Henderson Center, opened in 1981, presents a spectacular profile against the campus skyline on Third Avenue on the north side of campus. The facility was named to honor legendary coach Cam Henderson, whose career at Marshall extended from 1935 to 1955. Special features include a 9,000+-seat basketball arena, four secondary basketball courts, racquetball courts, training rooms, weights rooms, locker rooms and meeting rooms. The Frederick A. Fitch Natatorium, an 800-seat swimming area, was named in honor of a professor and chair of physical education. The building contains human performance labs, intercollegiate offices, the Sports Information office, the Big Green Scholarship office, and the athletic events ticket office.

Campus Christian Center, completed in 1961 on Fifth Avenue beside the Memorial Student Center, is privately owned and operated by a corporation whose Board of Directors is elected by nine Christian denominations. No state funds were involved in its construction. The building contains a chapel, conference rooms, fellowship hall and kitchen, lounge, office space for campus ministers, workshop rooms, and the Stewart H. Smith religious library, named to honor the President (1946 to 1968) of Marshall College and then Marshall University.

Career Services, Career Services, a division of the Office of Career Education, is located on the southwest corner of Fifth Avenue and 17th Street. The center provides career and resume development and revision assistance for undergraduate

and graduate students, as well as alumni seeking employment. The building features a computer lab for job search skill development, interview rooms, career counseling offices, and online resources.

Communications Building, the third building of the Smith Hall Complex, was completed in 1970. Located on Third Avenue at the east end of the complex, it houses the studio of WMUL-FM radio, Digital Media Services, the Department of Safety Technology, the MUOnLine Design Center and IT Outreach, and University College.

Corbly Hall, a four-story building located at the southwest corner of campus, was named for Lawrence J. Corbly, who served as "principal" of Marshall College from 1896 to 1907, and as its first president from 1907 to 1915. When dedicated in November 1980, Corbly Hall was the largest academic building in the West Virginia state system of higher education. It is the home of the College of Business, which includes the Division of Accountancy and Legal Environment, the Division of Finance and Economics, and the Division of Management, Marketing, and Management Information Systems. Corbly also houses the Department of English.

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. This is a 118,000 square foot, state-of-the-art facility. Its west side presents a traditional facade that is compatible with adjacent Old Main, while the east side, with an imposing five-story atrium, is modern in design. The dual outward appearance is reflected inside, as the facility melds a full range of traditional library services with state-of-the art computing and distance education facilities that include multimedia training and presentation rooms, quiet study and work rooms, computer work stations and computer carrels. The Drinko Study Center is open 24 hours five days per week and includes access to a spacious reading room with computer consultation stations. The overall library system includes close to three million items consisting of numerous subject-specific databases, print and electronic books or periodicals, scores, multimedia resources, government publications, special collections, and microforms. The Drinko Library provides private and group study rooms, conference rooms, classrooms, and an auditorium. The Information Technology administration and several units in this division are also housed in Drinko.

The **First Year Residence Halls** (FYRH) opened in the fall of 2008. There are two buildings of four floors each, which house a total of approximately 782 students. Students share a bedroom and bathroom with one roommate. Each student is provided an extra-long bed, bureau, desk and chair. These residence halls provide Ethernet and wireless Internet access, along with cable television. There are emergency phones on each floor and card access into the building, along with security cameras in the common areas. These residence halls also have study lounges, classrooms and common area space for student use. Resident Advisors are assigned to each floor and 24-hour desk coverage is provided. A professional staff member lives on site for after-hours emergencies.

Gullickson Hall, completed in 1961, adjoins the newer Cam Henderson Center at 18th Street and Fourth Avenue on the northeast side of campus. It was named in honor of Otto (Swede) Gullickson, who developed a large collegiate intramural program at Marshall beginning in 1930 and continuing for almost four decades. This three-story facility contains classrooms, offices, a gymnasium seating 250, the W. Don Williams Health and Fitness Center (named for a former division chair), dance studio, rifle range, steam room, and first-aid laboratory. It houses the Environmental Center, the department of health, physical education, and recreation, the College of Information Technology and Engineering (CITE), and the department of military science.

Harris Hall, on Third Avenue on the north side of campus, was completed in 1976 and named in honor of Arvil Ernest Harris, a political science and social studies professor who served as dean of the graduate school from 1948 to 1964. The four-story building houses the departments of classics, geography, history, religious studies, philosophy, psychology, counseling, adult and technical education, and education administration.

Holderby Hall, built in 1963 on Fifth Avenue as South Hall to house male students, was expanded in 1969 to become a nine-story, co-ed residence hall with a capacity of approximately 250 in all deluxe singles. Holderby Hall is also home to one of our Faculty-In-Residence. In 1980 it was renamed in honor of James Holderby, who in 1837 sold one and one-fourth acres of his farm to establish Marshall Academy. Living areas on the ground-level floor offer ADA-accessible rooms for male students. Marshall University's Campus Express: Pizza, Subs and More, or C' Store, is located on the north side of the building along with the Department of Housing and Residence Life.

Jenkins Hall, constructed in 1937 and located on the eastern side of the inner campus, was named in honor of a distinguished Confederate cavalry officer, General Albert Gallatin Jenkins, who was a native of Cabell County. Until 1970 the building provided kindergarten through high school education and served as a laboratory for prospective teachers. Now, Jenkins houses administration, offices, and classrooms of the College of Education and Professional Development. The facility includes a statistical laboratory, a learning resource center, a mathematics education laboratory, a school plant laboratory, and an adult reading center.

Joan C. Edwards Performing Arts Center is located on Fifth Avenue on the south side of campus across from Memorial Student Center. Completed in 1992, the facility was named to honor Joan C. Edwards, a Huntington philanthropist and patroness of the arts. The facility includes performance and support space for a 530-seat theater auditorium, an experimental theater, and rehearsal rooms.

Joan C. Edwards Stadium, built in 1991, is located at the corner of 20th Street and Third Avenue on the eastern end of campus. The 38,000-seat stadium has an artificial playing surface of 53,147 square feet, and houses luxury boxes, coaches' boxes, a working press area, and a Big Green meeting room. On the east side of the stadium is a 129,000 square foot grass practice field.

Jomie Jazz Center, at the east side of the Edwards Performing Arts Center, was completed in 2000. Named for Joan and Jimmie Edwards, supporters of Marshall University and the fine arts, it houses the jazz studies program (School of Music) and

the offices of the Marshall Artists Series. The building features a state-of-the-art digital recording studio, a music computer laboratory with digital workstations, and the Jazz Forum, an intimate performance space.

Joseph M. Gillette Welcome Center, relocated in 2007, is located on Fifth Avenue at 16th Street on the southwest side of campus, opposite Corbly Hall. Home of the Office of Recruitment, the Gillette Welcome Center is the first stop for prospective students to obtain information about the university and its many academic programs. Daily information sessions and campus tours begin in the Welcome Center.

Laidley Hall, located on the corner of 3rd Avenue and 18th Street, was formerly a residence hall.

Marshall Commons opened in the fall of 2003. The five-building complex is located on Fifth Avenue, east of the Jomie Jazz Center. The four residence halls in the complex are identical, contemporary buildings with accommodations for approximately 480 students in suite-style arrangements. All are co-ed residences; Willis Hall is designated for Honors students. Haymaker is designated as an upper-class hall for juniors and seniors and is home to the Greek Living-Learning Community. Wellman Hall is home to the Health Professions Living-Learning Community. The Commons are also home to one of our Faculty-In-Residence. Each hall has laundry facilities, recreation rooms, lounges, and is fully wired for each student's computer connections. Harless Dining Hall, which opened in January 2004, has a capacity to seat 340 students and includes a meeting room as well.

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. For additional information refer to the website at *www.marshallcampusrec.com*.

Marshall University Medical Center, located at 1600 Medical Center Drive several blocks south of the main campus and adjacent to Cabell Huntington Hospital, opened in 1998 as the new home of the Joan C. Edwards School of Medicine. It is a dual complex composed of the Robert C. Byrd Center for Rural Health (honoring U. S. Senator Byrd) and the University Physicians Center. The four-floor structure houses the departments of Psychiatry & Behavioral Medicine, Internal Medicine, Family Practice, Surgery, Pediatrics, and Obstetrics/Gynecology. The facility also includes the outpatient Hanshaw Geriatric Center (named for Frank E. Hanshaw, Sr., a founder and first president of the Marshall University Foundation), Cardiovascular Services, a Health Science Library, offices for the School of Medicine, and an auditorium and teleconference center.

Memorial Student Center, located on Fifth Avenue on the south side of campus, was completed in 1971. Its name commemorates the loss of the entire Marshall football team in a 1970 plane crash. On the campus side a plaza is centered by a fountain designed by sculptor Harry Bertoia with points at the top that represent those lives lost in the crash. The building houses offices of Student Government, Student Activities, the Center for African American Students, the Student Resource Center, Student Affairs, Student Legal Aid, West Virginia Army National Guard, Campus I.D., Food Service, Lesbian-Gay-Bisexual Outreach and the food pantry. It includes a large central lounge, study areas, cafeteria, restaurant, coffee shop, recreation area, information desk, computer lab, and meeting and conference rooms. Memorial Student Center also houses the **University Bookstore,** which was renovated and enlarged in 1998.

Morrow Library, named for James E. Morrow, head of Marshall College from 1872-1873, is located on Third Avenue and was constructed in 1930 with an addition completed in 1967 that doubled the library size to over 100,000 square feet. Drinko Library opened in 1998 as the university's primary library facility, and Morrow Library now houses a mix of library and university functions. The library facilities include the Archives & Special Collections department which includes the university archives that relate to the history of Marshall; the West Virginia and regional history book collection; West Virginia state documents; manuscript collections of local and regional interest; the Rosanna Blake Library of Confederate History, which includes resources on antebellum Southern history; as well as the Morrow Stacks (general books and periodicals). Library services also include Government Documents, a federal depository for government materials with a collection of over one million items. In addition to library services, the building houses the Department of Computer and Information Technology's instructional and computer laboratories, faculty offices and "learning commons." Morrow is also home to the Appalachian Studies Association office and the Testing Center.

Myers Hall, completed in 1992 on 18th Street at the east end of campus, was named to honor Wilbur E. Myers, who contributed most of the private funds used to build and furnish the facility. The structure houses the nationally recognized Higher Education for Learning Problems (H.E.L.P.) Center, which provides services for those college students diagnosed as having learning disabilities such as dyslexia or attention deficiency disorder.

Old Main, Marshall University's administrative building, faces Hal Greer Boulevard and Fourth Avenue on the west side of campus. The oldest building at Marshall University, Old Main is actually five buildings joined together in a series of additions constructed between the years 1868 and 1908. Its towers have become the symbol of the university to alumni. Old Main houses the principal administrative offices of the university and the offices of the College of Liberal Arts the Graduate College, and the Center for Teaching and Learning. On the second floor is the John Deaver Drinko Academy, named for a graduate and supporter of the university, and the Center for Academic Excellence, which houses the Honors College.

One Room School Museum, located on Fifth Avenue near the Memorial Student Center, was a former one-room school dating from 1889 in Cabell County. It was moved to the Huntington campus and dedicated in 1995 to honor West Virginia's rural education heritage.

Prichard Hall, situated in the eastern mid-part of the inner campus, was completed in 1955 and named in honor of Lucy Prichard, a distinguished professor of classics and faculty leader during the 1920's and 30's. Formerly a residence hall, this four-story structure was renovated in 1973 and now houses the classrooms of the College of Health Professions, as well as the offices of counseling, Student Support Services, and the Women's Center. The College of Science has instructional and computer laboratories, faculty offices and the MAGIC (Marshall's Advanced Gaming and Interactivity Center) lab located in Prichard Hall, also.

Robert C. Byrd Biotechnology Science Center, opened in 2006 and is named for the late Robert C. Byrd, U.S. Senator (D) representing West Virginia. Federal, state, and private funding supported the construction and equipping of the $48 million, 144,000-square-foot center. This state-of-the-art research and educational facility is located on Third Avenue across from the Science Building. It is designed to facilitate interdisciplinary research between the College of Science and School of Medicine. Fostering this interaction is a 285-ft., over-the-street walkway connecting the Biotechnology Science Center with Marshall's Science Building.

Science Building, located on Third Avenue on the north side of campus, was completed in 1942 and expanded in 1985 and 1995. The facility houses administration, offices, classrooms and laboratories of the College of Science. In addition the Science Building includes laboratories and offices of the Clinical Laboratory Services department, a greenhouse, and a chemical storage building on the east side.

Smith Hall complex includes **Smith Hall**, **Smith Music Hall**, and the **Communications Building**.

Smith Hall, a seven-story structure on Third Avenue at the northwest corner of campus, opened in 1967 and was named in honor of Stewart H. Smith, President of Marshall University from 1946 to 1968. It houses the departments of art, communication disorders, communication studies, criminal justice, mathematics, modern languages, political science, sociology and anthropology, as well as the offices of the College of Arts and Media, and the Birke Art Gallery. The structure has an 84-car parking garage in the lower level.

Smith Music Hall, at the northwest corner of campus and part of the Smith Hall complex, was opened in 1967. Named to honor Evelyn Hollberg Smith, whose husband served as President of Marshall University from 1946 to 1968, the facility is home to the music program. It contains classrooms, faculty studios, practice rooms, a listening laboratory, a 490-seat recital hall, and rehearsal facilities for vocal and instrumental performances of both individuals and group ensembles.

The **Communications Building** houses the School of Journalism and Mass Communications, as well as University College.

Sorrell Maintenance Building, named in honor of Howard K. Sorrell, who was a service engineer at Marshall University for 35 years, was constructed in 1965 on 20th Street at the eastern end of campus. It houses the departments of physical plant, facilities planning and management, and health and safety, in addition to supply rooms and storage facilities.

Twin Towers East and West, which opened in 1969, stand on Fifth Avenue on the southeast side of campus. These buildings are fifteen-story, co-ed residences. Quiet floors are available in Twin Towers West as well as the male Business and Science living-learning communities. Twin Towers East houses a First Year Experience community, along with upper-class floors. Both buildings have living spaces on the second floors that are ADA accessible. A dining hall, renovated in the summer of 2011, connects the two towers. These residence halls provide Ethernet and wireless Internet access as well as study lounges, classrooms and common area space for student use.

OTHER HUNTINGTON LOCATIONS

The **Visual Arts Center,** located at 927 Third Avenue, houses all of the majors in the School of Art and Design except ceramics and sculpture, which are taught in the university's Art Warehouse.

Huntington's Kitchen, located at 911 Third Avenue, houses the Department of Dietetics of the College of Health Professions. It is a joint operation of Cabell Huntington Hospital and Marshall University.

Robert C. Byrd Institute for Advanced Flexible Manufacturing, envisioned by the late U.S. Senator for whom it was named, provides technical, hands-on assistance with state-of-the-art capabilities for small and medium-sized manufacturers. Since opening in 1991 on Fourth Avenue in downtown Huntington, the RCBI has expanded its operations through four additional manufacturing technology centers in strategic locations around the state.

SOUTH CHARLESTON CAMPUS

Administration Building houses the admission office, classrooms (including an electronic classroom), and two computer labs, in addition to offices for faculty and staff.

Robert C. Byrd Academic and Technology Center is named for the late U.S. Senator Byrd in recognition of his efforts on behalf of education in West Virginia. The facility contains thirteen classrooms and the Robert C. Byrd Institute for Advanced Flexible Manufacturing. On the first floor it also houses the South Charleston Campus Library and Research Commons, which holds a core collection of books and journals that support the undergraduate and graduate programs offered on that campus. Access to all Marshall Libraries electronic resources is available, along with a professional staff to assist students and faculty with their research needs. Photos for Marshall IDs are taken in the library, and the staff also proctors the Miller Analogies Test.

Undergraduate Programs

FOUR-YEAR PROGRAMS OFFERED AT MARSHALL UNIVERSITY

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

A *major* is a program of study requiring at least 24 semester credits for completion. It is offered within one department or by a combination of departments. It is a field of study within an approved degree program, having its own curriculum. A degree program may have more than one major. All courses in the major must be taken for a grade except internships, practica, and approved foreign study courses.

An *Area of Emphasis* is a specific subject area of study which has limited course offerings within an approved degree program and major. Normally, a minimum of twelve (12) credit hours would be expected for an area of emphasis at the undergraduate level. Areas of emphasis are indented below under Program and Major.

Degree Abbreviations:

B.A.: Bachelor of Arts
B.B.A.: Bachelor of Business Administration
B.F.A.: Bachelor of Fine Arts
B.S.: Bachelor of Science
B.S.B.M.E. Bachelor of Science in Biomedical Engineering
B.S.E.: Bachelor of Science in Engineering
B.S.E.E. Bachelor of Science in Electrical Engineering
B.S.M.E. Bachelor of Science in Mechanical Engineering
B.S.W.: Bachelor of Social Work
R.B.A.: Regents Bachelor of Arts

College Abbreviations:

CAM: College of Arts and Media
CITE: College of Information Technology and Engineering
COEPD: College of Education and Professional Development
COLA: College of Liberal Arts
COHP: College of Health Professions
COS: College of Science
COB: College of Business

Program/Major/Area of Emphasis	*Degree*	*College*
Accounting	B.B.A.	COB
Art (See Visual Art)		
Athletic Training	B.S.	COHP
Comprehensive		
Health Communication		
Occupational Safety and Health		
Pre-Chiropractic		
Pre-Med		
Pre-Physical Therapy		
Pre-Physician's Assistant		
Safety		
Biological Sciences	B.S.	COS
Biological Sciences		
Cellular, Molecular and Medical Biology		
Ecology and Evolutionary Biology		
Microbiology		
Natural History and Conservation		
Plant Biology		
Pre-Dentistry		
Pre-Med		
Pre-Pharmacy		
Pre-Veterinary		
Biomechanics	B.S.	COHP

(continued)

Program/Major/Area of Emphasis	*Degree*	*College*
Biomedical Engineering	B.S.B.M.E.	CITE
Chemistry	B.S.	COS
Biochemistry		
Chemistry		
Pre-Dentistry		
Pre-Med		
Pre-Pharmacy		
Pre-Veterinary		
Environmental Chemistry		
Forensic Chemistry		
Chemistry (ACS Certified)	B.S. Chemistry	COS
Classical Language		
Latin	B.A.	COLA
Communication Disorders	B.S.	COHP
Communication Studies	B.A.	COLA
Health Communication		
Interpersonal Communication		
Organizational Communication		
Public Communication		
Computer and Information Technology	B.S.	COS
Computer Application Development		
Game/Simulation Development		
Web/Mobile Application Development		
Computer Science	B.S.	CITE
Criminal Justice	B.A.	COS
Law Enforcement		
Legal Studies		
Corrections		
Cytotechnology	B.S. Cytotech	COHP
Dietetics	B.S.	COHP
Digital Forensics and Information Assurance	B.S.	COS
Economics	B.A.	COLA
Economics	B.B.A.	COB
Education, Early Childhood (See Education)		
Education	B.A.	COEPD
Education, Early Childhood		
Education, Elementary		
Early Education – PreK-K		
Elementary Education K-6		
English 5-9		
General Science 5-9		
Mathematics 5-9		
Multi-Categorical K-6		
Social Studies 5-9		
Education, Secondary		
Art Education PreK-Adult		
Biological Science 9-Adult		
Chemistry 9-Adult		
English 5-Adult		
English 5-9		
General Science 5-Adult		
General Science 5-9		
Mathematics 5-Adult		
Mathematics 5-9		
Mentally Impaired 5-Adult		
Music Education PreK-Adult		
Physics 9-Adult		
Social Studies 5-Adult		
Social Studies 5-9		
Spanish 5-Adult		
Wellness PreK-Adult		

Program/Major/Area of Emphasis	*Degree*	*College*
Electrical Engineering	B.S.E.E.	CITE
Engineering	B.S.E.	CITE
Civil Emphasis		
English	B.A.	COLA
Creative Writing		
Generalist		
Literary Studies		
Exercise Science	B.S.	COHP
Applied Exercise Physiology		
Clinical Exercise Physiology		
Finance	B.B.A.	COB
Geography	B.A.	COLA
Geography	B.S.	COLA
Meteorology		
Weather Broadcasting		
Geology	B.A.	COS
Geology	B.S.	COS
Engineering Geology		
Environmental Geoscience		
Health Sciences	B.S.	COHP
History	B.A.	COLA
Humanities	B.A.	COLA
Classics		
Philosophy		
Religious Studies		
International Affairs	B.A.	COLA
International Business	B.B.A.	COB
Journalism and Mass Communications	B.A.	CAM
Advertising/Public Relations		
Advertising		
Public Relations		
Sports Public Relations		
Journalism		
Broadcast		
Multimedia		
Broadcast Sports		
Print Sports		
Media Production		
Radio/Television Production and Management		
Video Production		
Latin	B.A.	COLA
Management	B.B.A.	COB
Energy Management		
Health Care Management		
Management Information Systems	B.B.A.	COB
Marketing	B.B.A.	COB
Entrepreneurship		
Marketing		
Mathematics	B.S.	COS
Applied Mathematics		
Mathematics		
Statistics		
Mathematical Statistics		
Mechanical Engineering	B.S.M.E.	CITE
Medical Imaging	B.S.	COHP
Cardiovascular/Interventional Advanced Practice		
CT/MRI Advanced Practice		
Mammography		
MI Management Advanced Practice		
RT Completion		

(continued)

Program/Major/Area of Emphasis	*Degree*	*College*
Medical Laboratory Science	B.S. Med Tech	COHP
Modern Languages	B.A.	COLA
French		
Japanese		
Spanish		
Music	B.A.	CAM
Multidisciplinary Music Studies	B.F.A.	
Jazz Studies		
Performance		
Theory and Composition		
Natural Resources and the Environment	B.S.	COS
Environmental Science		
Applied Environmental Science		
Conservation and Wildlife		
Environmental Science		
Natural Resources and Recreation Management		
Nursing	B.S.N.	COHP
Physics	B.S.	COS
Pre-Medical		
Applied Physics		
Bio Physics		
Medical Imaging		
Political Science	B.A.	COLA
Psychology	B.A.	COLA
Regents Degree	R.B.A.	
Anthropology		
Criminal Justice		
Digital Forensics		
Creative Writing in English		
Game Development		
Geography		
Instructional Technology and Librarianship		
Literature in English		
Military Science		
Preschool Development		
Psychology		
Religion Studies		
Sociology		
Web Application Development		
Women's Studies		
Respiratory Care	B.S.	COHP
Cardiovascular/Interventional Advanced Practice		
CT/MRI Advance Practice Track		
Mammography		
MI Management Advanced Practice Track		
RT Completion		
Safety Technology	B.S.	CITE
Secondary Education (See Education)		
Social Work	B.S.W.	COHP
Sociology and Anthropology	B.A.	COLA
Anthropology		
Sociology		
Sport Management	B.S.	COHP
General Management		
Sport Marketing		
Sport Agency		
Facilities and Operation Management		
Sport Information		
Recreation and Physical Activities		
Sport Studies		

Teacher Education (see Education)		
Theatre	B.A.	CAM
Performance	B.F.A.	
Production		
Video Production	B.A.	CAM
Visual Art	B.A.	CAM
Ceramics	B.F.A.	
Fibers		
Graphic Design		
Painting		
Photography		
Printmaking		
Sculpture		

UNIVERSITY TWO-YEAR PROGRAMS OFFERED

Program/Major/Area of Emphasis	*Degree*	*College*
Medical Laboratory Technology	A.A.S.M.L.T.	COHP
Nursing		
St. Mary's Cooperative Program	A.S.N.	COHP

UNDERGRADUATE CERTIFICATE PROGRAMS

Appalachian Studies
Asian Studies
Geospatial Information Science
Information Assurance
Public Health
Worksite Wellness

Admissions

OFFICE OF ADMISSIONS

One John Marshall Drive
Huntington, West Virginia 25755
Telephone 1-800-642-3499 or 1-304-696-3160
admissions@marshall.edu
www.marshall.edu/admissions

GENERAL ADMISSION INFORMATION

Students applying for admission to Marshall University must submit an application form available from the Office of Admissions or apply online. **All applications for admission or re-admission must be submitted to the Office of Admissions, along with all required credentials, at least two weeks prior to the start of a term.** Applications that are submitted after this deadline or that are not complete by this deadline may not be evaluated in time for applicants to register for the current term. **Applicants who apply late or who fail to ensure that their application files are complete at least two weeks prior to the start of a term must recognize that admission may be deferred to a future term and assume all responsibility for failure to complete the application process by the stated deadline.**

All materials and credentials submitted to the Office of Admissions become the property of Marshall University. Materials and credentials will not be returned or released to third parties. **Any student admitted on the basis of false and/or incomplete information is subject to immediate dismissal or other disciplinary action.**

Requests for information, the online application, and additional resources can be found at *www.marshall.edu/admissions*. For specific admission requirements relative to student type please see the appropriate section below.

Admission to the university does not guarantee admission to any particular college or degree program. Each student must meet the requirements of the academic college s/he wishes to enter, or of the degree program sought. Check individual college program listings for details.

Admission to Marshall University is granted for a specific term only. If an applicant fails to register during the term for which s/he is admitted, the applicant may contact the Office of Admissions and request an extension of acceptance for up to one academic year. If an applicant attends another accredited college or university during that time, s/he must re-apply as a transfer student. Appeals of the admission decision will be granted on a very limited basis at the discretion of the Admission Appeals Committee when extenuating circumstances exist. The student must show great potential for success, provide a plan for improving academic performance, and submit documentation of all extenuating circumstances. For more information on submitting an appeal, please contact the Office of Admissions.

A housing reservation, scholarship award, or grant-in-aid is contingent upon admission to Marshall University. Admission to the university does not guarantee housing. All students must be fully admitted to re-enroll for succeeding terms. Once an applicant is admitted, s/he can visit *www.marshall.edu/newstudentchecklist* for information regarding all steps in the enrollment process. The **enrollment deposit** is required before any new student is permitted to register for courses or reserve housing.

COMPLIANCE WITH MILITARY SELECTIVE SERVICE ACT

State law provides that a male person who has attained the age of eighteen (18) years may not enroll in a state-supported institution of postsecondary education unless he is in compliance with the Military Selective Service Act (50 U.S. Code, Appendix 451, et. eq. and the amendments thereto). Also, a male person may not receive a loan, grant, scholarship, or other financial assistance for postsecondary higher education funded by state revenue, including federal funds or gifts and grants accepted by this state, or receive a student loan guaranteed by the state unless he is in compliance with the Military Selective Service Act.

APPLICATION FEES

All new domestic undergraduate students applying to Marshall University must pay a $40 application fee. Once the $40 application fee has been paid, no additional application fee is required for subsequent undergraduate applications.

In lieu of the application fee, transfer students must pay a $50 transfer evaluation fee. Transfer evaluation fees are valid for one academic year only.

International applicants are required to submit a non-refundable $65US application fee that is valid for one academic year. International transfer students must submit the $65US application fee and $50US transfer evaluation fee.

FRESHMEN

Application Procedures for Freshmen and Non-Transfer Students

High School Graduates

General Requirements:

1. A high school diploma (official transcript with graduation date required).
2. An overall Grade Point Average of 2.00 on a 4.00 scale and an ACT Composite score of 19 or SAT Total Score[1] of 990 or an overall Grade Point Average of 3.00 on a 4.00 scale and an ACT Composite of 16 or SAT Total Score[1] of 880 is required for regular freshman admission. Majors within the College of Information Technology and Engineering have additional requirements for admission. Please consult the current undergraduate academic catalog for specific information regarding requirements.
3. **Recommended** completion of Higher Education Policy Commission (HEPC) academic core unit requirements:
   - 4 units of English (including English 12CR and courses in grammar, composition, and literature)
   - 4 units of mathematics (three units must be Algebra I and higher or Math I or higher; Transitional Math for Seniors will also be accepted). Courses designed as "support courses", such as Math I Lab or Math I Support, that provide extra instructional time but no additional content shall not be acceptable as meeting the required 4 mathematics course core requirements.
   - 3 units of social studies (including U.S. studies/history)
   - 3 units of science (all units must be college-preparatory laboratory science, preferably including units from biology, chemistry, and physics)
   - 2 units of world language (two units of the same world language; sign language is also acceptable)
   - 1 unit of arts

Students seeking admission to four-year degree programs must earn credit for the courses listed above.

Applicants who have not completed the HEPC course requirements may be admitted, but must complete commensurate college-level coursework prior to degree completion. Please consult an academic advisor for specific course requirements.

First-time freshmen pursuing a four-year baccalaureate degree who meet all admission requirements will be admitted unconditionally.

A very limited number of students who do not meet the GPA, ACT/SAT, or Higher Education Policy Commission general requirements for admission may be admitted conditionally to University College and must enroll on the Huntington campus. Under the terms of the admissions policy, only a limited number of conditionally admitted students will be permitted to enroll at Marshall. For specific requirements for conditionally admitted students, see "Conditional Admission." Students who do not meet the general or conditional requirements may appeal the decision through the Admission Appeals Committee.

Required Application Materials:

1. Completed application for admission.
2. A non-refundable application fee of $40.
3. An official, final transcript, including graduation date, sent directly from the student's high school to the Marshall University Office of Admissions.
4. Official college transcript sent to the Marshall University Office of Admissions directly from the college or university if a student has completed a non-Marshall college course while in high school or in summer school.
5. American College Test (ACT) or Scholastic Aptitude Test (SAT) scores sent directly from the testing agency. The Higher Education Policy Commission requires that all freshmen submit the American College Test (ACT) or Scholastic Aptitude Test (SAT) scores except applicants who graduated from high school five years or more ago. (Applicants who graduated from high school five years or more ago and who lack test scores must pass placement exams or designated English and mathematics prerequisites before they are permitted to enroll in courses in English and mathematics. Students without standardized test scores for composition placement should contact the English Department to discuss placement options.) ACT or SAT test scores are used in placing students in English and mathematics, for scholarship and loan applications, for academic counseling, for determining eligibility for certain degree programs, and in part to meet NCAA athletic eligibility requirements.[1]

(continued)

[1]SAT (CR+M) of 900 prior to March 2016 is equivalent to an SAT Total Score of 990; an SAT (CR+M) of 770 prior to March 2016 is equivalent to an SAT Total Score of 880.

6. A valid immunization record including measles and rubella vaccinations (or MMR) and all other required vaccinations or screenings. Students must provide proof of immunity before or during the first semester of enrollment or they will not be permitted to enroll in subsequent terms. If an applicant has religious beliefs that prohibit vaccination, the applicant must submit a notarized statement from a member of his or her clergy. Requests for exemptions should be made to the Office of Admissions. Students born prior to January 1, 1957 are exempt from the measles and rubella (or MMR) immunization requirement.

Conditional Admission of Freshman Students

Marshall University offers admission to a limited number of students who do not meet freshman admission requirements. These students are admitted conditionally to University College, must enroll on the Huntington campus, and must complete all requirements within three semesters.

Requirements include:

- For students having Verbal ACT scores of less than 18 or SAT ERW 320, successful completion of required corequisite English course.
- For students having Math ACT scores of less than 19 or SAT Math 510, successful completion of required prerequisite or corequisite math course(s).
- Successful completion of academic support class (UNI 100).
- Completion of 18 graded hours with a 2.00 GPA (cumulative and MU).

Upon completion of the requirements, the student may transfer into any major/college for which s/he is eligible. Some majors and colleges require separate applications and have additional requirements for admission into their programs.

Provisional Admission of Freshman Students

Students who have met minimum admission requirements but who are unable to provide one or more of certain required application materials may be admitted provisionally in some instances. Freshman students may be provisionally admitted to the university for one semester only with the following minimum documentation:

1. Completed application for admission with $40 application fee;
2. Preliminary high school transcript showing senior schedule or passing score on designated state high school equivalency diploma exam;
3. American College Test (ACT) or Scholastic Aptitude Test (SAT) exams with minimum required scores.[1]

Freshman students will be fully admitted to the university and will be eligible to register for succeeding terms when all admission requirements have been met and all required materials have been received.

A student who attends another collegiate institution during the summer session immediately following graduation from high school is admitted as an entering freshman with advanced standing.

HIGH-SCHOOL EQUIVALENCY DIPLOMA (GED, HiSET, TASC) RECIPIENTS

A student holding a high school equivalency diploma may be admitted to Marshall University if s/he passes the TASC (Test Assessing Secondary Completion) with a score of at least 500 on each of the five subtests or passes the GED (General Education Development Test) with scores considered acceptable for admission. The HiSET exam is also accepted, and students must pass the HiSET with a total scaled score of at least 45. Applicants for admission who have held the high school equivalency diploma for at least five years subsequent to the graduation date of their high school class are not required to submit ACT or SAT scores except if applying to the College of Information Technology and Engineering. Applicants holding the high school equivalency diploma for fewer than five years subsequent to the graduation date of their high school class must submit ACT or SAT scores for admission. Students admitted without ACT or SAT scores are required to take English and math placement examinations prior to course registration or to contact program coordinators to discuss other placement options. A limited number of students who do not meet high school equivalency test and ACT/SAT requirements may be admitted to University College at the discretion of the Admission Appeals Committee (see Conditional Admission). Students holding a high school equivalency diploma may not enroll at Marshall University prior to the graduation date of their high school class.

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[1]Students who graduated from high school five years or more ago are not required to take the ACT or SAT exam except for admission into the College of Information Technology and Engineering. Students admitted without ACT or SAT scores must take the placement examination prior to course registration. Placement exam scores do not replace the requirement for ACT or SAT exams.

High School Equivalency Diploma Admission Requirements:

1. Applicants for high school equivalency diploma admission must be beyond the age and time of their regular high school graduating class.
2. Applicants must have official high school equivalency test scores sent directly from the state testing center or state department of education.
3. Applicants who completed the high school equivalency test in the Armed Forces can have an official copy of their scores forwarded to the Office of Admissions. More information is available online at *www.dantes.doded.mil*.
4. A high school equivalency diploma recipient is admitted on the basis of obtaining high school equivalency test scores considered acceptable for admission to Marshall University. Please contact the Office of Admissions for more specific acceptable high school equivalency test score requirements. No course credit is granted for completion of a high school equivalency diploma.

EARLY HIGH SCHOOL COMPLETERS

If a high school student has met all high school graduation requirements by the end of the fall semester of the senior year, s/he may be provisionally admitted for the spring semester of the senior year under the following conditions:

1. All general freshman admission requirements are met;
2. High school counselor must submit a letter indicating that the student has met all high school graduation requirements but will not receive a diploma until her/his graduating class receives the diploma;
3. Registration will be permitted for one term only. Students will not be permitted to register for subsequent terms until final high school transcript with graduation date has been received.

If a student cannot provide the aforementioned documentation, s/he may apply as an Early Admission student (see Early Admission Options section). **Early High School Completers and Early Admission students are not eligible for financial aid and may not reside on campus.**

TRANSFER STUDENTS

Application Procedures for Transfer Students

A high school graduate or high school equivalency diploma recipient who wishes to enroll at Marshall University and who has attempted coursework from another accepted, accredited college or university is classified as a transfer student. Marshall University does not at any time or under any condition disregard college or university credits attempted or earned at accepted, accredited institutions for the purpose of admission. Any student admitted on the basis of false and/or incomplete information is subject to immediate dismissal or other disciplinary action.

General Admission Requirements:

All transfer students must be eligible to return to the institution they most recently attended.

In addition, transfer students who have fewer than 30 earned semester hours must meet one of the following criteria:

- Must meet the current freshman admission standards

OR

- Have earned 12 graded college-level semester hours while maintaining a 2.00 cumulative college GPA.

Transfer students who do not meet either of these requirements may appeal the decision through the Admission Appeals Committee. If a transfer student is admitted with a cumulative GPA below 2.00, he or she is on academic probation and is eligible to register for a limited number of credit hours. Please contact the appropriate dean's office for specific guidelines.

Admission to Marshall University does not guarantee admission to specific academic programs. Students must meet all requirements of an academic program in order to be admitted to that program.

Required Application Materials:

1. Completed application for admission. (The application must be complete before transfer students can be considered for admission to the university.)
2. A non-refundable transfer evaluation fee of $50.
3. Official transcripts from the Registrar's Office of all accepted, accredited institutions attended must be sent directly to the Marshall Office of Admissions. (Faxed transcripts, transcripts marked "Issued to Student," transcripts issued to any third party, or transcripts submitted directly by students cannot be accepted.)

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4. Transfer applicants with fewer than 30 earned semester hours must also submit an official high school transcript with graduation date.
5. American College Test (ACT) or Scholastic Aptitude Test (SAT) scores sent directly from the testing center. The Higher Education Policy Commission requires that all freshmen submit the American College Test (ACT), or Scholastic Aptitude Test (SAT) scores except applicants who graduated from high school five years or more ago. (Applicants who graduated from high school five years or more ago and who lack test scores must pass placement exams or designated English and mathematics prerequisites before they are permitted to enroll in courses in English and mathematics. Students without standardized test scores for composition placement should contact the English Department to discuss placement options.) ACT or SAT test scores are used in placing students in English and mathematics, for scholarship and loan applications, for academic counseling, for determining eligibility for certain degree programs, and in part to meet NCAA athletic eligibility requirements.[1]
6. A valid immunization record, including measles and rubella (or MMR) and all other required vaccinations or screenings, is required of all transfer students. Students must provide proof of immunity before or during the first semester of enrollment or they will not be permitted to enroll in subsequent terms. If an applicant has religious beliefs which prohibit vaccination, the applicant must submit a notarized statement from a member of his or her clergy. Requests for exemptions should be made to the Office of Admissions. Students born prior to January 1, 1957 are exempt from the measles and rubella (or MMR) immunization requirement.

Evaluation of Credit

Transfer Students from West Virginia State Colleges or Universities:

Credits and grades earned for all baccalaureate level courses at any accredited baccalaureate degree-granting institution in the West Virginia state-supported system of higher education are transferable to Marshall University.

Transfer Students from Community Colleges or Branch Colleges:

Seventy-two hours of credits and grades completed at community colleges or branch colleges may be applied toward graduation at Marshall University.

Evaluation of Transfer Credit

Transfer students should apply to Marshall University and submit their credentials at least one month before course registration to allow ample time for an evaluation of their credits.

All materials and credentials submitted to the Office of Admissions become the property of Marshall University and will not be returned or released to third parties.

Marshall University accepts all transferable coursework from accepted, accredited institutions. Coursework taken at another accepted, accredited institution transfers at the level at which it was taken. This is something important to consider since Marshall students must have a minimum number of upper division credits (300/400 level credit), determined by their college, in order to graduate. If, for example, a student takes ENG 220, American Literature, at another institution, and this course converts at Marshall to ENG 320, American Literature, the student will get credit for ENG 320 at Marshall, but those credits will count as lower division (100- to 200-level) credits.

Grades earned for coursework taken at other institutions are calculated in the overall GPA (includes courses taken at Marshall University and other institutions), but have no impact on the Marshall GPA (includes only Marshall University coursework), except for D/F repeats.

The Core Curriculum (see additional information under "Academic Information") applies to transfer students. Students who believe they may have taken coursework at other institutions that would satisfy part of the Core Curriculum should submit documentation (course syllabi, catalog descriptions) to their dean's office for review by the appropriate committee.

Appeal of Denial of Transfer Credit, or Course Equivalency Determination, or Course Substitution

Students may appeal decisions on how transfer credits are evaluated.

The MU Office of Admissions determines transferability of credits and course equivalency at the time of admission. Once admitted, if a student believes the proper equivalent credit has not been awarded, the student should request, in writing, an explanation of credit denial from the Office of Admissions. This initial step must be taken within thirty (30) days of receipt of the transfer credit evaluation or within ten (10) instructional days of the beginning of the student's matriculating term, whichever comes first. The Office of Admissions will review the request for technical errors and issue a written response within ten (10) days.

The college in which the student's degree program is housed determines course substitutions. After receiving the transfer credit evaluation from the Office of Admissions, the student should meet with an academic advisor in the student's degree

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[1]Students who graduated from high school five years or more ago are not required to take the ACT or SAT exam except for admission into the College of Information Technology and Engineering. Students admitted without ACT or SAT scores must take the placement examination prior to course registration. Placement exam scores do not replace the requirement for ACT or SAT exams.

program to determine the extent to which transferred credits and course equivalencies meet specific degree requirements. At this point, the advisor may make certain additional course substitutions per the policies of the college that houses the student's degree program.

If the student is not satisfied with the determinations in Step 2 regarding course substitutions, the student may initiate a formal appeal, in writing, to the dean of the academic college in which the student is admitted. The appeal must include applicable syllabi and other supporting documents and must be submitted within thirty (30) days of the beginning of the student's matriculating term.

If a course substitution is not granted by the dean, the student may appeal the decision to the West Virginia Higher Education Policy Commission, in writing, within ten (10) days of the issuance of the dean's decision. The Commission will review the entire case, including both course equivalencies and course substitutions, and issue a recommendation to the Provost and Senior Vice President for Academic Affairs at Marshall University, who shall then render the final decision.

Provisional Admission of Transfer Students

Transfer students may be provisionally admitted to Marshall University for one semester only with the following minimum documentation:

1. Completed application for admission with $50 transfer evaluation fee;
2. Transfer Applicants who have earned 30 or more semester hours from accepted, accredited institution(s) and who are currently enrolled while in good standing may be provisionally admitted pending receipt of all outstanding official, final college transcripts.
3. Transfer Applicants who have earned fewer than 30 semester hours from accepted, accredited institution(s), are currently enrolled while in good standing with a 2.00 or higher cumulative GPA on 12 graded college-level semester hours may be provisionally admitted pending receipt of all outstanding official, final college transcripts.
4. Transfer Applicants who have earned fewer than 30 semester hours from accepted, accredited institution(s), are currently enrolled while in good standing, and who meet minimum freshman admission requirements may be provisionally admitted pending receipt of all outstanding official, final college transcripts.
5. If a student has fewer than 30 semester transfer hours s/he must have an official final high school transcript with graduation date or high school equivalency test scores and ACT/SAT scores mailed directly to the Office of Admissions from the high school, state testing center or state department of education. All test scores must be sent directly to the Office of Admissions from a state testing center, a state department of education, the American College Test (ACT) or The College Board (SAT).

Transfer students will be fully admitted to the university and will be eligible to register for succeeding terms when all requirements have been met and all required documentation has been received.

EARLY ADMISSION OPTIONS

Marshall University offers a variety of early admission options. Students may apply to attend Marshall University on either a full or part-time basis prior to graduating from high school. Students who enroll at Marshall University prior to high school graduation are not eligible for freshman admission, financial aid, or on-campus housing. For admission to Marshall as an Early Admission student, applicants must meet the requirements listed below. Students with an exceptional talent in a discipline such as music may request permission to enroll in coursework in that discipline.

Please note that students who have taken college courses during high school under any of these options and plan to later apply for admission to Marshall University must meet all Marshall University admission standards described elsewhere in this catalog.

Early Admission to Marshall University: Prior to the Junior Year of High School

- Be currently enrolled in high school or a home-school program.
- Completed admission application.
- An ACT / SAT at the 85th percentile or above [ACT Composite = 26, SAT Total Score = 1230]. If the ACT or SAT has not been taken, a score at the 90th percentile or higher on another nationally normed standardized test that provides evidence of the ability to succeed at the college level is required.
- A current high school transcript reflecting a cumulative minimum GPA of 3.00 on a 4.00 scale.
- One letter of recommendation from a counselor or principal.
- Maintain a 2.00 GPA in all college courses.
- To take English or math courses, a student must have a qualifying ACT / SAT score in the subject area.

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Early Admission: Junior or Senior Year of High School

- Be currently enrolled in high school or a home-school program.
- Completed admission application.
- A current high school transcript reflecting a cumulative minimum GPA of 3.00 on a 4.00 scale.
- One letter of recommendation from a counselor or principal.
- Maintain a 2.00 GPA in all college courses.
- To take English or math courses, a student must have a qualifying ACT / SAT score in the subject area.

Early Admission: International Junior or Senior Year of High School

- Be currently enrolled in high school program.
- Completed admission application.
- A current high school transcript reflecting a cumulative minimum GPA of 3.00 on a 4.00 scale.

  U.S. high school - high school transcript reflecting a cumulative minimum GPA of 3.00 on a 4.00 scale.

  Non-U.S. high school - high school transcript in original language along with a certified English translation from the institution reflecting a minimum 3.00 GPA on a 4.00 scale; in some cases, high school transcripts may need to be evaluated by an accepted evaluation agency (please contact the Office of Admissions for more information).
- One letter of recommendation from a counselor or principal.
- Proof of English proficiency. If the student is currently attending a school in which the primary language of instruction for all programs is English, the counselor or principal from that high school can certify in writing that English is the official language of instruction. For information regarding other options for proving English proficiency, please see Proof of English Language Proficiency in the International Students section that follows.
- To take English or math courses, a student must have a qualifying ACT/SAT score in the subject area.

RESIDENT ALIENS

Resident Aliens must submit a copy of a valid resident alien card and meet all relevant freshman or transfer student admission requirements.

INTERNATIONAL STUDENTS

PROOF OF ENGLISH LANGUAGE PROFICIENCY

All undergraduate applicants to Marshall University, regardless of citizenship, who do not hold a high school degree or higher from an institution whose primary language of all instruction is English must provide proof they are proficient in the English language for admission to the university. Proof of English proficiency can be met by one of the following:

- Internet-based TOEFL (Test of English as a Foreign Language) score of 61 or higher.
- Paper-based TOEFL (Test of English as a Foreign Language) score of 500 or higher.
- IELTS (International English Language Testing System) score of 6.0 or higher.
- Michigan English Language Assessment Battery (MELAB) - minimum score of 79%.
- SAT - minimum ERW score of 320. Prior to March 2016, minimum verbal score of 450.
- ACT - minimum subscores of 18 in English and in Reading.
- Completion of Level 6 of INTO Marshall's Academic English program, with minimum *C*'s in all courses.
- Completion of INTO Marshall's Pathway course ENG 160 or ENG 101A with minimum *C* grade.
- Successful completion of an English as a Second Language (ESL) program approved by Marshall University's Office of Admissions.
- Degree or diploma from accredited secondary school, college or university in which the method of instruction for the entire institution is in English.

PROOF OF FINANCIAL SUPPORT

All admitted students who need to obtain a visa to enter the United States for academic study must show proof that they have secured finances to support their study and living costs for one academic year (9 months) before immigration documentation can be released to the student. Proof of financial support can be demonstrated by one of the following:

- An affidavit of sufficient financial support from a personal sponsor (i.e. parent, relative, friend, etc.) that has been certified by a U.S. bank or international financial institution.

- Documentation from a scholarship agency (i.e. government, corporation, etc.) stating the availability of funds and the intention to support the student's educational and living expenses for the entire duration of study at Marshall University.
- Bank statement from a U.S. bank, financial institution or its affiliate in U.S. dollars.
- Statement from the student's employer certifying that s/he has been granted study leave and salary support.

PROOF OF HEALTH INSURANCE

All international students are required to provide proof of health insurance prior to registration for each term at Marshall University. For more information, please visit *www.marshall.edu/iss.*

INTERNATIONAL FRESHMEN

Application Procedures for International Freshmen and International Non-Transfer Students

High School Graduates

General Requirements:

1. Equivalence of a U.S. high school diploma.
2. An Overall Grade Point Average of at least 2.50 on a 4.00 scale.
3. Proof of English proficiency (see Proof of English Proficiency section).
4. Proof of financial support (see Proof of Financial Support section).

Required Application Materials:

1. Completed application for admission including the $65US international application fee.
2. High school record:
   - *Non-U.S. high school* – official, final transcript, including graduation date, in the original language of issue, along with a certified English translation, submitted directly to the Marshall University Office of Admissions by the designated school official at the institution you attended.
   - *U.S. high school* – official, final transcript, including graduation date, sent directly from the student's high school to the Marshall University Office of Admissions.
3. College record:
   - *Non-U.S. college* – official college transcript of courses taken while in high school or as part of high school completion, including all courses taken and grades earned, in the original language of issue, along with a certified English translation, sent directly to the Marshall University Office of Admissions by the designated school official at the school you attended.
   - *U.S. college* – official college transcript sent to the Marshall University Office of Admissions directly from the college or university if a student has enrolled in a non-Marshall college course while in high school or in summer school.
4. A valid immunization record including measles and rubella vaccinations (or MMR) and all other required immunizations or screenings. Students must provide proof of immunity before or during the first semester of enrollment or they will not be permitted to enroll in subsequent terms. If an applicant has religious beliefs that prohibit vaccination, the applicant must submit a notarized statement from a member of his or her clergy. Requests for exemptions should be made to the Office of Admissions. Students born prior to January 1, 1957 are exempt from the measles and rubella (or MMR) immunization requirement.
5. Proof of English proficiency (see Proof of English Proficiency section).
6. Proof of financial support (see Proof of Financial Support section).

Provisional Admission

Students who have met minimum admission requirements but who are unable to provide one or more of certain required application materials may be admitted provisionally in some instances. Freshman students may be provisionally admitted to the university for one semester only with the following minimum documentation:

1. Completed application for international admission with appropriate fee.
2. Preliminary U.S. high school transcript or official, final high school transcript in the original language of issue, along with a certified English translation.
3. Proof of English proficiency (see Proof of English Proficiency section).

Freshman students will be fully admitted to the university and will be eligible to register for succeeding terms when all admission requirements have been met and all required materials have been received.

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A student who attends another collegiate institution during the summer session immediately following graduation from high school may be admitted as an entering freshman with advanced standing.

INTERNATIONAL TRANSFER STUDENTS

Application Procedures for Transfer Students

A high school graduate or a high school equivalency diploma recipient who wishes to enroll at Marshall University and who has attempted coursework from another accepted, accredited college or university is classified as a transfer student. Marshall University does not at any time or under any condition disregard college or university credits attempted or earned at accepted, accredited institutions for the purpose of admission. Any student admitted on the basis of false and/or incomplete information is subject to immediate dismissal or other disciplinary action.

General Admission Requirements:

All transfer students must be eligible to return to the institution they most recently attended while maintaining a 2.00 transfer GPA.

In addition, transfer students who have fewer than 30 earned semester hours must meet the international freshman admission standards (see International Freshmen section).

Admission to Marshall University does not guarantee admission to specific academic programs. Students must meet all requirements of an academic program in order to be admitted to that program.

Required Application Materials:

1. Completed undergraduate application for international admission.
2. A non-refundable international application fee of $65US and nonrefundable transfer evaluation fee of $50US.
3. College records:
   - *Non-U.S. college* – official college transcripts(s) of all college coursework taken after high school graduation and for college coursework taken in high school or as part of high school completion in the original language of issue, along with a certified translation in English, sent directly to the Marshall University Office of Admissions by the designated school official at the institution you attended.
   - *U.S. college* – official transcripts from the Registrar's Office of all accepted, accredited institutions attended must be sent directly to the Marshall Office of Admissions. (Faxed transcripts, transcripts marked "Issued to Student," transcripts issued to any third party, or transcripts submitted directly by students cannot be accepted.)
4. High school record (if student has earned fewer than 30 college-level semester hours):
   - *Non-U.S. high school* – official, final transcript in the original language of issue, along with a certified English translation, submitted directly to the Marshall University Office of Admissions by the designated school official at the institution you attended.
   - *U.S. high school* – official, final transcript, including graduation date, sent directly from the student's high school to the Marshall University Office of Admissions.
5. A valid immunization record, including measles and rubella vaccinations (or MMR) and all other required immunizations or screenings. Students must provide proof of immunity before or during the first semester of enrollment or they will not be permitted to enroll in subsequent terms. If an applicant has religious beliefs which prohibit vaccination, the applicant must submit a notarized statement from a member of his or her clergy. Requests for exemptions should be made to the Office of Admissions. Students born prior to January 1, 1957 are exempt from the measles and rubella (or MMR) immunization requirement.
6. Proof of English proficiency (see Proof of English Proficiency section).
7. Proof of financial support (see Proof of Financial Support section).

Provisional Admission of Transfer Students

Transfer students may be provisionally admitted to the Marshall University for one semester only with the following minimum documentation:

1. Completed application for international admission with $65US international application fee and $50US transfer evaluation fee.
2. Transfer applicants who have successfully earned 30 or more semester hours from accepted, accredited institution(s) and who are currently enrolled while in good standing may be provisionally admitted pending receipt of official, final college records in the original language of issue along with a certified English translation or all outstanding official, final college transcripts.
3. Transfer applicants who have earned fewer than 30 semester hours from accepted, accredited institution(s), are currently enrolled while in good standing, and who meet minimum international freshman admission requirements may be provisionally admitted pending receipt of official, final college records in the original language of issue along with a certified English translation or all outstanding official, final college transcripts.

4. If a student has earned fewer than 30 semester transfer hours s/he must have an official, final high school transcript in the original language of issue along with a certified English translation, or an official, final U.S. high school transcript with graduation date, submitted directly to the Marshall University Office of Admissions from the designated school official at the institution attended or the U.S. high school.
5. Proof of English proficiency (see Proof of English Proficiency section).
6. Proof of financial support (see Proof of Financial Support section).

Transfer students will be fully admitted to the university and will be eligible to register for succeeding terms when all requirements have been met and all required documentation has been received.

COLLEGE GRADUATES

Application Procedures for College Graduates

Second Baccalaureate Degree:

An applicant who wishes to pursue a second baccalaureate degree after completion of the first degree may earn another baccalaureate degree by:

- completing all of the major and minor requirements for the desired degree;
- completing a minimum of 30 additional hours beyond the 120 minimum hours required for the first baccalaureate degree;
- meeting the minimum residency requirement of 24 credit hours.

Special Students:

Applicants who hold a baccalaureate degree from an accepted, accredited institution but do not wish to pursue a second baccalaureate degree may enroll for undergraduate courses (for prerequisites, certification, etc.) by completing the application for admission and by presenting evidence to the Office of Admissions of the receipt of the baccalaureate degree in the form of an official transcript indicating that a baccalaureate degree was awarded.

TRANSIENT (VISITING) STUDENTS

Application Procedures for Transient (Visiting) Students

Students Visiting Marshall University from Other Institutions

Students enrolled in a degree program at another accepted, accredited institution during the previous year who would like to enroll at Marshall for no more than two consecutive semesters (excluding summer terms) can be admitted as transient students. Transient students must submit an application to the Office of Admissions for each term in which they wish to enroll and have the registrar at their home college send a letter of good academic standing to the Marshall University Office of Admissions for each term in which they wish to enroll.

Marshall University Students Who Wish to Visit Other Institutions

Current degree-seeking Marshall University students who wish to enroll at another institution must complete the "Approval of Courses to be taken for Advanced Standing" form (available in the Office of Admissions) prior to enrolling at another institution. If a student does not submit this form and attends another institution, s/he may be required to pay the transfer evaluation fee and reapply as a transfer student. Students who attend another institution for more than two semesters (excluding summer terms) must reapply as transfer students. This policy does not apply to students enrolled in the Regents Bachelor of Arts (RBA) program. A student who completes an advanced standing (transient approval) form must submit a transcript from the host institution for all semesters s/he attended. If the student did not actually attend the host institution for which approval was granted, that institution must provide documentation stating that the student was never enrolled there. Failure to provide these documents will result in a hold being placed on the student's record and the student being unable to register for subsequent terms.

Marshall University Students Enrolled in Study Abroad Programs

Students enrolled in Marshall University's Study Abroad Program must submit the Study Abroad approval form prior to enrolling at another institution. Students enrolled in the Study Abroad Program must meet the same requirements as all Marshall University students who wish to enroll at other institutions.

PART-TIME STUDENTS

Part-time students are those enrolled for fewer than twelve hours a semester. They must meet all requirements relative to the admission category for which they are applying (Freshmen, High-School Equivalency Completers, Home-School, Early High School Graduates, Transfer, Early Entry, Dual Credit, International, College Graduates, Transient, and Non-Degree) regardless of the number of hours for which they intend to enroll.

NON-DEGREE STUDENTS

A student who is not pursuing any type of degree may enroll as a non-degree student if he/she has been out of high school for more than five years and has no prior college work. A student cannot earn more than 30 total hours while classified as non-degree. Credit taken as a non-degree student will not necessarily transfer in all degree programs. Non-degree students are not eligible to receive financial aid.

Applicants who wish to apply as regular non-degree seeking must submit a completed application with all appropriate fees. If a regular non-degree student decides to become degree-seeking, he/she must re-apply as a freshman and provide all required documentation to be considered for admission. Before registering, regular non-degree students must obtain the permission of the dean of the college in which their intended course is offered.

CREDIT OPTIONS

ADVANCED PLACEMENT (AP) EXAMINATION

Marshall University recognizes certain examinations of the College Board Advanced Placement Program. Students who participate in the AP program and wish to have their scores evaluated for credit should have their official scores sent to Marshall University by selecting Marshall's code 5396 on the exam. To be evaluated for credit, official AP score reports must be sent directly to the Marshall University Office of Admissions from the College Board. AP examinations are prepared by the College Board, and the papers are graded by readers of the Educational Testing Service, Princeton, New Jersey 08540. Students cannot receive credit for a score below 3 on any exam. Students who do receive credit will be assigned the grade of CR which is not calculated into the GPA. All AP credit is counted as lower-division credit. See the following for required scores on specific exams.

AP Exams	*Required Score*	*Marshall Equivalent*	*Credit Awarded*
Art- (Studio) Drawing	3	ART 217	3
Art- 2-D Design	3	ART 214	3
Art- 3-D Design	3	ART 215	3
Art History	3	ART 112 or ART 101	3
Biology	3	BSC 104, 105	8
Biology	4	BSC 120, 121	8
Chemistry	3	CHM 203	3
Chemistry	4	CHM 211, 217	5
Chemistry	5	CHM 211, 212, 217, 218	10
Latin	3	LAT 101 and 102	6
Computer Science A	3	IST 264	3
Computer Science Principles	3	CS 105	3
Microeconomics	3	ECN 250	3
Macroeconomics	3	ECN 253	3
English Composition & Literature	3	ENG 231	3
English Composition & Literature	4	ENG 231 and 213	6
English Language & Composition	3	ENG 101	3
English Language & Composition	4	ENG 101 and 201	6
Environmental Science	3	Elective	4
Foreign Language, French Language	3	FRN 101, 102	6
Foreign Language, French Language	4	FRN 101, 102, 203	9
Foreign Language, German Language	3	GER 101, 102	6

AP Exams	*Required Score*	*Marshall Equivalent*	*Credit Awarded*
Foreign Language, German Language	4	GER 101, 102, 203	9
Foreign Language, Japanese Language and Culture	3	JPN 101, 102	6
Foreign Language, Japanese Language and Culture	4	JPN 101, 102, 203	9
Foreign Language, Spanish Language	3	SPN 101, 102	6
Foreign Language, Spanish Language	4	SPN 101, 102, 203	9
Foreign Language, Spanish Literature	3	Elective	6
Human Geography	3	GEO 100	3
Government and Politics, American	3	PSC 104	3
Government and Politics, Comparative	3	PSC 207	3
History, American	3	HST 230 and 231	6
History, European	3	HST 102 and 220	6
History, World	3	HST 101, 102, 103 (two of the three)	6
Mathematics, Calculus AB	3	MTH 132	5
Mathematics, Calculus AB	4	MTH 229	5
Mathematics, Calculus BC	3	MTH 229	5
Mathematics, Calculus BC	4	MTH 229, 230	9
Music Theory	3	MUS 101	3
Music Theory	4	MUS 101, 111	5
Music Theory	5	MUS 111,112, 113	6
Physics I	3	PHY 201	3
Physics I	4	PHY 201, 202	4
Physics II	3	PHY 203	3
Physics II	4	PHY 203, 204	4
Physics C, Mechanics	3	PHY 211	4
Physics C, Mechanics	4	PHY 211, 202	5
Physics C, Electricity & Magnetism	3	PHY 213	4
Physics C, Electricity & Magnetism	4	PHY 213, 204	5
Psychology	3	PSY 201	3
Statistics	3	STA 225, MGT 218, or PSY 223	3

INTERNATIONAL BACCALAUREATE

Marshall University recognizes examinations taken as part of the International Baccalaureate (IB) Program. Students who participate in the IB Program should have their scores sent directly to Marshall University from the IB testing program. Students will not receive credit for a score below 4 on any IB exam. All IB credit is counted as lower-division credit.

Following are the IB exams that will be considered for credit at Marshall University. Students will be awarded course equivalencies based on the score they are able to attain on the IB exam. Only Higher Level exams will be considered for credit.

IB Exams	*4*	*5*	*6*	*7*
Advanced Math	MTH 130	MTH 130	MTH 229, 130	MTH 229, 130
Art/Design	ART 112	ART 112	ART 112, 214	ART 112, 214
Biology	BSC 104	BSC 104	BSC 120, 121	BSC 120, 121
Business	MGT 100	MGT 100	MGT 100,	MGT 100,
Chemistry	CHM 203, 217	CHM 203, 217	CHM 203, 204, 217, 218	CHM 203, 204, 217, 218
Classical Latin	LAT 101	LAT 101	LAT 101, 102	LAT 101, 102
Computing Science	IST 264	IST 264	IST 264	IST 264
Economics	ECN 250	ECN 250	ECN 250, 253	ECN 250, 253

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IB Exams	*4*	*5*	*6*	*7*
English	ENG 101	ENG 101	ENG 101	ENG 101
French	FRN 101	FRN 101	FRN 101, 102	FRN 101, 102
Geography	GEO 100	GEO 100	GEO 100, GEO 3 Hrs Unclassified (lower division)	GEO 100, GEO 3 Hrs Unclassified (lower division)
German	GER 101	GER 101	GER 101, 102	GER 101, 102
History	HST 103	HST 103	HST 103	HST 103
History of the Americas	N/A	HST 230, 231	HST 230, 231	HST 230, 231
Islamic History	HST 260	HST 260	HST 260, 261	HST 260, 261
Music	MUS 142	MUS 142	MUS 142, 111	MUS 142, 111
Physics	N/A	PHY 201, 202	PHY 201, 202, 203, 204	PHY 201, 202, 203, 204
Psychology	PSY 201	PSY 201	PSY 201	PSY 201
Russian	MDL Unclassified 3 hrs. (lower div.)	MDL Unclassified 3 hrs. (lower div.)	MDL Unclassified 6 hrs. (lower div.)	MDL Unclassified 6 hrs. (lower div.)
Social Anthropology	ANT 201	ANT 201	ANT 201,	ANT 201,
Spanish	SPN 101	SPN 101	SPN 101, 102	SPN 101, 102
Theater Arts	THE 112	THE 112	THE 112, THE 220	THE 112, THE 220

COLLEGE LEVEL EXAMINATION PROGRAM

The College Level Examination Program (CLEP) enables students who can demonstrate knowledge and/or proficiency in certain fields to reduce the cost in time and money for pursuing a college education by successfully completing CLEP tests for credit.

Intensive reading in a particular field, on-the-job experience, or adult education may prepare a student to earn college credit through CLEP tests. This would reduce the total amount of coursework needed to complete degree programs. Scores on the test may also validate educational experience obtained at a non-accredited institution or through noncredit college courses. Credit completed through CLEP does not count as a part of the 18-hour limit under the Credit/Non-Credit Option. Credit earned through CLEP exams does not automatically satisfy specific academic requirements. Since colleges and departments have different curriculum requirements and may use the scores in different ways, students should consult first with their department or division chairs or their deans' offices regarding how the examinations would be used. Please call 304-696-2330 for more information or to schedule a CLEP exam.

On the following list are the CLEP exams that will be considered for credit:

CLEP Exams	*Required Score*	*Marshall Equivalent*	*Credit Awarded*
Algebra, College	50	Math 130	3
Precalculus	50	Math 132	5
Am. Government	50	Pol. Sci. 104	3
Biology, General	50	Biology 104-105	8
Calculus w/ elem. Functions	50	Math 229	5
Chemistry, General	50	Chem 211-212	6
Info Systems and computer applications	50	IST 264	3
Macroeconomics, Principles of	50	Economics 253	3
Management, Principles of	50	Management 320	3
Marketing, Principles of	50	Marketing 340	3
Microeconomics, Principles of	50	Economics 250	3
Psychology, Introductory	50	Psychology 201	3
Sociology, Introductory	50	Sociology 200	3
College Mathematics	50	MTH 121, 125	6
Humanities	50	Unclassified elective	6
Natural Science	50	Unclassified elective	6
Social Sciences and History	50	Unclassified elective	6

MILITARY EXPERIENCE AND TRAINING CREDIT

Marshall University recognizes and awards college credit for military training and experience as outlined by American Council on Education recommendations. To receive credit, current students must have earned at least 12 semester hours at Marshall University with a cumulative GPA of 2.00 or higher. Qualifying veterans should request a copy of their Joint Services Transcript (JST) or Community College of the Air Force/Air University transcript(s) be mailed directly to the Office of Admissions from the issuing agency.

Army Commission Credit

Veterans should contact the Military Science Department if they are interested in receiving credit for military service and applying it toward receiving a commission as an Army officer.

Service Members Opportunity Colleges

Marshall University is an institutional member of Service Members Opportunity Colleges (SOC), a group of over 1500 colleges and universities providing postsecondary education to members of the military throughout the world. As an SOC member, Marshall recognizes the unique nature of the military and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and experiences.

United States Marine Corps Platoon Leaders Class

Equivalent credit in Military Science may be awarded for successful completion of the Marine Corps Platoon Leaders Class. Students who have completed this class may apply at the Marshall University Department of Military Science Office for possible awarding of credit. For additional information on this class, write to: United States Marine Corps, Officer Selection Office, 641 Corporate Drive, Suite 104, Lexington, Kentucky 40503, phone: (606) 223-2446.

WEST VIRGINIA RESIDENCY

Requests for changes in residency status for new students will be evaluated by the Office of Admissions 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

RESIDENCY CLASSIFICATION FOR ADMISSION AND FEE PURPOSES

§133-25-1. General.

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

1.2. Authority. – West Virginia Code §§18B-10 and 18B-2B-6.

1.3. Filing Date. – May 9, 2017.

1.4. Effective Date. – June 9, 2017.

1.5. Repeal of Former Rule. -- Repeals and replaces Title 133, Series 25 which had an effective date of January 20, 2017.

§133-25-2. 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.

(continued)

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.

§133-25-3. 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.

§133-25-4. 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.

§133-25-5. 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 §133-25-3 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.

§133-25-6. 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 in-state students for tuition and fee purposes. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

6.3. Any student living in West Virginia and receiving education benefits provided under Chapter 30 or Chapter 33 from the U.S. Department of Veterans Affairs shall be charged in-state tuition and fees to attend a West Virginia public institution of higher education so long as such student is considered a "covered individual" as described in 38 U.S.C. §3679, as in effect at any time.

§133-25-7. Aliens.

7.1. Students who meet the domiciliary requirements noted in Sections 3, 4, and 5 of this policy, and who are U.S. Permanent Resident Aliens, Political Asylees or Political Refugees, or who hold an A, E, G, H, I, L, O, P, R, TD, TN, U, or V

visa, may apply to be reviewed for in-state residency for tuition purposes.

7.2. Students who hold B, C, D, F, J, K, M, or Q visas are not eligible for establishing in-state residency for tuition purposes.

7.3. Students who meet the domiciliary requirements and who are the beneficiary of a pending I-485 application to adjust status to permanent resident may apply to be reviewed for in-state residency for tuition purposes.

§133-25-8. 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 §133-25-3 of these rules, regarding proof of domicile and intent to remain permanently in West Virginia.

§133-25-9. 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.a. 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.a.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.a.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.b. 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.c. Residency appeals shall end at the institutional level.

INTO MARSHALL UNIVERSITY

One John Marshall Drive
Huntington, WV 25755, USA
1-304-696-4686
E-mail: *into@marshall.edu*
Website: *http://intohigher.com/marshall*

Marshall University offers academic Pathway and English language training programs through the INTO MU Center.

Undergraduate Pathway Programs

Undergraduate Pathway programs combine intensive language study, academic skills development, and academic coursework. The programs are designed to move students successfully through the first year of a four-year degree program. All courses taken in the Undergraduate Pathway are credit-bearing.

The Undergraduate Pathway programs are designed for students who:

- Want to study for an undergraduate degree in the U.S.
- Need to improve their English language skills
- Desire additional academic, language, and cultural support in order to succeed during their first year at a U.S. university
- Are not eligible for direct entry
- Any or all of the above

For more information, and a complete list of available Pathway programs, please visit *www.intohigher.com/marshall/programs*.

English Language Programs

The Academic English and special programs provide students with high-quality English language training.

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Academic English

The Academic English program provides international students with an excellent opportunity to improve their English, develop academic skills, and adjust to the local culture and community. Six levels of instruction are offered across 15-week terms in fall and spring, and 12 weeks in summer. Students receive a minimum of 20 hours of classroom instruction per week. Successful completion of Level 4 (no grades below *C* at that level) fulfills the English language proficiency requirement for admission to the Undergraduate Standard Pathway programs; successful completion of Level 6 (no grades below *C* at that level) fulfills the English language proficiency requirement for direct admission to the university or admission to the Undergraduate Accelerated Pathway programs.

Special Programs

Special Programs are designed for students of all levels of English who want to develop communications skills in many social and professional situations while also learning about American culture. The length and the hours of instruction per week are varied upon agreement. Students in this program are tested for language proficiency and then placed in the appropriate level. If the number of students is insufficient, those students may be placed in appropriate levels of the Academic English Program.

Financial Information: Fees, Assistance, and Scholarships

Bursar's Office
1-304-696-6620
bursar@marshall.edu
www.marshall.edu/bursar

UNIVERSITY EXPENSES: a general overview

Basic university expenses fall into three categories:

- tuition and fees,
- housing and meals,
- incidental or personal expenses.

Apart from unusual financial obligations, students living on campus in 2018-2019 can expect estimated annual expenses at Marshall University to range from about $19,500 to $28,500, including personal expenses.

The following is a table of estimated costs for the 2018-2019 academic year (Fall and Spring semesters), based on a normal undergraduate load of 15 credits per semester.

Note: A full-time student carries at least 12 credit hours per semester.

	In-State	Metro*	Out-of-State
Base Tuition & Fees	$8,128	$14,006	$18,614
Double-Occupancy housing	$6,454	$6,454	$6,454
Board, unlimited meals per week	$3,996	$3,996	$3,996
Subtotals	**$18,578**	**$24,456**	**$29,064**

Incidental and personal: $3,500 to $4,000, depending upon individual needs.

NOTE: Most colleges and/or programs have specific additional fees. For a more accurate total of tuition and fees, view the fulll listing at *www.marshall.edu/tuition.*

Warning: Do not calculate your expenditures based solely on these figures. They apply only to the 2018-2019 academic year. Actual costs for the next academic year should be available by July 1 each year. For more information, please contact the Bursar's Office at 304-696-6620.

TUITION & FEES: specific information

Tuition and fee costs are based on the college in which your major is housed and the specific program in which you are enrolled. For a complete schedule of tuition and related fees for the current year, please visit *www.marshall.edu/tuition.*

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 2018-2019 academic year.

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*Metro Fee is applicable to students whose residence is as follows:
in Ohio: Gallia, Jackson, Lawrence, Meigs, and Scioto Counties.
in Kentucky: Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin and Pike Counties

TUITION & ENROLLMENT FEES
UNDERGRADUATE TUITION AND FEES

Regular Semester - Fall 2018 - Full-Time Student

	Resident Rates	Metro Rates[1]	Non-Resident Rates
Base Tuition and Fees	**$4,064.00**	**$7,003.00**	**$9,307.00**
Regents Bachelor of Arts	**$4,064.00**	**$7,003.00**	**$9,307.00**
University College	**$4,064.00**	**$7,003.00**	**$9,307.00**
College and Program Fees			
College of Arts and Media			
Fine Arts Programs	320.00	395.00	395.00
Journalism Program	100.00	175.00	175.00
College of Business	150.00	250.00	250.00
College of Education and Professional Development	188.00	188.00	188.00
College of Health Professions			
Clinical Lab Sciences, Communication Disorders, and Dietetics Programs	300.00	550.00	550.00
Kinesiology Programs	300.00	550.00	550.00
Nursing Programs	450.00	700.00	700.00
All Others	200.00	450.00	450.00
College of Information Technology and Engineering	550.00	850.00	850.00
College of Liberal Arts	100.00	100.00	100.00
College of Science	160.00	200.00	200.00

SPECIAL STUDENT FEES

Application Fees (non-refundable)	
Undergraduate	40.00
Undergraduate Readmission	25.00
International Application Fee	65.00
Transfer Evaluation Fee	50.00
School of Nursing	30.00
CLEP/DANTES Testing	25.00
Course-Specific/Laboratory Fees:	
COHP-SOK - SCUBA Fee	200.00
Distance Program - Undergraduate	2927.00
E-Delivery Course Fee (per credit hour)	40.00
Electronic Course Fee - Undergraduate/WV Rocks (per credit hour)	223.00
Enrollment Deposit (Undergraduate)	100.00
Graduation Fees*:	
Associate Degree	50.00
Baccalaureate Degree	50.00

[1]Metro Fee is applicable to students whose residence is as follows:

in Ohio: Gallia, Jackson, Lawrence, Meigs, and Scioto Counties.

in Kentucky: Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin and Pike Counties

*Non-refundable.

Certificate Fee	15.00
Diploma Replacement	50.00
Health Professions - Non-Major Course Fee	1,720.00
Housing and Residence Life Fees:	
Improper Check-out Fee*	50.00
Mail Box Re-Key (per lock)	30.00
Reservation Deposit	200.00
Room Re-Key (per lock)	50.00
International Student Fee	100.00
Late Payment Fee*	25.00
Meal Card/ID Card Replacement	20.00
Pharmacy - Matriculation Fee (Annual, Year 1 only)	270.00
Pharmacy - Progression Fee (Annual)	280.00
Pharmacy - Simulation Fee (Annual)	350.00
Pharmacy - Practice Readiness Fee (Annual, Year 2 only)	270.00
Pharmacy - Practice Readiness Fee (Annual, Years 3-4 only)	455.00
Regents BA Degree Evaluation	300.00
Regents BA Posting Fee (per credit hour awarded)	10.00
Reinstatement Fee – Course Schedule*	25.00
Returned Check Fee	25.00
Revalidation of Credit Fee (per hour)	25.00
Senior Citizens Course Fee-Series 67	50.00
Student Success Fee	60.00
Study Abroad Fee (Registration Fee - per program)	100.00
Study Abroad Application/Advising/Shipping Fee	150.00
Transcript - Paper	10.00
Transcript - Electronic	12.00
University College - Placement Testing Fee	35.00

*Non-refundable.

ROOM AND MEALS

Residence Halls and Food Service Plans

The Department of Housing and Residence Life provides on-campus living space for approximately 2,500 students. Individual residence halls will accommodate between 120 and 500 students in single and double occupancy rooms, and suite-style rooms. All halls are located within walking distance of academic buildings and downtown Huntington. There is 24-hour security in every residence hall. Every student living on campus has a meal plan, a room with WIFI and cable television. Each hall is managed by a Residence Director with a Resident Advisor on each floor who provides the students with the best possible living and learning environment and resources.

Marshall University requires all full-time freshman and sophomore students to live on campus. Exceptions are granted to those living within a 50-mile radius that 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 the residency requirement, a release request and supporting documentation must be submitted to the Department of Housing and Residence Life by July 1 (Fall semester) or November 15 (Spring semester).

SEMESTER FEES (16 weeks):

Residence Halls

Double Occupancy

First-Year Residence Halls	$3,227.00
Twin Towers	$2,737.00
Buskirk	$2,751.00

(continued)

Deluxe Single Occupancy

Buskirk (if available)	$3,833.00
Holderby Hall	$3,394.00
Twin Towers	$3,813.00

Single Room Suite

Gibson, Haymaker, Wellman, Willis	$4,218.00

Double Room Suite

Gibson, Haymaker, Wellman, Willis	$3,207.00

Board Rates

Unlimited Meal Plan

w/ $50 Flex Dollars	$1,998.00
w/ $150 Flex Dollars	$2,098.00
w/ $250 Flex Dollars	$2,198.00

This option offers students unlimited continuous dining throughout the week during the scheduled hours at Harless Dining Hall or Towers Marketplace - Recommended for students who like to dine as often as they wish

175 Meal Passes per Semester Plan with Flex Dollars

w/525 Flex Dollars	$1,998.00
w/625 Flex Dollars	$2,098.00

This option offers students 175 meals to dine with throughout the semester during the scheduled hours of operation at Harless Dining Hall or Towers Marketplace.

160 Meal Passes per Semester Plan with Flex Dollars

w/625 Flex Dollars	$1,972.00

This option offers students 160 meals to dine with throughout the semester during the scheduled hours of operation at Harless Dining Hall or Towers Marketplace.

140 Meal Passes per Semester Plan with Flex Dollars

w/725 Flex Dollars	$1,919.00
w/65 Flex Dollars	$1,545.00 (this option available to juniors and seniors only)

Flex dollars can be used like cash and are for personal or guest use in the following locations: Memorial Student Center Food Court, all campus coffee shops, Smith Hall Simply to Go, and MU Campus Express.

Each meal plan comes with five meal passes per semester for guests or parents.

Each meal plan comes with four late-night passes per week (one per night).

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

Twin Towers Double Occupancy	$1,446.00
Twin Towers Single Occupancy	$1,776.00

EARLY ARRIVAL/BREAK HOUSING

Double Occupancy per day	$30.00
Single Occupancy per day	$40.00

*Rates are subject to change.

COMMUTER MEAL PLANS

Fifty Meals w/$100 Flex Dollars	$455.00
Thirty Meals w/$200 Flex Dollars	$410.00
Twenty Meals w/$50 Flex Dollars	$222.00
Twenty Meals w/$100 Flex Dollars	$275.00 (includes 5 guest passes
Twelve Meals with $150 Flex Dollars	$260.00 (includes 2 guest passes)
Summer Unlimited Meal Plan	$602.00

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.

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. For more information on payment plans or to enroll in a payment plan, visit *www.marshall.edu/bursar*, or log on to CashTrack through myMU (*www.marshall.edu/mymu*).

You can pay fees by Visa, MasterCard, Discover, or American Express by using CashTrack on myMU (*www.marshall.edu/myMU*). Credit card payments are also accepted at the Office of the Bursar, 101 Old Main. Please note that a nonrefundable processing fee of 2.25% will apply to credit or debit card payments.

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 Assistance 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 the obligation may be assigned to a state-authorized collection agency.

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

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 Bursar 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. *Schedule Adjustments* - Students who drop one or more classes through the end of the Late Registration period shall be eligible for a full reduction of tuition and fees of the dropped course(s), provided that the remaining tuition and fee assessment falls below twelve credit hours for undergraduate students or nine credit hours for graduate students.
2. *Complete Withdrawals* - Students initiating a complete withdrawal from the University shall receive a reduction in tuition and fees calculated using the following schedule, in accordance with Title 133 Legislative Rule, Series 32, Section 6.1:

   During the first 10% of the term, 90% reduction,

   From 11% to 25% of the term, 75%,

   From 26% to 50% of the term, 50%,

   After 50% of the term is completed, no reduction in tuition and fees will occur.

   Should the percentage calculation identify a partial day, the entire day should be included in the higher refund period.
3. *Course Withdrawals after Late Registration* - Students who do not officially withdraw from all classes at the University shall not be eligible for a reduction in tuition and fees.
4. Students receiving financial assistance covered by Title IV, who officially withdraw shall receive a refund in accordance with the 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.

Cancellation and Refund Policy for Housing and Residence Life

Cancellation of this 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 15th. Such cancellations will result in a refund

of $100.00 of the reservation deposit. Cancellations postmarked after May 15th 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 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 all monies paid for room. The student remains liable for any unpaid room balance due. A prorated refund will be processed for any unused portion of the board plan. Please note that meal assignments are billed for a full week thru Sunday.

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 any unpaid room or 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.

For students called to armed services, refunds 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 6 – 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 2018 summer terms, the student must have a 2018-2019 FAFSA on file. A 201819 FAFSA may also be used to consider Federal Pell Grant elegibility for summer.Submit a request by visiting *www.marshall.edu/summeraid.* Regardless of whether a student submits a request for summer aid, any student who enrolls in the summer and qualifies for a Pell Grant will be awarded.

Eligibility Determination

1. **Student Aid Report**

   After filing the FAFSA, the student receives a Student Aid Report (SAR). When an email address is provided on the FAFSA, the SAR will be emailed; otherwise, it will be sent by regular mail. At the same time, 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.

   Students have the ability to access their SAR by going to *www.fafsa.gov*. Students will need their FSA ID to access their SAR.

2. **Cost of Attendance**

   The Office of Student Financial Assistance determines your financial aid eligibility by subtracting your Expected Family Contribution (EFC) from your Cost of Attendance (COA). The information you report on your FAFSA is used in a formula established by the U.S. Congress, which determines your EFC. The COA that your financial aid package is based upon reflects standard and reasonable costs. Your COA attendance includes average tuition and fees based on your residency (*i.e.,* West Virginia, Metro*, and Non-resident), enrollment status, and program of study. For actual tuition, fee, residence halls, and meal plan charges. please visit the Bursar website at *www.marshall.edu/bursar*. *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.

Housing & food charges vary based upon residence hall assignment and meal plan. When you live on campus, you will be billed directly for your room and your meal plan. Marshall University policy requires all full-time freshmen and sophomores to live on campus. You may only request an exemption from this policy if your parent/legal guardian(s) live within 50 miles of campus by completing a Housing Release Request form. You may obtain the Housing Release Request form by visiting *www.marshall.edu/housing/resources-and-services/forms*. The COA budget component for housing and meals for students who live with parents or reside in off-campus housing varies according to your personal circumstances. Marshall University does not charge you for these amounts, but they are part of your Financial Aid COA budget to determine your financial aid eligibility.

Your COA also includes allowances for books and supplies. Books and supplies costs vary based upon your particular program of study. Transportation and Miscellaneous expenses are also variable costs and can consume a large part of your educational expenses if you don't budget carefully. The Office of Student Financial Assistance estimates certain values for these variable cost components to determine your full COA. You may view your financial aid COA by accessing your Cost of Attendance via the Financial Aid portal within myMU, but you must review your student account to see your actual Marshall University charges.

In all cases, the total amount a student is awarded in financial aid, e.g., scholarships, grants, loans, and work-study, cannot exceed the cost of a Marshall University education. In some instances, when Title IV (certain federal financial aid programs) and certain WV Higher Education programs are awarded, students are limited to receive grants and scholarships up to the student's demonstrated financial need.

3. Eligibility Confirmation

Using information reported on the FAFSA, the U.S. Department of Education performs data exchange with federal agencies to confirm that students 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, overpayment status for federal student grants, and Pell Grant life-time limits

The Office of Student Financial Assistance must also review other eligibility requirements such as:

- Admission Status
- Satisfactory Academic Progress
- Enrollment Status
- Academic Level
- Dependency Status
- Marital Status
- Identity
- Unusual enrollment patterns

If any of the items are 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 discrepancies.

4. Verification

Verification is the process in which Student Financial Assistance (SFA) – as dictated by federal and state regulations – compares the information reported on the FAFSA with financial and other data including but not limited to the following items:

- Adjusted Gross Income
- U.S. Income Tax Paid
- Education credits
- Untaxed IRS distributions
- Untaxed pensions
- IRA deductions and payments
- Tax-exempt interest
- Income earned from work
- Household size

- Number in college
- Supplemental Nutrition Assistance Program (SNAP)
- Child Support paid
- High school completion status
- Identity/statement of educational purpose

Students who are selected for verification are sent notification instructing them to access their financial aid records by logging into myMU.

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 provided 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 you respond to requests for information promptly because finalized **financial aid awards are processed in the order of file completion date.** To ensure that your financial funds disburse as scheduled at the start of the fall semester, you must be registered for classes and submit all required documentation by June 10. You may still submit documents after June 10; however, you should be prepared. to make payment arrangements with the Bursar's Office in the event your financial aid is not finalized by the billing due date.

The deadline for submittal of all verification documents is **30 days prior to the end of the academic year/period** you are enrolled. This designated deadline allows SFA to process and authorize disbursements within the timeframe permitted under regulations set forth for administering the federal and state financial aid programs. Failure to provide requested documentation within this timeframe will will result in cancellation of your financial aid offers.

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

A Federal Pell Grant applicant selected for verification must complete the process by the deadline published in the Federal Register. The deadline specified in the Federal Register for 2017-18 is September 22, 2018, or 120 days after the student's enrollment, whichever is earlier.

You will be sent an email directing you to review your revised financial aid awards by logging into my MU and accessing your financial aid records when there are any changes as a result of verification.

Financial Aid Satisfactory Academic Progress

Satisfactory Academic Progress (SAP) is the term used to define successful completion of degree requirements to maintain eligibility for federal and state financial aid. As required by regulations, Marshall University must determine whether a student meets SAP requirements. SAP evaluation for undergraduate students occurs at the conclusion of each payment period, which is at the end of the fall semester, spring semester, and summer terms. Financial aid eligibility determination for a future term of enrollment cannot be done until SAP evaluation occurs.

The student's entire academic history must be considered when determining SAP status irrespective of whether or not the student received financial aid. This also includes Advance Placement (AP) and International Baccalaureate (IB) credits, as well as transfer credits that apply to a Marshall University degree.

Requirements of the SAP Policy:

Qualitative (Grade Point Average)

The qualitative component measures the quality of the student's SAP by conducting a review of the student's cumulative grade point average (GPA). To meet the qualitative requirement, the student must have a minimum cumulative Marshall University and an overall GPA of at least 2.0. Credits accepted from other schools that may be applied to a Marshall University degree are counted in the calculation of the student's GPA, thus, are included in the qualitative measure.

(Specific external and institutional scholarships, assistantships, and grants may require a different minimum GPA for continued eligibility. This consideration is a separate and distinct factor in renewing or continuing eligibility for these specific financial aid funds. Information about the terms and conditions of specific student aid programs that have GPA and credit completion requirements is provided to the student at the time the award is offered. This information may be reviewed by logging into myMU and accessing financial aid award records.)

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Quantitative Measure (Calculating Pace or Completion Ratio)

The quantitative component corresponds to the pace at which the student must progress through his or her program of study. This evaluation is to ensure completion within the maximum timeframe (see below) permitted and provides for the measurement of the student's progress at the end of each period of enrollment. Pace or completion ratio is calculated by determining the cumulative number of credit hours the student has successfully completed divided by the number of cumulative credit hours the student has attempted. Credits accepted from other schools that may be applied to a Marshall University degree are counted in the calculation as both attempted and completed hours. To meet the quantitative requirement, the student's completion ratio must be 67% or higher.

Maximum Time Frame Measure

The maximum timeframe is a period of no longer than 150 percent of the published length of the education program as measured in credit hours. To meet the maximum timeframe requirement, the following rules apply:

Undergraduate Pursuing an Associate Degree
Not to exceed 100 attempted credit hours

Undergraduate Pursuing a Baccalaureate Degree
Not to exceed 180 attempted credit hours

Undergraduate who has an Associate Degree and is pursuing a 2nd Associate Degree
Not to exceed 130 attempted credit hours

Undergraduate who has a Baccalaureate Degree and is pursuing an Associate Degree
Not to exceed 210 attempted credit hours

Undergraduate who has a Baccalaureate Degree and is pursuing a 2nd Baccalaureate Degree
Not to exceed 240 attempted credit hours

In addition to the three measures referenced above to determine a student's SAP, a student who is placed on Academic Probation or Academic Suspension by his or her school or college based on University academic policy is considered ineligible for financial aid.

Effects of Remedial, Repeated, and Pre-requisite Courses

Remedial or developmental courses do not count toward the student's degree requirements, but they are counted as earned hours and are used to determine a student's academic grade level or classification. Hence, they are calculated according to the rules set forth in this policy. (Financial aid may be awarded to cover up to 30 remedial course credits. Remedial course credits in excess of 30 cannot be calculated as enrolled hours for financial aid purposes. This rule is not related to SAP 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 or she has earned a D or F grade taken no later than the semester or summer term during which the student attempts the 60th semester hour, and before he or she earns a baccalaureate degree, the student may have the D/F Repeat rule applied. When the D/F Repeat rule is applied, the original grade shall be disregarded, and the new grade (excluding a W) shall be used in determining the student's GPA.

(Coursework that a student repeats may be included when determining a student's enrollment status for Title IV-federal student aid purposes as long as it is not a result of 1) more than one repetition of a previously passed course, or 2) any repetition of a previously passed course due the student failing other coursework. This rule is not related to SAP but is a general financial aid eligibility requirement.)

Pre-requisites or preparatory courses are those in which a student must complete in order to meet admission requirements for a graduate or professional program. They do not count toward the student's degree requirements; however, they are calculated according to the rules set forth in this policy.

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 counted as credits attempted for quantitative and maximum timeframe measures, but are not included in the GPA or the credits earned count until the incomplete grade changes to a passing or failing grade.

Effect of Change in Major

If a student changes his or her major, all the credits the student earns toward any Marshall University undergraduate degree will be included in the calculation of qualitative, quantitative and maximum time frame measures.

SAP Definitions:

Financial Aid Warning

Financial Aid Warning status is assigned to a student who fails to meet one or more of the SAP measures at the conclusion of a payment period. Students placed on Financial Aid Warning will be notified by email and directed to log into myMU to review their SAP record. The student may continue to receive financial aid for one subsequent payment period under this status despite the determination that the student is not making SAP. Students who do not enroll during the period in which the Financial Aid Warning period was assigned will forfeit that status.

Financial Aid Probation

Financial Aid Probation status is assigned to a student who fails to make SAP (following Financial Aid Warning status) and who has successfully appealed. A student who is placed on Financial Aid Probation may receive financial aid for one subsequent payment period. A student on Financial Aid Probation may be required to meet certain terms and conditions while on Financial Aid Probation, such as taking a reduced course load or taking specific courses. A student assigned a Financial Aid Probation status will be placed on a Financial Aid Academic Plan. At the conclusion of the SAP Academic Probation payment period, the student must either meet the SAP standards or fulfill the requirements specified in the Financial Aid Academic Plan.

SAP Appeal Procedures:

If a student fails one or more of the three measures (qualitative, quantitative and maximum time frame) or is placed on Academic Probation or Academic Suspension, the student is not eligible for federal and state financial aid including grants, scholarships, work-study and loans. Students failing SAP standards who have had mitigating circumstances (e.g., death in the family, illness, involuntary military leave), however, may request reinstatement of their financial aid eligibility by completing the SAP Appeal for Financial Aid Reinstatement Form by the published deadlines and submitting it to the Financial Aid SAP Appeals Committee, c/o Office of Student Financial Assistance. The SAP Appeal for Financial Aid Reinstatement Form is available at www.marshall.edu/fasap.

The appeal, which must be typed, includes the following student requirements:

1. A completed and valid 2018-19 Free Application for Federal Student Aid (FAFSA) by the deadline dates specified below;
2. Not be in Federal Student Loan Default or owe a Title IV (Federal) Student Aid Overpayment;
3. Detailed explanation for failure to meet SAP standards for each payment period the student failed to perform satisfactorily;
4. Documentation to support the reason for failure;
5. Student Graduation Plan (Degree Works) indicating which courses apply to the degree and which courses remain to complete the program of study;
6. If cumulative GPA is less than a 2.0, a copy of Academic Improvement Plan;
7. Detailed explanation of what has changed that will now allow the student to comply with SAP standards, a statement of academic objectives, and corrective action plan; and
8. Meet and discuss the appeal with an academic advisor or dean and obtain his or her signature.

SAP Appeal Deadlines:

Semester/Term	*Date*
Fall Semester	One week prior to the first day of classes (for 2018-19, August 13, 2018)
Spring Semester	One week prior to the first day of classes (for 2018-19, January 7, 2019)
Summer Terms	End of Award Year (for 2018-19, June 28, 2019)

SAP Appeals Committee and Decision:

The SAP Appeals Committee is comprised of representatives from the Office of Student Financial Assistance, Student Affairs, and Academic Affairs. Students will be notified by email and directed to log into myMU to review the decision of the SAP Appeals Committee. The decision of the SAP Appeals Committee is final; however, the student may appeal again by the published deadlines for a future payment period.

If the appeal is approved, the student is placed on Financial Aid Probation and the student's financial aid eligibility is reinstated for one subsequent payment period. During the Financial Aid Probation period, the student may be required to fulfill certain conditions for financial aid reinstatement. In addition, all students placed on Financial Aid Probation will be provided a Financial Aid Academic Plan and will be required to sign a Financial Aid Academic Probation Agreement. At the conclusion of the payment period, if the student meets the standards of SAP, the Financial Aid Probation status will be removed. If not, the student's academic performance for the term will be evaluated against the student's Financial Aid Academic Plan.

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The academic plan requires students to complete 80% of the attempted coursework (100% if the student failed the maximum timeframe measure) and earn a minimum 2.1 GPA for the payment period the student is on SAP Academic Probation. If the student meets the requirements of the Financial Aid Academic Plan, the student will be assigned continued Financial Aid Probation for a subsequent payment period. (The FA Academic Plan is separate and distinct from an Academic Improvement Plan, which is required of students who fail to maintain a minimum 2.0 Marshall or overall GPA.) If the student fails to meet SAP standards or the requirements set forth in the Financial Aid Academic Plan, the student will be deemed ineligible for financial aid, but may appeal again for a future payment period by published deadlines. A student who has a change made to his or her academic transcript (i.e., grade change) during the semester in which the student is ineligible, on Financial Aid Warning or Financial Aid Probation, may request a SAP re-evaluation.

Enrollment Status

Enrollment Classification

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 a student's financial aid package is based on full-time enrollment and the Office of SFA uses the enrollment status on the first day after drop/add period (usually the 8th day of the semester) to determine financial aid eligibility. Only courses that apply to the student's degree may be included to determine the student's enrollment status for federal student aid eligibility.

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 – 29	1st Year or Freshman
30 – 59	2nd Year or Sophomore
60 – 89	3rd Year or Junior
90 +	4th Year or Senior

7. Dual Enrollment and 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.

Types of Aid Available

Financial aid is funding for college education that comes from sources outside of the student's family. Gift aid and self-help aid are the two categories of financial aid. Gift aid comes in the form of grants and scholarships and usually does 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 for undergraduate students:

Merit-Based Scholarships and Grants
Need-based Grants
Loan Programs
Student Employment
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 MUNet account and password. Any student that has problems accessing their myMU records should email *servicedesk@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.

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
- Requirements
- Eligibility
- Awards

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

The earliest financial aid may credit to a student's billing account 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.

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.*

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.

Visit the Bursar website at *www.marshall.edu/bursar* for more information on financial aid refunds.

5. 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 affect 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. This could affect students' future financial aid eligibility.

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Total withdrawal from the university is defined as dropping all classes for which a student is registered. Total withdrawal requires that a withdrawal form be submitted to the Registrar's Office.

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 their 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.

Adjustments to institutional, state (if Title IV financial aid was not received) 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:

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

Period of Withdrawal During a Semester	*Percentage of Aid Returned to Program*
During the first 10% of the term	90%
From 11% to 25% of the term	75%
From 26% to 50% of the term	50%

For example, if a student withdraws during the 5th 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, as required by federal statute, must recalculate federal financial aid eligibility for students who drop out, who withdraw, or who are dismissed, prior to completing 60% of the semester or the financial aid payment period.

When the student ceases 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 SEOG Grant
8. Federal TEACH Grant
9. Iraq and Afghanistan Service Grant

If the student is a recipient of both Title IV and West Virginia state aid, the aforementioned policy applies to West Virginia state aid.

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. However, 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.

Marshall University has an official grading policy that provides instructors with the ability to differentiate between those students who complete the course but failed to achieve the course objectives and those students who did not complete the course. The instructor is required to notify the Director of Student Financial Assistance in the case of the latter.

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 by visiting *www.fec.gov/votregis/vr.shtml*. 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; Fax: (304)696-3242; E-Mail Address: *sfa@marshall.edu*.

Learning Opportunities and Resources

ACADEMIC ADVISING

Sherri Stepp, Director, University College
Smith Hall 212/304-696-3169
advising@marshall.edu
www.marshall.edu/uc

The University College Advising Center provides advising sessions for conditional admits, early entry/dual enrollments, special admits, and Liberal Arts undecided students. The center offers a supportive staff and atmosphere where all students may obtain information regarding various majors and academic opportunities. Although not necessary, appointments are encouraged.

Academic advising is structured differently throughout the various colleges at Marshall. Each student is strongly encouraged to consult his or her dean's office for information regarding advisor assignments, curriculum requirements, and support services.

CAREER EDUCATION

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

The Office of Career Education assists students in self-assessment of skills, interests, and career goals; exploring and declaring a major; developing pertinent experience through employment, internships, community based learning and campus involvement; and becoming career ready through interviewing/resume workshops, networking, Career Expos and the job search. The Office provides services at three locations: the Career Services Center on the corner of 5th Ave. and 17th St. (Huntington Campus), the Student Resource Center in the Memorial Student Center (Huntington Campus), and the Student Resource Center (South Charleston Campus).

Career Services Center

Fifth Avenue and 17th Street/304-696-2370
career-services@marshall.edu
www.marshall.edu/career-services

The Career Services Center, a division of the Office of Career Education, assists students in all phases of professional development leading to a career. Career Counselors guide students in effective resume building and interviewing skills. In addition, students are offered practical, hands-on techniques for networking and searching for part-time, internship, and entry-level employment. The services include:

- **Marshall JobTrax (Online Career Management)** – This employer/student database allows students to become aware of and RSVP to career events, research employers and job titles, build an online credential file of resumes and other documents, as well as search for jobs and internships. Employers may post positions, giving students direct contact with local and national companies. They may apply for these positions directly with the companies, often by submitting their resumes right from their Marshall JobTrax account.
- **Job Search Assistance** – Career consultants will counsel students on the job search process. From part-time employment while attending the university to entry-level employment upon graduation, students may obtain the skills necessary to conduct an effective job search.
- **Internships** - The center works with undergraduate and graduate academic programs to assist students in securing internships. All students are encouraged to gain work experience with at least one internship or experience in field, or gain additional skills through on campus service learning, volunteering, or participation in student organizations prior to graduation.

- **Resume Development** – Experienced staff will guide students in preparing effective and professional resumes.
- **Career Expos** – Students can meet and talk with employers at seven Career Expo Events each year: Fall and Spring campus-wide expos for full-time positions and Fall and Spring Job-a-Paloozas for part-time and internship positions, along with an Educator Expo, a Pharmacy Expo and a Physical Therapy Expo.
- **Networking** – Career Services provides other networking opportunities for students through a "Mocktail" event with the College of Business, a Career Day event with the College of Liberal Arts, and individual employer Showcase Days, which allow students to learn in-depth information on careers and career paths with a particular company.
- **Professional Skill Development** – Career Services provides opportunities each semester for students to develop their career skills through mock interviews, Interview Stream (webcam) mock interviews, etiquette dinners, and career development mock interview equipment.
- **On-Campus Recruiting** – Career Services hosts visiting local, regional and national employers interested in recruiting Marshall University students and graduates. We welcome any referrals of companies that might be interested in recruit our Marshall talent.
- **Marshall Mentor Network** – Allows students to connect with MU alumni and other professionals for career-related and professional advice before they graduate. Students may search the mentor database on Marshall JobTrax and request to connect with a mentor related to their major or chosen career.
- **Website** – *www.marshall.edu/career-services* provides information concerning all career-related services and activities available to students/alumni, faculty, parents and employers.

Student Resource Center (SRC)

Memorial Student Center, 2nd Floor/304-696-5810
src@marshall.edu
www.marshall.edu/src

The Student Resource Center, a division of Career Education, assists freshmen, sophomores, and transfer students in aligning academic goals with career goals, leading to the appropriate choice of major and long-term student persistence and success. SRC staff members are also available to answer academic resource questions and to evaluate the resource needs of any student who walks into the SRC. Services include:

- **Career and major exploration** – Students who wish to change to a different major or who are seeking guidance about whether their current major is a good fit are invited to make an appointment with a Major Exploration Consultant. Consultants offer comprehensive guidance about whether or not one should remain in the current major pathway, how to transition to another major without losing credits, and how to assess whether a given major and career pathway actually build on the student's strengths, personality, and interests. Students will usually complete one or more commonly used assessments, such as Focus 2 and the O-Net Interest Profiler. These assessments utilize the Holland Code, which subdivides career clusters into six categories: realistic, investigative, artistic, social, enterprising, and conventional. Major exploration consultations in the SRC tend to open doors rather than close them, significantly improving a student's opportunities for success both academically and professionally. This service is particularly helpful to pre-majors at the freshman and sophomore levels, but any student who wishes to arrange for a consultation is invited to do so.
- **Job Shadowing:** Students may participate in the Career Exploration Experience (CEE) job shadowing program during the spring or fall as a way to "test drive" various careers. Students wishing to participate are matched with a local employer in their anticipated career field and observe working professionals in that industry. Job shadowing allows students to have a real-world look at a given occupation or field and help them to discern whether it is a good match for them.
- **Early academic and career engagement** – Once a student commits to a major and associated career goals, consultants are available to assist freshmen, sophomores, and transfers in planning engagement opportunities throughout the entire four-year collegiate experience. Academic and career engagement comes in many different forms: alternative spring break, undergraduate research, service learning, community based learning, student leadership, strategic selection of a minor and/or certificates, internships, involvement in student organizations, job shadowing, foreign language proficiency, learning communities, "soft skill" development, study abroad, domestic exchange programs to other US universities, etc.
- **Academic support** – Consultants also provide guidance to students who are facing challenging but common academic issues, such as poor study skills and time management. Students may be referred to other offices, such as tutoring or counseling services, or to individual points of contact within a particular college, for further assistance.

Student Resource Center (SRC)

South Charleston Campus

The Student Resource Center on the South Charleston campus assists South Charleston students with resource needs related to registration, financial aid, major selection and career planning, academic success, student groups, job shadowing and internships in the Kanawha Valley, etc. The South Charleston SRC Specialist also serves as the liaison between the

South Charleston Campus and the Huntington Campus, making referrals or facilitating conversations between students and Huntington Campus service staff as necessary, arranging excursions to the Huntington Campus, and coordinating a student's transition to the Huntington Campus for degree completion.

CENTER FOR AFRICAN AMERICAN STUDENTS

Maurice Cooley, Director
Memorial Student Center 1W25/304-696-6705
cooley@marshall.edu
www.marshall.edu/caas

The Center for African American Students (CAAS), under the auspices of the Office of Intercultural Affairs, is a historically significant program that serves as a catalyst for involving and supporting the African or African American student's academic and personal success toward college graduation and an accomplished professional career in his/her chosen field of study.

The CAAS home provides a pleasant and centrally located office setting where students may relax, study, debate and connect with others. Everyone is welcome....and soon realize that the center is a "home away from home" to all students who enter.

Student Benefits

- Progressive academic and personal advising and problem solving
- Career and majors advising
- Mentoring services
- General guidance and crisis management
- University information and solution-oriented networking

The center has a vital role in the recruitment and retention of African American students through unique program offerings and programs for scholars. The CAAS often collaborates with the Office of Recruitment and various university colleges for the purpose of strengthening recruiting initiatives for African American students. This program provides administrative oversight for Black United Students and the Society of Black Scholars, and offers more than 30 programs and activities each academic year, which include the MU Annual Diversity Breakfast, Annual Outstanding Black High School Student Weekend, Women of Color Day, Donning of Kente, MU Unity Walk, Annual Diversity Plenary, African American History Bowl, Annual Soul Food Feast, lecture series, urban and cultural travel outings, and many others.

CENTER FOR ENVIRONMENTAL, GEOTECHNICAL, AND APPLIED SCIENCES

112 Gullickson Hall/304-696-4748
cegas@marshall.edu
www.marshall.edu/cegas

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

CENTER FOR TEACHING AND LEARNING

Karen McComas, Executive Director
109 Old Main/304-696-2206
catl@marshall.edu
www.marshall.edu/ctl

The mission of the Center for Teaching and Learning (CTL) is to empower faculty in their teaching and research by cultivating a campus culture that values pedagogical, disciplinary, and program-based inquiry in support of student learning. More specifically, CTL provides opportunities for faculty to engage with, and develop, the instruments of teaching and learning (e.g., curricula and pedagogy) and the processes of teaching and learning (e.g., data-driven teaching strategies, reflective and metacognitive practices). In addition to professional development opportunities, the center administers the annual faculty awards, conducts classroom observations, directs a New Faculty Orientation program, hosts an annual

teaching conference, and maintains a library of resource books related to a variety of teaching and learning topics. Housed within CTL are the Writing Across the Curriculum and Community-Based Learning programs.

Writing Across the Curriculum

April Fugett-Fuller, Director
Harris Hall 314
304-696-2276
www.marshall.edu/ctl/writing-across-the-curriculum

All Marshall University undergraduates must take two courses with the Writing Intensive designation, sometimes called a WAC class. Created to reinforce writing skills in classes outside of English composition, writing intensive classes engage students directly in the subject matter of the course through a variety of activities that focus on writing as a means of learning. Some of these activities are informal, ungraded class exercises that teach (among other things) critical thinking, organization and synthesis of diverse elements, summarizing skills, and awareness among students of their own learning processes. Other activities, formal and graded, teach these same skills through careful revision and rethinking, peer evaluation, and reformulation into a finished product. These class projects use writing as a means of engaging the mind, body, and spirit of students in the activity of learning a particular subject matter. Writing intensive classes make students aware that writing is a necessary and frequently used skill no matter what their occupation will be, and they prepare students for writing in their careers and in their personal and community lives.

Community-Based Learning

C. Damien Arthur, Director
Smith Hall 739C
304-696-2795
www.marshall.edu/cbl

The Marshall University Community-Based Learning program assists faculty, students, and community partners in course-specific collaborations that connect learning objectives to public service and civic engagement. The combination of Community-Based Learning and academic theory enhances personalized education for students and creates opportunities to connect key course concepts with relevant real-world experiences. Engaging the community empowers students as learners, teachers, achievers, and leaders as students can make a more meaningful and long-term impact on Marshall University and in the community. CBL will empower students who want to become more involved with the community and who wish to learn in an interactive, transformative environment. Community-Based Learning is a mechanism by which the university mission is enhanced. A course in which all learning is passive memorization and library research will not create an environment wherein students can reach their full learning potential. Therefore, the inclusion of CBL in coursework enhances student research skills and offers them an opportunity to participate in community transformations. CBL coursework provides an element of pedagogy that propels students towards future successes. Participating in Community-Based Learning courses also provides students with the tools they need to be successful in the working world, providing resume-building opportunities and potential contacts for employment.

CHILD DEVELOPMENT ACADEMY

520 22nd Street/304-696-5803
Susan Miller, Director
millers@marshall.edu
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 and Psychology. The facility was opened in August of 1999 and the construction was a joint venture of Marshall University and the City of Huntington.

DIGITAL MEDIA SERVICES (formerly Instructional Television and Video Services)

Eric Himes, Director
102B Communications Building/304-696-2974
www.marshall.edu/it
ITVS@marshall.edu

DRINKO ACADEMY

Montserrat Miller, Executive Director
Old Main 211/304-696-3183
www.marshall.edu/drinko/
drinko@marshall.edu

The John Deaver Drinko Academy is devoted to enhancing public understanding of American institutions and the responsibilities of citizens to their society, particularly our sense of shared values and common purpose. The efforts of the Center are designed to counteract the erosion of our civil culture, evident in the steady decline of citizens' participation in voting and jury duty, despite an expansion of the franchise in the 20th Century and federal laws protecting voting rights. The Center is named for the late Dr. John Deaver Drinko, a 1942 Marshall graduate and senior managing partner of Baker & Hostetler, one of the nation's largest law firms. He and his wife, Elizabeth Gibson Drinko, were longtime significant supporters of academic programs at Marshall.

The heart of the Drinko Center is a core of several distinguished visiting professors who are given a great deal of latitude to create courses and engage in other educational and scholarly activities that address the mission of the Drinko Center. Along with the Distinguished Visiting Professors, faculty from various departments are appointed on a rotating basis as Drinko Academy Fellows.

HIGHER EDUCATION FOR LEARNING PROBLEMS (H.E.L.P.)

Debbie Painter, Director
Myers Hall/304-696-6316
help@marshall.edu
www.marshall.edu/help/

Higher Education for Learning Problems (H.E.L.P.) Program was established in 1981. H.E.L.P. provides qualified college students who have Learning Disabilities and/or Attention Deficit Disorder (ADD) the rights they are guaranteed under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. The program offers these services:

- Assessment to determine presence of LD and/or ADD.
- Tutoring by Graduate Assistants in coursework, note-taking, study skills, organization and memory improvement.
- Remediation in reading, math, spelling, and written language skills by Learning Disabilities Specialists.
- Liaison among professors, H.E.L.P., and students.
- Arrangement for accommodations in testing.
- Counseling for problems with self esteem and severe test anxiety.

Application to H.E.L.P. must be made separately from application to the university and should be completed no fewer than six months in advance.

HONORARY SOCIETIES

The following honorary and professional societies maintain active chapters on the Marshall campus. For contact information, call the Office of Student Organizations at 304-696-2283.

Alpha Delta Sigma (advertising)
Alpha Epsilon Delta (pre-medicine)
Alpha Epsilon Rho (broadcasting)
Alpha Kappa Delta (sociology)
Alpha Phi Sigma (criminal justice)
Alpha Psi Omega (theater)
Beta Alpha Psi (accounting, finance, information systems)
Beta Gamma Sigma (business)
Delta Epsilon Chi (marketing education)
Delta Omicron (music)
Eta Sigma Phi (Classics)
Gamma Beta Phi (honor, service)
Gamma Theta Upsilon (geography)
Kappa Delta Pi (education)
Kappa Kappa Psi (band)
Kappa Omicron Nu (family and consumer science)
Kappa Omicron Phi (home economics)
Lambda Alpha Epsilon (criminal justice)
Lambda Pi Eta (communication studies)

National Society of Collegiate Scholars (first and second Year honorary)
Omicron Delta Epsilon (economics)
Omicron Delta Kappa (leadership, scholarship)
Phi Alpha Theta (history)
Phi Eta Sigma (national freshman honorary)
Phi Kappa Phi (all academic disciplines, junior/senior/graduate students)
Pi Kappa Delta (forensics)
Phi Theta Kappa (Community and Technical college)
Pi Mu Epsilon (mathematics)
Pi Omega Pi (office technology)
Pi Sigma Alpha (political science)
Psi Chi (psychology)
Scabbard and Blade (military science)
Sigma Delta Pi (Spanish)
Sigma Theta Tau (Nursing)
Sigma Tau Delta (English)
Upsilon Pi Epsilon (computer science)

HOUSING AND RESIDENCE LIFE

Mistie Bibbee, Director
Holderby Hall/304-696-6765
housing@marshall.edu

The Department of Housing and Residence Life is committed to the development and academic success of its students. Working in partnership with students and other members of the Marshall community, the Department of Housing and Residence Life is structured to provide a residential experience that supports and enhances students' learning, personal growth, and academic achievement. We foster and nurture inclusive communities, create social and educational opportunities to enhance student development, and provide each student with a safe, quality, living experience that supports the educational goals of the university.

Housing and Residence Life efforts are guided by several commitments to our students: to compliment and support the core academic mission of the university; to provide co-curricular learning opportunities that support the classroom experience; to offer students a residential environment that values and supports diversity; to provide a residential environment that safeguards and augments all aspects of student wellness, including academic, physical, educational, emotional, cultural, and spiritual development and health; to establish a residential environment in which students explore their independence and interdependence, becoming part of a community in which they develop a better understanding of the impact of others on themselves, and their own impact on others; and to provide a dedicated and competent staff that will continually look for new and better ways to increase the efficiency of the department and the services we provide to our students.

Living on campus provides students with a unique living experience that cannot be found through living off campus. Housing and Residence Life continues to provide safe, supportive, and well-maintained residential environments which complement students' educational experiences during their stay here at Marshall.

Living-Learning Communities

Living-Learning Communities place students who share a common academic interest together on one floor of a residence hall. The students benefit not only from informal interaction with others who share their goals and interests, and who in many cases will also be in the same classes, but will also have opportunities to participate in informal activities planned by the faculty and residence hall staff and geared to their specific interests.

Students may find information on specific living-learning communities by calling 1-800-438-5391 or by visiting *www.marshall.edu/housing*. Students may request to participate in a living-learning community along with their regular housing application, or submit the request separately if they have already applied for housing.

INFORMATION RESOURCES AND CUSTOMER SERVICE

Jody Perry, Executive Director
122 Drinko Library /304-696-3226
Jody.perry@marshall.edu

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.

Computer Accounts

As a Marshall student, you automatically have a MUNet generated for you. Students attending Orientation are provided their MUNet account usernames and passwords. Students may also receive their login credentials by taking your Marshall University ID to the Information Technology Service Desk located on the first floor of the Drinko Library, or the South Charleston Information Technology office. Students may also look up MUNet usernames and change passwords by visiting *www.marshall.edu/id*.

Information Technology Service Desk

The IT Service Desk is located on the first floor of the Drinko Library. Co-Located with the MUID office, the Service Desk provides 24 hour support for your technology needs. The Service Desk is available via telephone (304-696-3200), email (*ITServiceDesk@marshall.edu*), WebChat (*www.marshall.edu/it/*) or walk-up service in the Drinko Library. .

INFORMATION TECHNOLOGY OFFICE

Edward Aractingi, Chief Information Officer
305 Drinko Library/304-696-3900
cio@marshall.edu
www.marshall.edu/it

The Marshall University Information Technology office is located in the third floor administrative suite of the Drinko Library. Information Technology (IT) is committed to improving the efficiency and effectiveness of every aspect of technology throughout Marshall University by promoting and supporting Information Technology applications as a means of enhancing teaching/learning and administrative operations. The IT Office integrates instructional technology, web delivery methods, and computing resources for all Marshall University campuses and centers. This office leads the development of an integrated information technology environment. By actively aiding and enhancing the academic and support activities of the University, IT delivers support and services that help faculty, staff, and students achieve Marshall University technology goals.

INFORMATION TECHNOLOGY INFRASTRUCTURE AND ENTERPRISE APPLICATIONS

it@marshall.edu
www.marshall.edu/it

The administrative offices are located on the fourth floor of the Drinko Library on the Huntington Campus.

Online Support

At the IT website, students and staff can find the most up-to-date information. IT exists to provide information, facilitate communications with its customers, and provide a secure source for downloading software. One example of downloadable software is the free anti-virus software, which the university licenses for all users; other software is available. Go there and get yours now at *www.marshall.edu/it.*

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 web site at *www.marshall.edu/it.* 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 at *https://www.marshall.edu/it/wifi-map/*.

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 Ellucian'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, courseware delivery, and electronic publishing packages.

INTERCULTURAL AFFAIRS

Maurice Cooley, Associate Vice President
Old Main 107 / 304-696-4677
www.marshall.edu/mcip
mcip@marshall.edu

Marshall University established the Division of Multicultural Affairs in 1989. By weaving it into the mission of the institution, Marshall University affirmed its commitment to an environment of teaching and learning which recognizes and welcomes diversity of race, color, sex, sexual orientation, age, religion, national origin, marital status, political and ethnic backgrounds. Consistent with its awareness of different people, backgrounds and cultures, and now known as Intercultural Affairs, the office is committed to developing the potential of all students by creating and maintaining an environment that promotes and fosters a multicultural, international, global community. Intercultural Affairs is organized to provide underrepresented populations with programs that enhance knowledge, skills and awareness to function in a complex global society.

The Office of Intercultural Affairs Strives to...

- Create and maintain an environment that promotes cross-cultural understanding.
- Ameliorate and eliminate barriers to students, faculty, and staff interactions across racial, ethnic and cultural boundaries.
- Increase the number of underrepresented groups as undergraduate, professional and graduate students from the four (4) federally recognized minority groups (African American, Native American, Hispanics and Asian Americans).
- Recruit and retain underrepresented racial minorities and diverse populations as members of the faculty, staff, administration and student populations.
- Promote a multicultural presence throughout the university to include but not limited to: university governance, college & department committees, and administration
- Improve the campus climate to foster nurturing, acceptance, and respect of diverse individuals.
- Support and maintain programs which present a variety of cross-cultural opportunities for all constituents of Marshall University.

Marshall University Intercultural Affairs

Marshall University Intercultural Affairs comprises the Office of the Associate Vice President for Intercultural Affairs and the Center for African American Students' Programs, the Women's Center, and the Lesbian, Gay, Bisexual, Transgender and Other office. Each department is further broken down into individual units responsible for a host of programs and initiatives that contribute to Marshall University Intercultural Affairs' primary objectives.

Programs and Initiatives

Dr. Martin Luther King, Jr. Annual Recognition

The Annual Dr. Martin Luther King, Jr. Celebration was first established in 1994 as an opportunity for Marshall University and the Tri-State community to reaffirm Dr. King's dream of an America where principles of social justice and racial equality reign supreme over the archaic attitudes of intolerance and hate. The celebration recognizes the life and legacy of the late civil rights leader and social justice advocate.

Social Justice

Social Justice permeates all aspects of the university and is a key component to its function. Toward that end, Intercultural/Social Justice projects, for example, provide opportunities for faculty, staff, and student organizations to develop Marshall University as a multicultural campus in the quest for social justice. Since 1990, Marshall University Intercultural Affairs has funded projects in research, curriculum development, seminars, workshops, conferences and visiting professorships. The common theme of these projects is the promotion of intercultural understanding, pluralism and diversity awareness throughout the Marshall community.

The Health Sciences and Technology Academy (HSTA)

The Health Sciences and Technology Academy (HSTA) was launched in Cabell and Lincoln counties in 2003 with the collaboration of Marshall University Intercultural Affairs and College of Science. HSTA is intended to increase students' competitiveness in science and mathematics while promoting multicultural sensitivity, study skills, communication skills, technological literacy and community leadership. In addition to financial support, HSTA stimulates interest in postsecondary health science degrees. Operating solely in West Virginia, HSTA provides enrichment programs to students in minority and

lower-socioeconomic groups in grades 8-12 with the focused attention of the HSTA local community governing board staff, volunteers, teachers and field experts.

Intercultural Leadership Ambassadors

The Intercultural Leadership Ambassadors are a group of select, trained peer educators comfortable with their own diversity. The selected Multicultural Leadership Ambassadors serve as the "official student voice" for the Division of Intercultural Affairs.

The Ambassadors promote diversity throughout campus through presentations designed to educate the audience and heighten awareness on issues of inclusion. The Ambassadors comprise diverse students representing a broad range of cultures.

Intercultural Faculty in Residence Program

The Intercultural Faculty in Residence program is designed to attract individuals at the dissertation stage or newly minted terminal degree holders to teach two courses in his or her academic discipline. The selected faculty member in residence will reside on campus during the academic year. A room will be provided as a part of the compensation package. A senior level faculty member will be assigned to the faculty member in residence to encourage integration into the Marshall University community, provide research assistance, guidance, and information on publishing.

For additional information contact:

Maurice Cooley
Associate Vice President for Intercultural Affairs
304-696-4676
cooley@marshall.edu
www.marshall.edu/mcip

Marshall University Chancellor's Scholars Program

The Chancellor's Scholar's Program (CSP) is designed to recruit, educate and graduate underrepresented minority doctoral students. The program is focused on targeted recruitment and retention of underrepresented minority groups, specifically African American, Hispanic/Latino American, Native American and Asian American doctoral-level students. Program participation is determined through a formal application process.

The Ivy Academy

The Ivy Academy at Marshall University, sponsored in partnership with Alpha Kappa Alpha Sorority, Inc., is a one-day interactive leadership conference designed to empower young women in high school. The Ivy Academy provides participants with the leadership, self-esteem and motivational skills necessary for college and life success. Academy participants are treated to an information fair, workshops, forums and a keynote address. The Ivy Academy is held biennially, every odd year.

The Louis Stokes Alliance for Minority Participation (LSAMP)

The Louis Stokes Alliance for Minority Participation is a program funded by a National Science Foundation grant. Its purpose is to increase the number of minority students who successfully complete baccalaureate degrees in science, technology, engineering, and math (STEM) fields. The long-term goal of the program is to increase the minority presence of Ph.D.'s in STEM faculty positions.

Visiting Intercultural Scholar in Residence

Visiting Scholars in Residence provide the opportunity for the Marshall University community to learn from experts in various fields. These scholars are accomplished professionals and bring a wealth of experience to the classroom and other campus and community venues.

LIBRARIES AND ONLINE LEARNING

Monica Brooks, Associate Vice President for Libraries and Online Learning
306 Drinko Library/304-696-6474
library@marshall.edu
www.marshall.edu/library

University 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, and the Library and Research Commons on the South Charleston campus. Together, the University Libraries' holdings support teaching and research needs, with close to 3 million total items (including government publications and audiovisual materials) and access to more than 50,000 periodical titles. Students may use print and electronic books, periodicals, documents, CD-ROMS, videocassettes, sound recordings, electronic journals, online reference materials and microforms. Access to electronic resources and online research services

is done via the University Libraries' web pages. Each library operates as part of the university system and provides unique service to the clientele and programs with which it is associated. The libraries play an essential role in the educational and research activities of the individual university programs. Using the library as a gateway, students have access to the tools to search multiple resources and obtain materials from a variety of sources. A dynamic interlibrary loan and document delivery program provides materials from other libraries in electronic format, often in a matter of hours. Courier services also enhance turnaround time and overcome geographical limitations.

The John Deaver Drinko Library is open 24/5 and houses more than 150,000 volumes, current print subscriptions, a computer lab, multimedia presentation facilities, an assistive technology center for the visually impaired, faculty and student instructional technology rooms, and a fully wired auditorium. Circulation, Reference, and Media are located in the Drinko Library, with extensive collections and a team of qualified personnel. The Drinko Library is a state-of-the-art facility which also houses University Computing Services and University Telecommunications.

The James E. Morrow Library, situated between Smith Hall and the Science Building, houses Special Collections, Government Documents, and shelving for over 300,000 volumes. Special Collections features the University archives, West Virginia Collection of state and regional materials, and the distinctive Hoffman and Blake collections. Government Documents, a federal depository collection, contains more than a million items and provides materials in electronic, microform, and paper formats.

The Health Science Library, specializing in medical resources for the schools of medicine and nursing, maintains a current collection of medical monographs, periodicals and electronic resources. Staff provide a variety of document delivery services and searches on medical-related databases. The library is located in the Robert C. Byrd Center for Rural Health, next to the Cabell-Huntington Hospital on Hal Greer Boulevard.

The Library and Research Commons is located in the Robert C. Byrd Academic and Technology Center. This facility supports the undergraduate and graduate programs offered on this campus. Access to all Marshall Libraries electronic resources is available, along with a professional staff to assist students and faculty with their information and research needs. 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. The Library and Research Commons is also the site on the South Charleston campus for taking Marshall photo IDs. For details on services and hours, go to the South Charleston library's home page www.marshall.edu/musclibrary).

Online Learning

MUOnLine: Blackboard Learn is the electronic course delivery software used to power the online system and its peripheral programs. Housing approximately 600 fully online courses, with up to 250 active sections per term, and serving close to 15,000 students annually, this program strives to meet student needs by facilitating faculty development and supporting quality, affordable, and convenient distance education courses and programs.

Online Learning: The Marshall University distance education program is supported by four Instructional Design specialists and a team of well-trained students developers who aid faculty in developing and delivering online and hybrid courses. In addition to development support, the MUOnLine Instructional Designers center staff also provide regular training and workshop opportunities to faculty who participate in any aspect of online course delivery and support.

The **Online Learning Instructional Design Center,** located in the Drinko Library room 235, provides teaching and learning with technology training and online course development support for Marshall University's faculty and staff. This unit provides the hardware, software, networking and technological assistance and support to assist faculty with online courses and traditional course supplements. Faculty interested in developing an online course or in using an online course section as a supplement to a hybrid or face-to-face class, simply submit an online form to launch their project and obtain the checklist and paperwork to initiate the development and review process. Complete information about teaching online and using technology in general for instruction is provided along with a user group seminar series to allow faculty to present and share their online courses materials, lesson plans, and projects.

Online course development is facilitated and approved by faculty peers. The Distance Education Course Committee (DECC) is coordinated by a member of the faculty who provides guidance, support, and training. The DECC conducts regular online course reviews to ensure that new and existing online faculty meet best practices and technical requirements for delivery. The DECC was formed in 2002 under its original name, Faculty Development Committee for Online and Multimedia Instruction, with the ongoing responsibility to evaluate newly developed online courses according to a set of standard requirements formulated by the committee. DECC members also coordinate and conduct monthly user group meetings on both campuses to keep faculty apprised of software developments and additions, teaching-learning with technology strategies, and online teaching tools, techniques, and tips. With over 300 faculty involved in the program in some way, the committee is an excellent venue for dissemination of distance education delivery development at the local and national level.

Online Course Quality Initiative: Collaboration with providing faculty training and development with the Center for Teaching and Learning during 2011 helped solidify our decision to launch the Quality Matters (QM) program at Marshall that year. In conjunction with the Higher Education Policy Commission's Statewide Director of Higher Education e-Learning,

Marshall became an institutional subscriber to the nationally recognized Quality Matters program and began providing the "Applying the Quality Matters Rubric" training on the Huntington and South Charleston campuses and online. QM is a faculty-centered, peer review process that is designed to certify the quality of online and blended courses in reference to

course design and course outcomes alignment. Adopted by the MU DECC FDCOMI committee as the baseline for internal online course reviews, QM is a leader in quality assurance for online education and has received national recognition for its scalable, peer-based approach and continuous improvement in online education and student learning.

Copyright Education Program: Currently, Library and Online Learning faculty and staff provide support for a multi-campus copyright education program designed to keep faculty apprised of appropriate use of copyrighted materials provided in a variety of formats in both face-to-face and online courses. Members of the team stay abreast of national shifts in copyright interpretation, field questions from the university community, make referrals to University Counsel when appropriate, and provide support for university policies that ensure compliance with Title 17 of the US Code and the TEACH Act.

Course Designations and Definitions: "Online course" refers to any distance education course in which 100% of the course content is delivered asynchronously. There are no synchronous, face-to-face, or on-site attendance requirements. Online

MARSHALL TECHNOLOGY OUTREACH CENTER

Kelli Mayes, Director
214 Communications Building/304-696-3325
mayes@marshall.edu
www.marshall.edu/mtoc

The Marshall Technology Outreach Center (MTOC) is located in Communications Building 214 on the Huntington campus. The mission of the Marshall Technology Outreach Center is to establish Marshall University as the leader in technology outreach in the Advantage Valley region so that information is actively exchanged with external audiences benefiting the individuals, communities, and organizations served, as well as Marshall University. Technology outreach allows Marshall University to enhance the lives of the community through integrating the university externally and dissolving barriers to traditional technology education. Students who may not have the opportunity to be part of the formal campus can be linked to the university through outreach activities. Programs include Online College Courses in the High Schools (OCCHS) and ongoing K-12 technology partnerships including teacher-training initiatives and staff development.

MARSHALL UNIVERSITY FOUNDATION, INC.

Ronald Area, Chief Executive Officer
Foundation Hall/304-696-6264; Toll-free: 1-866-308-1346
www.marshall.edu/foundation
foundation@marshall.edu

The Marshall University Foundation, Inc. was established in 1947, as a non-profit, tax-exempt, educational corporation. In the spirit of philanthropy and through a commitment to education, the foundation solicits, receives, manages and administers gifts on behalf of Marshall University. It is a public charity under Section 501(c)(3) of the Internal Revenue Service.

The foundation, in collaboration with Marshall's Office of Development, secures private financial support for the university and encourages greater participation by alumni. The Marshall University Foundation Hall, home of the Erickson Alumni Center, is llocated at the intersection of 5th Avenue and John Marshall Drive. The building opened in February of 2010.

NATIONAL SCHOLARSHIPS

Mallory Carpenter, Program Manager
Old Main 230E/304-696-3169
Mallory.carpenter@marshall.edu
www.marshall.edu/nationalscholarships

The Office of National Scholarships helps students across the university apply to nationally competitive scholarships such as the Rhodes, Fulbright, Goldwater, and Truman. The office assists with scholarship selection, application review, and interview preparation. Available scholarships can fund summer opportunities, study abroad programs, graduate school, or more. Students that actively engage with the application process for nationally competitive scholarships will:

- Enhance and strengthen their relationships with faculty members;
- Clarify their own personal and professional goals;
- Improve skills in writing that are vital for graduate school applications, cover letters, and resumes;
- Learn what separates them as an individual from their peers;
- Gain confidence in themselves from completing a sophisticated application process.

Although not required, appointments are encouraged.

NATIONAL STUDENT EXCHANGE

University College, Smith Communications Building 212
304-696-3169
NSE@marshall.edu
www.marshall.edu/uc/national-student-exchange/

The National Student Exchange (NSE) program is a consortium of four-year colleges and universities in the United States, its territories and two universities in Canada that have joined together for the purpose of exchanging students. The NSE is the only program of its kind in the country and serves as a national resource for inter-institutional study throughout the United States. NSE offers study opportunities at diverse university settings and provides access to a wide array of courses and programs. The program features a tuition reciprocity system which allows students to attend their host institution by paying the normal tuition/fees of their home campus. Travel, housing, and daily living expenses are additional costs.

Work completed while on exchange at the host campus is brought back to the home institution and credited to the student's degree program. Advance approval is required. Students may choose a semester or year-long exchange. The deadline for applications is February 15th of every year for priority placements. If room is still available, students can apply after the deadline with permission from the NSE Coordinator. Application information is available in University College.

ORIENTATION

Sabrina Simpson, Director of New Student Orientation
304-696-2354; (1-800-438-5392)
www.marshall.edu/orientation/
simpson@marshall.edu

New Student Orientation Programs are conducted during the summer to help freshmen, transfer students, and their parents learn more about Marshall and meet students, staff, faculty, and administrators. During the Orientation programs, students and parents will learn about campus services, extracurricular activities, and community life. Most important, new students will meet with an academic advisor, plan their course schedules, and register for classes. All newly admitted students who have submitted their Enrollment Deposit will be eligible to register for Orientation. All students are expected to attend this important first step into college life at Marshall University.

PLACEMENT EXAMINATIONS

University College, Smith Communications Building 212/304-696-3169
www.marshall.edu/uc

College math requires an ACT math score of 19, an SAT math score of 500, or successful completion of prerequisite math courses. Students who do not meet the above prerequisites for math may challenge their placement by taking an exam administered by University College in Smith Communications Building, Room 212. To schedule an exam and obtain information to prepare for the exam, please call 304-696-3169 or visit the University College website at *www.marshall.edu/uc*.

PRE-LAW EDUCATION

Patricia Proctor, J.D., Pre-Law Advisor

The American Bar Association does not recommend a particular major for those who wish to pursue a degree in law, and there is no specific major which law schools prefer. Students should major in something that will help them develop skills which will be valuable to them as law students and legal practitioners. Any major that will enable students to develop skills in analytical thinking and communication, especially writing, is a good pre-law major. Regardless of the major, students should choose electives that will facilitate critical understanding of economic, political and social institutions. Because a lawyer must be able to communicate effectively, students should emphasize communicative skills. Also a knowledge of elementary accounting is desirable and highly recommended, as is a course in logic.

Prospective law school applicants should:

- consult as soon as possible, preferably during their first semester, with Professor Proctor for further information and advice;
- register for the June or October (preferably) or the December administration of the Law School Admission Test (LSAT) and apply for law school admission during the fall of their senior year in college. (Full LSAT information and registration materials are in the Law School Admission Bulletin, which is available at the Simon Perry Center for Constitutional Democracy.)

PRE-MEDICAL/PRE-DENTAL EDUCATION

Students who wish to prepare themselves for any of the professions in medicine (Chiropractic, Podiatry, Osteopathy, Medicine or Dentistry) must meet certain basic requirements. They may major in any subject. Most pre-professional students typically major in one of the sciences but it is not necessary. Most medically related postgraduate programs require a bachelor's degree that includes two years of chemistry, one year of biology, one year of math, one year of English and one year of physics.

For more information, see "Preparation for Professional Careers in the Health Care Professions" at the end of the College of Science section of this catalog. Moreover, students can stop by Science Building 270 and visit the Associate Dean of the College of Science, who also serves as the Chief Pre-Professional Health Care Advisor for Marshall University.

PSYCHOLOGY CLINIC

Keith Beard, Director
Harris Hall 449/ 304-696-2772
www.marshall.edu/psych/
psychology@marshall.edu

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 is 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.

PUBLIC SERVICE INTERNSHIP

Cheryl Brown, Political Science
Smith Hall 780/304-696-3598
brownca@marshall.edu

The Public Service Internship Program places qualified students in state government agencies for an off campus learning period of one semester. Students enrolled in this program work a forty hour week with an executive agency in a supervised intern program. They also attend a weekly seminar conducted by the state program coordinator and have a directed studies program conducted by their major department at Marshall. Participants must be full time Juniors or Seniors. They also must have the approval of their department chairperson and the university selection committee. The state program coordinator makes the final placement. Students receive 12 hours of academic credit and an educational stipend for their participation in the program. Academic credit for the program is offered in these courses:

488	Directed Studies	3 hours
489	Seminar in Public Service	3 hours
490	Public Service Internship	6 hours

All courses must be taken in order to receive credit. Students interested in this program should contact the Department of Political Science early in the semester preceding the one in which they wish to participate.

SERVICE LEARNING

Kristi Fondren, Director
Smith Hall 739C
304-696-2795
www.marshall.edu/ctl/service-learning

See Center for Teaching and Learning.

SOCIETY OF OUTSTANDING BLACK SCHOLARS

Maurice Cooley, Director
Memorial Student Center 1W25/304-696-6705
cooley@marshall.edu

The governing spirit of the Society of Outstanding Black Scholars of Marshall University is to provide an essential foundation for learning, personal growth, and academic success through active participation in planned enrichment experiences. The society aspires to support and nurture African American students in character building, leadership skills, professional maturity, and service to others. The society recognizes the uniqueness and positive attributes associated with one's ethnicity and will challenge students to achieve greater prosperity and balance for leadership in diverse and multicultural environments in today's society.

Admission Requirements

Admission to the Society of Outstanding Black Scholars is exclusive to African Americans enrolled as full time students at Marshall University.

All candidates must possess and verify the existence of an academic scholarship utilized to support his/her education at Marshall University, at the time of admission.

All candidates must participate in an interview with the director of the society chiefly to determine the student's level of interest in the society, evaluate the student's personal and academic goals, and to address whether the student's goals and interests are compatible with activities and functions set aside for members of the society.

Unless his/her scholarship stipulates otherwise, the minimum GPA for admission to the Society is 3.0 for currently enrolled students as well as for entering freshmen.

Compliance Requirements

In order to remain in good standing each student must maintain his or her scholarship. Membership in the society will be terminated if the student's scholarship is terminated. (If one's scholarship is terminated merely due to the lack of available scholarship funding, the 3.0 Overall GPA and attendance rule will apply. In such cases, the director may allow a grace period for students to upgrade their overall GPA's to meet minimum standards for continued membership.)

In order to remain in good standing, each student must attend 70% of scheduled activities, unless excused by the director. Reasons that may prohibit attendance may include: conflicts with work schedule; conflicts with exams or exam preparations; attending class; illness; out of town; and other similar reasons. Students who are unable to attend planned functions must contact the director by phone, e-mail, or person to person to present the details concerning his/her inability to attend. Planned functions include an annual Student Lecture Series, educational travel, special receptions, special presentations, art and culture outings, and a variety of enrichment experiences.

All members of the society are required to assist in planning and/or implementation of the Outstanding Black High School Students' Weekend in November of each year under the direction of the Center for African American Students' Programs.

SPEECH AND HEARING CENTER

Pam Holland, Director
Smith Hall 143/304-696-3641
www.marshall.edu/commdis

The Department of Communication Disorders in the College of Health Professions operates the Speech and Hearing Center which provides quality evaluation and treatment services for people of all ages with speech and hearing problems. The center also provides special training for individuals who would like assistance with dialect change. Services are available for Marshall students, faculty and staff, and the general public. For information regarding services contact the number listed above.

STUDENT AFFAIRS

Cedric Gathings, Vice President for Student Affairs
2W40B Memorial Student Center/304-696-6423
student-affairs@marshall.edu
www.marshall.edu/student-affairs

Student Affairs Office

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

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

The various units within the dean's office are:

1. Student Activities and Involvement
2. Recognized Student Organizations
3. Office of Student Conduct
4. Student Government
5. Student Advocacy
6. Parent Programs
7. Greek Affairs (fraternity and sorority)
8. Office of Community Engagement

Student Development

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

Many units of the Student Development Center are located on the first floor of Prichard Hall (304-696-3111):

1. Counseling Services: assists students in the resolution of personal or emotional concerns; the center is staffed by mental health professionals and provides comprehensive services; call 304-696-3111 for information.
2. Student Health Education/Substance Abuse Prevention, 304-696-4800
3. Disabled Student Services, 304-696-2271

Student Health Service

The Student Health Service (SHS) is located at the Marshall Medical Center at Cabell-Huntington Hospital. The SHS is designed to treat acute illnesses. Services are delivered by the Department of Family and Community Medicine, a division of the School of Medicine. Operating hours are from 8 a.m.-4:30 p.m., and it is closed Saturdays, Sundays, and on school holidays. The Student Health Clinic works both on an appointment and a walk-in basis. Same-day appointments are normally made. To make an appointment, or for more information on the Student Health clinic call 691-1100.

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

STUDENT RESOURCE CENTER

A Division of the Office of Career Education
Memorial Student Center, 2nd Floor/304-696-5810
src@marshall.edu
www.marshall.edu/src

See Career Education.

STUDENT CONDUCT

Lisa Martin, Director
2W38 Memorial Student Center/304-696-2495
martil@marshall.edu
muwww-new.marshall.edu/student-conduct/

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 university-sponsored 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. The *Student Code of Conduct, Student Academic Rights and*

Responsibilities, and the judicial processes are available in the *Student Handbook,* published by the Department of Student Affairs.

STUDENT SUPPORT SERVICES

Bonnie Bailey, Director
Prichard Hall West Lobby (1st Floor)/304-696-3164
sss@marshall.edu

The Student Support Services (SSS) program is one of several federally funded TRiO grant programs established to help students overcome class, social, academic, and cultural barriers to higher education. SSS provides a host of FREE programming and support services to 200 eligible participants.

Eligible participants are undergraduate students who meet at least one of the three requirements:

- First-generation college attendees (neither parent/guardian has graduated from a 4-year institution)
- Income eligible as determined yearly by the Department of Education
- Documented learning or physical disability

The staff provides one-on-one academic advising to assist the student in achieving his/her academic goals. SSS also provides living learning communities and courses, Supplemental Instruction assistance, various courses and opportunities to enhance academic performance and guidance, assistance with financial aid processes and requirements, and postgraduate assistance.

STUDY ABROAD

Old Main 102/304-696-3160
studyabroad@marshall.edu
www.marshall.edu/iss/studyabroad/

Undergraduate students can experience life in a different culture while pursuing an approved course of study toward the baccalaureate degree. (See information on transfer of credit and grades below.) This international experience will serve as excellent preparation for whatever career students choose. Marshall students have enrolled in programs of study in such countries as England, Spain, Mexico, Australia, Japan, France, Germany, and China. Students can arrange for study abroad in several ways:

- study abroad for one or more semesters or during the summer;
- enroll in another American institution's study abroad program (see Marshall Students Visiting Other Institutions)
- enroll in an International Exchange Program. Marshall maintains a number of these programs (see below) which involve a direct relationship with the institution abroad as well as easy transfer of credits.

The Office of International Student Services will help find the right program for a student's needs. Study abroad is done typically in the junior year. Advance planning will ensure a successful experience. By making an early commitment to study abroad, students can plan their curriculum, save money, and prepare for living in a foreign setting, possibly with a host family or in a shared apartment.

ELIGIBILITY TO PARTICIPATE IN MU STUDY ABROAD PROGRAM:

- You must have completed your first two semesters of university level coursework to participate in a study abroad program.
- You must have a GPA of 2.50 overall/cumulative as well as 2.50 Marshall GPA or higher
- Students on academic or disciplinary probation or suspension are not eligible for study abroad.

TYPES OF STUDY ABROAD PROGRAMS

International Exchange Programs

Marshall University currently maintains student exchange programs with the following institutions:

- Anglia Ruskin University in Cambridge, England
- Kansai-Gaidai University in Osaka, Japan
- Chukyo University in Nagoya, Japan

(continued)

- Universitat Jaume I in Castellon de La Plana, Spain
- Université Catholique de Lyon, Ecole Supérieure de Commerce et Management in Lyon, France
- Rennes 2 University in Rennes, France

ISEP Direct - International Student Exchange Program

ISEP Direct provides access to over 300 study sites in 42 countries. Programs in English are not only in English-speaking countries but in Bulgaria, the Czech Republic, Denmark, Estonia, Finland, Hong Kong, Hungary, Iceland, Japan, Korea, Latvia, the Netherlands, South Africa, Sweden and Thailand. Students can search ISEP programs online by location, major or language of instruction at *www.isep.org*.

Knowledge Exchange Institute (KEI)

Marshall University is a member of Knowledge Exchange Institute (KEI) which offers more than 25 programs in Africa, Latin America, Asia, Australia and Europe. For additional information, please visit *www.keiabroad.org*.

Junior Year Abroad

Nine to twelve months fully integrated into the foreign environment requires the most commitment. It requires fluency in the host language and often is the most costly of the options. However, it also yields the most in personal growth and maturity.

Semester Abroad

Because most foreign universities are not organized on a semester system or offer credit hours, these one semester programs are usually run by American universities. Classes are usually offered in English by American or host professors.

Short-Term Study Abroad

These are typically summer programs lasting six to ten weeks. Often they are a quick way to become fluent in a language or gain a good understanding of a country. The Department of Modern Languages currently sponsors summer language study programs in France and Spain.

Travel-Study Tours

These are usually very short-term events (over Spring Break), which involve travel rather than residential study. Students who enroll in study abroad programs maintain their Marshall student status.

TRANSFER OF FOREIGN CREDITS/GRADES

1. Students who plan to study abroad should consult with the Study Abroad Coordinator in the Office of Admissions. The coordinator will provide a copy of the procedures for obtaining credit for transfer courses and the Study Abroad Approval Form.
2. Foreign study courses may be taken for letter grades or as Credit/No Credit, depending on the grading system of the host institution and pending approval of the student's academic college.
    - All students must obtain advance approval for courses taken for a letter grade or Credit/No Credit by completing the Study Abroad Course Credit Approval form prior to participating in the program.
    - Students can earn up to 3 hours of international (IR) study credit toward graduation requirements.
    - Students must take all hours in a given term as either Credit/No Credit or for a letter grade.

STEPS TO PREPARE

1. Commit to study abroad and begin planning.
2. Gather information—use the study abroad library in the Office of Admissions, Old Main 102. Also, check out online sources for study abroad. Estimate costs - talk with parents, the Financial Aid Office and the Study Abroad Coordinator.
3. Decide on a program—semester, summer, or a full year. Decide on a country and on what language you may need.
4. Consult often with the Study Abroad Coordinator and faculty. They can offer insightful tips and pre-departure orientation.

TESTING CENTER

Vickie Seguin, Director
Room G-45, Morrow Library/304-696-2604
seguin@marshall.edu

The Marshall University Testing Center administers the computer-based GRE, Praxis I, TOEFL, and various other tests in contract with the Educational Testing Service. For additional information and hours call the number above.

TEXTBOOK LOAN PROGRAM

University College, Smith Communications Building 212/304-696-3169
www.marshall.edu/uc/textbook-loan-program

Textbooks for several gateway and core curriculum courses are now available in the Drinko Library for a short-term loan period of three hours and cannot be removed from the library. A list of textbooks that are part of the loan program can be found on the Textbook Loan Program website. Students who would like to utilize the textbook loan program should visit the Circulation Desk at the Drinko Library. To request the book, the student should know the title of the book, identify the book as part of the Textbook Loan Program, and present a student ID.

TUTORING SERVICES

University College, Smith Communications Building 211/304-696-6622
Sabrina Simpson, Coordinator
tutoring@marshall.edu
www.marshall.edu/uc

Tutoring Services are available to all enrolled students. Nearly all subjects are tutored each semester, particularly high-demand subjects and gateway courses. The goal of tutoring is to help lead students to academic excellence, not just remediation. Tutoring is available by registering online and requesting either a one-time visit or longer-term, recurring individual appointments. Online tutoring is also available upon request. Since hours of operation vary per term, students are highly encouraged to stop by University College or visit the UC website for a complete schedule.

WRITING ACROSS THE CURRICULUM

April Fugett Fuller
Harris Hall 314
304-696-2276
www.marshall.edu/ctl/writing-across-the-curriculum

See Center for Teaching and Learning.

WRITING CENTER

Anna Rollins
Drinko Library, 2nd Floor/304-696-2405
www.marshall.edu/writingcenter

The Writing Center, which is administered by the Department of English, provides free writing consultation to students. Students can drop in without an appointment to receive help with writing or to use a PC. The Writing Center tutoring staff, which consists of English graduate students and undergraduate peer tutors of all majors, can help students through the entire writing process, from discussing initial ideas to revising and editing their work.

University Policies and Procedures

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 Web site at *www.marshall.edu/library/copyright.*

EQUAL OPPORTUNITY/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.

The university ensures equality of opportunity and treatment in all areas related to student admissions, instructions, employment, placement, accommodations, financial assistance programs and other services. Marshall University also neither affiliates with nor grants recognition to any individual, group or organization having policies that discriminate on the basis of race, color, sex, religion, age, disability, national origin or sexual orientation.

Further, the university is committed to the ideals of inclusion for students, faculty and staff and whenever appropriate, will take affirmative steps to enhance diversity.

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.

PRIVACY RIGHTS OF PARENTS AND STUDENTS

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

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

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

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

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

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

The University encourages complainants to lodge a formal complaint with the Dean of Student Affairs.

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

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 Board of Governors Policy GA-9, updated June 11, 2013)

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:

- The university subscribes to a third-party service to provide notifications by e-mail, text message, and telephone, referred to as "MU Alert" at Marshall. All students, faculty and staff will be enrolled in the MU Alert database with their university e-mail addresses, and, in the case of faculty and staff, their office telephone numbers. Students, faculty and staff may provide additional contact methods, including those for text messaging and cell phone numbers, through the use of the myMU portal.

  In cases of weather-related or other emergency closings and delays, University Communications staff will use all contact points in MU Alert to send notification.
- 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.

NOTE: 3.3 This section applies only to the Huntington campus and all releases should make it clear that it relates only to the Huntington campus. The weather-related closings policy for the South Charleston campus and other education centers will be managed by the chief administrative officer (as designated by the University president) for the respective location, and all releases should make clear that the release applies only to the affected location.The South Charleston phone number is 746-2500. See the following 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.

(continued)

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.

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. The authoritatively correct statement of the University's condition (Huntington) is stipulated to be the message on the main page of the website at *www.marshall.edu*.

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 Chief of Staff, Senior Vice President for Academic Affairs and the Senior Vice President for Administration following the consultation with other appropriate officials, including the President. Should only one or two of those three persons be available, the ones available 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) MU Alert, and (c) University website. Students may check the status of their classes by checking the website.

Point Pleasant, Beckley, Teays Valley and Other Educational Centers

Procedures for delayed openings and class cancellations are similar to those for the South Charleston campus. 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 there may be 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

South Charleston Closed: All classes cancelled and offices closed.

South Charleston Classes Cancelled: All classes cancelled. Details provided by site.

South Charleston Delay: A delay in the beginning of non-class activities, e.g. a two-hour delay would mean the normal work day would begin at 10:00 a.m. rather than 8:00 a.m.

Academic Information

Absences from Class (see Class Attendance)

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/academic-common-market.*

Academic Dishonesty Policy

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.

- *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, paraphrasing 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 is prohibited.
- *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 responsible office, 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.

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.

Reporting:

Any time an accusation 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.

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

Instructors are encouraged to give a copy of the "Academic Dishonesty Report Form" to a student accused of an offense. However, 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.

Revised by Marshall University Board of Governors
July 12, 2013

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 Forgiveness

The academic forgiveness policy allows forgiveness of *D* and *F* grades for purposes of calculating the Grade Point Average (GPA) required for graduation. This policy is designed to help students who left college with low grades. It will be implemented, provided certain conditions are satisfied, where the *D* and *F* repeat rule is not applicable:

- The student must not have been enrolled on a full-time or part-time basis for more than 12 credit hours at any higher education institution for a period of five consecutive calendar years prior to the request for academic forgiveness.;
- only *D* and *F* grades received prior to the five year, non enrollment period can be disregarded for GPA calculation;
- in order to receive a degree or certificate, the student must complete at least 24 additional credit hours through actual coursework from Marshall University after the non enrollment period, earn at least a 2.0 GPA on all work attempted after the non enrollment period and satisfy all degree or certificate requirements.

Grades disregarded for GPA computation remain on the student's permanent record. This policy applies only to the calculation of the GPA required for graduation and does not apply to GPA calculation for special academic recognition (such as graduating with honors) or to requirements for professional certification which may be within the province of licensure boards, external agencies, or the West Virginia Board of Education.

A student may apply for academic forgiveness by submitting to his/her college dean an application for "Academic Forgiveness," available in the college office. The dean can accept, modify, or reject the application and will provide a justification. Students who do not normally qualify for readmission because of a low GPA will, if their request for forgiveness is approved, be readmitted and placed on academic probation. The decision of forgiveness must be made again whenever the student changes programs, departments, colleges, or institutions. (Amended and approved at December 9, 1986, APSC meeting.)

Students should be aware that this policy is not necessarily recognized by other institutions of higher education outside the state of West Virginia.

Exception: The Board of Regents Bachelor of Arts Program is governed by a different forgiveness policy. (See section on Board of Regents degree.)

Academic Probation and Suspension

For information on Financial Aid Probation, please see the section on Student Financial Assistance.

Probation for Academic Deficiencies

All undergraduate students whose Overall or Marshall GPA drops below a 2.0 will be placed on Academic Probation. Academic Probation is a period of restricted enrollment for a student. All probation students are subject to the following restrictions.

(continued)

- Students on probation must 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.
- Students on probation may take a maximum of 14 hours and should repeat courses under the *D/F* Repeat Rule to reduce deficiency points.
- Students on probation must 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 Academic Probation will result in suspension (see below).
- Students on probation are not allowed to register by myMU.
- Students on probation must participate in their College's Retention Program.
- Other requirements may be imposed in the Academic Improvement Plan.

The student is returned to Academic Good Standing when his or her Marshall and Overall GPA are 2.0 or higher.

Suspension for Academic Deficiencies

Academic Suspension is defined as a period in which a student cannot enroll in courses at Marshall University. A student who has pre-registered and is subsequently suspended will have his/her registration automatically canceled.

a. 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 (see Table One) will be suspended for one regular semester (the summer terms do not count as a term of suspension).

Table One – Suspension QPD

GPA Hours	0-29	30-59	60-89	90 or more
Quality Point Deficit	20	15	12	9

b. 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 listed in Table 1 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.**

c. Petition for Reinstatement after a Second or Subsequent Suspension

Reinstatement after a second or subsequent suspension is only by written petition to the Dean of a student's college, school, or program. The petition must be in writing and provide evidence that the student can meet the requirements of his or her Academic Improvement Plan. The written petition for readmission must be submitted at least 30 days prior to the beginning of the semester for which readmission is sought.

Probation for Academic Dishonesty

Academic probation for up to 1 year may be recommended by the instructor but will need to be imposed by the department chair, academic dean or the Office of Academic Affairs.

Suspension for Academic Dishonesty

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).

Appeals of Academic Probation and Suspension

See "Academic Rights and Responsibilities of Students."

Approved by Faculty Senate, May 9, 2002, to go into effect Fall 2003)

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 SA-2.

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 Board of Governors Policy SA-2. 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 an instructional 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.

(continued)

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.
     - 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.

   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 0-29 GPA hours will be suspended if they have 20 or more quality point deficiencies; with 30-59 hours, they will be suspended with 15 or more quality point deficiencies; with 60-89 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 (Fall or Spring). 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
5. Should the student or the instructor be dissatisfied with the determination of the Academic Appeals Board then then either party may file an appeal with the Provost and Senior Vice President for Academic Affairs within thirty (30) days of receipt of the decision of the Board. The decision of the Provost and Senior Vice President for Academic Affairs must be rendered in writing within ten (10) days of receipt of the appeal, and 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.

(continued)

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.
    c. If the student is dissatisfied with the outcome of the meeting outlined in (b) above, the student may 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.

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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.

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.

2. 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 ~~p~~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.

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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

Academic Suspension

See "Academic Probation and Suspension."

Academic Standing

(for more detailed information, see "Academic Rights and Responsibilities of Students")

Students receive official notification of academic standing in their grade report at the end of the regular semester or summer session.

Academic standing is defined by one of three categories:

1. *Good Standing:*

   The student is in good standing when the cumulative Marshall and Overall GPA (includes Marshall grades and any grades earned at other institutions), is at least 2.0. For purposes of participation in extracurricular activities, a student is considered to be in good standing if he or she is eligible to enroll in classes that semester and not under specific restriction as described in the Marshall University Code of Student Rights and Responsibilities, Section C (1-3). Individual activities or organizations may have further requirements for participation such as minimum GPA.

2. *Academic Probation*:

   The student is placed on academic probation at the end of any regular semester or summer session when either the cumulative Marshall or Overall GPA (includes Marshall grades and any grades earned at other institutions) is less than 2.0. The student will be notified by mail that a hold has been placed on registration activity. This means the student cannot register or make schedule changes by telephone or on the web. All registration activity must take place in person at the Office of the Registrar. After seeing his/her advisor (if subject to mandatory advising), the student must also get written permission from the associate dean of his/her college to register or make schedule changes. Probation students are also limited in the number of credit hours they can take each semester and may be subject to financial aid, athletic participation, and other restrictions imposed by their colleges.

3. *Academic Suspension:*

   If a student exceeds the maximum quality point deficits in the cumulative Marshall or Overall GPA (includes Marshall grades and any grades earned at other institutions) for his/her GPA hours at the end of any given semester, he/she will be suspended for the following semester. The college dean notifies suspended students by mail that a hold has been placed on their registration status and their registration for the following semester has been canceled (excluding summer terms). Please see "Academic Probation and Suspension" for details.

Accelerated Master's Degree (AMD)

Marshall University offers an accelerated path through a number of its master's degree programs. We encourage qualified undergraduates to consider doing an Accelerated Master's Degree.

Undergraduates accepted to an Accelerated Master's Degree program can begin taking graduate coursework in their senior year up to a maximum of 12 hours in place of electives. Students reduce the number of hours required to complete the Bachelor's degree by the number of graduate hours they complete (up to a maximum of 12). They must meet all other degree requirements for their Bachelor's degree while they work on their Master's degree. None of the credit hours used for the Bachelor's degree can be counted toward the Master's degree.

Graduate coursework/credit will appear ONLY on the graduate transcript, and graduate course grades will be calculated at the graduate level. The undergraduate transcript will indicate that graduate courses were used to fulfill the AMD requirement.

Advantages of an Accelerated Degree

- complete the Bachelor's degree with up to 12 fewer credit hours (must meet all other degree requirements for the Bachelor's degree);
- begin work on the master's degree during the senior year;
- complete up to 12 graduate credits at undergraduate tuition rates;
- earn a bachelor's and master's degree in less time.

Programs Available

Currently, the Accelerated Master's Degree is offered in these master's programs: Criminal Justice, Geography, Political Science, Sociology, and Psychology. Please check with the Graduate College office (Old Main 113) for additional AMD programs.

Eligibility Requirements for Accelerated Master's Degree program

- must have completed at least 90 hours toward the bachelor's degree;
- must have at least a 3.30 overall undergraduate GPA;
- must have at least a 3.30 GPA in the major;
- must meet the admission requirements of the chosen master's degree program. (Note: AMD programs may have admission requirements that differ from the admission requirements for the regular master's degree. For example, some departments might waive the required admission test, such as the GRE, GMAT or Miller Analogies. Students should check with the chosen master's degree program.)

How to Apply

1. During the junior or senior year, eligible students should meet with their undergraduate advisor and the Director of Graduate Studies of their chosen master's degree program to develop an AMD Plan of Study. The Plan of Study form is available from the Graduate College office or online at the Graduate College website. The completed, signed, and approved Plan of Study must be submitted to the Graduate College. Any changes to the AMD Plan of Study must be approved by the undergraduate advisor and Director of Graduate Studies and submitted in writing to the Dean of the Graduate College.
2. The student's acceptance into the AMD program is subject to the approval of the Plan of Study by the Dean of the Graduate College.
3. Students accepted into the AMD program should apply for admission to the chosen master's degree program for the first semester after the bachelor's degree is awarded. Applications should be submitted during the last semester of the senior year.

Requirements for Continuation in the AMD Degree Program

Students must maintain a minimum GPA of 3.0 for all graduate credit toward their master's degree program.

Withdrawal from the AMD

A student may withdraw at any time from an approved AMD program by informing the undergraduate advisor, the Director of Graduate Studies, and the Dean of the Graduate College in writing. A student's status will then revert to the standard undergraduate degree program. Any graduate hours earned must be approved for use in fulfillment of bachelor's degree requirements by the student's Undergraduate Dean.

From Undergraduate to Graduate Student

Beginning with the semester after the student has earned the bachelor's degree and has been accepted into a master's degree program, the student is enrolled in the Graduate College and is assessed tuition and fees at the graduate rate. All rules regarding graduate education will apply to the student once admitted into the master's degree program.

Additional Baccalaureate Degrees

It is possible to earn more than one baccalaureate degree by meeting these requirements:

- completing all of the major and minor requirements for the desired degree;
- completing a minimum of 30 additional hours for each degree beyond the 120 hours required for the first baccalaureate degree (this means completing a total 150 hours for a second baccalaureate, 180 for a third baccalaureate, and so on);
- meeting the minimum residency requirement of 24 credit hours.

Grade Point Averages and graduation with honors must conform to existing university policies.

Advising

Although students are ultimately responsible for selecting a major and planning their course schedules, advising services are available to all students.

- The college office may assign an advisor to students with a declared major.
- Undecided students are advised by University College.
- Students on academic probation are also required to meet with the associate dean of their college for written approval to register or change their schedule.

The academic advisor is a very good person to get to know. He or she will help with advice and support with academic or career questions. Students usually see their advisors during registration periods, but all faculty advisors are available during office hours throughout the semester. Students should take the initiative and arrange an appointment with their advisors at any time during the semester when they need advice or help.

Some colleges require their students to consult with an academic advisor before they can register. The college office places an advising hold on the student's registration. This hold remains until the student has met with the appropriate advisor. Students should consult their college dean or major department for specific advising requirements.

Appeals Board

See "Academic Appeals" under "Academic Rights and Responsibilities."

Area of Emphasis

An area of emphasis is a specific subject area of study which has limited course offerings within an approved degree program and major. Normally, a minimum of twelve (12) credit hours would be expected for an area of emphasis at the undergraduate level.

Auditing Courses

Audit students enroll only for purposes of refreshing or acquainting themselves with the material offered in the course. Students can audit a course when there is space available in the class and the instructor authorizes audit status. Audit students receive no academic credit. Enrollment for audit is limited to the regular registration period for the semester or term. A student must enroll for the course as an Audit, and must pay fees in the same way and at the same tuition rate as students enrolling for credit. Faculty members who wish to audit courses must secure approval of the instructor of the course and must enroll in the regular way. The instructor of the course will determine attendance and any other special requirements for audit students. It is the instructor's responsibility to discuss the requirements of the course with the auditor. The instructor can notify the student's college dean and the Registrar's Office to withdraw the auditor from the class if attendance or other requirements are not met. **A student cannot 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.**

Catalog of Record

The catalog of record is the academic catalog that is in effect at the time the student declares a major. It identifies the graduation requirements that must be met to earn the degree. Once a major is declared, the catalog of record remains the same. A student has 10 years in which to complete the degree. If within that 10 year period the student changes majors or transfers colleges at Marshall, the catalog at the time of the change of major becomes the catalog of record. The student then has 10 years in which to complete the degree under the new catalog. If a student exceeds the 10 year period, the catalog of record is the one in effect at the date of graduation. Students must meet the graduation requirements in this catalog. Students can substitute courses no longer offered with the permission of their college dean. (Education majors: see the residency requirements in the College of Education section of this catalog.)

Class Attendance

Policy Statement:

Students are expected to attend punctually all class meetings, laboratory sessions, and field experiences and to participate in all class assignments and activities as described in the Course Syllabus. Absences are counted from the first class meeting after the student registers. Students registering late are expected to make up all missed assignments in a manner determined by the instructor. Students should be aware that excessive absences, whether excused or unexcused, may affect their ability to earn a passing grade.

The instructor of each class shall establish a policy on class attendance and make-up work, and provide the policy to students in the Course Syllabus. This policy must not conflict with university policies, including this policy. Class attendance may be a criterion in determining a student's final grade in the course if the instructor provides a statement to this effect in the course syllabus.

Students must promptly consult with their instructors about all class absences. Instructors will work with students to identify appropriate documentation and discuss any missed class time, tests, or assignments.

Except in the case of University Excused Absences, it is the decision of the instructor to excuse an absence or to allow for additional time to make up missed tests or assignments. A student may not be penalized for an excused absence, provided that the student, in a manner determined by the instructor, makes up the work that has been missed.

Instructors are required to honor valid University Excused Absences and to provide reasonable and equitable means for students to make up work missed as a result of those absences. Academic obligations that cannot be made up should be addressed by the course instructor in consultation with the student to ensure that continued enrollment is feasible while there is still an opportunity to drop the course within the established withdrawal period.

This policy excludes academic endeavors that require the completion of a specific number of clock hours, such as clinical experiences, practica, and internships. For those courses, the department chair or program supervisor will determine the maximum number of absences. This policy does not supersede program accreditation requirements.

This policy also excludes laboratory courses that require significant preparation and monitoring. For such courses, departments will determine the minimum number of laboratories a student must complete to pass the course. If a student cannot complete this number of labs, the instructor may recommend that the student withdraw from the class.

If the instructor believes that the number of absences accrued under the terms of this policy (whether excused or unexcused) is such that a student cannot fulfill the learning experience and mastery that a course requires, the instructor may recommend that the student withdraw from the class.

University Excused Absences

These are addressed by the instructor or the Student Advocate and Success Specialist as described in each item. Appropriate documentation is required for each absence. The Student Advocate and Success Specialist will notify course instructors of his or her actions using the university e-mail system.

1) **University-sponsored activities.** Student participation in authorized activities as an official representative of the university. Such activities include official athletic events, ROTC, student government and student organization activities, regional or national meetings or conferences when endorsed by an academic or organization faculty advisor, performances, debates, and similar activities. The Student Advocate and Success Specialist addresses these absences.
2) **Medical circumstances.**
   a) A student who is briefly ill or injured with fewer than three consecutive hours of class (see (b) below), and is therefore unable to attend class, should first consult with his or her course instructor about the absence. If necessary, the instructor may refer the student to the Student Advocate and Success Specialist.
   b) The Student Advocate and Success Specialist will address absences of three or more consecutive hours of class. This includes absences of three consecutive one-hour class meetings, one three-hour class meeting, etc.

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3) **Death or critical illness of an immediate family member.** Immediate family is defined as parents, legal guardians, siblings, children, spouse or life partner, grandparents, and grandchildren. The Student Advocate and Success Specialist addresses these absences.
4) **Other official activities.**
   a) **Short-term military obligations.** The Student Advocate and Success Specialist addresses these absences. Students who are subject to federal military activation are covered by a separate policy. Please consult the catalog for this policy.
   b) Jury duty, subpoenas for court appearance, religious holidays, and other official activities deemed by the Student Advocate and Success Specialist to warrant an excused absence.
5) **Extreme personal emergencies.** Examples of such events include house fires, serious crimes, and other grave emergencies deemed by the Student Advocate and Success Specialist to warrant an excused absence.

Classification of Students

Classification of students is based on the number of college level credit hours earned as shown following:

CLASSIFICATION	SEMESTER HRS.
Freshman	0-29
Sophomore	30-59
Junior	60-89
Senior	90 or more

COURSE NUMBERS	LEVEL
100-199	freshman level
200-299	sophomore level
300-499	junior and senior level
500 and above	graduate level

Core Curriculum (General Education)

The Core Curriculum is Marshall's general education program and applies to all majors. The Core Curriculum is designed to provide essential skills for students' varied life paths after college in an ever-evolving world.

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II may be fulfilled through a combination of transfer and Marshall credit hours.

Core I: 9 hours

- 3 hours: First Year Seminar (100-level)
- 6 hours of discipline-specific courses with an emphasis on critical thinking (CT) and active learning (100- or 200-level). Specific courses that fulfill the CT requirement may be found at *www.marshall.edu/gened*. CT credits must be earned at Marshall University.

Core II: 25 hours (100- or 200-level)

Specific courses that fulfill Core II may be found at *www.marshall.edu/gened*.

- 6 hours: Composition
- 3 hours: Communication
- 3 hours: Math
- 4 hours: Physical or Natural Science
- 3 hours: Social Science
- 3 hours: Humanities
- 3 hours: Fine Arts

Additional University Requirements

- 6 hours of Writing Intensive credit in any discipline at any level (Writing Intensive credits must be earned at Marshall University)
- 3 hours of Multicultural or International coursework in any discipline at any level
- Capstone project in the major

Core I courses include First Year Seminar and two Critical Thinking (CT) courses. First Year Seminars are taught by trained, full-time faculty who help students develop intentional critical thinking skills integral to lifelong learning through inquiry, discussion, interaction, discovery, problem solving, writing, research, reflection and examination of complex multicultural/global ideas and themes.

CT courses provide students training in key skills specific to the discipline in which the course is offered. Each course focuses on at least five outcomes from Marshall University's Baccalaureate Degree Profile; Integrative Thinking and at least four others. CT credits must be earned at Marshall University. Marshall's Baccalaureate Degree Profile's Domains of Critical and Outcomes are:

Domains of Critical Thinking	*Baccalaureate Learning Outcomes*
Communication Fluency	Students will develop cohesive oral, written, and visual communications tailored to specific audiences.
Creative Thinking	Students will outline multiple divergent solutions to a problem, develop and explore risky or controversial ideas, and synthesize ideas/expertise to generate innovations.
Ethical and Civic Thinking	Students will determine the origins of core beliefs and ethical principles, evaluate the ethical basis of professional rules and standards of conduct, evaluate how academic theories and public policy inform one another to support civic well-being, and analyze complex ethical problems to address competing interests.
Information Literacy	Students will revise their search strategies and employ appropriate research tools, integrate relevant information from reliable sources, question and evaluate the complexity of the information environment, and use information in an ethical manner.
Inquiry-Based Thinking	Students will formulate focused questions and hypotheses, evaluate existing knowledge, collect and analyze data, and draw justifiable conclusions.
Integrative Thinking	Students will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations.
Intercultural Thinking	Students will evaluate generalizations about cultural groups, analyze how cultural beliefs might affect communication across cultures, evaluate how specific approaches to global issues will affect multiple cultural communities or political institutions, and untangle competing economic, religious, social, political, or geographical interests of cultural groups in conflict.
Metacognitive Thinking	Students will evaluate the effectiveness of their project plan or strategy to determine the degree of their improvement in knowledge and skills.
Quantitative Thinking	Students will analyze real-world problems quantitatively, formulate plausible estimates, assess the validity of visual representations of quantitative information, and differentiate valid from questionable statistical conclusions.

The skills gained in Core I courses will facilitate student learning in later coursework. These courses provide a direct linkage between the first classes a student takes, Core II courses, major-specific courses, and the senior capstone experience.

Core II courses provide necessary training in communication, writing, and math as well as deeper engagement with discipline-specific skills and knowledge. These courses develop student capacity as skilled and knowledgeable citizens.

Multicultural or International designated courses are dedicated to developing students' intercultural capacity. Students in multicultural courses learn to explain and examine elements of multiple cultures, past and present. Multicultural Studies courses encourage students to compare their own cultures with other cultures, enabling them to evaluate their own. At least half of the content in international courses is dedicated to current topics beyond the United States' borders. Students will identify and evaluate the fundamental dynamics that shape the current world; recognize and appraise major issues, concerns, and problems of a super-national or global scope in the current world; and/or recognize and assess diversity within, and

interactions among, current world nations, peoples, and cultures, and how these help shape the current world. (See *www.marshall.edu/gened*.)

Writing Intensive Courses engage students directly in the subject matter of the course through a variety of activities that focus on writing as a means of learning. In this way, writing is not added to content, but the content is entered and secured through writing. In other words, both teaching and learning are directed toward specific projects carefully created and monitored by the instructor so that students, by doing these projects, acquire the skills and knowledge of the content of the course as set forth in the course objectives. (See *www.marshall.edu/wac*.)

Capstone courses are taken as part of a major in a student's senior year. Therein, students undertake projects that synthesize past learning and demonstrate their abilities.

Contact Information

Students are required to have a valid, permanent address on file with the university. Updates to this address should be made online in the Student Information section of myMU.

Students must use their official Marshall e-mail addess when communicating with university offices and faculty, unless otherwise instructed, such as for online courses.

Course Substitution

Students may apply for course substitutions or waivers to accommodate disabilities under the following policy:

Conditions

A student seeking a course substitution or waiver due to the presence of a disability must meet the following conditions:

- Completion of the Course Substitution/Waiver Form. This form requires that the student attach a recent (within two years) diagnosis of a disability warranting a substitution or waiver. (The form is available in the Office of Disability Services, the H.E.L.P. office, the Buck Harless Student Athlete Program office, college deans' offices, and the office of the Dean of Student Affairs.) A licensed psychologist, a licensed school psychologist, or a properly credentialed education specialist must have made the diagnosis in the case of a learning disability.
- Verification on the Course Substitution/Waiver Form from the dean of the student's college, upon recommendation by the faculty of the department in which the student is a major, that the course for which a substitution is requested is not an integral part of the student's course of study. If the course is integral to the course of study the substitution or waiver request shall not go forward.
- Submission of the Course Substitution/Waiver Form to the Office of Disability Services.

The Committee

The Course Substitution Committee will consist of three faculty members. Two faculty members, appointed annually, will have expertise in areas related to disabilities and academic accommodations. The first faculty member will be the Director of the Psychology Clinic or designee. The second faculty member must have expertise related to accommodating disabilities and is appointed by the Dean of the College of Education. The third faculty member is to have expertise in the discipline of the course for which the student is applying for substitution or waiver. This faculty member will be appointed by the dean of the college that houses the discipline of the course for which the substitution/waiver is requested. The Office of Disability Services is responsible for notifying the appropriate academic dean that an appointment is necessary for the purpose of considering appropriate courses for substitution.

Procedure

Submission of the Course Substitution Form by the student to the Office of Disability Services initiates the process.

The Office of Disability Services confirms that a diagnosis of a disability is presented by the student and that the disability is known to hinder or prevent successful completion of the course of study for which the substitution is requested. If there is no such diagnosis the request is denied. If the appropriate diagnosis is presented the Office of Disability Services proceeds to form the committee by securing, from the appropriate academic dean, the third faculty appointment required for the Course Substitution Committee. All materials submitted by the student are forwarded to the committee members with a certification that the student has presented a diagnosis of a disability warranting a substitution. The committee is charged with identifying courses that would constitute appropriate substitution and reporting these courses to the Office of Disability Services.

A representative of the Office of Disability Services convenes the Course Substitution Committee and facilitates its work. The committee will meet up to two times a semester to address all pending requests and assign specific courses for substitution. The Office of Disability Services will report decisions to the student and include the student's dean on all correspondence.

A student who is denied a course substitution or waiver may appeal in writing within 10 working days to the Provost/Senior Vice President for Academic Affairs, whose decision is final.

Students should be aware that a course substitution/waiver would not be valid at any other institution and would have to be approved by the new college or department if the student changes major or declares a second major at Marshall University.

Approved by Faculty Senate, January 24, 2003
Amended April 8, 2014

Credit by Examination

Course credit by examination is granted at Marshall in some academic departments. Students interested in earning credit this way should contact the chairperson of the department in which the course is offered. With the department chair's permission, the student should obtain a "Credit by Examination" form from the Registrar. This form must be signed for approval by the department chair, the dean of the student's college, and the Registrar. If the student is not a full-time student, he/she must also pay a $30.00 examination fee. The grade received on the special exam will be applied to the student's transcript. Students may not use Credit by Examination to repeat a course under the *D/F* Repeat Rule.

Credit Hour (same as Semester Hour)

Generally a student earns one credit for each 15 hours of class contact. Classes normally meet 45 hours in a semester for 3 units of credit. Students should plan on two hours of preparation/study for each in-class hour. Laboratory classes require two or three hours of lab per week for each semester hour of credit.

D/F Repeat Rule (Repeating Courses)

If a student earns a grade of *D* or *F* (including failures due to regular and/or irregular withdrawal) on any course taken no later than the semester or summer term during which the student attempts the sixtieth semester hour, and if that student repeats this course prior to the receipt of a baccalaureate degree, the original grade shall be disregarded and the grade or grades earned (excluding a *W*) when the course is repeated shall be used in determining his/her Grade Point Average. The original grade shall not be deleted from the student's record.

The *D/F* Repeat Rule applies only to graduation requirements and not to requirements for professional certification which may be within the province of licensure boards, external agencies, or the West Virginia Board of Education.

Adopted by West Virginia Higher Education Policy Commission(Series 22)
Effective August 1, 2002.

Dead Week

The last five class days of the fall and spring semesters are designated as "dead week." During this period, instructors cannot give exams that count as 15% or more of the final course grade. They can assign major papers and/or projects which count as 15% or more of the final course grade ONLY if the assignment is stated in the course syllabus. Instructors can introduce new material and give make up exams during the Dead Week. Exemptions from this policy include night classes, laboratories, freshman English composition courses, and any classes meeting once a week. Dead Week is not applicable to Intersession or Summer Session.

Dean's List

Students registered for 12 or more hours of courses for which they receive letter grades, and who at the end of a semester have Grade Point Averages of 3.3 or above, are considered honor students. The names of these students make up the "Dean's List'' in their undergraduate college.

Degree Program

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

Distance Education Courses

According to the Higher Education Opportunity Act, "distance education" is defined as education that uses one or more of the following technologies to deliver instruction to students who are separated from the instructor; and to support regular and substantive interaction between the students and the instructor, synchronously or asynchronously. The technologies used may include: the Internet; one way and two way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices; audio conferencing; or videocassettes, DVDs, and CD-Roms (PL 110–315, 14 AUG. 2008). At Marshall University, distance education courses consist of two formats: online courses and hybrid courses.

Online Courses

The term "online course" refers to any distance education course in which 100% of the course content is delivered asynchronously by technological means. There are no synchronous, face-to-face, or on-site attendance requirements because online courses are the electronic versions of classes offered on the Marshall campus delivered completely over the Internet. Online courses are accessible through MUOnLine which is powered by Blackboard, a set of online course tools and supporting software. Communication between students and instructors can occur by any electronic means and there are no required on-campus or real-time meetings.

Online courses generally follow the Marshall 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 undergraduate courses regardless of residency or number of credit hours the student may be registered for in addition to the online courses. Academic and lab fees may also apply depending on college or school policies. For example, students in the College of Health Professions will still be responsible for clinical and program fees in addition to the online course fee. Likewise, students in the College of Business are still required to pay the technology fee in addition to the online course fee.

Hybrid Courses

"Hybrid course" refers to any distance education course in which 75% or more of the course content is delivered by technological means. There will be synchronous, face-to-face, or on-site attendance requirements described in the course syllabus that may require Internet access, a webcam and/or headset with microphone for real-time communication. Hybrid courses may also use MU OnLine and require that students attend online class meetings at designated dates/times. Students should check the syllabus for each individual class for equipment requirements and attendance information. There is no additional fee for a hybrid course and they follow all regular university registration and withdrawal periods outlined in the academic calendar. 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.

Double Major

Students can major in more than one discipline by completing the requirements for both majors. If the two majors are in different colleges, the student must secure permission from both college deans in order to pursue both majors. For administrative purposes, the student can only be housed in one college; this is the college of record which maintains the student's records. The student would only complete the **college** requirements of the college of record. To earn dual degrees, see "Additional Baccalaureate Degrees."

Dropping All Courses (Withdrawal from the University):

Final Date: Last Day of Class

The last date for complete withdrawal from the university is the last day of class. Withdrawal from the university is defined as dropping all classes for which a student is registered. The student must submit a withdrawal form to the Registrar or mail a request for withdrawal to the Registrar. The effective date of withdrawal is the date that the withdrawal form is submitted to the Registrar. The postmark on mail requests is the official date of withdrawal.

Grades Assigned for Withdrawal from the University

Students withdrawing from the university receive a grade of *W* for all courses. The *W* grade (withdrew) has no impact on the Grade Point Average.

Students who withdraw from the university improperly, or who do not follow the regulations described here, receive grades of *F* at the end of the semester or term.

Dropping Individual Courses

Final Date: Tenth Friday in a Regular Term

- **Day classes**: Students can drop individual courses after the Schedule Adjustment period and during the Withdrawal period which lasts until the Friday of the tenth week of class during a regular semester. The exact last day for dropping individual courses is always published in the Academic Calendar for any given semester or term. A student must get a "Schedule Adjustment and Class Drop Form" from the Registrar's Office, fill in the required course drop information, and then obtain the signature of the course instructor. If a student is on academic probation, he/she must also get the approval and signature of the associate dean of his/her college and bring the completed form to the Registrar's Office.
- **E-Course Withdrawal Period:** The withdrawal policy for e-courses parallels that for regular courses. A student can withdraw from an individual e-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 e-courses also parallels that of regular courses.
- **Night or Off-Campus classes, or E-Courses**: Students can drop a night class, an off-campus class, or an e-course by mailing a request to drop to the Registrar. The postmark on the request will be the official date of withdrawal. The instructor's signature is not required. If a student is on academic probation, he/she must have the approval signature of his/her associate dean.
- **High-demand course:** If a student drops a "high-demand" course during the Withdrawal period, he/she will not be able to pre-register for the course for the following semester. High-demand courses include:
    - ACC 215
    - BSC 227
    - ENG 101, ENG 201
    - MTH 121, 127, 130
    - SPN 101, SPN 102

Students can obtain an up-to-date listing of high-demand courses from the Office of the Registrar.

Grades Assigned for Dropping Individual Courses

A student dropping courses or withdrawing from the university during the Withdrawal period (which lasts until 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 withdrawal period ends the Friday immediately following the two thirds point in the course. Exact withdrawal dates are published in the annual University Academic Calendar. The *W* grade (withdrew) has no impact on a student's Grade Point Average.

Students who drop courses improperly, or who do not follow the regulations described here, receive a grade of *F* at the end of the semester or term.

Exceptions:

Military Service

Men and women called to active duty in the armed services of the United States are 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, is granted if the call comes thereafter. However, credit is granted only in those courses in which the student is maintaining a passing grade at the time of departure to military service. The term "called to active duty" is 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 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 shown on the student's permanent record. *Please note:* Students called to active duty should present a copy of activation orders to the Office of the Registrar to ensure proper handling of their academic records in accordance with this policy.

Medical Reasons

See Medical/Emergency Withdrawal Policy.

Electronic Courses (see Distance Education courses)

Final Exams

Absence from Final Exams

Students are required to take all regular examinations. If a student attends a course throughout the semester and is absent from the final examination without permission, the instructor counts the examination as zero and reports the final grade of *F*. If the absence is the result of illness or some other valid reason beyond the student's control, the instructor reports a grade of *I*. In all cases, the student must verify the reason for the absence. (See "Incomplete'' under Grades and Quality Points.)

Rescheduling of Final Exams

If a student has final exam conflicts or has three or more final exams scheduled for the same day, he/she should follow these steps:

- pick up a "Final Examination Rescheduling Form" from the major department or the college office;
- fill in the top part of the form in which he/she must show his/her complete final exam schedule;
- take this to the dean for verification;
- take the verified form to one of his/her class instructors and attempt to make a rescheduling agreement (date, time, place);
- if the student and instructor reach an agreement, the instructor should sign the form, keep a copy, and send a copy to the dean of the student's college;
- if an agreement cannot be reached, the instructor should note this fact and sign the form. In this case, the student should try to reach an agreement with the instructor of another class in conflict;
- if no instructors agree to reschedule and the student has all comments and signatures on the form, take the form to the Provost and Senior Vice President for Academic Affairs (OM 110);
- the Provost or designee will determine if an exam should be rescheduled and if so, the time, date, and place–the student and the instructor will receive written notice of any rescheduling;
- the Provost's ruling can only be modified by an agreement between the instructor and the student;
- if the student rejects a ruling by the Provost, he/she thereby agrees to take each exam at the scheduled time.

Note: the Provost will not consider any form submitted less than one week before the first day of finals, or any form that is incomplete. An instructor is not required to reschedule a final exam at the student's request.

Four-Year Graduation Plans

A sample four-year graduation plan for each major may be viewed by following the link on the Student Resource Center website at *www.marshall.edu/sn-app/academic-planning*. The plan is a guide to timely degree completion. Students should consult with their advisors in order to adapt the plan for their specific circumstances.

Full-time Student

A full-time student must carry at least 12 semester hours of undergraduate courses or a combination of 12 semester hours of undergraduate and graduate courses in a regular semester; during a five week summer term, a full-time student must carry at least 4 semester hours.

Grade Appeal

See section entitled "Academic Rights and Responsibilities of Students."

GRADE INFORMATION AND REGULATIONS

Grade Point Average Defined

A Grade Point Average (GPA) is a numeric value calculated by dividing total quality points by total credit hours attempted (courses in which a student earned a letter grade). The Grade Point Average computed for graduation purposes (not necessarily each semester), is based on all work attempted with these exceptions:

- Courses with grades of *W, I, CR/NC,* and *AU*
- Grades of *D* or *F* repeated under the D/F Repeat Policy
- Developmental courses

1. An overall Grade Point Average is a calculation based on credit earned at Marshall **and** all other accredited institutions of higher learning;
2. A Marshall Grade Point Average is a calculation based on credit earned at Marshall **only**.

Quality Points Defined

Quality points are numeric values assigned to letter grades that allow a student to calculate a Grade Point Average (GPA). Quality points are based on these values for **EACH** semester hour of credit**:** *A*=4; *B*= 3; *C*= 2; *D*= 1; and *F*= 0. When the GPA is a 2.0, the student has neither a surplus nor a deficiency of quality points. If the GPA is below a 2.0 the student will have a **deficiency of quality points ("deficit points")** resulting from excessive grades of *D* and/or *F*. Grades of *A* and/or *B* can help to earn a surplus of quality points.

GPA Calculation

The following example is provided as a guide for calculation of the GPA:

First Semester:

Course	*Grade*	*Quality Pts.*		*Credit Hrs*		*Total Quality Pts.*
ENG 101	*B*	3	x	3	=	9
SOC 200	*A*	4	x	3	=	12
MTH 121	*D*	1	x	3	=	3
PE 115	*B*	3	x	1	=	3
UNI 100	*CR*	0	x	(1)	=	0
BSC 104	*C*	2	x	4	=	8
TOTAL				14		35

Multiply the number of Quality Points for each grade by the number of Credit Hours for that class. Divide the total number of Quality Points for the semester (35) by the total number of Credit Hours (14). This yields a GPA of 2.50 for the semester.

Second Semester:

Course	*Grade*	*Quality Pts.*		*Credit Hrs*		*Total Quality Pts.*
BSC 105	*D*	1	x	4	=	4
PSY 201	*C*	2	x	3	=	6
HST 101	*F*	0	x	3	=	0
CMM 103	*D*	1	x	3	=	3
PHL 201	*C*	2	x	3	=	6
TOTAL				16		19

Multiply the number of Quality Points for each grade by the number of Credit Hours for that class. Divide the total number of Quality Points for the semester (19) by the total number of Credit Hours (16). This yields a GPA of 1.18 for the semester.

To determine this student's cumulative GPA (the GPA for both semesters), add the total Quality Points for both semesters (54) and divide by the total Credit Hours for both semesters (30), resulting in a 1.8 GPA.

Note that this cumulative GPA is under 2.00. Since it is less than 2.00, this student has a **quality point deficiency.** Her college will place her on academic probation and she will remain there until future grades eliminate the deficiency.

Marshall and Overall GPA

A *Marshall Grade Point Average* is a calculation based on credit earned at Marshall ONLY.

An *Overall Grade Point Average* is a calculation based on credit earned both at Marshall AND all other accredited institutions of higher education. Both GPA's are calculated for eligibility and graduation purposes.

Types of Grades

- *Credit/No Credit Option:* A student may choose to take a maximum of 18 semester hours on a credit/no credit basis toward fulfillment of requirements of a baccalaureate degree. Credit completed through the College Level Examination Program (CLEP) or Advanced Placement, as well as approved foreign study, does not count as a part of the 18 hour limit under the *CR/NC* option. Students make the decision to take a course on a credit/no credit basis at the time of registration and cannot change this after the end of the Schedule Adjustment period. Courses taken *CR/NC* must be in areas other than the student's major or teaching specialization, although approved foreign study courses can be taken *CR/NC.* (See "Study Abroad" section elsewhere in this catalog.) Some departments and colleges have additional regulations regarding *CR/NC.*

  A student must earn a letter grade of *C* or better to receive a *CR* grade. A grade of *NC* is recorded for work that would earn a letter grade of *D* or *F.* All withdrawals under the *CR/NC* option will receive a *W* grade. The *CR/NC* grade has no impact on the Grade Point Average.

- *Incomplete:* The grade of *I* (incomplete) indicates that the student has completed three-quarters of the course, as determined by the instructor, but cannot complete the course for a reason that accords with the university excused-absence policy. For courses (traditional or online) that do or do not have a defined absence policy, it is determined by the instructor to issue the *I* grade. Students must be in good standing (for example a *C* grade or better) in the class prior to requesting an incomplete. The course instructor decides whether or not an incomplete will be granted and specifies in writing on the university incomplete grade form what work the student must complete to fulfill the course requirements. The student has until the end of the next fall or spring semester from the date of receipt of the incomplete grade in which to complete the course, or the instructor may establish an earlier deadline. If special circumstances exist, which prevent the student from completing the course in the prescribed time, the incomplete may be extended with the written approval of the instructor, the instructor's chair or division head, and the instructor's dean noting the time period for the work to be completed. If the student satisfactorily completes the course in the prescribed time he/she will receive a letter grade. 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.

  In the event that the faculty member leaves the institution or is no longer available, the disposition of incomplete grade or grades is the responsibility of the chair, the dean, or the provost. If the the chair is unavailable, the responsibility falls on the dean; if the dean is unavailable the responsibility goes to the provost. The decision will be made in consultation with the faculty in the appropriate discipline.

- *W (Withdrew):* If a student drops courses during the Withdrawal period (which lasts until the tenth Friday after the first week of the regular semester), or withdraws completely from the university through the last day of class, he/she will receive a *W.* For eight week courses, summer session courses, 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 published in the annual University Academic Calendar. The *W* (withdrew) has no impact on the Grade Point Average. (Please be aware that withdrawing from a course may change a student's status from that of full-time to part-time student—a full-time student is enrolled for 12 hours or more. Part-time status could negatively affect financial aid, athletic participation, or health insurance eligibility.)

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.

Midterm Grade Reports for Freshmen and Sophomores

Shortly before the middle of the Fall and Spring semester (around the eighth week), all faculty evaluate the freshman and sophomore students in their classes. Freshman and sophomore students who are earning the equivalent of a grade of *D, F,* or *NC* at this time will receive a grade report mailed to their permanent address and a letter explaining how they can improve their academic performance. A midterm grade is not a promise of a particular final grade nor is it recorded on the student's official transcript. It is intended only as an early warning.

Graduation Information

1. Academic Requirements

A student's college will make the final check of courses required, total earned credits, degree, and GPA requirements, as well as other university-wide requirements. To receive a baccalaureate degree from Marshall University, a student must:

- Have a minimum of 120 credit hours (some colleges or majors require more);
- Have an overall Grade Point Average of 2.00 or higher;
- Have a Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of *C* or better in English 201 or 201H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum;
- Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements");
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia two-year institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

2. Application for Graduation

Students must apply for graduation at the beginning of the semester or term in which they intend to complete graduation requirements. They should initiate the application for graduation in their college office. Complete information about graduation applications is available in each college office. The university also requires every prospective graduate to pay a diploma fee at the Bursar's office. A receipt for this fee must accompany the completed application for graduation. The deadline for applying for graduation for every semester or term in the academic year is listed in the online Academic Calendar.

3. Commencement/Graduation Dates

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.

Students who complete all requirements for a degree at any time other than the above dates will be graduated on the next successive date. Students will not be graduated on any dates other than those noted above. Students who are graduated at the end of summer terms are invited to attend the fall Commencement Exercises.

4. Honors Graduation

A. Baccalaureate Degree

Baccalaureate degree candidates who have achieved special distinction in academic work are recognized at Commencement Exercises. Their honor status is printed on their diplomas and transcripts. Honor status is determined by this scale for the final cumulative Grade Point Average:

- Summa cum laude (3.85 and above)
- Magna cum laude (3.60 to 3.84)
- Cum laude (3.30 to 3.59)

Note: Honor calculations are not rounded.

For May graduates, honors recognition at Commencement is based on academic standing prior to the Spring term. For December graduates, honors recognition at Commencement is based on academic standing prior to the Fall term. The diploma and transcript will reflect honors standing after calculation of final grades.

Honors eligibility for transfer students (baccalaureate degree):

Transfers from in-state public institutions: Honors are calculated on the overall GPA

- *From a two-year college in WV state system*: must have earned at least 56 hours of work at Marshall University.
- *From a four year institution in WV state system*: must have earned a minimum of 36 hours of work at Marshall University.

Transfers from non-West Virginia public institutions: Honors are calculated on the overall and Marshall GPA

- *All other transfer students*: must have earned at least 64 hours of work at Marshall, at least 50 percent of which must be upper division work (300/400).

B. Associate Degree:

Associate degree candidates for graduation who have achieved special distinction in academic work are recognized at Commencement. Their honor status is printed on their diploma. Honor status is determined by this scale for the final cumulative Grade Point Average:

- With High Honors 3.70 and above
- With Honors 3.30 to 3.69

Note: Honor calculations are not rounded.

Honors eligibility for transfer students (associate degree):

A transfer student must have earned at least 36 hours of work at Marshall, 32 of which must be applicable to an associate degree program and must have attained honors for all work attempted at Marshall and honors for all academic work attempted at the collegiate level regardless of the institution attended.

5. Residence Requirements

For all undergraduate degrees (see exceptions below), at least one year's work in residence is required. "In residence" means to be enrolled in Marshall University courses. A "year in residence'' is comprises at least 24 hours credit earned in at least two semesters' work in residence or one semester and two summer terms in residence. One semester must be in the senior year. **Transfer students** must take at least 12 hours of 300/400 level coursework in their college and at least 15 hours in their major field except for Combined College and Professional Programs.

Exceptions:

- College of Education students must meet the college residency and teacher certification requirements.
- Regents Bachelor of Arts Degree.

All students should check with their own colleges for any additional residence requirements.

Inter-College Transfer

Students who wish to transfer to another college must initiate the request in the office of their current college. Any student who is currently eligible to attend Marshall University shall be eligible to transfer from one college to another within the institution so long as he or she meets the admission requirements for the college. Students on probation are eligible to transfer if all other admission criteria are met.

Exception: Individuals who are returning to the university from one or more years of active military duty may enter the college of their choice, provided they meet that college's entrance requirements.

Independent Study

Independent studies are tutorials, independent readings, research, problem reports, and other individualized activities designed to meet the special needs of students within their major. Independent studies are offered only at the discretion of the department chair and college dean.

Internship

An internship is a supervised, off campus work/study arrangement with external agencies or institutions. Usually a student, with faculty approval, registers for an internship course for which he or she will receive credit. Often the students are paid, but not always. They generally serve as trainees under the supervision of an individual at the off-campus site. A Marshall faculty member usually serves as a coordinator and resource person. Students may expect regular site visits from a faculty member as well as on-campus training seminars, although internship experiences will vary across departments.

Laboratory Courses

Lab courses supplement classroom courses. They are organized activities involving the observation and verification of experiments and experimental techniques. Laboratory courses require two or three hours of lab per week for each semester hour of credit.

Major

A major is a program of study requiring at least 24 semester credits for completion. It is offered within one department or by a combination of departments. It is a field of study within an approved degree program, having its own curriculum. A degree program may have more than one major. All courses in the major must be taken for a grade except internships, practica, and approved study abroad courses.

Medical/Emergency Withdrawal Policy

A student may request and be considered for a medical or emergency withdrawal when extraordinary circumstances, such as a serious illness, injury, or catastrophic situation prevents the student from continuing classes. The policy covers physical and mental health, as well as life-changing difficulties

A medical/emergency withdrawal from the university will constitute a full withdrawal from all academic classes for the requested semester, with the exception of those classes whose completion dates occurred prior to the withdrawal. Refund of tuition and fees will be a separate determination, as will eligibility for future financial aid. These decisions will follow policies, guidelines and schedules set forth by the university and state and federal government.

If a student is currently enrolled, consideration should be given to withdrawing from those courses through the regular process prior to requesting a medical/emergency withdrawal.

A request for a medical/emergency withdrawal must be filed within six months of the end of the semester involved unless the student can provide rationale and documentation to show that it was not possible to make the request within this timeframe. Students may apply for a medical/emergency withdrawal by following the guidelines provided below. Application for a medical/emergency withdrawal does not guarantee that a withdrawal will be granted. All requests are evaluated on an individual basis.

All students requesting a medical/emergency withdrawal submit a complete packet of information to the Associate Dean of Student Affairs. The packet must include:

1. Completed Request for medical/emergency withdrawal in the form of a typed, signed letter, or e-mail from the student's Marshall e-mail account, explaining how the illness, condition, or situation affected their ability to maintain their status as a student at the university and why withdrawing from courses through the regular process is/was not an option for them. The request must also include the student's Marshall ID number and mailing address. Incomplete grades in courses may be arranged in compliance with university policy, and may be an option for students to consider instead of a medical/emergency withdrawal.
2. *For medical withdrawal:* Typed letter from the student's treating physician(s) recommending a withdrawal for medical reasons. The letter must state the specific rationale for the recommendation, including diagnosis or medical impressions; why the illness or condition prevented the student from maintaining their status as a student at the university; the effective date of the onset of the illness or condition; dates of treatment; and anticipated date of resolution, if applicable. The letter must be on official letterhead and must be signed by the service provider. The letter may be faxed from the treatment provider's fax machine. Medical information will be kept confidential.

   For withdrawal due to catastrophic event: Documentation sufficient to support the student's claim of involvement in a catastrophic situation. Said documentation will vary depending on the situation and should follow guidelines set forth by the Associate Dean of Student Affairs.

   A request for a medical/emergency withdrawal without the supporting rationale will not be considered.
3. Complete Medical/Emergency Withdrawal Consultation Form, Financial Aid.
4. Complete Medical/Emergency withdrawal Consultation Form, Residence Services (if applicable)
5. Complete Medical/Emergency withdrawal Consultation Form, International Students (if applicable)
6. Other relevant supporting documentation as needed.

If the withdrawal is granted, the student will be unable to register for classes until he or she provides the Office of Student Affairs with a letter from their health care provider(s) (in the case of a medical withdrawal) releasing the student to return to the university and outlining the student's sufficient ability to manage coursework at Marshall. In the case of a catastrophic event, the student must provide a written statement that outlines the satisfactory resolution of the negative impact of the event.

The Office of Student Affairs will send a notice to the student regarding the outcome of the medical/emergency withdrawal request.

Approved by Faculty Senate, January 24, 2017

Minors

A minor is a program of study outside the major department requiring at least 12 semester credit hours for completion. All courses in the minor must be taken for a grade except for approved study abroad courses. With the exception of college-approved interdisciplinary minors, each academic department/division designates the specific courses or range of courses required for each minor it offers. Please consult the department description in the catalog for requirements.

myMU

myMU is a campus portal for students using the Marshall University World Wide Web site. Using the portal, students can access a number of online services quickly, including registering for classes and checking schedules and grades.

To use myMU, a student must know his or her MUNet ID and password. Students on academic probation or who have any other kind of registration hold, cannot register via myMU. For instructions on how to use myMU, see the current *Schedule of Courses* or visit *www.marshall.edu/myMU*.

Placement Examinations

Students are placed in composition and college math by meeting a minimum score on the ACT or SAT. ENG 101 requires an ACT verbal score of 18 or SAT ERW of 480. Students who score below 18 on the ACT verbal (or below 480 on the SAT ERW) will be placed in ENG 101P. College math requires an ACT math score of 19, an SAT math score of 460, or successful completion of MTH 099, or MTH 100, or MTH 102, or MTH 102B. Students who do not meet the above prerequisites for math may challenge their placement by taking an exam administered by University College. To schedule an exam and obtain information to prepare for the exam, please call 304-696-3169.

Plagiarism (see Academic Dishonesty)

Practicum

This is a closely supervised experience in a student's professional area. It may be on or off campus, or at a combination of the two. Ordinarily, there is extensive collaboration with a faculty supervisor. With faculty approval, a student registers for a practicum for which he or she will receive credit. Practicum experiences vary across departments.

Readmission to the University

Former students not enrolled at Marshall University for one year or longer must apply for readmission. Readmission decisions are based on the student's academic standing at Marshall University. If eligible to return, former students will be readmitted to the college of last enrollment. Graduates of bachelor's degree programs will be readmitted to a post-baccalaureate major pending selection of a new major or degree program. The readmission application is available at the Admissions office or online at *www.marshall.edu/admissions*.

If a student previously attended Marshall and subsequently attended another institution, he/she must apply to Marshall as a transfer student.

Repeating Courses

Credits for a repeated course may not be used to fulfill the credit hour requirements for graduation. Exceptions: courses repeated under the *D/F* Repeat Rule, approved Special Topics courses, internships, practica, and other approved courses in departments such as Music. Students should check with their college dean for a list of all exemptions.

Residence

"In residence" means to be enrolled in Marshall University courses.

Semester Hour

Same as "Credit Hour."

Schedule Adjustment

Students can change their class schedules during the late registration and schedule adjustment period each term. The exact schedule adjustment period for any semester or term is published in the academic calendar for that semester or term. Schedule changes can be made on *www.marshall.edu/myMU*, or in person at the Registrar's Office. If a student wants to change sections of a course during the schedule adjustment period, he/she must drop the section in which he/she is currently enrolled and add the new section.

See section entitled "Dropping Courses" for information on dropping a class after the schedule adjustment period.

Semester Load

To make normal progress toward graduation, students should complete approximately 30 to 34 semester hours during a calendar year, which includes Fall, Spring and Summer terms. If students want to take 19 or more credit hours during Fall or Spring term, or 7 or more hours during a regular Summer term, they must obtain permission of the dean of their college.

Seminar

A seminar is a small class, usually offered at the junior/senior level, which may be involved in advanced study or original research.

Special Topics

Special Topics are experimental courses that can be offered twice by a department without formal committee approval. No more than 6 credits of special topics can be applied toward an associate degree; no more than 12 can be applied toward a baccalaureate degree.

Summer School

Marshall offers four summer sessions:

- Intersession: 4 weeks
- Summer 1: 12 weeks
- Summer 2: 5 weeks
- Summer 3: 5 weeks

Exact dates for each term are available on the registrar's website at *www.marshall.edu/registrar*.

Admission requirements for Summer School are the same as for the regular semester. Summer offerings, which include undergraduate and graduate courses, vary from year to year. Registration for Summer School usually begins in March.

Syllabus Policy

On the first day of class, instructors must provide each student a copy of the course requirements which includes these items:

- Course name and number.
- Instructor's name, office location, phone, e-mail address and office hours.
- List of all required texts.
- Attendance policy.
- Grading policy.
- Due dates for major projects and exams.
- Course description from most recent catalog
- Course student learning outcomes.
- Schedule of class sessions and assignments.
- Grid showing how each course student learning outcome will be practiced, and assessed, in the course.
- Link to Official University Policies located on the Academic Affairs website.
- Semester course meets, e.g., Spring 2012

(continued)

- Time course meets, e.g. M/W/F 1:00-1:50 p.m.
- Course location.

Exceptions to this policy might include thesis, seminar, problem report, independent study, field work, internships, and medical clerkships. Colleges may develop more detailed requirements concerning the content of the syllabus.

Adopted by Marshall University Board of Governors, March 8, 2006.

Transcript

Official transcripts cost $10.00 per paper copy and $12.00 per electronic 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 Registar. Students must sign the request to authorize release of the transcript.

Students may obtain unofficial transcripts at no cost in the registrar's office or the college dean's office. Unofficial transcripts also may be accessed using the university's online self-service portal, *myMU*.

Transfer Credit

- **New Students**:

  When a student applies for admission to Marshall University, the Admissions office will determine the acceptability of credits earned at other institutions.

- **Enrolled Students**:

  After enrollment as a regular undergraduate at Marshall, if a student plans to take courses at another institution he/she must have **prior** approval from the dean of his/her college if the student wants those courses to count towards his/her degree requirements at Marshall. The student should pick up an off-campus form ("Approval of Courses to be Taken for Advanced Standing") from the Office of Admissions or his/her college office. After filling in the name of the visiting institution as well as the exact courses the student wishes to take there, the student takes the form to the Office of Admissions. The Admissions staff will convert the proposed coursework into equivalent Marshall courses and will then send the form to the student's college office for review. The associate dean will approve the application if the proposed courses are appropriate for the student's degree requirements. The form is then forwarded to the Registrar. The Registrar will send the student a copy of the completed form.

- Courses students take without prior approval may be rejected when they are evaluated for degree requirements.
- Before the credit earned at another institution can be transferred and recorded on the permanent academic record at Marshall, the student must have an official transcript forwarded from the other institution to the Marshall Office of Admissions.
- Coursework taken at another institution **transfers at the level at which it was taken**. This is something important to consider because undergraduate degree students must have a minimum number of hours of upper division credit to graduate. The exact number of required upper division hours is determined by the student's college.
- Grades earned for coursework taken at other institutions are computed into the *overall* GPA, (includes courses taken at MU and other institutions), but have no impact on the Marshall GPA (except grades earned under the *D/F* Repeat Rule).
- Courses taken through the Study Abroad office require a different form and process. Please see the Study Abroad section of this catalog.

Appeal of Denial of Transfer Credit, or Course Equivalency Determination, or Course Substitution

Students may appeal decisions on how transfer credits are evaluated.

The MU Undergraduate Office of Admissions determines transferability of credits and course equivalency at the time of admission. Once admitted, if a student believes the proper equivalent credit has not been awarded, the student should request, in writing, an explanation of credit denial from the Office of Undergraduate Admissions. This initial step must be taken within thirty (30) days of receipt of the transfer credit evaluation or within ten (10) instructional days of the beginning of the student's matriculating term, whichever comes first. The Office of Undergraduate Admissions will review the request for technical errors and issue a written response within ten (10) days.

The college in which the student's degree program is housed determines course substitutions. After receiving the transfer credit evaluation from the Office of Admissions, the student should meet with an academic advisor in the student's degree program to determine the extent to which transferred credits and course equivalencies meet specific degree requirements. At this point, the advisor may make certain additional course substitutions per the policies of the college that houses the student's degree program.

If the student is not satisfied with the determinations in Step 2 regarding course substitutions, the student may initiate a formal appeal, in writing, to the dean of the academic college in which the student is admitted. The appeal must include applicable syllabi and other supporting documents and must be submitted within thirty (30) days of the beginning of the student's matriculating term.

If a course substitution is not granted by the dean, the student may appeal the decision to the West Virginia Higher Education Policy Commission, in writing, within ten (10) days of the issuance of the dean's decision. The Commission will review the entire case, including both course equivalencies and course substitutions, and issue a recommendation to the Provost and Senior Vice President for Academic Affairs at Marshall University, who shall then render the final decision.

Higher Education Policy Commission Policy on The Transferability of Undergraduate Credits and Grades

1. Undergraduate level credits and grades earned at any public institution under the Higher Education Policy Commission shall generally be transferable to any other such institution.
2. At least 64 and no more than 72 hours of credits and grades completed at community colleges or branch colleges in the West Virginia state system of higher education shall be transferable to any baccalaureate degree-granting institution in the state system.
3. All grades earned for college credit work within the state system shall be counted for purposes of graduation with honors, and transfer students from within the state system shall be treated the same for this purpose as generic students.
4. With the exception of those enrolling in specialized four year programs which have demonstrable and bona fide externally imposed requirements making such a goal impossible, students completing two year associate degrees at public institutions under the Higher Education Policy Commission shall generally, upon transfer to a baccalaureate level degree granting institution, have junior level status and be able to graduate with the same number of total credit hours as a non-transfer student at the same institution and in the same program. An exception may exist in any instance where the associate degree is a technical type designed for terminal career purposes and the general education component is substantially of a markedly different nature than that required for a student at the same two year institution enrolled in a college transfer associate degree program. Credit hours taken in general education toward associate degrees will count toward the total number of general education credit hours required at the baccalaureate degree granting institution.
5. There shall be developed and maintained specific detailed articulation agreements between appropriate institutions in the state system. Particularly community colleges, community college components, and branch colleges will indicate clearly in catalogs and other official materials which courses are not necessarily transferable for major programs or other specific purposes to those institutions where significant numbers of students traditionally transfer; any such course(s), however, will be transferred as elective credit up to the maximum herein required.
6. A statewide Ad Hoc Articulation Council appointed by the Chancellor consisting of two (including at least one faculty member) representatives from free standing components and branch colleges, two (including at least one faculty member) representatives from baccalaureate degree granting institutions, the Chairman of the Advisory Council of Students or his representative, and two representatives from the Higher Education Policy Commission staff shall be convened as a facilitating body in cases of disagreements between institutions over the transfer of credit. This Council will make a report and a recommendation to the Chancellor.
7. Consistent with provisions above, each baccalaureate degree granting institution may require transfer students to meet any of the following standards:
    a) An average of *C* on previous work attempted and the required Grade Point Average for admission to a particular program.
    b) The completion of 36 or more additional hours of credit in residence, regardless of the number of hours transferable.
    c) The completion of 16 of the last 32 hours before graduation in residence.

Any policies of this Board contrary to the foregoing are rescinded.

Adopted: West Virginia Board of Regents July 10, 1979
Board of Trustees policy effective July 1, 1989
Higher Education Policy Commision policy effective June 22, 2003

Undergraduate Students in Graduate Courses

A senior with an overall GPA of 2.75 or better can apply to take courses at the graduate level (500/600). A student should pick up an application in the office of the Graduate College (OM 113) or in the Office of Admissions and Records in South Charleston. The application requires the recommendation of the student's major department chairperson, college dean, and the dean of the Graduate College. A completed application must be on file in the Graduate College office before the opening of the term of enrollment. Seniors can apply credit for graduate courses either to an undergraduate or a graduate degree at Marshall, but not to both, with the exception of the 3+2 Program in the College of Business. The grades a senior may earn in a graduate course taken for undergraduate credit are included in the computation of the student's undergraduate GPA.

Students should be aware that Marshall University's Graduate College has established a limit on the number of credit hours earned as an undergraduate that can be applied to a graduate degree. Other instiutions may have similar limits.

UNI 100: Freshman First Class (1 Credit Hour; Graded)

UNI 100 is made up of two parts: (1) the seminars and group sessions that are part of the Week of Welcome (WOW); and (2) additional weekly, 1-hour seminars for the first eight weeks of the semester. Successful completion of this course earns one credit hour of elective credit. The course is graded. To earn the one hour of elective credit, attendance at WOW seminars, group sessions and seminars is required along with successful completion of course activities and assignments. Students are encouraged to take advantage of this opportunity to learn about Marshall University, college-level expectations and student success. (See also "Week of Welcome," which follows.)

Week of Welcome (WOW)

Week of Welcome is an opportunity for freshmen to familiarize themselves with the Huntington campus and learn what it means to be a student at Marshall University. Arriving on campus a few days early, freshmen participate in the President's Freshman Convocation and sessions with the dean, faculty and staff of their academic college along with large group sessions and small group seminars. Week of Welcome (WOW) is an integral part of Freshman First Class (UNI 100), an introduction to academic structures and expectations of college life. (See above.) Week of Welcome includes optional evening activities and social events for both residential and commuter students. Information about Week of Welcome is available at *www.marshall.edu/wow*.

College of Arts and Media

Dr. Wendell Dobbs, Interim Dean
Dr. David Castleberry, Associate Dean
Ms. Janet Dooley, Associate Dean
www.marshall.edu/cam
cam@marshall.edu

School of Art and Design

Mr. Daniel Kaufman, Interim Director
www.marshall.edu/cam/art

Professor

Barnes-Marsano, Cox, Harrison, Reed

Associate Professor

Bartolovic, Cook, Hagarty, Kaufmann, Stark

Assistant Professor

Danford, Dean, Kozlowski-Slone, McDermott

W. Page Pitt School of Journalism and Mass Communications

Ms. Janet Dooley, Director
www.marshall.edu/cam/sojmc

Professor

Bailey, Dooley, Hapney, Hollis, Morris, Rabe, Sias, Swindell

Associate Professor

Goodman, Ingersoll

Assistant Professor

Bumgarner, York

School of Music

Dr. Susan Tusing, Director
www.marshall.edu/cam/music

Professor

Alves, A. Bingham, E. Bingham, Castleberry, Dikener, Dobb**s,** Hall, Lawson, Miller, Saunders, Smith, M. Stroeher, V. Stroeher, Tusing, Zanter

Associate Professor

Vauth

Assistant Professor

Botes, Lee, Nannen, Nolan, Waugh

Instructor

Dalton, Stevens, Wolfe

School of Theatre

Mr. Lang Reynolds, Director

www.marshall.edu/cam/theatre

Professor

Colclough, Jackson, Murphy, Reynolds, St. Germain

The College of Arts and Media at Marshall University was created on July 1, 2013. The college includes the School of Art and Design; the W. Page Pitt School of Journalism and Mass Communications; the School of Music, the School of Theatre; the Marshall Artists Series; the student newspaper, *The Parthenon;* and the student radio station, WMUL-FM.

The College of Arts and Media offices are in Smith Hall 158. The School of Art and Design offices are in the Visual Arts Center 601; the W. Page Pitt School of Journalism and Mass Communications offices are in Communications Building 100; the School of Music offices are in Smith Music Hall 154, and the School of Theatre offices are in the Joan C. Edwards Performing Arts Center 230. Art and design courses are taught in the Visual Arts Center and the Art Warehouse. Journalism and mass communications courses are taught in Smith Hall and the Communications Building. Music courses are taught in Smith Music Hall and the Jomie Jazz Center. Theatre courses are taught in the Joan C. Edwards Performing Arts Center.

MISSION OF THE COLLEGE

The College of Arts and Media is dedicated to the discovery, application, transmission, and advancement of knowledge in arts and in media. Through its rich and varied public programs, our college informs and enhances the lives of students and the wider community.

Our students receive professional, discipline-based training within the context of broad learning. They become critical thinkers, creative problem solvers, and collaborators. They are prepared for productive lives as global citizens and 21st century leaders through their professions and in their communities.

The specific goals of the College of Arts and Media are:

1. To educate and train those seeking professions in arts and in media;
2. To support the university's general academic curricula by offering courses that stimulate an understanding of and response to the verbal, aural, and visual nature of our programs;
3. To offer diverse opportunities through exhibitions, informational media, performances, presentations, and service for the enrichment of the campus and other publics; and
4. To provide leadership in and advocacy for arts and media.

PROGRAMS OF THE COLLEGE

The curricula of the College of Arts and Media are designed to certify that, upon graduation, students have completed a program that leads to development of the ability:

1. To recognize, investigate, and solve problems through critical thinking, analysis, and the application of appropriate research and creative strategies;
2. To integrate an array of skills and knowledge in preparation for a professional career;
3. To demonstrate an awareness of the value of the arts and media in society and in the global community in preparation for becoming citizen-artists.

Degree Programs

The College of Arts and Media offers undergraduate programs leading to the Bachelor of Arts with majors in allied arts, music, theatre, video production, or visual arts, the Bachelor of Arts (B.A.) degree with majors in advertising/public relations, journalism and media production, and the Bachelor of Fine Arts Degree (B.F.A.) with majors in music, theatre, and the visual arts.

Degrees in Arts and Media Education

Programs leading to the Bachelor of Arts degree in education toward certification in art or music education for teachers in West Virginia public schools are listed under the College of Education in this catalog. Graduates in art or music education qualify for certification to teach in grades PreK to Adult.

Graduate Degrees in Arts and Media

Graduate programs leading to the Master of Arts (M.A.) degree in music and the Master of Arts degree in Journalism (M.A.J.) may be found in the *Graduate Catalog.*

ARTS AND MEDIA MAJORS

BACHELOR OF ARTS

The Bachelor of Arts degree offered by the College of Arts and Media places an emphasis on the arts and their relationships to outside disciplines. This degree focuses on a breadth in content knowledge with a liberal-arts orientation that features exploration in non-art fields.

Students enrolled in the B.A. degree program will select one of five majors:

Allied Arts
Art
Music
Theatre
Video Production

Within most majors, students select an area of emphasis that aligns most closely with their chosen career path.

Students should contact the dean or the school director for information pertaining to each of the majors and areas of emphasis and to determine special admission requirements for each potential sequence. In unusual circumstances, students may enter the B.A. program as undecided majors upon the recommendation of the dean or school director.

Curricular Structure

The Bachelor of Arts degree in the College of Arts and Media includes the following components:

Core I requirements	9 credit hours
Core II requirements	25 credit hours
Major Area Requirements	48-51 credit hours
Minor	15-18 credit hours
Additional Electives	17-29 credit hours
Total Requirements for Graduation	**120 credit hours**

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATIONS

Through the W. Page Pitt School of Journalism and Mass Communications, the College of Arts and Media offers a Bachelor of Arts degree with nine emphases housed in three majors: advertising/public relations and emphases in advertising, public relations and sports public relations; journalism and emphases in broadcast, multimedia, sports broadcast and sports print; and media production with emphases in radio television production and management and video production.

Professionally oriented courses and laboratory experiences are combined with extensive liberal arts preparation to provide students with the background necessary for employment in mass communications. The program is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

Curricular Structure

The Bachelor of Arts degree in the School of Journalism and Mass Communications includes the following components:

Core I requirements	9 credit hours
Core II requirements	25 credit hours
JMC Cognizance area	24 credit hours
JMC Core	21 credit hours
Major requirements	27 credit hours
Required Non-JMC and elective courses	14 credit hours
Total Requirements for Graduation	**120 credit hours**

BACHELOR OF FINE ARTS IN MUSIC, THEATRE OR VISUAL ARTS

Through the School of Art and Design, the School of Music, and the School of Theatre, the College of Arts and Media offers the Bachelor of Fine Arts (B.F.A.). This is a professional degree designed to prepare students to: (1) enter careers as professionals in their chosen artistic disciplines; (2) pursue professional studies at the graduate level; (3) apply principles learned through the fine arts to the myriad life choices all graduates make, regardless of vocation.

Students enrolled in the B.F.A. degree program will select one of three majors: music, theatre, or visual arts. Within each major, students are further required to select a major area of emphasis, allowing specialization. Majors and areas of emphasis are as follows:

MUSIC MAJOR: areas of emphasis
- Jazz Studies
- Multidisciplinary Studies
- Performance
- Theory and Composition

THEATRE MAJOR: areas of emphasis
- Performance
- Production

VISUAL ARTS MAJOR: areas of emphasis
- Ceramics
- Fibers
- Graphic Design
- Painting
- Photography
- Printmaking
- Sculpture

Curricular Structure

The Bachelor of Fine Arts degree program, consistent with professional degree programs in the fine arts in United States higher education, includes the following components:

Core I requirements	9 credit hours
Core II requirements	25 credit hours
Electives outside of the Major	13 credit hours
Majors and Area of Emphasis requirements	73 credit hours
Total Requirements for Graduation	**120 credit hours**

UNIVERSITY CORE CURRICULUM

Core I: 9 hours

- 3 hours: First Year Seminar (100-level)
- 6 hours of discipline-specific courses with an emphasis on critical thinking (CT) and active learning (100- or 200-level). Specific courses that fulfill the CT requirement may be found at *www.marshall.edu/gened*.

Core II: 25 hours (100- or 200-level)

Specific courses that fulfill Core II may be found at *www.marshall.edu/gened*.

- 6 hours: Composition
- 3 hours: Communication
- 3 hours: Math
- 4 hours: Physical or Natural Science
- 3 hours: Social Science
- 3 hours: Humanities
- 3 hours: Fine Arts

Additional University Requirements

- 6 hours of Writing Intensive credit in any discipline at any level
- 3 hours of Multicultural or International coursework in any discipline at any level
- Capstone project in the major

For more information, consult the general education website: *www.marshall.edu/gened.*

ADDITIONAL DEGREE REQUIREMENTS

For specific degree requirements, see the appropriate major.

COLLEGE OF ARTS AND MEDIA INTERDISCIPLINARY PROGRAM

Bachelor of Arts with a major in Video Production

Admission and Performance Standards

Prospective students who wish to apply for admission to the Bachelor of Arts program must meet the general admission requirements for Marshall University.

Students enrolled in the Bachelor of Arts programs are required to complete all coursework in the respective majors with a minimum grade of *C*. Course grades of *D* and *F* are not counted toward graduation requirements and must be replaced with a grade of *C* or better before graduation or before using that course as a prerequisite for another required course.

Candidates for graduation must have a Grade Point Average of 2.0 or higher in all work attempted at Marshall University.

Forty (40) credit hours must be earned in courses number 300-400.

No courses in the college and major requirements for graduation in the College of Arts and Media may be taken Credit/Non-Credit unless the course is otherwise specified.

Students pursuing the B.A. will complete a capstone project appropriate to their emphasis area and outside field. Projects must be approved the student's capstone advisor.

Bachelor of Arts, with a Major in Video Production

Video Production Major Requirements ..... 51 hours

AM 299, 490, 498, 499

ART 101, 219, 325, 423, 453, 454, 489

JMC 101, 221, 332, 432, 475

MUS 219

THE 240 or 245 or 250, 437

Minor* ..... 15-18 hours

Non-ART/JMC/MUS/THE Electives ..... 17-20 hours

*Students may elect to complete a second major with their electives rather than a minor, depending upon their career goals.

SCHOOL OF ART AND DESIGN

Bachelor of Arts with a major in Allied Arts or Art

Admission and Performance Standards

Prospective students who wish to apply for admission to the Bachelor of Arts program must meet the general admission requirements for Marshall University.

Students enrolled in the Bachelor of Arts program are required to complete all coursework in the respective majors with a minimum grade of *C*. Course grades of *D* and *F* are not counted toward graduation requirements and must be replaced with a grade of *C* or better before graduation or before using that course as a prerequisite for another required course.

(continued)

Candidates for graduation must have a Grade Point Average of 2.0 or higher in all work attempted at Marshall University.

Forty (40) credit hours must be earned in courses numbered 300-499.

No courses in the college and major requirements for graduation in the College of Arts and Media may be taken Credit/Non-Credit unless the course is otherwise specified.

Students pursuing the B.A. will complete a capstone project appropriate to their emphasis area and outside field. Projects must be approved by the student's school director and capstone advisor. B.A. students must register for ART 499, Senior Capstone Project.

Foundations Review

After completing the required six foundation courses (ART 101 and ART 214, 215, 217, 218, 219), students pursuing the Bachelor of Arts in Art or Education PreK-Adult are required to present a portfolio of work for review by the Art and Design faculty. To do so, B.A. students must register for ART 299, Foundations Review: BA, before completing 21 credit hours in studio art courses (includes ART 214, 215, 217, 218, and 219). Successful completion of ART 299 is required and is a prerequisite for program advancement. Students who do not pass the Foundations Review and are within the studio art credit hour range listed above may apply for reconsideration. Students who have transferred within Marshall University will have two semesters to complete the courses listed above and participate in this review. However, transfers from art or art education departments at other universities are required to complete the review during the first semester they enroll in the MU School of Art and Design.

Internship

Students may also complete an internship appropriate to their emphasis and outside field.

*The curricular structure is designed with enough flexibility that students so desiring could expand a minor into a second major.

Bachelor of Arts, with a Major in Allied Arts

Allied Arts Major Requirements.....78-81 credit hours

Students in "Allied Arts" will declare a primary field of art or theatre and fulfill the emphasis area requirements for that field (51 credits). Students will also determine a secondary arts field of art, music, or theatre (may not duplicate their primary field) as their "allied" art and fulfill 27-30 credits in that area. With the assistance of an advisor/faculty mentor, students will create individualized secondary arts field curriculum plans based on the student's career goals. The curriculum for the secondary field must include a mixture of applied/performance skill courses and academic courses for the student to acquire the professional skills and learning experiences needed for future success. Students must meet the basic entrance requirements for the B.A. degree in that major for both their primary and their secondary arts field.

Emphasis Area..... 51 credits
Allied Arts Area.....27-30 credits
Outside Electives.....5-14 credit hours

Bachelor of Arts, with a Major in Art

Students will choose from one of two tracks: Visual Art and Design or Art History.

Visual Art and Design Track

Visual Art and Design Track Core: ..... 25 credit hours

ART 101, 201, 202, 214, 215, 217, 218, 219, 299, 499

Studio Electives: ..... 12 credit hours

Selected from the following:

ART 301, 303, 305, 307, 312, 314, 315, 317, 318, 343, 353, 418, 444

Students must choose four courses that reflect the student's program of study from the following, selected in consultation with the academic advisor in Art and Design. The purpose of this component is to allow the student to engage with various media beyond exposure in the art core and to develop further studio skills.

For example, a student who wishes to write and illustrate children's books or graphic novels might select ART 301, ART 353, ART 418 and ART 444. A student who wishes to work in the fashion industry might select ART 301, ART 303, ART 315, and ART 418.

Additional studio art courses: ..... 12-15 credit hours

Working in consultation with the Academic Advisor in Art and Design, students select 12-15 hours of 300 and 400 level art studio courses intended to allow the student to develop concepts and skills that enhance the student's ability to pursue career goals in an interdisciplinary way.

Minor* ..... 15-18 credit hours

Additional Non-Art Electives..... 17-29 credit hours

*Students may elect to pursue a second major with their non-art electives rather than a minor.

Art History Track

Art History Track Core:..... 21 credit hours

ART 101, 201, 202, 389, 464, 485, 486

Art History Electives:..... 18 credit hours

Taken from the following

ART 404, 407, 408, 409, 410, 411, 413, 414, 415, 416, 424, 425

Studio Electives ..... 12 credit hours

Taken from the 200- and 300-level studio courses; may include foundation courses

Minor ..... 15-18 credit hours*

Additional Non-Art Electives..... 17-29 credit hours

*Students may elect to complete a second major with their non-art electives rather than a minor, depending upon their career goals.

Bachelor of Fine Arts with a Major in Visual Arts

Students desiring to enter the Bachelor of Fine Arts degree program with a visual arts major are urged to contact the School of Art and Design prior to enrollment. A formal review of prior work in a portfolio is not required, but students are encouraged to bring examples of their work to the initial conference.

Candidates for the Bachelor of Fine Arts degree (B.F.A.) with the major in visual arts are required to complete seventy-three (73) hours of credit in art courses, including the art core (49 hours) and a major area of emphasis (24 hours). Majors must also satisfy the following requirements:

1. After completing the required six foundation courses (ART 101 and ART 214, 215, 217, 218, 219), students pursuing the Bachelor of Fine Arts are required to present a portfolio of work for review by the Art and Design faculty. To do so, B.F.A. students must register for ART 298 before completing 21 credit hours in studio art courses (includes ART 214, 215, 217, 218, and 219). Successful completion of ART 298, Foundations Review: BFA, is required and is a prerequisite for program advancement. Students who do not receive a passing grade of *C* in the Foundations Review and are within the studio art credit hour range listed above may apply for reconsideration. Students who have transferred within Marshall University will have two semesters to complete the courses listed above and participate in this review. However, transfers from art or art education departments at other universities are required to complete the review during the first semester they enroll in the MU School of Art and Design.
2. Students enrolled in the Bachelor of Fine Arts degree program must complete all work in the major with a minimum grade of *C*. A student who receives a *D* or *F* in an art course counted toward graduation must repeat it and earn at least a *C* before graduation or before using that course as a prerequisite for another required course.
3. Forty (40) credit hours must be earned in courses numbered 300-499.
4. No course in the major requirements for graduation may be taken Credit/Non-Credit unless the course is so specified.
5. A successful exhibition of creative work must be presented by all students during the senior year as a requirement for graduation. To do so, B.F.A. students must register for ART 498, Senior Capstone Project – BFA.

Major and Area of Emphasis Requirements in Art

Art Core.....37 credit hours

ART 101, 201, 202, 214, 215, 217, 218, 219, 298, 389 or 464, 390, 498; art history elective.

Students must also choose four courses from the following:

ART 301, 303, 305, 307, 308, 313, 315, 343, 353, 418, or 444 .....12 credit hours

Areas of Emphasis in Visual Arts .....24 credit hours

Students will complete 24 credit hours in a studio area of emphasis. Specific courses are listed below. Advanced Studio Sequence courses, ART 475, 476, 478, and 479, may also be used. With the approval of the director, students may substitute up to 6 credit hours chosen from any courses offered by the School of Art and Design to complete the emphasis area requirement.

Ceramics

ART 305, 343, 446, 447, 448, 449 or 451

Fibers

ART 303, 308, 313, 419, 420, 450

Graphic Design

ART 312, 314, 316, 317, 440, 489, 490

Painting

ART 350, 351, 353, 354, 355, 455, 456 or 458

Photography

ART 315, 324, 325, 423, 426, 427

Printmaking

ART 301, 302, 320, 444, 463 or 465

Sculpture

ART 307, 319, 331, 332, 333, 369, 417 or 443

MINORS IN ART AND DESIGN

A minor in the School of Art and Design consists of a minimum of 15 credit hours. A minor may be completed either in art history or in studio art.

A minor in art history requires ART 201, 202 and three additional courses in art history at an advanced level.

A minor in studio art requires two courses selected from studio art foundation classes (ART 214, 215, 217, 218 or 219), and three courses in one of the art studio areas of emphasis (ceramics, fibers, graphic design, painting, photography, printmaking, or sculpture).

All coursework must be selected in consultation with an art faculty member responsible for that studio area of emphasis. The School Art and Design program director serves as faculty advisor for art history and studio art minors, and verifies coursework and approves minors.

SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS

The W. Page Pitt School of Journalism and Mass Communications' programs and curriculum are based in the conviction that future journalists and mass communicators are best prepared for life and for their careers when they are broadly educated in the liberal arts. The importance of preparing them for the demands of the workplace is recognized as well.

Knowledge and skills essential to success in journalism and mass communications are emphasized, with the aim of preparing students for full participation, including leadership, in their professions. In addition, the school's program seeks to promote knowledge and awareness about mass communications among students who do not intend to pursue careers in one of the mass communications fields.

Students in journalism and mass communications majors will learn (1) how to gather, write, edit, package, and present information and entertainment in a multimedia context; (2) how the field of mass communications changes and evolves and how to adapt accordingly; (3) how to make responsible and effective decisions; and (4) the roles, effects, and impacts of mass communications in society.

The school offers a Bachelor of Arts degree in three majors:

- advertising/public relations, with emphases in
  advertising,
  public relations and
  sports public relations;
- journalism, with emphases in
  broadcast,
  multimedia,
  broadcast sports and
  print sports; and
- media production with emphases in
  radio/television production and management, and
  video production.

Professionally oriented courses and laboratory experiences are combined with extensive liberal arts preparation to provide students with the background necessary for employment in mass communications. The program is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

Of the 120 credit hours required for the bachelor's degree, students must have a minimum of 72 non-journalism hours and 48 journalism and mass communications hours, and they must meet the liberal arts and sciences requirements of the university.

Majors must also satisfy the following requirements:

1. Students must have typing keyboard proficiency for many JMC courses.
2. Students must pass a language proficiency exam with a score of 77% or better, or pass JMC 100 with a *C* or better, or pass JMC 103 with a *C* or better, or have an ACT verbal score of 30 or better or SAT verbal scores of 650 or better, for graduation and before admission to any 300/400 level JMC courses.
3. A minimum Grade Point Average of 2.25 in required journalism and mass communications courses and a 2.25 overall is required for graduation.
4. A student who receives a *D* or *F* in a journalism and mass communications course counted toward graduation must repeat it and earn at least a *C* before graduation or before using that course as a prerequisite for another required journalism and mass communications course.
5. At least 42 hours of credit toward the B.A. must be in courses numbered 300-499. Courses transferred from two-year or community colleges cannot be used to satisfy this requirement. Courses taken at four-year accredited colleges transfer at the level at which they were taken.
6. Graduating seniors are required to submit for review by faculty a portfolio of selected works they have completed in the program. Students should consult with their advisers for specific guidelines on portfolio development.

Transfer Students

Because of the standards of the school's accrediting body, students transferring into the school from two-year institutions are restricted to using 12 hours of transfer credit in journalism and mass communications toward the 120 credit hours required for the B.A. Further, the transferred JMC hours must be at the 100 and 200 levels, with the exception of JMC 330, AD-PR Principles and Ethics.

Transfer students, including those transferring from other units at Marshall, must have a 2.0 (*C*) average and no academic deficiencies in math and English.

Major Requirements in Journalism and Mass Communications

JMC Cognizance area.....24 hours

Diversity..... 15 hours

Modern Language ..... 6 hours

Successful completion of any combination of Arabic, French, German, Japanese, Latin, Spanish or Greek.

Cultural..... 3 hours

Select ANT 201, SOC 200 or GEO 100
ANT 201, SOC 200 or GEO 100 completed as part of CORE I, CORE II or electives meets this requirement.

Multicultural..... 3 hours

Any 3 hours of multicultural credit completed as part of CORE I, CORE II or electives meet this requirement.

(continued)

International ..... 3 hours

Any 3 hours of international credit completed as part of CORE I, CORE II or electives EXCEPT JMC 436 meet this requirement. JMC 436 credit may not be applied to the cognizance area.

Historical (any HST course) ..... 3 hours

Literature ..... 6 hours

Any course with a "literature" attribute. Writing courses do not satisfy the literature requirement. Literature taken as part of Core II Humanities may meet 3 of the 6 hours of required literature.

Journalism and Mass Communications Core ..... 21 hours

JMC 101, Media Literacy ..... 3 hours

JMC 102, Media Toolbox ..... 3 hours

JMC 245, Media Design ..... 3 hours

JMC 260, Digital Imaging for JMC ..... 3 hours

JMC 345, Mass Communications Law and Ethics ..... 3 hours

JMC 361, Digital Presence ..... 3 hours

JMC 490, Internship, or JMC 470, Practicum ..... 3 hours

All journalism and mass communications majors must pass a language proficiency exam with a score of 77% or better before admission to any JMC courses at the 300/400 level. The language proficiency requirement may also be met by completing JMC 100 with a *C* or better OR by completing JMC 103 with a *C* or better. ACT verbal scores of 30 or better or SAT verbal scores of 650 or better may be used in place of the exam.

No more than 4 hours of non-JMC electives may be completed in PEL.

Courses Required for the JMC majors ..... 41 hours

Advertising/Public Relations major

Advertising emphasis

JMC 330, 380, 383, 408, 415, 424, 439 (Capstone)

and any additional 6 hrs. of 300/400-level JMC ..... 27 hours

Required Non-JMC courses:

Management 100 ..... 3 hours

Marketing 340 ..... 3 hours

Non-JMC electives ..... 8 hours

Public Relations emphasis

JMC 301, 330, 380, 383, 408, 437, 438, 439 (Capstone)

and any additional 3 hrs. of 300/400-level JMC ..... 27 hours

Required Non-JMC courses:

Management 100 ..... 3 hours

Marketing 340 ..... 3 hours

Non-JMC electives ..... 8 hours

Sports Public Relations emphasis

JMC 300, 303, 330, 437, 438, 439 (Capstone)

and any additional 9 hrs. of 300/400-level JMC ..... 27 hours

Non-JMC electives ..... 14 hours

Journalism major

Broadcast emphasis

JMC 300, 301, 340, 414, 451, 452, 458, 465 (capstone)
and any additional 3 hrs. 300/400-level JMC ..... 27 hours

Required Non-JMC courses
Either PSC 104 or PSC 202 ..... 3 hours
Non-JMC electives ..... 11 hours

Multimedia emphasis

JMC 300, 301, 458, 465 (capstone); and 15 hours from among JMC 302, 305, 332, 414, 430, 451 or 462 ..... 27 hours
Non-JMC electives ..... 14 hours

Sports Broadcast emphasis

JMC 231, 300, 303, 321, 458, 465 (capstone); 6 hours from JMC 272, 273, 331, 332, 372, 373;
3 hours from 404, 414, 445 or 455 ..... 27 hours
Non-JMC electives ..... 14 hours

Sports Print emphasis

JMC 300, 302, 303, 305, 458, 465 (capstone); one course from 330, 410, 430, 445 or 455;
3 hours from 404, 414, 445 or 455 ..... 27 hours
Non-JMC electives ..... 14 hours

Media production major

Radio/Television Production and Management emphasis

JMC 231, 272-3 (one hour); 300 or 380; 332 or 432; 390; 420; 436; 450 or 455;
and any additional 5 hrs. 300/400-level JMC ..... 27 hours

Required Non JMC courses:
Accounting 215 ..... 3 hours
Marketing 231 ..... 3 hours
Non-JMC electives ..... 8 hours

Video production emphasis (interdisciplinary)

JMC 231, 332, 380, 432, 438, 475, 6 hours of 3/400 JMC electives,
AM 498 and AM 499 ..... 27 hours
AM 299 (0 credit), ART 219, 325, 423, 453, 454,
THE 437 and one from THE 240 (4 hrs.)/245 (4 hrs.)/250 (4 hrs.) ..... 22 hours

For video production students AM courses are counted among the JMC requirements. Video production students also are encouraged to select general education and journalism cognitive courses that carry the international and multicultural attributes to complete the degree program within the 120-hour framework.

REGENTS B.A. STUDENTS

Students in the Regents B.A. program are allowed no more than 12 hours of journalism and mass communications credit through presentation of a portfolio. If a student did not receive portfolio credit for particular journalism courses, he or she may register for them and receive credit upon successful completion of course requirements.

MINORS IN JOURNALISM AND MASS COMMUNICATIONS

Non-Journalism and Mass Communications majors may select from one of three, 15-hour minors within the school as follows:

Advertising

JMC 330, AD-PR Principles and Ethics
JMC 380, AD-PR and Continuity Writing
JMC 415, Content Strategy
and two of the following:
JMC 241, Media Design
JMC 383, Content Creation
JMC 385, Advertising Media Planning
JMC 408, Research and Analytics
JMC 445, Advertising in Modern Society
JMC 439, AD-PR Campaigns

Journalism

JMC 101, Media Literacy
JMC 300, Reporting and News Writing
and six hours from:
JMC 340, Basic Broadcast News
JMC 301, Beat Reporting
JMC 305, Copy Editing
JMC 361, Digital Presence
JMC 430, Magazine Article Writing
JMC 414, Reporting Public Affairs
and one three hour 300/400-level JMC elective.

Public Relations

JMC 301, Beat Reporting
JMC 330, AD-PR Principles and Ethics
JMC 437, Public Relations Planning
JMC 438, Public Relations Case Studies
JMC 439, AD-PR Campaigns

Media Studies

JMC 222-Introduction to Media Studies
and 12 hours from
JMC 101, Media Literacy
JMC 345, Mass Communications Law and Ethics
JMC 404, History of Mass Communications
JMC 436, International Mass Communications
JMC 445, Advertising in Modern Society
JMC 450, Contemporary Issues in Radio and Television
JMC 455, Race, Gender and Mass Media
JMC 468, Environmental Communications

SCHOOL OF MUSIC

The mission of the Marshall University School of Music is to equip students for pursuing careers in their chosen field of musical study and for making a positive impact in their communities and the profession, to provide opportunities for enriching musical experiences for all Marshall University students, and to serve as an important cultural resource for the region.

In the pursuit of our mission, we are committed to the following goals:

- to foster a student-centered environment that inspires musical, academic, and personal growth and excellence;
- to educate students to think critically, work creatively, communicate effectively, and become technologically literate;
- to champion the creation, performance, teaching, research, and study of music through the professional work of our music faculty;

- to provide leadership within the university and the region in all matters pertaining to music;
- to function as a vital and visible contributor to the cultural life of the university and community by providing performances, festivals, and other presentations, as well as by engaging in arts partnerships and other collaborations.

The music program is a fully accredited institutional member of the National Association of Schools of Music. Undergraduate students may pursue the Bachelor of Arts with a major in Allied Arts or Music, a Bachelor of Fine Arts degree with a music major or content-area coursework for the Bachelor of Arts degree in Education toward PreK-Adult certification in music. Requirements for the Bachelor of Arts degree in Education are described in the College of Education catalog section. The School of Music also offers a minor in music. Students who wish to major in music or education with certification in music, or minor in music, should consult the Director of the School of Music for admission and audition requirements.

Bachelor of Arts with a major in Music

Admission and Performance Standards

Students pursuing the Bachelor of Arts with a major in music prepare for numerous careers in the music field. Students combine courses supporting a fundamental knowledge of music content with minor and/or elective courses in fields other than music. Students in the Bachelor of Arts program in Music select an emphasis area from the following: Commercial Music, General Music, Music History, Pedagogy, or Vocal Jazz.

Prospective students who wish to apply for admission to the Bachelor of Arts program must meet the general admission requirements for Marshall University. Students wishing to enroll in the music major must complete an entrance audition.

Students enrolled in the Bachelor of Arts program are required to complete all coursework in the respective majors with a minimum grade of *C*. Course grades of *D* and *F* are not counted toward graduation requirements and must be replaced with a grade of *C* or better before graduation or before using that course as a prerequisite for another required course.

Candidates for graduation must have a Grade Point Average of 2.0 or higher in all work attempted at Marshall University.

Forty (40) credit hours must be earned in courses numbered 300-499.

No courses in the college and major requirements for graduation in the College of Arts and Media may be taken Credit/Non-Credit unless the course is otherwise specified.

Students pursuing the B.A. will complete a capstone project appropriate to their emphasis area and outside field. Projects must be approved by the student's school director and capstone advisor.

Internship

Students may also complete an internship appropriate to their emphasis and outside field.

*The curricular structure is designed with enough flexibility that students so desiring could expand a minor into a second major.

Bachelor of Arts, with a Major in Music

B.A. Music Requirements:.....50-52 credit hours

MUS 100, 110, 111, 112, 113, 114, 211, 213, 212 and 214 or 217, 218, 250 or 290, 310, 360 or 361, 376, 497

Students must complete 14-16 music emphasis credits in the emphasis area of their choice (requirements follow).

Students must complete six (6) semesters of non-credit applied music laboratory (MUS 100).

Piano Proficiency (Examination or completion of MUS 179D).

Four (4) credit hours of 100-level applied study on the principal instrument.

Four (4) credits of principal ensemble . These must be earned in four different semesters.

Minor .....15-18 credit hours*

Additional Non-Music Electives*.....17-29 credit hours

*Students may elect to complete a second major with their non-music electives rather than a minor, depending upon their career goals.

Areas of Emphasis for the B.A.

General Emphasis: Students may select any 14-16 credit hours of music (MUS) courses to complete this emphasis area.*

Commercial Music Emphasis: MUS 219, 227, 327, 427, 495, College of Business course (selected from ENT 220, LE 306, MGT 320, MKT 340 , or other approved course), three (3) credits music electives

Music History Emphasis: MUS 200, 250 or 290 (not selected above), 360 or 361 (not selected above), 301; one course selected from MUS 227, 308, 401, 426, 480-483, 485-488

Pedagogy Emphasis: applied music (4 semesters, 300-level), two applied pedagogy courses (in student's applied performance area), two applied literature courses (in student's applied performance area), MUS 495, three (3) credits music electives.

Vocal Jazz Emphasis: applied voice (4 semesters, 300-level), MUS 205, 231, 260, 312, 405, 412, 460, two (2) credits music electives (upper division)

Note: A minimum of 40 credit hours, out of the minimum 120 required for completion of this degree, must be at the 300- or 400–level.

Bachelor of Fine Arts with a Major in Music

The Bachelor of Fine Arts degree with a music major is designed to prepare students for entry into professional musical careers or graduate school.

In addition to this catalog, detailed information regarding program policies and procedures and specific requirements for applied music and ensemble participation can be found on the website at *www.marshall.edu/music*.

ENTRANCE AND PROGRAM REQUIREMENTS

Students desiring entry into the B.F.A. degree or the music education program or the music minor must be formally admitted to the music program. This admittance is based upon an audition in the student's major performance area (instrument or voice) and an interview with the area faculty. Students desiring to enter the theory and composition area of emphasis should be prepared to show evidence of music theory study and/or compositions. Students should contact the music office to arrange for an audition and interview. Music majors returning after having not enrolled in applied music study for two or more consecutive semesters must re-audition before permission to continue in the major will be granted. Students should consult the music program website for specific audition requirements for their instrument.

Majors must also satisfy the following program requirements:

1. All coursework in the music and music education majors must be completed with a grade of *C* or above. A course with a grade of *D* or *F* must be repeated with at least a grade of *C* to count for graduation or be used as a prerequisite for another required course.
2. All music and music education majors are required to pass a piano proficiency examination prior to the capstone semester.
3. A total of 120 credit hours is required for the B.F.A. degree with a music major. In addition to university and degree program requirements listed under the Bachelor of Fine Arts, candidates for the B.F.A. in music must complete 73 credit hours of study in music, divided into the core curriculum of 18 credit hours and 55 credit hours devoted to one of four areas of emphasis.
4. Forty (40) credit hours must be earned in courses numbered 300-499.
5. No course in the major requirements for graduation may be taken Credit/Non-Credit unless the course is so specified.
6. Upon completion of the fourth semester of 100-level applied music study on the principal instrument, students must pass a sophomore hearing for promotion to upper-division (300-level) applied music study on the principal instrument. Students are permitted a maximum of two attempts to pass the sophomore hearing.

Major and Area of Emphasis Requirements in Music

Music Core 17*

Music 100, 110, 111, 112, 113, 114, 211, 213, 218, 310, 376, 476

Students must complete eight (8) semesters of non-credit applied music laboratory (MUS 100).

Senior Recital.

Piano Proficiency (Examination or completion of MUS 179D or 279D).

Area of Emphasis (select one).....55

***Jazz Studies*:** *(In addition to the Music Core)*

Music 217, 231, 232, 250, 323, 331, 332, 360, 361, 412, 413, 497

Eight (8) credit hours of 100-level applied study on the principal instrument.

Eight (8) credit hours of 300-level applied study on the principal instrument.

Four (4) credit hours of 200-level jazz ensemble and four (4) credit hours of 400-level jazz ensemble relating directly to the principal applied area. These must be earned in eight different semesters. Full-time music students are required to participate in ensembles in each semester of residence.

In addition to the formal coursework in this area of emphasis, both a junior recital (MUS 376, minimum of 30 minutes of music) and a senior recital (MUS 476, minimum of 50 minutes of music) are required for graduation.

Two (2) elective credit hours in music.

Multidisciplinary Studies: *(In addition to the Music Core)*

Music 212 and 214 (or 217), 290, 301 or 412, 315, 360, 361, 497

Four (4) credit hours of 200-level principal ensemble and three (3) credit hours of 400-level principal ensemble relating directly to the principal applied area. These must be earned in seven different semesters. Full-time music students are required to participate in ensembles in each semester of residence. Upon approval of the applied teacher, guitar and keyboard majors may substitute up to two semesters of an appropriate chamber ensemble or accompanying for two semesters of a principal ensemble.

Eight (8) credit hours of individual applied study on the principal instrument at the 100 level.

Four (4) credit hours of individual applied study on the principal instrument at the 300 level.

Sixteen (16)* hours outside of music to be determined based on the student's career plans and in consultation with the academic advisor.

Two (2) elective credit hours in music.

***Performance*:** *(In addition to the Music Core)*

Music 212, 214, 290, 301, 315, 360, 361, 497

Eight (8) credit hours of 100-level applied study on the principal instrument.

Eight (8) credit hours of 300-level applied study on the principal instrument.

Four (4) credit hours of 200-level principal ensemble and four (4) credit hours of 400-level principal ensemble relating directly to the principal applied area. These must be earned in eight different semesters. Full-time music students are required to participate in ensembles in each semester of residence. In addition, string majors must complete four semesters of chamber ensemble. Upon approval of the applied teacher, guitar and keyboard majors may substitute up to two semesters of an appropriate chamber ensemble or accompanying for two semesters of a principal ensemble.

One (1) credit of improvisation class.

One music literature course related to the principal applied performance area.

Ten (10) credit hours of music electives relating to the student's principal performance area. Voice majors will complete MUS 222 and 224 and either MUS 428 or 429 among the electives. Piano majors will complete MUS 440 and MUS 441 among the electives. Electives should be chosen in consultation with the student's program advisor.

In addition to the formal coursework in this area of emphasis, both a junior recital (MUS 376, minimum of 30 minutes of music) and a senior recital (MUS 476, minimum of 50 minutes of music) are required for graduation.

Theory and Composition: *(In addition to the Music Core)*

Music 212 and 214, or 217; 290, 301, 315, 317, 320 or 322, 360, 361, 432, 497

Four to eight (4-8) credit hours of applied study on the principal instrument (100 level).

Eight (8) credit hours of 100-level applied composition

Eight (8) credit hours of 300-level applied composition

Four* credit hours of 200-level principal ensemble relating directly to the principal applied performance area. These must be earned in four different semesters. Full-time music students are required to participate in ensembles in each semester of residence. Composers may substitute one semester of MUS 270 for 200-level principal ensemble.

Two to six (2-6) credit hours of music electives.

*Composers may substitute one semester of MUS 270 for 200-level principal ensemble.

One (1) credit of improvisation class.

The student will present two concerts of his or her original compositions on a junior recital (MUS 376, minimum of 30 minutes) and a senior recital (MUS 476, minimum of 50 minutes).

APPLIED MUSIC

Principal Instrument

Following the entrance audition, and upon the recommendation of the area faculty, acceptance into the music or music education major or the music minor will be given by the school director. The student's principal instrument will be the one on which he/she performed the entrance audition.

For music majors, applied music lessons on the principal instrument include one hour of lesson time per week, with two hours minimum of daily preparation expected. For music minors or elective students, applied music lessons include one half-hour of lesson time per week, with one hour minimum of daily preparation expected. All applied music students are expected to attend weekly studio class. Applied music students are not permitted to drop lessons during the course of a term without specific permission from the department chair. This permission is granted only for extraordinary reasons in exceptional cases. Registration for all applied music study requires the permission of the music office. Music majors returning after having not enrolled in applied music study for two or more consecutive semesters must re-audition before permission to continue in the major will be granted.

All music minors and music or music education majors registering for applied music must enroll concurrently in a principal ensemble. If all other ensemble requirements have been met (see "Ensemble Requirements" below), the ensemble should be chosen in consultation with the studio teacher. Elective students registering for applied music may be required by their instructor to enroll concurrently in an ensemble.

1. All music education majors are required to complete 12 credit hours of study on the principal instrument – 6 hours of lower division and 6 hours of upper division. These are earned over 7 different semesters.
2. All music majors enrolled in the jazz studies or performance area of emphasis must complete 16 credit hours of study on the principal instrument – 8 hours of lower division (100 level) and 8 hours of upper division (300 level). These are earned over 8 different semesters.
3. All students enrolled in the theory and composition area of emphasis must complete 4-8 credit hours of study on the principal instrument at the 100 level and 16 credit hours of applied composition - 8 hours of lower division (MUS 180) and 8 hours of upper division (MUS 380). These are earned over 8 different semesters. Students in this area of emphasis will complete a sophomore hearing after 8 hours of applied composition study (100 level) by submitting a portfolio of compositions for review. A maximum of two attempts are allowed to pass the sophomore hearing.
4. All students enrolled in the multidisciplinary studies area of emphasis must complete 12 hours of study on the principal instrument–8 hours of lower division (100 level) and 4 hours of upper division (300 level). These are earned over 6 different semesters.
5. All students enrolled in the Bachelor of Arts with a major in Music program must complete 4 lower-division credit hours of study on the principal instrument. These are earned over 4 different semesters. In some BA emphasis areas, additional applied music studies are required.
6. All students pursuing the music minor must complete 4 semesters of study on the principal applied instrument. Continuation of applied study beyond these credits shall occur after consultation with the applied studio teacher. Music minors desiring to continue applied study at the upper division (300 level) must pass a sophomore hearing before permission will be granted.
6. Each applied music student must be approved through jury examination at the end of each semester before registering for additional study on the principal instrument. At the end of the fourth semester, students must complete the sophomore hearing before upper division (5th semester) applied music study may be started. Students not approved for advancement will be required to repeat lower level work until successfully completing the sophomore hearing. Students are permitted a maximum of two attempts to pass the sophomore hearing.
7. Performance on the principal instrument is required at least once each semester on weekly daytime recitals held for this purpose (MUS 100). First semester music education majors may be exempted from student recital performance at the discretion of the studio teacher. All senior music and music education majors, and junior B.F.A. majors must give a recital as part of the requirements for graduation. Music Education majors must complete the senior recital before the student teaching semester begins. Approval to plan a recital must be obtained during the jury examination preceding the recital semester. During the junior recital semester, B.F.A. students co-register for applied study on the principal instrument and MUS 376. During the senior recital semester, B.F.A. students co-register for applied study on the principal instrument and MUS 476. The capstone course (MUS 497) is generally taken during the final semester.

Piano Proficiency

All music and music education majors are required to pass a piano proficiency examination as part of the degree requirements. Music education majors must pass the entire proficiency examination prior to beginning the student teaching semester. B.F.A. students must complete the piano proficiency prior to the capstone semester. Piano proficiency may be demonstrated through passing the piano proficiency exam or upon successful completion of MUS 179D or MUS 279D.

Theory Placement

A placement test will be given on the first day of theory class Fall and Spring semesters. All students must demonstrate the ability to read bass and treble clefs; identify scales, key signatures, intervals, and triads aurally and in written form, and perform rudimentary melodic and rhythmic dictation. Students needing developmental assistance in theory will be enrolled in MUS 101 (Basic Musicianship).

Elective Study

Students may elect applied music study on a secondary instrument, upon the approval of the school director and the studio teacher, and receive one credit hour per semester. Elective lessons provide one half-hour lesson per week and require one hour of daily preparation. These lessons are permitted on a first-come, first-served basis according to availability. In piano, voice, and guitar, special beginning classes are listed in the *Schedule of Courses.* Elective students registering for applied music may be required by their instructor to enroll concurrently in an ensemble.

CAPSTONE EXPERIENCE

All students registering for the capstone course, MUS 497, will be required to complete a written and oral comprehensive examination. Students may not register for MUS 497 prior to completing the piano proficiency requirement. Before registering for MUS 497, students must have completed or co-registered for the final required semester of applied music, MUS 476 (if required), and the final course of the music history sequence.

ENSEMBLES

Students participate in ensembles that are varied both in size and nature and chosen from those appropriate to the area of specialization. With the approval of the ensemble conductor and the academic advisor, a student may enroll in more than one ensemble in a semester. Enrollment in some ensembles requires the permission of the instructor. The actual number of clock hours per week of rehearsal may vary depending on the ensemble. All ensembles receive one semester hour credit.

Principal and Secondary Ensembles

The principal ensembles are Chamber Choir, University Chorus, Jazz Ensemble, University Symphony Orchestra, Symphonic Band, and Wind Symphony. Secondary ensembles are Marching Band, Choral Union, Opera Workshop, Jazz Improvisation Ensemble, Pep Band, chamber ensembles (Brass, Woodwind, Percussion, Guitar, and String), and any others not listed as principal ensembles. Jazz Ensemble counts as a principal ensemble for jazz studies majors only.

Ensemble Requirements

Music Education and Multidisciplinary Studies majors: All full-time music education and multidisciplinary studies majors are required to participate in ensembles in each semester of residence. Seven semester hours (four lower division and three upper division) in a principal ensemble are required. These must be earned in seven different semesters. All music education majors whose principal applied area is an instrument other than voice are required to complete one semester in a choral ensemble. During the fall semester of the first two years, Marching Band and Orchestra (audition required), Wind Symphony (audition required) or Symphonic Band are corequisites for students whose principal applied area is a wind, brass, or percussion instrument. In the spring of the junior year, these students may petition the school director to substitute University Chorus or Chamber Choir (audition required) for Marching Band during the fall semester of the senior year, during which they also must enroll in a principal ensemble related to their area of principal applied study.

During one fall semester, music education majors whose principal instrument is voice, keyboard, or strings (including guitar) must register concurrently for Marching Band and a principal ensemble related to their area of principal applied study. String performers (including guitar) must complete four semester hours of String Ensemble or Chamber Music. Upon approval of the applied teacher, guitar and keyboard performers may substitute up to two semesters of an appropriate chamber ensemble or accompanying for two semesters of a principal ensemble.

Performance and Jazz Studies: All full-time performance and jazz studies majors are required to participate in ensembles in each semester of residence. Eight semester hours (four lower division and four upper division) in a principal ensemble are required. These must be earned in eight different semesters. Although not required to do so, wind and percussion performers are encouraged to participate in the Marching Band (fall semester only) following consultation with the applied teacher. String performers must complete four semester hours of String Ensemble or Chamber Music. Upon approval of the applied teacher, guitar and keyboard performers may substitute up to two semesters of an appropriate chamber ensemble or accompanying for two semesters of a principal ensemble.

Theory and Composition Majors: All full-time theory and composition majors are required to participate in ensembles in each semester of residence. Four semester hours of lower-division credit in a principal ensemble are required. These must be earned in four different semesters. Composers may substitute one semester of MUS 270 for 200-level principal ensemble.

Bachelor of Arts in Music Majors: All full-time BA-Music majors are required to participate in four semesters of a principal ensemble at the 200 level. Additional ensemble requirements vary, according to the student's selection of emphasis area.

MINOR IN MUSIC

Minor in Music..... 19 credit hours

Core..... 15 credit hours

Music 111, 113, 142 (7 credit hours)

Four (4) semesters of 100-level applied study on the principal instrument (4 credit hours)

Four (4) semesters of ensemble relating directly to the principal applied area (4 credit hours)

Electives..... 4 credit hours

(Electives to be chosen in consultation with the student's music advisor.)

Students who wish to minor in music should consult with the director of the School of Music for admission and audition requirements.

SCHOOL OF THEATRE

The mission of the School of Theatre at Marshall University is consistent with its identity as a professionally oriented program within the College of Arts and Media. The School of Theatre at Marshall University offers rigorous Bachelor of Arts and Bachelor of Fine Arts while fostering a broad liberal arts approach to study. Upon completion of their course work, graduates are prepared for entrance into the theatre profession, further studies in competitive graduate programs, related careers in the entertainment industry, and a variety of creative and communications based occupations.

Our educational objective is to foster the development of individuals who can contribute to their profession and the culture as a whole. The program methodology combines foundations in professional craft with high performance standards that reflect the best in professional practices. . Programming and coursework are anchored in tradition while at the same time encouraging creative problem solving and attention to contemporary trends. Graduates of the Marshall University School of Theatre are prepared to understand the standards of their field, and the moral, social, political, and personal impact of their work.

The School of Theatre emphasizes preparedness, collaboration, community, curiosity, imagination, cross-cultural perspectives, and respect for the art of theatre and respect for one another. To support our educational mission and objectives the School of Theatre provides:

1. A collaborative training environment in classes and productions that allows for full interdisciplinary interaction between actors, technicians, playwrights, directors, designers, and stage managers.
2. Production opportunities that model staffing, development, and performance standards on professional guidelines
3. Professional outreach opportunities for students
4. Leadership in the area of theatre arts, for the academic and regional communities of which they are an integral part.

Bachelor of Arts with a major in Allied Arts or Theatre

Admission and Performance Standards

Prospective students who wish to apply for admission to the Bachelor of Arts program must meet the general admission requirements for Marshall University.

Students enrolled in the Bachelor of Arts program are required to complete all coursework in the respective majors with a minimum grade of *C*. Course grades of *D* and *F* are not counted toward graduation requirements and must be replaced with a grade of *C* or better before graduation or before using that course as a prerequisite for another required course.

Candidates for graduation must have a Grade Point Average of 2.0 or higher in all work attempted at Marshall University.

Forty (40) credit hours must be earned in courses numbered 300-499.

No courses in the college and major requirements for graduation in the College of Arts and Media may be taken Credit/Non-Credit unless the course is otherwise specified.

Students pursuing the B.A. will complete a capstone project appropriate to their emphasis area in theatre and their chosen minor or second major field. Projects must be approved by the student's school director and capstone advisor.

Bachelor of Arts with a Major in Allied Arts

Allied Arts Major Requirements.....78-81 credit hours

Students in "Allied Arts" will declare primary field of art or theatre and fulfill the emphasis area requirements for that field (51 credits). Students will also determine a secondary arts field

of art, music, or theatre (may not duplicate their primary field) as their "allied" art and fulfill 27-30 credits in that area. With the assistance of an advisor/faculty mentor, students will create individualized secondary arts field curriculum plans based on the their career goals. The curriculum for the secondary field must include a mixture of applied/performance skill courses and academic courses for the student to acquire the professional skills and learning experiences needed for future success. Students must meet the basic entrance requirements for the B.A. degree in that major for both their primary and their secondary arts field.

Emphasis Area ..... 51 credit hours
Allied Arts Area ..... 27-30 credit hours
Outside Electives ..... 5-14 credit hours

Bachelor of Arts, with a Major in Theatre

B.A. Theatre Core: ..... 36 credit hours
THE 101, 201, 245, 250, 295, 440, 441, 499
And six to seven (6-7) credit hours from 221, 222, 240, 330, 340, 354
And four (4) credit hours of theatre practicum (THE 270 and THE 370)

Theatre electives ..... 15 credit hours

Minor* ..... 15-18 credit hours
Additional Non-Theatre Electives ..... 17-29 credit hours

*Students may elect to complete a second major with their non-theatre electives rather than a minor, depending upon their career goals.

Bachelor of Fine Arts with a Major in Theatre

Students desiring entry into the B.F.A. degree must be formally admitted to the program following the completion of the Sophomore Review. This admittance is based upon an audition or portfolio review in the student's area of emphasis and an interview with the area faculty. This audition or portfolio review may occur at any time, but typically takes place during the second semester of the student's sophomore year. Theatre majors returning after having not enrolled in theatre study for two or more consecutive semesters must re-audition/interview before permission to continue in the major will be granted. Students should consult the theatre program website for specific audition/portfolio requirements. Majors must also satisfy the following program requirements:

1. B.F.A. Theatre majors must complete seventy-three (73) credit hours of coursework in theatre and related disciplines in addition to the general distributional requirements and free electives. The theatre courses are divided into the theatre core curriculum of forty-six (46) hours and the student's choice of areas of emphasis (performance or production) with twenty-seven (27) hours.
2. Theatre majors must complete all work in the major with a minimum grade of *C*. A student who receives a *D* or an *F* in a theatre course must repeat it and earn at least a *C* before graduation or before using that course as a prerequisite.
3. B.F.A. Theatre majors who have successfully completed THE 101, 201, 240, 245 and 250 AND a minimum of 9 credit hours from 220, 221, 222, 260, 330 AND a minimum of 30 credit hours overall, are required to enroll in THE 295, Sophomore Review. This course consists of an interview and either a portfolio review (B.F.A. Production) or an audition (B.F.A. Performance). Students must pass Sophomore Review with a minimum score of 75% in order to be eligible for invitation to the B.F.A. program. Students who fail to successfully complete the Sophomore Review are allowed two additional opportunities to complete the requirement. Review dates are announced the first week of the fall and spring semesters. Specifics with regard to the portfolio review, audition, format of the review and evaluation rubric can be obtained in the School of Theatre office or from the student's faculty advisor.
4. B.F.A. Theatre majors must enroll in Theatre Internship (THE 490) for a total of four (4) credit hours and successfully complete an approved internship prior to initiating the senior capstone (THE 499) experience. Internships are approved by the faculty advisor and the school director. Typically, internships take place during the summer months and demonstrate the individual's ability to participate on a regional or national level. Successful completion of an internship requires the student to prepare a resume and audition or portfolio, and through that preparation acquire a position with a theatre-related, professional organization. Summer employment with professional organizations (out-of-state or in-state organizations) holding auditions or interviews at S.E.T.C. or similar

regional or national conventions are considered appropriate internships. Substantial skills workshops and studies abroad in theatre (where the application involves competition) may also be considered appropriate internships. Students must make arrangements with the producing organization to provide an evaluation of their work.

5 All students must have completed a minimum of ninety (90) hours of coursework before enrolling in the senior capstone (THE 499) experience. Students who are juniors must discuss the capstone experience with their advisors prior to the second semester of their junior year.

6 Forty (40) credit hours must be earned in courses numbered 300-499.

7 No course in the major requirements for graduation may be taken Credit/Non-Credit unless the course is so specified.

In addition to formal coursework, the theatre program provides laboratory experience through productions during the academic year.

Students majoring in theatre will have laboratory/production responsibilities with significant time requirements and commitments outside of class throughout their undergraduate degree program. These responsibilities may impact on the time a student has available for non-academic activities.

Major and Area of Emphasis Requirements in Theatre

Theatre Core 46

Theatre 101, 201, 240, 245, 250, 295, 440, 441, 490, 499
and nine (9) credit hours from 220, 221, 222, or 330
and six (6) hours of theatre practicum (THE 270 and THE 370).

Areas of Emphasis in Theatre 27

Students are required to select one of these areas of emphasis and to complete 27 credit hours. Specific courses to be included in each area of emphasis are as follows:

Performance

Theatre 230, 320, 322, 423, and fifteen (15) hours of approved theatre electives.

Production

Theatre 340, 354, 355, 360, 450, and fifteen (15) hours of approved theatre electives.

MINORS IN DANCE AND THEATRE

Minor Requirements in Dance

Students intending to minor in dance should contact the Director of the School of Theatre. The director serves as the dance advisor for students with a minor in dance.

DAN 230, Ballet Technique ..... 2 hrs.
DAN 270 or THE 270, Dance Practicum ..... 2 hrs.
DAN 316, Modern Jazz Dance ..... 2 hrs.
DAN 320, Modern Dance Technique ..... 2 hrs.
THE 240, Introduction to Stage Lighting ..... 4 hrs.
Choice of six (6) hours from DAN 205, DAN 210, DAN 280, or repeat from the Dance courses above. ..... 6 hrs.
Total for Dance Minor ..... 18 hrs.

Minor Requirements in Theatre

Students intending to minor in theatre should contact the Director of the School of Theatre. The director serves as the theatre advisor for students with a minor in theatre.

THE 101, THE 111 ..... 6 hrs.
Choice of one: THE 240, THE 245 or THE 250 ..... 4 hrs.
Choice of one: THE 201, THE 440, or THE 441 ..... 3 hrs.
Elective (choose one): THE 240, THE 245, THE 250, THE 220 and THE/DAN 270, or THE 221 and THE/DAN 270 ..... 4 hrs.
Total for Theatre Minor ..... 17 hrs.

COLLEGE OF ARTS AND MEDIA ACADEMIC POLICIES

Advising

Each student will be assigned a faculty advisor in the student's area of interest, who will provide academic advice and guidance in the registration process. Students majoring in the arts are subject to mandatory advising every semester of enrollment. Students in journalism and mass communications are subject to mandatory advising until junior status is obtained. Only after a student has met with the academic advisor for approval of the course schedule will the advising hold be lifted, thus enabling the student to register for classes. A student who has not been assigned an advisor or who has questions about the assignment of advisor should contact the dean of the College of Arts and Media or the school director.

Catalog of Record

The College of Arts and Media adheres strictly to the University Academic Catalog of Record Policy found in the "Academic Information" section of this catalog. This policy affects all undergraduate students in the College of Arts and Media. You may also consult the catalog website: *www.marshall.edu/catalog/*.

Change of Major

Students who change majors within the College of Arts and Media will continue to operate under the catalog in effect when they entered. Students transferring from other units of the university must meet the requirements of the catalog in effect at the time of the change in major.

Degree Progress Audit

During the semester students are enrolled for their 80th hour, they are required to have a check of their progress toward graduation. The check is to be initiated in the college office. Failure to do so will result in a hold on registration that will be removed after the check is completed.

Probation and Academic Dismissal

The College of Arts and Media adheres strictly to the University Academic Probation and Suspension Policy found in the "Academic Information" section of this catalog. This policy affects all undergraduate students in the College of Arts and Media regardless of their catalog year. You may also consult this catalog website: *www.marshall.edu/catalog*.

SPECIAL OPPORTUNITIES FOR ALL STUDENTS

Center for Wellness in the Arts

In August of 2014, the College of Arts and Media and the College of Health Professions launched an exciting venture on behalf of students that has become the Marshall University Center for Wellness in the Arts. The center is a place where performing and visual artists can be evaluated by licensed athletic trainers, skilled vocal and hearing clinicians, dietitians, exercise physiologists and performance anxiety specialists who have the proper knowledge and equipment to assess discipline-specific health risks and offer wellness strategies. The CWA contributes to the academic and professional development of students and faculty through education, treatment and research.

The CWA draws upon university resources in behavioral and physical health, exercise science, communication disorders, and speech and hearing, to provide students with a groundbreaking system of support and learning. Rejecting the premise that a certain amount of pain is part of the artist's process, the CWA promotes a culture in which pain is a problem to be treated, and wellness an essential component of successful careers in the arts. For further information, please consult the Center for Wellness in the Arts website at *www.marshall.edu/cwa*.

Exhibitions

The Birke Art Gallery on the Marshall University campus and the Visual Arts Center Gallery in downtown Huntington feature student, faculty, and guest artist exhibitions. These galleries are open year-round and are free to students and the public.

Non-major Participation in Arts and Media Courses and Minors

Students wishing to develop or advance their artistic, journalistic, mass communications, musical, or theatrical skills are welcome to enroll in courses in the college and to join the various student organizations. Students who desire a minor in the arts or journalism and mass communications should refer to the school listings for the sequence of courses in each program.

Performances and Productions

All university students are encouraged to participate in the many music ensembles and theatrical productions offered by the School of Music and the School of Theatre.

Professional and Student Organizations

The College of Arts and Media houses a number of professional and student organizations that enhance and explore various aspects of its majors and areas of specialization. Please consult with the school director for more information.

Student Media

The student newspaper, *The Parthenon,* is published Monday through Friday online and in print Tuesday and Friday during the fall and spring semesters and weekly from June to August. The student radio station, WMUL-FM, 881. FM, is on the air 24 hours daily throughout the year. All university students are encouraged to volunteer at WMUL-FM. MU Report is a student-produced, 15-minute bi-weekly television newscast seen throughout West Virginia on public television. Basketball Friday Night in West Virginia is a three-hour talk show about the state's high school basketball games. Seven Arrow Creative is a student-run advertising and public relations agency serving the Huntington campus and communities.

COMMUNITY ENGAGEMENT

The College of Arts and Media enriches the Huntington campus and regional community with many performances, exhibitions, broadcasts, publications, lectures, and special presentations. The programs of the Marshall Artists Series, including the Baxter Series, Mount Series, Belanger Series and International Film Festival and special events throughout the year, present world-class artists and organizations. Exhibitions in multiple exhibition venues presented by the School of Art and Design are open to all students. *The Parthenon*, MU Report, WMUL, Seven Arrow Creative, and Basketball Friday Night in WV, a radio/television/live web simulcast, in the School of Journalism and Mass Communications inform the community, debate topical issues, broadcast documentaries, and aid local businesses.

Marshall University Music presents many recitals and concerts by its faculty, students, and ensembles, in addition to programs featuring guest artists. Throughout the academic year and during the summer sessions, the Marshall University Theatre provides many major dramatic productions. Students are cordially welcomed to all events and are urged to explore the excitement, enrichment, and entertainment offered by the College of Arts and Media.

Lewis College of Business

Dr. Avinandan Mukherjee, Dean
Dr. Jeffrey Archambault, Associate Dean for Acadmic Programs
Dr. Jean Price, Associate Dean for Accreditation and Strategic Initiatives
www.marshall.edu/cob

Division of Accountancy and Legal Environment

Dr. Nancy Lankton, Division Head

Professors
J. Archambault, Lankton

Associate Professors
M. Archambault, Keener, Price, Stivason

Assistant Professors
Baker, Lanham, Yoo

Instructors
Akathaporn, Carr, Thompson-Abbott

Division of Finance and Economics

Dr. Richard Agesa, Division Head

Professors
J. Agesa, R. Agesa, Brozik

Associate Professors
Karim, McCutcheon, S. Zhang

Assistant Professors
Biswas, Duan, Feng, Yemba

Division of Management and Health Care Administration

Dr. Deepak Subedi, Division Head

Professors
Braun, Coustasse-Henecke, Emmett, Ha, Lee, McInerney, Subedi

Associate Professors
Muslin, Sollosy

Assistant Professors
Knotts, Lawani, McKinney, Willis, J. Zhang

(continued)

Instructors
Halleck, Phillips

Division of Marketing, Management Information Systems, and Entrepreneurship
Dr. Elizabeth Alexander, Division Head

Professors
Alexander, Gurung, D. Mader, F. Mader, D. Shao, Tate, Weible

Associate Professors
McClure

Assistant Professors
Bushey, Eng

Instructors
York

Division of Military Science
LTC Painter, Department Head

Professor
LTC Painter

Assistant Professor
CPT Canafax

Senior Military Instructor
2LT Adamczak

Recruiting Officer/Scholarship Officer
Brewer

LEWIS COLLEGE OF BUSINESS VISION STATEMENT

The Lewis College of Business will provide current and comprehensive undergraduate and graduate education and be recognized as a major contributor to the region's economic development.

LEWIS COLLEGE OF BUSINESS MISSION STATEMENT

The Lewis College of Business prepares students to become successful business professionals advancing economic development throughout West Virginia and beyond. The College provides a high quality business education in a supportive learning environment that encompasses exemplary teaching, service to our communities, and a faculty committed to applied and pedagogical scholarship.

STRATEGIC PRIORITIES

HIGH-DEMAND CURRICULUM

- Health Care Management
- Entrepreneurship
- Energy Management
- Business Analytics
- Supply Chain

DESIRED SKILL SETS

- Agility & Flexibility
- Creativity
- Analytics
- Communication
- Collaboration
- Leadership
- Ethics
- Social Responsibility

EXPERIENTIAL LEARNING, EXTERNAL ENGAGEMENT AND ECONOMIC DEVELOPMENT

- Herd Solutions
- Projects with Companies
- Speaker Series
- Student Competitions
- Student Organizations
- Outreach Centers

ENTREPRENEURSHIP AND INNOVATION

- Design Thinking
- Intrapreneurship
- Start-up Culture
- Social Entrepreneurship
- Risk Management
- Incubator
- Accelerator
- Eco-system

GLOBAL FOOTPRINT AND CONNECTIONS

- International Partnerships
- Articulation Programs
- Student Exchanges
- Faculty Exchanges
- Cross-cultural Immersion
- Collaborative Projects
- International Internships
- Study Abroad

DEGREE PROGRAMS

The Lewis College of Business offers the following undergraduate programs of study:

Bachelor of Business Administration (B.B.A.) in Accounting
Bachelor of Business Administration (B.B.A.) in Economics
Bachelor of Business Administration (B.B.A.) in Finance
Bachelor of Business Administration (B.B.A.) in International Business
Bachelor of Business Administration (B.B.A.) in Management with majors in Energy Management, Health Care Management, and Management
Bachelor of Business Administration (B.B.A.) in Management Information Systems
Bachelor of Business Administration (B.B.A.) in Marketing with majors in Entrepreneurship and Marketing

The college also offers the following graduate programs of study. Complete descriptions of each of the graduate programs are provided in the Graduate Catalog.

Master of Business Administration (M.B.A.)
Master of Science in Accountancy (M.S. ACC)

(continued)

Master of Science in Health Care Administration (M.S. HCA)
Master of Science in Human Resource Management (M.S. HRM)
Doctor of Management Practice in Nurse Anesthesia (D.M.P.N.A.)

ADMISSION

Regular admission to the university constitutes admission to the Lewis College of Business for entering freshmen and students transferring from other institutions of higher education; there is no separate admissions procedure. Students in other colleges within Marshall University must be eligible to attend Marshall University at the time of transfer into the Lewis College of Business.

For students transferring into Marshall University, the Lewis College of Business will permit application of any appropriate transfer credits accepted by the university to meet general education requirements, lower division business requirements, or nonbusiness electives. For accepted transfer work to fulfill upper division business requirements and electives, the course credits must be earned at the upper division levels or a validation process is available for FIN 323, MGT 320, and MKT 340, as outlined in "Transfer of Credits from Another Institution."

TRANSFER OF CREDITS FROM ANOTHER INSTITUTION

When students transfer courses from another institution to Marshall University, the Office of Admissions produces a Transfer Equivalency Worksheet. Advisors in the Academic Advising Center work closely with transfer students to determine how courses taken at other institutions will count toward their B.B.A. requirements. Please see the requirements for Transfer Credit for Enrolled Students in the Marshall University Undergraduate Catalog for other details.

Students need to be especially aware of the distinction between upper and lower division credit. The Transfer Equivalency Worksheet may list a Marshall equivalent class as being a 300 or 400 level course, however, the presence of an asterisk (*) just to the left of the course title indicates the student received upper division credit for the course taken at another institution. No asterisk indicates lower division credit. A plus sign to the left of the course title indicates a developmental course. Developmental course hours do not count toward graduation requirements.

All 300 and 400 level business courses listed on a student's curriculum sheet required for a B.B.A. must be completed at the upper division level. For example: if a student completed Principles of Management at another institution and the course number was taken at the freshman or sophomore level, the Transfer Equivalency Worksheet will list the Marshall equivalent as MGT 320, which is Principles of Management at Marshall. However, the course completed was a lower division course and the student did not complete the requirement for upper level credit. Therefore, the student would need to re-take the course at Marshall for upper division credit or validate the course. For a few courses, the Lewis College of Business offers a method of validating courses that transfer in as lower division, but require upper division credit. Students who receive lower division credit in the following courses can validate those courses by choosing one of the following options:

FIN 323, Principles of Finance - Students can (1) take FIN 343 or FIN 370 and receive a grade of *C* or better; (2) pass a validation exam given by the Division of Finance and Economics; or (3) pass FIN 323 at Marshall for upper division credit.

MGT 320, Principles of Management - Students can (1) take MGT 422 and receive a grade of *C* or better; (2) pass a validation exam given by the Division of Management and Health Care Administration; or (3) pass MGT 320 at Marshall for upper division credit.

MKT 340, Principles of Marketing - Students can (1) take MKT 371 and receive a grade of *C* or better; (2) pass a validation exam given by the Division of Marketing, Management Information Systems, and Entrepreneurship; or (3) pass MKT 340 at Marshall for upper division credit.

A student who chooses to retake the equivalent course at Marshall can only apply the credit hours from one of the courses towards graduation. Students who have any questions regarding upper or lower division credit or validating a course should see an advisor in the College of Business.

Transfer students should also understand the meaning of the term *unclassified* (UNC) on the Transfer Equivalency Worksheet. Unclassified is a term that reflects the fact that Marshall does not offer a course that is an equivalent of the course taken at the transfer institution. Unclassified does not mean the transfer course will not count toward a degree program at Marshall University. Students may apply unclassified credit toward B.B.A. requirements if the course content meets the essential elements needed. In unclassified course credit cases, the academic advisor may ask the student to submit a catalog course description or a syllabus. Not all unclassified courses can be applied toward a B.B.A. degree requirement.

PROBATION AND ACADEMIC DISMISSAL

The Lewis College of Business adheres strictly to the University Academic Probation and Suspension Policy found in the "Academic Information" section of this catalog. Students should be aware of the policy, as it changed significantly effective Fall 2003. This policy affects all undergraduate students in the LCOB regardless of their catalog year.

ADVISING

All students are assigned an academic advisor. The academic advisors for the LCOB are located in the Lewis College of Business Advising Center in CH 334. Students are required to attend mandatory advising during each semester of their freshman year and one time as juniors. As a freshman, the student will receive an advisor hold on their account each semester and will be unable to register until they meet with their advisor. When a student reaches 60-70 earned credit hours, the student will be required to meet with their advisor to complete a Junior/Senior Evaluation. A Junior/Senior Evaluation hold will be placed on the student's account until he or she meets with the advisor and completes the Junior/Senior Evaluation. The hold will prevent a student from registering.

Students on academic probation or returning from suspension are required to meet with the Director of Student Services to register for courses and create an Academic Improvement Plan. The student may be required to participate in the college's retention program.

Although advising is not mandatory, students are highly encouraged to meet with their advisor each semester to ensure that they are staying on track to graduate. Students have the responsibility of checking prerequisites prior to enrollment. If a student has not met all prerequisites for a course prior to the first day of class, the Dean's Office has the right to withdraw the student from the course. Students are allowed to change majors at any time by filling out a Change of Major form in the Academic Advising Center.

PREREQUISITES

A prerequisite is a course or student classification which must be successfully completed prior to taking a course for which you may want to enroll. An example is that you must complete Economics 250 before you can take Economics 253. The prerequisite must be completed (with a grade of *D* or better) before the first day of class. Accounting majors are required to complete prerequisite accounting courses with a minimum grade of *C* or better. The LCOB strictly enforces prerequisites. Be careful and plan ahead. Students will not be allowed to register for a course if they have not completed, or are not presently completing, the prerequisite course.

It is the responsibility of the student to complete all prerequisites before beginning the next successive course. It is also the responsibility of the student to be familiar with and follow the prerequisite requirement for the B.B.A. Accounting degree. **STUDENTS WILL BE ADMINISTRATIVELY WITHDRAWN FROM COURSES IF THE PREREQUISITES HAVE NOT BEEN FULFILLED.** Enrollment for Management 460 requires senior standing and completion of multiple core business courses. Students will not be allowed to take MGT 460 and FIN 323 the same semester.

INTERNSHIPS

The purpose of the internship is to provide a means by which students can receive academic credit for educational experiences received in a work environment that cannot be provided by the College of Business. *Students approved for internship credit will actually register for a university course and are required to pay tuition for the credits they receive*. All proposals for an internship must clearly identify the educational benefits that will accrue to the student before the internship will be approved.

A student may earn up to a maximum of 12 credit hours of internship; a maximum of 6 credit hours can be earned in one semester, provided the student is working in a full-time, co-op experience and not enrolled as a full-time student. A maximum of 6 credit hours may count toward the 120 credit hours required to graduate. Every 200 hours worked equals three credit hours. Internship credit may be earned during regular semesters or summer sessions. Students must register for internship credit during the semester in which they are working the internship. A grade of Credit/No Credit will be assigned by the division head upon completion of internship requirements. Students will be required to submit a journal or report of his/her experience. Students can check with the Academic Advising Center about how internship credit will count toward their degree.

Students who register for a Management, Management Information Systems, Marketing internship and are majoring in that field will receive credit toward a Management elective, Management Information Systems elective, or Marketing elective, respectively. Students can only apply credit toward one Management, Management Information Systems, or Marketing elective. For students who take an internship twice, the second three hours will be counted toward free elective hours. They will not apply toward an additional required elective. Students who complete an internship in Accounting, Economics, or Finance will receive credit toward free elective hours.

To be eligible for internship credit, students must meet the following eligibility requirements:

- Junior or Senior standing and overall GPA of 2.5 or better.
- Transfer students meeting the above criteria are eligible to participate after one semester of coursework at the College of Business.

INDEPENDENT STUDY

The Lewis College of Business offers the option of Independent Study to selected students who wish to pursue topics that are business-related but not covered in depth in formal Lewis College of Business courses. Each student can obtain a maximum of eight (8) hours of Independent Study credit within the LCOB, and can earn no more than four (4) hours of such credit in any one semester.

In order to register for Independent Study in a given semester (provided the above hour limits have not been reached), the following conditions must be met:

1. COB students with senior standing who have 2.5 or higher in overall, Marshall, and major GPA's or with permission from the division head.
2. COB students with junior standing who have 3.0 or higher in overall, Marshall, and major GPA's or with permission from the division head.
3. An instructor within the student's major division must agree to be his/her Project Supervisor. The faculty member's agreement to serve in this capacity will be contingent upon his/her assessment of the feasibility and quality of the student's proposed project.
4. Written approval for the project, and written approval for Independent Study registration, must then be obtained from the student's Division Head. The Division Head's approval will be contingent upon his/her assessment of the feasibility and quality of the student's proposed project, in consultation with the student's proposed supervisor.

If a student is able to meet the above conditions, then he/she will be allowed to register for Independent Study, and will subsequently be bound by the "Procedures for Independent Study Projects" in the Academic Advising Center.

GRADUATION REQUIREMENTS

The following general requirements must be met by all students seeking bachelor's degrees through the College of Business:

1. Satisfaction of all university requirements for graduation.
2. Completion of all curricular requirements specified for the major and degree.
3. Completion of the following residency requirements:
   a. Earn at least 36 semester hours at Marshall.
   b. Earn at least 12 hours of senior level coursework in the Lewis College of Business at Marshall.
   c. Earn at least 15 hours in the major field at Marshall.
   d. Earn at Marshall 16 or more of the last 32 hours credited toward the degree.
4. Earn at least a 2.0 Grade Point Average (GPA) in each of the following three categories:
   a. All coursework attempted at Marshall and elsewhere.
   b. All Marshall coursework.
   c. All coursework attempted and included in the major(s) at Marshall.
5. Successful validation of transfer work as required.
6. Removal of all incompletes.
7. At most, 18 semester hours of coursework (consisting only of general education requirements and/or free electives) taken under the Credit/No Credit option may be applied toward graduation requirements. College of Business and other courses in your major may not be taken on a Credit/No Credit basis.
8. All candidates for graduation should file an Application for Graduation form in the semester PRIOR to the semester in which all requirements for the degree are to be met. This will enable the student to make all necessary schedule adjustments to correct potential graduation deficiencies in the final semester.

To ensure graduation at the end of the term of application, all records should be documented with needed transcripts, substitution forms, grade changes, and lower division validations. Students taking courses at another school in their last semester must have an official transcript sent from the other school to Marshall. The transfer work must be posted to the student's Marshall transcript by the end of the semester of application or the student's graduation may be delayed to the next graduation term.

CORE CURRICULUM REQUIREMENTS

Hours Required

CORE I:

First Year Seminar: FYS 100.....3 hours

should be taken during the freshman year.

Students who transfer to Marshall University as sophomores [30 or more credit hours] are exempt from taking FYS 100.

Critical Thinking (CT) ..... 6 hours

For a complete listing of courses that will meet the Critical Thinking requirement, please go to *www.marshall.edu/gened/critical-thinking-core-i-courses*.

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Students may wish to select a Critical Thinking course that will double-count as a Humanities.

CORE II:

Composition: ENG 101 and 201 (or 201H).....6 hours

Students with an English ACT score below 18 must complete ENG 101P, a four credit hour course.

Students with an ACT score of 28-33 are encouraged to take ENG 201H. Upon completion of this class with a minimum grade of "C" or better, students will receive six hours of credit to count toward ENG 101 and 201. If a student receives a grade of "D", the student will only receive three hours of credit toward ENG 201 and must either repeat ENG 201H or go back and take ENG 101. **Students MUST receive a grade of "C" or better in ENG 101 (101P) and ENG 201.** Students who receive a grade of "D" must repeat the course for a higher grade.

Communication Studies: CMM 207 .....3 hours

Students who complete CMM 104H as part of their Honors College requirements can substitute that for CMM 207. Students who transfer from another college on campus and have already completed CMM 103 can substitute that for CMM 207.

Fine Arts:.....3 hours

For a complete listing of courses that will meet the Fine Arts requirement, please go to *www.marshall.edu/gened/core-ii-courses*.

Humanities: .....3 hours

For a complete listing of courses that will meet the Humanities requirement, please go to *www.marshall.edu/gened/core-ii-courses*.

Math: MTH 127 or 130 ..... 3-5 hours

Students must complete an algebra course by either taking MTH 127 or MTH 130, depending on their math ACT score. Students with a **math ACT score of 21 or higher** can take MTH 130 for 3 credit hours. Students with a **math ACT score of 17, 18, 19 or 20** must take MTH 127 for 5 credit hours.

MTH 102 or MTH 102B is required for students who have a math ACT score of 16 or below. MTH 102 is a four-credit-hour course and may be counted toward the 120-hour graduation requirement as free elective hours. MTH 102B is a one credit-hour course and is required for students who have already completed MTH 100. Students who complete MTH 102 or MTH 102B then proceed into MTH 127.

Physical/Natural Science: .....4 hours

For a complete listing of courses that will meet the Physical/Natural Science requirement, please go to *www.marshall.edu/gened/core-ii-courses*.

PSY 201 (Social Science).....3 hours

Students who complete PSY 201 at Marshall will also fulfill one Critical Thinking (CT) course.

ADDITIONAL COLLEGE REQUIREMENTS:

Hours Required

ENG 204 ..... 3 hours

Communication Studies Elective ..... 3 hours

Select one: CMM 302, 308, 315, 319, 322

International Business Elective ..... 3 hours

Select one:

ECN 340, 408, 420, 460

FIN 440

MGT 445

MKT 371

ADDITIONAL UNIVERSITY REQUIREMENTS:

Writing Intensive:

Students must select 6 hours of courses designated as Writing Intensive. LCOB students are able to double-count **ENG 204** (Writing in the Workplace) as one of their Writing Intensive courses. The business capstone course, **MGT 460** (Strategic Management) will also double-count as a Writing Intensive course. MGT 460 and ENG 204 must be taken at Marshall in order to meet the Writing Intensive Requirement. If one or both courses are taken at another school, additional courses will be required at Marshall for the student to fulfill the Writing Intensive requirement.

Multicultural/International

This requirement will be met when the student completes the International LCOB Elective (see "Additional College Requirements" section above).

GENERAL BUSINESS REQUIREMENTS:

All business majors are required to take several core business courses. They are as follows:

CMM 207*	3 hours
ENG 204	3 hours
ACC 215, 216	6 hours
ECN 250, 253	6 hours
FIN 323	3 hours
LE 207	3 hours
MGT 218, 320, and 460	9 hours
MIS 200, 290	3 hours
MKT 340	3 hours

*Course also meets university core curriculum requirement.

In addition to the Core Curriculum requirements, students are required to complete courses for their majors. Please see section on "Major Requirements."

Free Electives

Students must complete at least 120 hours to graduate with a B.B.A. The number of free elective hours you will need to complete depends on your major, the number of hours you take to fulfill your math requirement (3 or 5 hours), and if you double-count any general education requirements.

To determine the number of free electives you will need to reach 120 hours to graduate do the following: Add up all the hours required on your curriculum sheet and subtract that number from 120. The total will be the number of free electives you need to complete. Free electives are any course that is 100-level or above. Please note that developmental courses (098, 099, etc.) do not count toward completion of free electives or the 120-hour graduation requirement. If you earn a "C" or

better in a course and repeat it, that is considered a Repeat Passing Grade. If you earn a "D" in a course that was taken after your first 60 attempted hours and repeat it, that is also considered a Repeat Passing Grade. Repeat Passing Grade hours cannot count toward the 120 hours needed for graduation and must be manually subtracted from the overall hours completed toward graduation.

Double-Counting

Any course that meets more than one graduation requirement (excluding free electives) can be double counted, if applicable. For example, CL 210 double-counts as Critical Thinking (CT) and Humanities. When completed at Marshall PSY 201 double-counts as a Social Science and a Critical Thinking (CT) course. Because you must have a minimum of 120 credit hours to receive a degree, double-counting will increase the number of free electives you will need. Therefore, if you take a class that meets two graduation requirements, you will then take additional free elective hours in place of the second course requirement.

MAJOR COURSE REQUIREMENTS

The courses required for each major are listed in the following sections. Students are required to have a 2.0 GPA in their major, in addition to their Overall GPA and Marshall GPA. Major GPAs are calculated with the grades earned in your Third Year and Fourth Year courses. If you have any questions, please consult with your advisor.

Choosing a Major

All students in the Lewis College of Business must declare a major by the time they have completed 60 hours of coursework. You should select your major based on your personal interests and career goals. Many students find it useful to complete their introductory business courses before selecting a major. If you are not ready to select a major, you can be classified as Undecided Business. This designation will allow you plenty of time to think about your options before you are required to select a major in business. When you are ready, you can declare your major by completing the Change of Major form in the Academic Advising Center in Corbly Hall 334.

Major Requirements: B.B.A. in Accounting

Required Coursework in the Major (34 Hours, as follows):

ACC 198[1], ACC 311[1], ACC 312[1], ACC 318[1]
ACC 341[1], ACC 348[1]
ACC 414, ACC 429, ACC 448, ACC 499 (Capstone)
LE 308
MIS 360
[1]Student must earn a grade of *C* or better in all ACC prerequisite courses, as well as ACC 215 and ACC 216.

Elective Credit in the Major (3 hours, as follows):

Students can take any 300- or 400-level ACC course (except ACC 490) or an approved graduate course.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Economics

Required Coursework in the Major (18 Hours, as follows):

ECN 250, ECN 253
ECN 326, ECN 328, ECN 423
ECN 466 (Capstone)

Elective Credit in the Major (9 hours, as follows):

Students can take any 300 or 400 level ECN or FIN course. One elective must be at the 400 level.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Energy Management

Required Coursework in the Major (24 Hours, as follows):

FIN 370
MGT 370, 380, 420, 428, 446
LE 308
MGT 458 (Capstone)

Energy Management Electives (9 hours, as follows):

Students can select from ECN 405, GEO 360, GEO 426, GLY 110/210L, GLY 325, GLY 427, GLY 455, NRE 212, NRE 320, NRE 321, MGT 419, MGT 422, MGT 424, MKT 341, MKT 350.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Entrepreneurship

Required Coursework in the Major (21 Hours, as follows):

ENT 220, 350, 467
MGT 360
LE 366
FIN 380 or 343
MKT 442

Elective Credit in the Major (15 hours from the following):

ENT 370, ENT 380, ENT 469, ENT 471, MGT 446, MGT 461, MKT 231, MKT 341, MKT 350, MKT 375, MKT 435, MKT 437, MKT 445, MKT 465

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Health Care Management

Required Coursework in the Major (25 Hours as follows):

MGT 350, 354, 355, 424, 455
FIN 356
LE 351
MGT 460 (Capstone)

Elective Credit in the Major (6 hours, as follows):

Any 300 or 400 level MGT course

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Finance

Required Coursework in the Major (15 Hours as follows):

FIN 323
FIN 343, FIN 370, FIN 440
FIN 470 (Capstone)

Elective Credit in the Major (9 hours, as follows):

Students can take any 300 or 400 level FIN, ACC, or ECN course. One elective must be at the 400 level.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in International Business

Required Coursework in the Major (27 Hours, as follows):

ECN 250, 253
ECN 420, 421
FIN 323, 343, 440
MKT 371
FIN 475 (Capstone)

Experiential Education Requirement (May be fulfilled by one of the following):

a) Approved Study Abroad Program
b) Faculty-led Study/Travel Abroad Course
c) Internship with a business that has international operations (with approval of Division Head)

Foreign Language Requirement (May be fulfilled by one of the following):

a) Pass a language proficiency exam given by the Department of Modern Languages
b) TOEFL minimum score of 500 – applies to foreign students only
c) Nine (9) hours of a foreign language, consisting of three sequential courses

Elective Coursework:

a) 6 hours of International Studies courses – any 300 or 400 International courses, as approved by the College of Business
b) 3 hours of International Business – already met via FIN 440

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Management

Required Coursework in the Major (18 Hours, as follows):

MGT 419, 420, 422, 424, 428
MGT 460 (Capstone)

Elective Credit in the Major (15 hours, as follows):

Students can take any 300 or 400 level MGT courses. Students may select one 300- or 400-level MKT or MIS course.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Management Information Systems

Required Coursework in the Major (24 Hours, as follows):

MIS 290, 300, 310, 333, 340, 470
MGT 420
MGT 475 (Capstone)

Elective Credit in the Major (3 hours, as follows):

Students can take any 300- or 400-level business course.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

Major Requirements: B.B.A. in Marketing

Required Coursework in the Major (21 Hours, as follows):

MKT 231, 341, 350, 371, 437, 442
MGT 465 (Capstone)

(continued)

Elective Credit in the Major (12 hours, as follows):

Students can take any 300 or 400 level MKT courses.

See also the Core Curriculum Requirements, Additional College Requirements, Additional University Requirements, and General Business Requirements.

MINOR PROGRAMS OF STUDY

Students may desire a limited but structured background in one of the functional areas of business. The following minor programs of study provide such structured backgrounds. These minors are the only minors available in the LCOB.

Accounting Minor - A minimum of 12 credit hours in Accounting, to include ACC 311, 318, 348, and three hours from another upper-level course. Choose from among ACC 312, 341, 412, 418, 448, or 400-level Special Topics. (See course descriptions for information about prerequisites.) NOTE: All courses must be completed with a grade of *C* or better.

Economics Minor - A minimum of 15 credit hours in Economics, with no more than six of those hours earned at the 200 level or lower.

Entrepreneurship Minor – A minimum of 15 credit hours to include – Required Courses: ACC 215/216 (ACC 310 for non-business majors only), MGT 360, MGT 461, and MKT 340. [ACC 215/216 counts only as 3 hours of an elective towards the 12 hours required for the minor]; and one Elective Course: FIN 380, LE 366; MIS 350, MKT 231; or an internship in entrepreneurship in ACC 490, ECN 490, FIN 490, MGT 490, MIS 490, or MKT 490.

Finance Minor - A minimum of 12 credit hours in Finance, to include FIN 323, plus six hours from among FIN 321, 343, 370; plus three hours taken in any of the discipline's 400-level courses.

Legal Environment - A minimum of 12 credit hours, including LE 207, LE 308, LE 351, and LE 366.

Management Minor - A minimum of 12 credit hours, including MGT 320 and 422; plus six hours of 400 level MGT courses.

Management Information Systems Minor - A minimum of 12 credit hours to include MIS 290 and MIS 340, plus six hours from among the 300/400 level MIS courses (excluding MIS 475).

Marketing Minor - A minimum of 12 credit hours, to include MKT 340 and nine other hours of Marketing.

Military Science and Leadership Minor - A minimum of 16 credit hours in military science and 3 credit hours in history, as well as completion of the Summer training program Leadership Development and Assessment Course at Fort Lewis, WA. All Military Science courses are 300- and 400- level (MS 301/301L, MS302/302L, MS401/401L, MS402/402L). Completion of minor with approval of the Professor of Military Science.

Risk Management and Insurance Minor - A minimum of 12 credit hours to include FIN 321, FIN 329, FIN 405, and three hours from among (1) a SFT course approved by the Finance and Economics division, or (2) a 300-400 level course approved by the Finance and Economics division.

3+2 PROGRAM

The 3+2 Program offered by the Lewis College of Business allows students to complete both their Bachelor of Business Administration and their Master of Business Administration or Master of Science in Accountancy, Health Care Administration, or Human Resource Management in a total of five academic years. Students enrolled in the program save time and money.

Students that meet the requirements that follow may enroll in up to nine hours of graduate coursework while still a senior. Students are allowed to double-count up to nine hours of graduate level courses from their graduate degree toward their bachelor's degree requirements. Three hours of graduate work may count as a major required elective (for example, a graduate MGT class can count as a MGT elective for a Management major) and six hours may count as free electives.

The 3+2 Program is especially attractive for accounting majors, who can enroll in the program to meet the requirements for the MBA or MS while completing the 150 hours required by the state of West Virginia to become a CPA.

Admission Requirements for Master of Business Administration

Students may apply to the 3+2 Program after all eligibility requirements are met. This typically occurs during the second semester of the junior year. Students must meet the following:

1) Senior status or be able to attain senior status after completion of the semester in which the student is currently enrolled;
2) Have completed all undergraduate foundation courses (ACC 215, ACC 216, ECN 250, ECN 253, MGT 218, MKT 340, MGT 320, and FIN 323) with a grade of "B" or better in each course by the end of the semester in which the student will be enrolled in the 3+2 Program; and completed a three-hour calculus course;
3) Be reasonably likely to complete all undergraduate degree requirements within two semesters after being admitted to the 3+2 Program;
4) Have an overall undergraduate GPA of 3.0 or better at the time of application.

Admission Requirements for Master of Accountancy

Students may apply to the 3+2 Program after all eligibility requirements are met. This typically occurs during the second semester of the junior year. Students must meet the following:

1) Senior status or be able to attain senior status after completion of the semester in which the student is currently enrolled;
2) Have completed Accounting Foundation courses with a grade of "C" or better in each course (ACC 311, 312, 318, 341, 348, and 429) before the student will be enrolled in the 3+2 Program;
3) Be reasonably likely to complete all undergraduate degree requirements within two semesters after being admitted to the 3+2 Program;
4) Have an overall undergraduate GPA of 3.0 or better at the time of application; or have completed the GMAT and received a score of 500 or better and have a minimum overall GPA of 2.75; or have a minimum overall GPA of 2.75 and a 3.0 average in ACC 311, 312, 318, 341, 348, and 429.

Admission Requirements for Master of Health Care Administration

Students may apply to the 3+2 Program after all eligibility requirements are met. This typically occurs during the second semester of the junior year. Students must meet the following:

1) Senior status or be able to attain senior status after completion of the semester in which the student is currently enrolled;
2) Be reasonably likely to complete all undergraduate degree requirements within two semesters after being admitted to the 3+2 Program;
3) Have an overall undergraduate GPA of 3.0 or better at the time of application.

Admission Requirements for Master of Human Resource Management

Students may apply to the 3+2 Program after all eligibility requirements are met. This typically occurs during the second semester of the junior year. Students must meet the following:

1) Senior status or be able to attain senior status after completion of the semester in which the student is currently enrolled;
2) Have completed all undergraduate foundation courses (MKT 340 and MGT 320) with a grade of "B" or better in each course by the end of the semester in which the student will be enrolled in the 3+2 Program;
3) Be reasonably likely to complete all undergraduate degree requirements within two semesters after being admitted to the 3+2 Program;
4) Have an overall undergraduate GPA of 3.0 or better at the time of application.

MILITARY SCIENCE

U.S. Army Reserve Officers' Training Corps

The Marshall University Reserve Officer Training Corps (ROTC) program, established at Marshall in September 1951, is open to both men and women. The objective of this program is to produce creative and adaptable leaders of character capable of service as commissioned officers in the U.S Army's active and reserve forces. It provides a basic military education that, in conjunction with other college disciplines, develops the attributes essential for successful executive performance. Individuals who successfully complete all of the training may be commissioned in the United States Army, the United States Army Reserve or the National Guard upon graduation from the university.

Curriculum

The ROTC Program is divided into two parts - the Basic Course and the Advanced Course. The Basic Course (MS I and MS II) consists of 100- and 200-level Military Science classes and is designed primarily for freshman and sophomore students. Students do not incur any military obligation for participating in the Basic Course. The Advanced Course (MS III and MS IV) consists of 300- and 400-level Military Science classes and is reserved for junior, senior and graduate students. The Advanced Course enrollment requires approval of the Professor of Military Science. Upon contracting, students incur a military obligation and begin receiving a monthly stipend of $300 to $500 (depending on MS level) in addition to any scholarship benefits.

The Military Science curriculum can be taken in conjunction with any of the four-year university degree programs and may be applied toward graduation requirements as electives. Additionally, Advanced Course completion is a recognized academic minor in Military Science and Leadership. Students who attain a high standard of academic and military achievement will be given the opportunity to accept an active duty commission with beginning salary of approximately $43,000 per year.

Two-Year Program

Students who have not taken the first two years of Military Science may gain credit by attending the Cadet Initial Entry Training (CIET) course (MS 251) at Fort Knox, Kentucky. Students are awarded six credit hours for this camp and are paid approximately $900 for attending the four week camp. The Cadet Initial Entry Training (CIET) is the premier leadership program of its kind in the United States. An intense four-week introduction to Army life and leadership training of the Reserve Officers' Training Corps, the aim of the course is to motivate and qualify cadets for entry into the Senior ROTC program. Students interested in the two-year program should contact the military science department. Also, qualified veterans and students who have had junior ROTC in high school may be awarded credit for the first two years of ROTC.

Minor in Military Science and Leadership

A minimum of 16 credit hours in Military Science and 3 credit hours in History, as well as completion of the Cadet Summer Training Course at Fort Knox, Kentucky, will lead to a minor in Military Science and Leadership. All Military Science courses in the minor are 300 and 400 level (MS 301/301L, MS 302/302L, MS401/401L, MS 402 /402L). Completion of the minor is with approval of the Professor of Military Science.

Eligibility

To be eligible for enrollment in ROTC, an applicant must be a regularly enrolled full-time student capable of participating in a normal college physical education program. To progress to the Advanced Course, students must meet several requirements, including age, physical condition, and moral standards; have a 2.0 overall Grade Point Average, and be entering their junior year of college. Members of the Army Reserve and National Guard may enroll in Military Science classes and receive a commission.

Scholarships and Allowances

Scholarships are available for two, three, or four years. Students enrolled in the Advanced Course receive a tax-free subsistence allowance each month. They also receive about $700 for attending a five-week Advanced Camp (between the junior and senior year). Total remuneration for the final two years is approximately $7,500. All uniforms and equipment are furnished at no cost to students.

Military Science Extracurricular Activities

In addition to ROTC classes, the Military Science Department offers unique opportunities in various activities. These activities are designed to create new and lasting friendships as well as to develop leadership skills. The extracurricular activities are: the Color Guard, Intramural Sports, and Ranger Challenge Team (the varsity sport of Cadet Command).

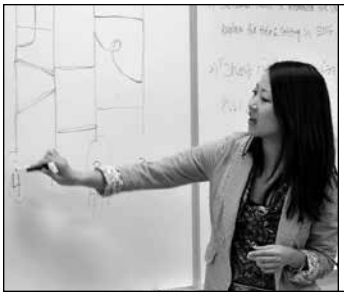
For further information, contact the Military Science Department, Room 217, Gullickson Hall, or call 304-696-6450.

Summer Training Opportunities

In addition to the Leaders Training Course and the Leader Development and Assessment Course, ROTC offers other training opportunities to broaden experience and leadership. These include the Basic Airborne Course, Air Assault Course, Mountain Warfare, Northern Warfare, United Kingdom Officer Training Course, Cadet Troop Leadership Training, Drill Cadet Leadership Training, Army Science Board, Cadet Intern Program, Nurse Summer Training Program, JFK Special Warfare Internship Program and Cultural Leadership Program. Some of these programs are conducted outside of the continental United States and with foreign countries. All programs are competitive and require the approval of the Professor of Military Science. Some cadets may also elect to train with a local Army Reserve or National Guard unit, each with additional training opportunities and benefits.

Ranger Challenge

This Cadet Command Varsity Sport challenges students to become better leaders and hone such Army skills as marksmanship, land navigation/orienteering, rope bridge, hand grenades, patrolling, physical fitness, and ruck marching. Winning teams will have the opportunity to compete at the prestigious Sandhurst Competition at West Point Military Academy.



College of Education and Professional Development

Dr. Teresa Eagle, Dean
Dr. Thelma (Sissy) Isaacs, Associate Dean
Dr. Sandra Stroebel, Associate Dean
www.marshall.edu/coepd
coepd@marshall.edu

Program Directors

Early Childhood Education: Dr. Ruthann Arneson (*arneson1@marshall.edu*)
Curriculum, Instruction and Foundations (Elementary/Secondary/Reading): Dr. Paula Lucas (*whitep@marshall.edu*)
Special Education: Dr. Debra Lockwood *(conner4@marshall.edu)*
Instructional Technology and Design: Dr. George Watson *(watson@marshall.edu)*

Professors

N. Arneson, Backus, Dozier, Isaacs, Klein, Lucas, Murphy, Reed, Seelinger, Watson

Associate Professors

Cartwright, Corrigan

Assistant Professors

Allenger, R. Arneson, Brumbaugh, Dunham, Jackson, Kinghorn, Lockwood, McFarland-Whisman

MISSION OF THE COLLEGE

The College of Education and Professional Development (COEPD) is one of the oldest academic units within Marshall University. When the West Virginia Legislature purchased Marshall College in 1867, it ensured the preparation of teachers by establishing the West Virginia State Normal School as part of the college program. This function has remained an integral part of the university mission throughout the years.

The College of Education and Professional Development continues to prepare teachers and other professional educators, including counselors, principals, supervisors, and superintendents. It also provides continuing education opportunities for professional educators. All teacher education programs at Marshall University are under the direction of the College of Education.

The College of Education and Professional Development provides educational services for students and the community which include the Appalachian Rural Systemic Initiative, Appalachian Studies Association, Autism Training Center, Child Development Academy, Early Education Center, Learning Resources Center (LRC), Testing Center, the Center for Higher Education for Learning Problems (HELP), the Center for Reading Excellence, and the June C. Harless Center for Rural Educational Research and Development. The College of Education and Professional Development provides education and services for programs that are open, complex, demanding, and evolving. It meets the academic needs of educators and other professional personnel.

PROGRAM CHANGES FOR THE COLLEGE OF EDUCATION AND PROFESSIONAL DEVELOPMENT

Students in the College of Education and Professional Development should monitor their programs of study carefully due to ongoing curricular changes. Please check with your advisor and/or the director of the Student Center of Professional Education Services (SCOPES) for information regarding your program.

ADMISSION TO THE COLLEGE OF EDUCATION AND PROFESSIONAL DEVELOPMENT

Regular admission to the university constitutes admission to the College of Education and Professional Development for entering freshmen.

DEGREE REQUIREMENTS

Students who expect to complete degree requirements in the College of Education and Professional Development are required to complete their ***capstone experience*** during one semester of the senior year. Students must complete at least 56 hours at Marshall University.

Candidates for a bachelor's degree who entered Marshall University within ten years prior to their graduation may graduate by meeting the requirements in effect at the time of their entrance into the College of Education and Professional Development.

When the candidate fails to complete the requirements within ten (10) years, he/she must meet the graduation/certification requirements in effect at the time of re-entry to the program. Any questions related to this matter should be referred to the director of the Student Center of Professional Education Services (SCOPES).

CREDIT FOR COURSES OFFERED EXTERNALLY

Credits earned through correspondence, extension, military service, radio, television, and special examinations are accepted up to a maximum of 28 semester hours. Courses are accepted only if such courses are offered by institutions of higher education which are accredited by a regional accreditation association of secondary schools and colleges and the National Council for Accreditation of Teacher Education. Enrollment for any such credit should be approved through the Student Center of Professional Education Services (SCOPES) prior to enrollment.

ACADEMIC PROBATION

Any student who has less than a 2.0 average will be placed on academic probation. Students with transfer credit must satisfy the 2.0 overall and institutional requirement.

A student on probation must show the improvement stipulated by the Marshall University Academic Probation and Suspension Policy during each succeeding term in which he or she is enrolled. Students failing to meet this standard will be suspended and declared ineligible to attend the next regular academic semester or may be dismissed from the university.

1. Students, while on academic probation, must request permission to enroll each term from the director of the Student Center of Professional Education Services (SCOPES) in Jenkins Hall 225.
2. Students desiring to take courses at another institution must complete an official request form seeking approval **PRIOR** to visiting another institution as a transient student.

PROGRAM REQUIREMENTS

The following information refers to programming required in the College of Education and Professional Development.

Students must complete the curricular requirements as outlined in the undergraduate catalog in effect at the time they enter their degree programs. **Students should monitor their programs of study carefully due to ongoing curricular changes.**

A minimum of 120 semester hours is required by the university for graduation. The degree program selected by a College of Education and Professional Development major could require additional hours to satisfy graduation. Program curricula, as printed, could have the same course listed in the general studies and the option areas. These need to be identified to determine the SPECIFIC NUMBER of SEMESTER HOURS REQUIRED for graduation in the selected major(s).

Credits for developmental courses are not included in the minimum 120-hour total.

A minimum of 45 semester hours must be earned in 300-400 level courses. Courses transferred from two-year colleges may not be used as part of the 300-400 level requirements. Courses transferred from four-year accredited colleges retain their original numbers.

Although students are expected to complete the majority of their work at Marshall University, it is possible to complete some coursework at other institutions. Arrangement for such enrollment must be made in advance of enrollment. Students must obtain a permission form in the Student Center of Professional Education Services (SCOPES), Jenkins Hall 225.

GRADUATION REQUIREMENTS

Graduation requirements in the College of Education and Professional Development differ by program area. General requirements for teacher education programs are listed. Individual program requirements are identified with the specific programs. **Students should monitor their programs of study carefully due to ongoing curricular changes in many programs.**

Teacher Education Programs:

- Satisfactory completion of the Core Curriculum, and the culminating capstone experience (student teaching). Completion of all required courses in each specialization, and in professional education.
- Grade Point Averages of:
  a. 2.80 overall and on all courses attempted at Marshall University. Transfer credit may not be used to increase the Marshall University Grade Point Average except in the case of *D/F* Repeat Policy.
  b. 2.80 in each specialization.
  c. 3.0 in professional education.
- Completion of a minimum of 120 semester hours, including at least 56 hours at Marshall University.
- A grade of *C* or better in all specialization and professional education courses.
- Successful passage of all parts of the Praxis CORE Academic Skills for Educators Exam.
- Successful passage of the Praxis II Content Exam.

TEACHER EDUCATION

Pre-Teacher Education

Incoming freshmen are admitted to Marshall University as Pre-Teacher Education students. During this time students are encouraged to register for Core Curriculum requirements. There is no bachelor's degree granted in pre-teacher education. Full admission to teacher education is dependent on successful completion of the requirements for admission to teacher education. To promote satisfactory academic progress and progress toward graduation, Pre-Teacher Education students must be admitted to the Teacher Education program prior to the completion of 90 credit hours. As noted below, admission to Teacher Education status requires a 2.80 GPA and successful completion of the Praxis CORE Academic Skills for Educators Exam. Pre-Teacher Education students should plan well in advance to insure that these requirements are met prior to completion of their 90th credit hour.

Transfer students are also admitted under the Pre-Teacher Education curriculum until they have met all of the standards for admission to teacher education.

Admission to Teacher Education

1. Enrolled in the College of Education and Professional Development as a PRE-TEACHER EDUCATION major.
2. Completed at least 24 credit hours, including EDF 201/270 (12 hours for transfer students).
3. Maintained Grade Point Average of 2.80 or better for all courses attempted OVERALL.
4. Maintained Grade Point Average of 2.80 or better for all courses attempted at Marshall University.
5. ACT composite of 21 (see the Student Center of Professional Education Services, 225 Jenkins Hall, for alternative entrance table).
6. Successfully passed ALL THREE PARTS (reading, writing, mathematics) of the Praxis CORE Academic Skills for Educators Exam, a requirement of the West Virginia Department of Education. This test **must be successfully completed within the first 24 hours of coursework in order for the student to make continuous progress in the professional education core.**

   Transfer students **must** complete the Praxis CORE Academic Skills for Educators Exam during their first 12 hours at Marshall University if they plan to begin professional education core classes during their second academic term.
7. Completion of Self-Assessment in LiveText.
8. Completion of Writing Sample in LiveText.
9. Three Recommendations uploaded to LiveText.

Process for Application for Admission to Teacher Education

1. During enrollment in EDF 201, each student will be asked to submit an Application for Admission to Teacher Education.
2. During the semester the application is submitted, personnel in the Student Center of Professional Education Services (SCOPES) (Jenkins Hall 225) will evaluate each student's record to determine eligibility for admission to Teacher Education.

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3. Each transfer student is responsible for initiating the application procedure through the Student Center of Professional Education Services (SCOPES), 225 Jenkins Hall.

Students who desire to become teachers in early childhood, pre-kindergarten/kindergarten, elementary, middle, and secondary schools and who are confident that they can attain the standards of academic and professional competency required, enroll in the College of Education. Students who are enrolled in another college or school of the university may not enroll in the professional education core courses except for EDF 201 and EDF 270.

Beginning Spring 2018, any candidate who wishes to student teach must successfully complete the Praxis II Content exam prior to the first day of the clinical placement.

Minor

No education minor is available through the College of Education.

CLINICAL EXPERIENCES

All teacher education students participate in clinical experiences which permit them to observe children or youth in activities which are examples of the teaching/learning process. These experiences are provided in cooperation with the local public schools. Students who enroll for these experiences must meet the standards of professionalism and conduct that apply to employees in the schools to which they are assigned.

Certain other programs require clinical experiences that are associated with specific courses. Students should examine the "Courses of Instruction" section of this catalog for descriptions of courses in their programs.

The College of Education and Professional Development *Clinical Handbook* can be accessed online at *www.marshall.edu/coepd/plc*.

PURIFIED PROTEIN DERIVATIVE (PPD) TEST

Students will not be permitted to work in any public school without a valid negative PPD test. The West Virginia State law concerning PPD examinations for persons entering public schools (HB 709) states that a person working with public school children **MUST** have a PPD examination prior to entering public school. This examination is valid for one year with the following exception:

If the PPD results in a positive reaction, the examinee must submit to an x-ray examination each year thereafter. If the x-ray proves negative, the person is then permitted to work in public school.

Students who expect to enter schools for clinical experiences during any semester must arrange for a PPD test prior to entering the school. REMEMBER, there is a THREE day waiting period for a PPD test. Persons are not permitted to enter a public school until a negative report is obtained. *Reports must be carried with the student and presented to the principal or his/her representative upon entering a school.*

Check with the instructor of your course or inquire in the Student Center of Professional Education Services (SCOPES) for further details.

BACKGROUND CHECK POLICY

ALL STUDENTS REPRESENTING MARSHALL UNIVERSITY MUST BE AUTHORIZED BY THE DIRECTOR OF CLINICAL EXPERIENCES PRIOR TO ENTERING A SCHOOL.

West Virginia law mandates that all persons entering a school or having contact with students must have completed a background check and have not been found on the sexual offender registry prior to entering a school. Each county and school can also use the results of that background check as a basis for admitting or denying admittance. It is the procedure of the Marshall University College of Education and Professional Development that every student will obtain a background check prior to being placed in a school setting.

Marshall University has chosen Castlebranch.com as an approved provider of background checks for our students. You must obtain a background check at Castlebranch.com or another third party vendor (approved by the Student Center of Professional Education) to be permitted into a school. All results must be received prior to placement for any clinical assignment. Castlebranch charges $46.00 for this service. Renewals are cheaper – check the website. All fees are the responsibility of the student. You should contact the clinical office at 304-696-3239 if you have any questions about your background check.

ALL STUDENTS ENTERING A FIELD EXPERIENCE MUST COMPLETE A BACKGROUND CHECK EVERY 12 MONTHS.

STUDENT TEACHING

An applicant for a professional certificate who is to be recommended to the West Virginia Department of Education for licensure must enroll for student teaching at Marshall University.

Any coursework in addition to the student teaching block must be approved by the director of the Student Center of Professional Education Services (SCOPES) prior to registration. Any additional class scheduled during this period must meet after 4:00 p.m. A student may not take more than sixteen (16) semester hours during the student teaching semester.

Students are assigned to public schools that have an agreement to provide student teaching experiences in cooperation with Marshall University. Since the supply of supervising teachers is limited and the College of Education and Professional Development has a large number of teacher candidates, it is sometimes necessary to assign students to selected schools outside the campus area. It is not possible to place students in schools within walking distance. Students must provide transportation to student teaching site(s). In all cases the responsibility for placements rests with the Director of Clinical Experiences and with the approval of the public school administration of the county and school in which the student is to be placed. Students who are assigned a student teaching position but who do not complete the assignment may not be assured of a future assignment.

Admission to student teaching at Marshall University requires the following:

1. Completion of the professional education core prerequisites.
2. CORE CURRICULUM REQUIREMENTS with the grade of *C* or better in English composition 101, 201, or 201H.
3. A Grade Point Average of 2.80 or better in all courses attempted, all coursework at Marshall University, and all courses in the teaching specializations; and a 3.0 in all courses in professional education.

   Courses in specialization(s) and professional education must be passed with the grade of *C* or better. Students should review their program sheets to identify professional education courses. It will be the student's responsibility to insure that the above grade averages have been met prior to entering student teaching. Any student who enters student teaching without the above grade averages will be withdrawn by administrative action.
4. The completion of 90% of the coursework in the teaching specialization(s). Applicants must complete a minimum of 100 hours prior to the beginning of student teaching. All professional education courses must be taken prior to student teaching except EDF 475.
5. **Application for Student Teaching**. Applications must be completed the semester previous to enrolling for this experience. The deadline date for making application for student teaching will be posted outside the Office of Clinical Experiences, Jenkins Hall 227.
6. Successful passage of the Praxis II Content exam.

NOTE: Students who are members of varsity teams may not participate in the student teaching program during the active season of their particular sport (e.g., football team members may enroll for student teaching only during the spring semester, basketball team members may enroll for student teaching only during the fall semester and so on).

Site Selection

Teacher candidates will be placed in public schools where there is exposure to students who are diverse, at risk, and have special needs. The public school supervisors at the schools have a thorough understanding of the College of Education's expectations for the candidates during these experiences. While in these schools, the teacher candidates will have an opportunity to integrate content, basic professional knowledge and pedagogical skills in an appropriate educational setting.

CERTIFICATE REQUIREMENTS (WEST VIRGINIA)

In addition to the graduation requirements, the prospective educator must meet the following requirements for West Virginia certification:

1. Passing score on the applicable Praxis II: Subject Test for each teaching specialization. All students should complete the test(s) during their senior year.
2. Passing score on the applicable Praxis II: Principles of Learning and Teaching (PLT) tests.
3. Cumulative Grade Point Average of 2.7 or better for all courses attempted.
4. Grade Point Average of 2.7 or better in all subject specialization courses, with all courses passed with a *C* or better.
5. Grade Point Average of 2.7 or better in all professional education courses, with all courses passed with a *C* or better.
6. Grade Point Average of 2.7 or better in all courses attempted at Marshall University. Transfer credit may not be used to increase the Grade Point Average except in the case of *D/F* Repeat Policy.

Students seeking certification in states other than West Virginia should check with the appropriate state department of education.

CERTIFICATE RENEWAL

Marshall University, in addition to offering teacher preparation programs, is actively involved in the continuing education of all professional teachers. The West Virginia Board of Education has approved a program of continuing education for all professional teachers and school service personnel. Information relative to renewal of a teacher's professional certificate is available from the Certification Office, Jenkins Hall 225.

POLICIES FOR ADMISSION AND RETENTION IN THE UNDERGRADUATE TEACHER EDUCATION PROGRAM

Admission to Teacher Education

Undergraduate, post-baccalaureate, or graduate students pursuing initial licensure in Elementary or Secondary Education must be admitted to teacher education before they can take professional education courses or student teach.

Monitoring Acceptance Status

Once applications are processed and entered on the teacher education database, the student will receive an e-mail that indicates whether he/she has been accepted in teacher education or if any deficiencies exist.

Appeals of Acceptance Status

Students who have not been fully accepted in teacher education may appeal to the Teacher Education Standards Committee (TESC). The Teacher Education Standards Committee meets the Friday before each semester begins (fall and spring semesters only). Students make an appointment to see the committee through the Student Center of Professional Education Services (SCOPES), Jenkins Hall 225, prior to the beginning of the semester.

Maintaining Admission Status

Students who have been admitted into teacher education programs must continue to meet all criteria that were required for admission throughout their course of study. Failure to maintain those criteria could result in probationary status or dismissal from the program.

It is expected that students in professional education programs exhibit professional behaviors and apply professional knowledge in their coursework and clinical experiences. Students will be expected to:

- Communicate effectively both orally and in writing;
- Apply professional knowledge and skills (content and methodology) to meet their ethical and professional responsibilities in order to enhance student learning;
- During coursework and clinical experiences, demonstrate a respect for individual and family diversity;
- Demonstrate the application of critical thinking skills;
- Meet all standards of professional behavior established at each clinical site.

Probationary Status or Unsatisfactory Performance

Initiating the Process

Any member of the professional education community who questions the competency of a candidate related to any of the criteria for admission or other relevant professional performance standard, as described above, should contact the candidate's program director. The program director will request that the Executive Cabinet for the College of Education and Professional Development review the candidate's overall performance and make one of three decisions.

- Student's performance is satisfactory
- Student's performance is unsatisfactory; the student should be put on probation and counseled with an appropriate plan for action. The Teacher Education Standards Committee should be notified.
- Student Performance is extremely unsatisfactory; the student should be counseled regarding options for a major other than teacher education. If necessary, the case would be referred to the Teacher Education Standards Committee.

The student will be informed of each performance review, have the opportunity to meet with the Executive Cabinet and the Teacher Education Standards Committee, and be informed of the decisions of the committees.

Determining Probation

To place a student on probation, the program director will notify the Executive Cabinet that he/she is recommending probationary status for the student.

- If the Executive Cabinet agrees with this recommendation, it will oversee development of a plan of action that identifies the areas of concern, an intervention plan, expectations for satisfactory performance, a monitoring

process and timeline including what impact the probationary status would have on student teaching, and specified consequences. The student will receive a copy of the recommended plan.

- The Teacher Education Standards Committee will review the plan and endorse it or ask for more clarification first. The student may request to meet with TESC if he/she objects to any portion of the plan. TESC will then make the decision regarding the plan, and notify all parties. The student will receive a copy of the final plan and will meet with the Associate Dean and the Program Director (or representative) to review the plan.
- At the end of the time period specified in the action plan, the Executive Cabinet will either recommend removal or extension of the probationary status or dismissal from teacher education.

Determining Extremely Unsatisfactory Performance

To recommend that a student not continue in teacher education, the program director will submit a written recommendation from the Executive Cabinet with supporting documentation to the Teacher Education Standards Committee. The student will also receive the information.

- Within 21 days, the Teacher Education Standards Committee will meet to review the recommendation. At that time the Program Director (or representative) and the student will be asked to meet with the committee. Each will have the opportunity to present his/her case with supporting evidence.
- The Teacher Education Standards Committee will then meet in a closed session to make a decision either not to permit the student to continue in teacher education or to place him/her on a continuing probationary status.
- All parties involved will be advised of the results of the review.
- If a student is placed on continuing probation, a timeline for improvement will be developed. If the student does not improve, he/she will not be permitted to continue in teacher education.
- Students who are not successful on continuing probation in the teacher education program will be notified in writing by the chair of the Teacher Education Standards Committee. Reasons for non-continuation in the program will be explained as they relate to standards of professional behavior.

Procedures for Appeal

The decision of the Teacher Education Standards Committee may be appealed to the Dean of the College of Education and Professional Development on the grounds of due process. This is the final decision level in the College of Education and Professional Development.

COLLEGE OF EDUCATION AND PROFESSIONAL DEVELOPMENT PROGRAMS

The degree offered by the College of Education and Professional Development is the Bachelor of Arts degree (B.A.). Students may select from the following teacher education programs:

1. Early Childhood Education
2. Elementary Education K-6 Comprehensive
3. PreK-Adult Education
   - Art
   - Music
   - Wellness
4. Secondary 5-Adult Education
   - English
   - General Science
   - Mathematics
   - Social Studies
5. Secondary 9-Adult Education
   - Biological Sciences
   - Chemistry
   - Physics
6. Additional Endorsement Programs - Optional programs that must be coupled with one of the above listed majors.
   - Early Education PK-K
   - English 5-9
   - General Science 5-9

(continued)

Mathematics 5-9
Multi-Categorical Special Education K-6 or 5-Adult
Social Studies 5-9

Students obtain curriculum sheets from the Student Center of Professional Education Services (SCOPES), 225 Jenkins Hall, when they declare their majors. These sheets will assist in the planning and in the recording of progress.

Students should monitor their programs of study carefully due to ongoing curricular changes in many programs.

CURRICULAR STRUCTURE

The Bachelor of Arts degree in the College of Education and Professional Development includes the following components:

University-Wide Requirements

Core I requirements ..... 9 hours
- FYS 100
- 2 CT-designated courses

Core II requirements ..... 25 hours
- ENG 101
- ENG 201
- CMM 103
- Fine Arts
- Humanities
- Math
- Physical/Natural Science
- Social Science

Additional requirements ..... 9 hours
- 6 hours of Writing Intensive courses
- 3 hours of International or Multicultural courses

College-Wide Requirements
- 45 Upper-division hours
- Successful passage of all three parts of the Praxis CORE Academic Skills for Educators Exam
- Admission to Teacher Education

ART PreK-ADULT

TEACHING SPECIALIZATION ..... 55 hours
- ART 113, 201, 202, 214, 215, 217, 218, 219, 350 or 353, 299, 301, 305, 307, 315, 340, 389 or 464, 460, 499
- ART __ and __: Select two advanced courses from Art Studio, Art History, or Art Education

PROFESSIONAL EDUCATION CORE ..... 39 hours
- EDF 201, 270, and 475
- CISP 421 and 422
- CI 345, 401, 449, and 470
- ART 468
- Student Teaching (full semester) (CAPSTONE)

Other Requirements:

- A portfolio of art work completed in the freshman year for review by the Art faculty. This must be submitted **PRIOR TO** enrollment for advanced art classes.
- A satisfactory exhibition of creative work.
- All coursework in the School of Art and Design must be completed with a grade of *C* or better. A course with a grade of *D* or *F* must be repeated with at least a grade of *C* to count for graduation or to be used as a prerequisite for another required course.
- In addition to the requirements listed here, Art Education majors must meet the policies listed under the School of Art and Design, listed within the College of Arts and Media.

BIOLOGICAL SCIENCE 9-ADULT

TEACHING SPECIALIZATION.....66-67 hours

MTH 122 and 127

BSC 120, 121, 227, 302 or 430 or 460, 312, 320 or any Ecology or Environmental Science course, 322, 324, 416, and 491

CHM 211, 217, 212, and 218

GLY 200 and 210L

PHY 201 and 202

PS 325

PROFESSIONAL EDUCATION CORE ..... 39 hours

EDF 201, 270, 435, and 475

CISP 421 and 422

CI 345, 415, 449 and 470

Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT.....3 hours

CI 350

CHEMISTRY 9-ADULT

TEACHING SPECIALIZATION.....46-51 hours

MTH 127 or 130, and 140 or 229

CHM 211, 217, 212, 218, 307, 327, 345, 365, 366, and 490 or 491

CHM 300-499 Elective

GLY 420

PS 325

PROFESSIONAL EDUCATION CORE ..... 39 hours

EDF 201, 270, 435, and 475

CISP 421 and 422

CI 345, 415, 449, and 470

Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT.....3 hours

CI 350

EARLY CHILDHOOD EDUCATION

TEACHING SPECIALIZATION ..... 45 hours
- CI 201, 459
- CISP 320, 420
- ECE 101, 102, 201, 204, 215, 303, 322, 323, 324, 325

PROFESSIONAL EDUCATION CORE ..... 39 hours
- PSY 201, 311
- EDF 475
- CISP 428, 429, 445, 454, and 455
- ECE 420, 421, 430, 431, 435, and 472

EARLY EDUCATION PK-K (Second specialization only)

TEACHING SPECIALIZATION ..... 42 hours
- ECE 303, 430 and 431
- CISP 428
- CI 459

ELEMENTARY EDUCATION K-6 COMPREHENSIVE

TEACHING SPECIALIZATION ..... 49 hours
- ART 335
- CI 101, 201, 248, 342, 343, and 446
- ESS 305
- GEO 317
- HST 103, 230, and 231
- MUS 342
- BSC 105
- PS 121, 122

PROFESSIONAL EDUCATION CORE ..... 48 hours
- EDF 201, 270, 435 and 475
- CISP 421 and 422
- CI 301, 321, 360, 442, 447, 448, and 471
- Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours
- CI 350

ENGLISH 5-ADULT

TEACHING SPECIALIZATION ..... 36 hours
- ENG 350, 355, 402, 419, 430, 476, 499
- Choose one of the following: ENG 354, 360 or 408
- Choose two from ENG 203, 221, 240 , 241 , 242, 428, 450, or 451
- Choose one of ENG 410 or 412
- Choose one of ENG 421, 422, 423, 424, 432, or 434

PROFESSIONAL EDUCATION CORE ..... 42 hours

EDF 201, 270, 435, and 475
CISP 421 and 422
CI 345, 401, 403, 449, and 470
Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours

CI 350

ENGLISH 5-9 (Second Specialization only)

TEACHING SPECIALIZATION ..... 30 hours

ENG 203 or 221 or 240 or 241 or 242; 350; 402; 410 or 412; 419; 420, and 475
Choose one of ENG 409, 411, 413, 417, 421, 422, 436, 437, 438, 446, or 462
Choose one of ENG 414, 415, 416, 423, 424, 433, 434, or 447
Choose one of ENG 428, 450, or 451

PROFESSIONAL EDUCATION CORE ..... 18 hours

CI 401 and 403
Student Teaching CAPSTONE (full semester)

GENERAL SCIENCE 5-ADULT

TEACHING SPECIALIZATION ..... 50 hours

MTH 122 and 127
BSC 120, 121, and 320 or any Ecology or Environmental Science course
CHM 211, 217, 212, and 218
GLY 200 and 210L
PHY 201, 202, 203, and 204
PS 101, 325

PROFESSIONAL EDUCATION CORE ..... 45 hours

EDF 201, 270, 435, and 475
CISP 421 and 422
CI 345, 401, 403, 415, 449, and 470
Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours

CI 350

GENERAL SCIENCE 5-9 (Second Specialization only)

TEACHING SPECIALIZATION ..... 32 hours

BSC 120, 121, 320 or any Ecology or Environmental Science course
GLY 200 and 210L
PS 101 109, 109L, 110, 110L, 325

PROFESSIONAL EDUCATION CORE ..... 18 hours

CI 401 and 403
Student Teaching CAPSTONE (full semester)

JAPANESE PreK-ADULT

Admission to this program is currently suspended.

MATHEMATICS 5-ADULT

TEACHING SPECIALIZATION ..... 47 hours

MTH 229, 230, 231, 300, 331, 404, 405, 440, 445, 446, 448, 449, 450, and 491

PROFESSIONAL EDUCATION CORE ..... 42 hours

EDF 201, 270, 435, and 475

CISP 421 and 422

CI 345, 401, 403, 449, and 470

Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours

CI 350

MATHEMATICS 5-9 (Second Specialization only)

TEACHING SPECIALIZATION ..... 24-26 hours

MTH 122, 127 or 130, 140, 220, 225, 329, 400, and 401

PROFESSIONAL EDUCATION CORE ..... 24 hours

CI 301, 401 and 403

Student Teaching CAPSTONE (full semester)

MULTI-CATEGORICAL SPECIAL EDUCATION K-6 (Second Specialization only)

TEACHING SPECIALIZATION ..... 15 hours

CISP 320, 420, 438, 439 and 453

MULTI-CATEGORICAL SPECIAL EDUCATION 5-ADULT (Second Specialization only)

TEACHING SPECIALIZATION ..... 24 hours

CI 342, 343, 446

CISP 320, 420, 438, 439, and 453

MUSIC PreK-ADULT

TEACHING SPECIALIZATION ..... 62-65 hours

Principal Applied (12 Hours)

Principal Ensemble (7 Hours)

Techniques (5 Hours)

Recital (MUS 376) (0 Hours)

MUS 100 (7 classes)

MUS 111, 112, 113, 114, 211, 212, 213, 214, 218, 290, 301, 315, 320 or 321, 360, 361, 376 and 415

Voice, String, or Piano Majors: MUS 266 (1 semester/1 credit hour)

Instrumental Majors: MUS 266 (2 semesters/2 credit hours) and Choral Ensemble (1 semester/1 credit hour)

PROFESSIONAL EDUCATION CORE ..... 39 hours

EDF 201, 270, and 475

CISP 421 and 422

CI 345, 449, and 472

MUS 338, 339, and 340

Student Teaching CAPSTONE (full semester)

Other Requirements:

All coursework in the School of Music must be completed with a grade of *C* or above. A course with a grade of *D* or *F* must be repeated with at least a grade of *C* to count for graduation or to be used as a prerequisite for another required course.

In addition to the requirements listed here, Music Education majors must meet the policies listed under the School of Music, listed within the College of Arts and Media. Specifically, students should review the introductory section immediately under the music program heading, and the material under the Applied Music and Ensembles headings. In addition to this catalog, detailed information regarding music program policies and procedures and specific requirements for applied music and ensemble participation can be found in the *Music Student Handbook* issued by the School of Music.

PHYSICS 9-ADULT COMPREHENSIVE

TEACHING SPECIALIZATION ..... 57-58 hours

MTH 122, 127 or 130, and 140

CHM 211 and 217

GLY 200 and 210L

PHY 201, 202, 203, 204, 320, 421, 447, and 491 or 492

PS 325, 400, and 400L

PHY/PS (11 hours of Elective courses: 2 hours of advanced lab and 3 upper-elective courses)

PROFESSIONAL EDUCATION CORE ..... 39 hours

EDF 201, 270, 435, and 475

CISP 421 and 422

CI 345, 415, 449, and 470

Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours

CI 350

SOCIAL STUDIES 5-ADULT

TEACHING SPECIALIZATION ..... 51 hours

ECN 250 and 253

GEO 100, 203, and 317

HST 101, 102, 103, 208, 219, 230, 231, and 440

PSC 104

PSY 201

SOC 200

SOS 404

PROFESSIONAL EDUCATION CORE ..... 45 hours

EDF 201, 270, 435, and 475

CISP 421 and 422

(continued)

CI 345, 401, 403, 415, 449, and 470
Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours
CI 350

SOCIAL STUDIES 5-9 (Second Specialization only)

TEACHING SPECIALIZATION ..... 42 hours
ECN 200
GEO 100, 203, and 317
HST 101 or 102, 103, 208, 230, 231, and 440
PSC 104
PSY 201
SOC 200
SOS 404

PROFESSIONAL EDUCATION CORE ..... 18 hours
CI 401 and 403
Student Teaching CAPSTONE (full semester)

SPANISH 5-ADULT

Admission to this program is currently suspended.

WELLNESS (PreK-ADULT)

TEACHING SPECIALIZATION ..... 51 hours
DTS 210
HS 201, 220, 221, 222, 325, 365, 426
ESS 118, 211, 218, 305, 350, 369 and 435
6 PEL Activity Classes (Must have advisor's approval)

PROFESSIONAL EDUCATION CORE ..... 42 hours
EDF 201, 270, 435 AND 475
CISP 421 AND 422
CI 345, 401, 415, 449 AND 470
Student Teaching CAPSTONE (full semester)

ADDITIONAL COLLEGE REQUIREMENT ..... 3 hours
CI 350

College of Health Professions

Dr. Michael Prewitt, Dean
www.marshall.edu/cohp
cohp@marshall.edu

The College of Health Professions was formed in 1998 when the academic units of Nursing, Communication Disorders, Clinical Laboratory Sciences, and Dietetics united to better serve the health needs of the region. In July 2006 the college expanded to include the Department of Social Work. In 2010 we welcomed the School of Kinesiology and the Health Informatics program to the COHP. The undergraduate public health program is the only undergraduate public health degree offered in West Virginia. The Health Sciences degree will open doors for students seeking graduate education as well as those interested in integrating health sciences into other fields. We are proud to offer the only Doctor of Physical Therapy program in southern West Virginia. The School of Physical Therapy recently received candidate status in their accrediting process. The college offers a variety of health career opportunities at the associate, baccalaureate, and master's degree level.

MISSION

Consistent with the mission of Marshall University, the College of Health Professions (COHP) is committed to offering quality undergraduate and graduate nursing and health professions education. The focus of the College of Health Professions is upon being interactive with the community, including rural and underserved areas, and respond-ing to contemporary and future needs of society, nursing, and the health professions.

To accomplish this mission, the College of Health Professions:

- ensures the integrity of the programs through maintenance of rigorous professional education standards and through the high expectation of student learning and performance;
- encourages involvement of faculty in service to society and the profession;
- supports the engagement of faculty in research and scholarly activities;
- provides an environment that is sensitive to a culturally, racially, and ethnically diverse student body, faculty, and staff; and
- maintains an environment that provides for academic freedom and shared governance.

GRADUATION REQUIREMENTS FOR COHP MAJORS

The number of hours required for graduation varies among the COHP majors. While 120 is the minimum required by the university, several COHP major require additional hours.

GENERAL EDUCATION CORE REQUIREMENTS

The baccalaureate degree programs in the COHP require students to meet the University general education core requirements. The general requirements are listed below. In some programs students must take specific courses to meet core requirements. The most up to date information on the core, including lists of courses that fulfill the requirements is located at *www.marshall.edu/gened.*

CORE I:

First Year Seminar.....3 hours

FYS 100 should be taken during the freshman year.
Students who transfer to Marshall University as sophomores [30 or more credit hours] are exempt from taking FYS 100.

Critical Thinking (CT) .....6 hours

Students must choose from the Critical Thinking courses listed on the general education web page (*marshall.edu/gened*).

(continued)

Students who transfer to Marshall University as sophomores [30 or more credit hours] are only required to take one critical thinking course.

Students may wish to select a Critical Thinking course that will double-count as a Humanities (courses in bold).

CORE II:

Composition: ENG 101 and 201 (or 201H)..... 6 hours

Students with an ACT score of 28-33 are encouraged to take ENG 201H. Upon completion of this class with a minimum grade of "C" or better, students will receive six hours of credit to count toward ENG 101 and 201. If a student receives a grade of "D", the student will only receive three hours of credit toward ENG 201 and must either repeat ENG 201H or go back and take ENG 101. Students MUST receive a grade of "C" or better in ENG 201. Students who receive a grade of "D" in ENG 201 must repeat the course for a higher grade

Communication Studies ..... 3 hours

Students must choose from the Communication Studies courses listed on the general education web page (*www.marshall.edu/gened*)

Fine Arts..... 3 hours

Students must choose from the Fine Arts courses listed on the general education web page (*www.marshall.edu/gened*)

Humanities..... 3 hours

Students must choose from the Humanities courses listed on the general education web page (*www.marshall.edu/gened*)

Math ..... 3 hours

Students must choose from the Mathematics courses listed on the general education web page *(www.marshall.edu/gened)*

Physical/Natural Science: ..... 4 hours

Students must choose from the Physical/Natural Science courses listed on the general education web page *(www.marshall.edu/gened)*

Social Science..... 3 hours

Students must choose from the Social Science courses listed on the general education web page *(www.marshall.edu/gened)*

ADDITIONAL UNIVERSITY REQUIREMENTS

Writing Intensive: Students must select 6 hours of courses designated as Writing Intensive.

Multicultural/International: Students must select 3 hours of courses designated as Multicultural or International.

Students must complete the hours required to meet the program requirements of their degree program. The minimum hours required for graduation is 120, although most College of Health Professions majors require more than the minimum. The number of free elective hours a student will need to complete depends on the major, the number of hours needed take to fulfill the math requirement (3 or 5 hours), and double-counting general education requirements.

The number of hours required to graduate varies. To determine the number of free electives needed to reach the total hours to graduate from a specific major:

- Add up all the hours required on your curriculum sheet and subtract that number from 120. The total will be the number of free electives you need to complete. Free electives are any course that is 100-level or above. Please note that developmental courses (095, 096, 097, 098, 099, etc.) do not count toward completion of free electives or the 120 hours for graduation
- If you earn a "C" or better in a course and repeat it, that is considered a Repeat Passing Grade. If you earn a "D" in a course that was taken after your first 60 attempted hours and repeat it that is also considered a Repeat Passing Grade. Repeat Passing Grade hours cannot count toward the 120 hours needed for graduation and must be manually subtracted from the overall hours completed toward graduation.

Double-Counting

Any course that meets more than one graduation requirement (excluding free electives) can be double counted, if applicable. For example, CL 210 double-counts as Critical Thinking (CT) and Humanities. Because you must have a minimum of 120 credit hours to receive a degree, double-counting will increase the number of free electives you will need. Therefore, if you take a class that meets two graduation requirements, you will then take additional free elective hours in place of the second course requirement. You may only double-count in the general education area of your degree. You cannot double count one course as two major requirements.

COOPERATIVE PROGRAMS

The Marshall University Employee Dependent Undergraduate Tuition Assistance Program cannot be used to cover the tuition and fees of the St. Mary's/Marshall University cooperative programs, which include medical imaging, nursing, and respiratory care. These programs are classified as third-party waiver programs, which are exempted from the Employee Dependent Tuition Assistance Program.

PRE-HEALTH MAJOR

The Pre-Health curriculum is designed to encompass the Core Curriculum at Marshall University while preparing students for any of the health professions majors offered in the College of Health Professions. The courses include academic courses common to all health professions. This program of study is available for no more than four semesters. Therefore, students entering into Pre-Health, Pre-CD, Pre-CLS, or Pre-DTS must be eligible to enter their program of study by the end of the fourth semester or select an alternative choice of major. To facilitate the transfer from a pre-health designation to a major, an advisor hold will be placed on all students after three semesters. Students must meet with their advisors to select a major.

PRE-HEALTH COURSE REQUIREMENTS

In addition to those courses listed under Core I, Core II and University requirements, the courses required for each major are on the suggested four-year degree plans. If you have any questions, please consult with your advisor. A Pre-Health student should work with his or her academic advisor to develop a plan to meet the academic requirements of the major of his or her choice. Suggested courses include:

BSC 227 Human Anatomy
BSC 228 Human Physiology
CHM 203 General Chemistry I
CHM 204 General Chemistry II
CHM 211 Principles of Chemistry I
CHM 217 Principles of Chemistry I lab
CHM 212 Principles of Chemistry II
CHM 218 Principles of Chemistry II lab
MTH 121 Concepts and Applications of Mathematics
MTH 125 Finite Math
MTH 127 Expanded College Algebra,
MTH 130 College Algebra
PSY 201 General Psychology
SOC 200 Introduction to Sociology

Suggested Electives include:

ANT 201 Cultural Anthropology
ART 407 Tribal Art
BSC 250 Microbiology and Human Disease
CD 101 Intro to Communication Disorders
CD 241 Intro to Communication Science
CLS 105 Medical Terminology and Intro to Laboratory Medicine
DTS 201 Introductory Nutrition
DTS 202 Introductory Foods
Statistics (EDF 417, MGT 218, STA 225, PSY 223 or SOC 345)
GEO 100, Introduction to Cultural Geography
PH 105 Introduction to Epidemiology
PH 101 Introduction to Public Health
PH 270 Global Health
HS 200 Medical Terminology
HS 220 Personal Health I
HS 222 Personal Health II
HST 103, World Since 1850
PHY 101 Conceptual Physics
PHY 101L Conceptual Physics Lab
SFT 235 Introduction to Safety
SWK 203 Intro to Social Work
SWK 210 Social Justice and Human Behavior

CLINICAL LABORATORY SCIENCES

Dr. Jennifer D. Perry, Chair
www.marshall.edu/cohp
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Professor
Perry
Associate Professors
Amjad, Meadows

There are three degree options in the Clinical Laboratory Sciences (CLS) Department: the Associate in Applied Science in Medical Laboratory Technology (AAS-MLT or MLT); the Bachelor of Science in Medical Laboratory Science (BS-MLS), and the Bachelor of Science in Cytotechnology (BS-CYT). The AAS-MLT and BS-MLS form an integrated ladder curriculum following a "2+2" model. Students may choose to earn the associate degree only or to continue and also earn a bachelor's degree. The BS-MLS program is offered through online format only, and is for students who have already completed the AAS-MLT degree. All 300- and 400-level courses are offered online for the BS-MLS program. The bachelor's degree in Cytotechnology follows a "3+1" model, where a student completes 3 years of prerequisites and then completes a 1-year clinical component in a hospital school of cytotechnology.Information can be found on the CLS departmental website (*www.marshall.edu/clinical-lab-science*).

General information regarding CLS Degree Programs

Several courses in these curricula require a minimum ACT score or course prerequisites. Availability of hospital training sites varies, and placement is based on overall GPA of admitted students. Transportation and housing for hospital portions of these programs are the responsibility of the student. Medical insurance coverage is required for hospital rotations, and is the responsibility of the student. Costs of physical examinations, tuberculosis testing, and immunizations are borne by the student. Students will be required to either receive the hepatitis B vaccine series or sign a waiver form refusing the vaccine. Additional documentation may be required by individual clinical agencies or by the College of Health Professions. The College of Health Professions and the Clinical Laboratory Sciences Department provide academic advisement to students seeking admission to a CLS program.

Mission Statement

The mission of the Clinical Laboratory Sciences Department is to provide competent laboratory professionals who are qualified to staff health care facilities and, thus, furnish the highest quality of patient care to our servicing area, including the Huntington tri-state area and other underserved areas of West Virginia, Ohio and Kentucky. These clinical laboratory professionals provide the highest quality laboratory test results that provide 70-80% of the objective date needed for physicians to make accurate patient diagnosis. The Clinical Laboratory Sciences Department provides continuing clinical medical education for the region as required by professional organizations and health care facilities. In additional, it is an ongoing mission of the department to implement innovative programs to meet the dynamic needs of the medical community.

MEDICAL LABORATORY TECHNICIAN (AAS-MLT) ASSOCIATE DEGREE

Students completing the MU medical laboratory technician (AAS-MLT) curriculum can earn the Associate in Applied Science Degree. The curriculum is designed so that a student may complete the technical portion of the curriculum in three semesters: two semesters of on-campus instruction, and one semester of in-hospital, 15-week clinical practicum. The clinical practicum semester may be either in summer or fall, depending on availability of clinical sites and completion of all required coursework. Students declare their major as A.A.A. in MLT upon admission to the university, then seek admission into Year Two CLS courses if they meet required criteria.

Career Description and Opportunities

Certified medical laboratory technicians are prepared to perform approximately 90% of the routine diagnostic work in a clinical laboratory. They typically work under the supervision of a medical laboratory scientist. They collect blood samples and do a wide variety of blood and urine tests using microscopes, spectrophotometers, electronic counters, and other laboratory instruments. They also perform crossmatches for blood transfusion, culture pathogenic bacteria, and perform blood clotting tests. Besides working in hospital laboratories, medical laboratory technicians work in doctors' offices, clinics, and in industry. Certified clinical laboratory technicians are in great demand. Completion of a NAACLS-accredited MLT program is required for admission to the bachelor's degree in medical laboratory science at Marshall University. Upon completion of the MLT curriculum, the student is eligible to take a certification examination offered by the American Society of Clinical Pathologists (ASCP).

Admission and Progression

Entry to the MLT program involves completion of academic prerequisites with acceptable grades, application to the Clinical Laboratory Sciences Department, and competitive selection by an admissions committee. An applicant for the MLT program should expect to have earned an overall Grade Point Average (GPA) of 2.5. Students who fall into the category of having to take CHM 111 as a prerequisite to CHM 211 due to ACT scores must have successfully completed CHM 111 with a *C* or greater prior to being accepted into the MLT program. Students must be able to complete all required coursework, including clinical rotations, for the MLT program within 16 months of the August admission date of the program in order to be admitted to the program.

The number of available class spaces is determined annually by the MLT program director, based upon anticipated instructional resources both on campus and in affiliated hospital laboratories. The class sizes range between 12 and 18 per year. Admission of qualified applicants is not guaranteed and is dependent on availability of resources; qualified applicants that are not accepted will be placed on a waiting list for admission into the program and notified in writing of their status.

Students apply for admission during their freshman year by completing and submitting a transcript review form, two letters of reference, and a letter of application to the MLT Program Director between March 1 and May 31 for admission to the following semester. Late applications will be considered as class size permits. Transcript review forms and example letters are available at the Clinical Laboratory Sciences Department and on the department website (*www.marshall.edu/clinical-lab-science*).

The MLT program admissions committee reviews letters of application, college-level coursework, and letters of reference. Qualified applicants are selected primarily by Grade Point Average on courses in the CLS curriculum. Applicants who expect to complete all admission requirements before fall classes begin may be admitted conditionally. The committee selects students to fill available class spaces, then develops a ranked waiting list, if applicable. Letters are mailed to all applicants by June 15 notifying them of the admission committee decision.

Accepted students who are not properly registered or who are absent during the first week of regular classes without prior approval of the CLS program director will lose their space to a wait-listed applicant.

Progression through the MLT program is contingent upon satisfactory academic performance. Once admitted, MLT students are required to remain continuously enrolled in such a way as to complete the CLS course sequence (CLS 230, 210, 220, 255, 270-273) with their class. If a student should not successfully progress with his or her class, he or she will be dropped from the MLT program and will be notified of that status by letter. Decisions regarding readmitting students to pre-clinical CLS courses will be made by the admissions committee subject to space availability. No student is guaranteed readmission. Students seeking readmission reapply as described above. Readmitted students may be required to repeat one or more CLS courses or undertake directed independent study.

Once a student is admitted to the MLT program, in addition to the previous stated policies, the following apply:

1. All required coursework the Associate in MLT must be completed with a minimum grade of *C* or higher. Students who earn a grade of less than a *C* in required coursework must repeat the course and earn a *C* or greater.
2. Students must earn a minimum of *C* in all CLS courses in order to progress to the following semester's CLS courses.
3. Students must have completed all required coursework in the A.A.S. MLT curriculum with a minimum of *C* in order to be elibible for MLT clinical rotations (CLS 270, 271, 272 and 273). Therefore, students who do not make a *C* in ALL required coursework in the MLT curriculum will not be permitted to attend clinical rotations; this means that if a student makes below a *C* during the spring term in any required course and has already begun summer clinical rotations before this grade is known, the student will be removed from rotation courses, and will be expected to retake those course and obtain a *C* or greater before being permitted to re-enroll in clinical rotations. Clinical rotations are offered in the summer and fall terms only; therefore, if a student fails to complete all required coursework in the summer with a *C* or greater prior to the fall rotation, then that student must participate in directed independent study for all CLS courses, as well as completed required coursework with a *C* or greater, and wait until the following summer to attend clinical rotations.

MLT Clinical Practicum

The final semester of the program involves a 15-week clinical practicum rotation at one or more clinical affiliates. Two 15-week MLT hospital rotation periods are usually available: one in summer and another in fall. The affiliated laboratories include St. Mary's Medical Center (Huntington, WV), Cabell Huntington Hospital (Huntington, WV), VA Medical Center (Huntington, WV), Thomas Memorial Hospital (South Charleston, WV), King's Daughters Medical Center (Ashland, KY), Holzer Medical Center (Gallipolis, OH), Charleston Area Medical Center (Charleston, WV), and Pleasant Valley Hospital (Point Pleasant, WV). Available hospital clinical rotations will be assigned during the course CLS 255 at the discretion of MLT program faculty primarily based on student overall GPA. Student preference and academic achievement will be considered. Housing and transportation are the responsibility of the student.

If there are more qualified students than available clinical spaces, students will be placed in available spaces based on GPA, achievement, and progress in the MLT/MLS curriculum. Those not assigned to clinical rotations will receive first priority in the next available rotation schedule.

MEDICAL LABORATORY TECHNOLOGY COURSE REQUIREMENTS

The Associate of Applied Science – Medical Laboratory Technology requires the following courses in addition to those listed under Core I, Core II and University requirements:

CHM 211 Principles of Chemistry I
CHM 217 Principles of Chemistry I Lab
CHM 212 Principles of Chemistry II
CHM 218 Principles of Chemistry II Lab
BSC 227 Human Anatomy
BSC 228 Human Physiology
CLS 200 Clinical Biochemistry
CLS 230 Clinical Hematology
CLS 210 Clinical Immunohematology
CLS 220 Clinical Microbiology
CLS 255 Clinical Laboratory Problems
CLS 270 Clinical Practicum Hematology
CLS 271 Clinical Practicum Clinical Chemistry
CLS 272 Clinical Practicum Blood Bank
CLS 273 Clinical Practicum Microbiology

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE

Career Description and Opportunities

Medical laboratory scientists perform a variety of specialized tests in the clinical laboratory that provide information used by the physician to determine the extent and cause of disease. The tests performed by or supervised by the medical technologist are completed in such areas as hematology, blood banking, serology, immunology, clinical chemistry, bacteriology, and parasitology. The graduate medical technologist is prepared with the knowledge and abilities needed for certification by nationally recognized professional agencies. Certified medical laboratory scientists are accorded the status of professionals in the medical team. They often have responsibilities for supervision of laboratory sections, exercise independent judgement, and evaluate the work of others.

Most medical laboratory scientists are employed in hospital laboratories, while others find employment in physician's offices, the armed forces, and state and federal health agencies. CLS BS-MLS graduates have gone on to become physicians, dentists, physical therapists, nurses, health care computer specialists, hospital administrators, pharmaceutical salespersons, science teachers, college professors, biomedical researchers, librarians, medical sonographers, attorneys, and scientific device reviewers. Upon successful completion of the Bachelor of Science degree in Medical Laboratory Science, the student is eligible for certification examinations offered by such agencies including the American Society of Clinical Pathologists (ASCP).

Curriculum Overview

The MU Medical Laboratory Science program is offered through online course delivery and follows a "2+2 ladder" model. The first two years include the MLT associate degree curriculum. Year three involves completion of advanced science and other university academic requirements, and the fourth year involves one semester of didactic courses followed by advanced clinical practicum courses. A student who has completed required general studies and prerequisite courses could progress through the CLS sequence from MLT to MLS programs consecutively (see admission, below).

Students transferring from other NAACLS accredited programs must complete equivalent prerequisite courses to those listed in the MU BS in Medical Laboratory Science program in order to obtain a BS from Marshall University, which includes meeting Core Curriculum standards required for sophomore transfer students with 30 or more credit hours. Sophomore transfer students with 30 or more credit hours must complete one critical thinking (CT) designated course but are exempt from the remaining 6 hours of Core 1. Core II requirements may be fulfilled through a combination of transfer and Marshall credit hours.

In addition, MLT courses from other NAACLS accredited programs will be evaluated and course substitution credit will be recorded for 100 and 200 level CLS courses where appropriate by the MU CLS department chair/program director. Under special circumstances where an individual has graduated from an MLT program greater than five years previous, and has not worked as an MLT, proficiency exams may be required in order for substitution credit to be granted for 100 and 200 level CLS courses.

The CLS 300- and 400-level courses of the Bachelor of Science in Medical Laboratory Science Program are offered through online course delivery. All general prerequisite courses in the junior year are also offered online through Marshall University if preferred. ***A minimum of 41 credit hours must be taken from Marshall University in order to obtain the Bachelor of Science degree in Medical Laboratory Science.***

Admission

The application period for the online program is continual, however applications are reviewed and admission is granted once per semester, normally in October and March each year in preparation for advising for student registration. To be considered for admission into the Marshall University Online Bachelor of Science in Medical Laboratory Science program, applicants must meet the following criteria:

1. Successful completion of an associate's degree in Medical Laboratory Technology from a NAACLS accredited MLT/CLT program. Students applying from NAACLS accredited programs other than Marshall University must either submit a letter of satisfactory completion from the MLT program director, or submit documentation of MLT/CLT national certification through NCA or ASCP.
2. Minimum cumulative GPA of 2.0 prior to admission.
3. Candidates from a NAACLS accredited MLT program other than Marshall University: must submit two letters of reference prior to admission; the letter of satisfactory completion from the MLT program director stated above may substitute for one of the letters. Candidates from other NAACLS accredited programs must also submit an official transcript documenting coursework for the MLT program. Candidates from other NAACLS accredited MLT/CLT programs must submit a letter of application along with the references above.
4. Candidates from the Marshall University MLT program: Because students from other institutions are accepted into the online BSMLS program each year, MU MLT students must submit notification, either via email or letter in the last year of their MLT program of their desire to continue on into the BS in Medical Laboratory Science program; failure to do so could jeopardize securing a placement slot in MLS-level courses.

Admission will be granted to current Marshall University BS-MLS students who have had continuous enrollment each semester in the program coursework and who have provided written notification of their desire to continue during the final year of their MLT program.

Advanced Clinical Practicum/Applied Learning Experiences

As part of assessing clinical proficiency, students will be required to take cumulative online examinations in each discipline and pass with a minimum score of 70%. Students who do not have the minimum 70% on cumulative exams will participate in online remediation projects as part of Advanced Clinical Practicum courses at the end of the program. There is not a full clinical rotation for the on line B.S. in MLS program at Marshall University, rather, students complete required clinical tasks in courses taken in the final semester of the program. Most students in the program are working either full or part-time and can manage the required tasks while working. All students will complete requirements of the CLS 464, Laboratory Instrumentation and CLS 468 Senior Research courses in the clinical practicum setting during the final semester of the B.S. in MLS program. All students will also be required to complete an on-campus, one day hands-on workshop in Molecular Diagnostics as part of their Advanced Clinical Practicum experience, or provide documentation of recent hands-on clinical experience in this area in a clinical hospital laboratory.

It is the sole responsibility of all admitted MLS students to secure their own clinical site placement for required clinical tasks in the final semester of the program. A student will be required upon admission to the B.S. in MLS program to initiate the process of clinical site placement and/or the clinical affiliation process with a clinical laboratory in a hospital for advanced clinical experiences and obtain the necessary signed clinical affiliation documentation by mid-term of the semester preceding the student's anticipated advanced clinical practicum - signed clinical affiliations are an NAACLS accreditation requirement. All clinical affiliations must be approved by the Program Director. Failure of the student to complete these requirements would make the student ineligible for clinical site placement and would delay, or prevent, graduation from the BS in MLS program.

Part Time Enrollment Plan

Full-time enrollment at Marshall University requires that students take a minimum of twelve credit hours. Prerequisite courses, other than CLS courses, that are listed in Year Three in the curriculum may be taken in any sequence and in any combination. Part-time enrollment in CLS courses at the BS-MLS level is permitted for working MLTs; however students must take the following courses together and in this sequence:

Fall Semester 1	**Credit Hrs.**
CLS 460 Laboratory Management and Education	3
CLS 499 Seminar in Laboratory Management	2
Total Hours	**5**

Spring Semester 1	**Credit Hrs.**
CLS 310 Clinical Immunology and Molecular Diagnostics	3
CLS 466 Diagnostic Physiology	2
Total Hours	**5**

(continued)

Fall Semester 2	**Credit Hrs.**
CLS 400 Advanced Clinical Chemistry	2
CLS 410 Advanced Immunohematology	2
CLS 420 Advanced Clinical Microbiology	2
CLS 430 Advanced Hematology	2
Total Hours	**8**

Spring Semester 2*	**Credit Hrs.**
CLS 464 Laboratory Instrumentation	3
CLS 468 Senior Research (Capstone)	2
CLS 472 Advanced Clinical Practicum I	3
CLS 473 Advanced Clinical Practicum II	3
Total Hours	**11**

*CLS courses in this final Spring Semester can only be taken immediately preceding anticipated commencement in May.

Once a student has been accepted into the BS-MLS online program, he/she will work together with the chair/program director to outline an acceptable curriculum completion plan.

MEDICAL LABORATORY SCIENCE (BS-MLS) COURSE REQUIREMENTS

The Bachelor of Science – Medical Laboratory Science requires the following courses in addition to those listed under Core 1, Core II and university requirements:

3-hour Medical Laboratory Science Research/Management elective, which may be any of the following courses:
HP 320, HP 420, or PH 270
CHM 327, Introduction to Organic Chemistry
3-hour Medical Laboratory Science elective, which may be any of the following courses:
CHM 345, CHM 365, any upper-division BSC 300/400 elective, PH 475, or PH 105
ECN 200 or 250 Economics
STA 225 Statistics
CLS 310 Clinical Immuniology & Mol. Diag.
CLS 400 Advanced Clinical Chemistry
CLS 410 Advanced Immunohematology
CLS 420 Advanced Clinical Microbiology
CLS 430 Advanced Hematology
CLS 460 Laboratory Mgt. & Education
CLS 499 Seminar in Laboratory Medicine
CLS 466 Diagnostic Physiology
CLS 468 Senior Research (Capstone)
CLS 472 Advanced Clinical Practicum I
CLS 473 Advanced Clinical Practicum II
CLS 464 Laboratory Instrumentation

Accreditation

The MLT and BS-MLS programs are fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS, 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119, Tele. 773/ 714-8880). Students who complete CLS programs through Marshall University will be eligible for national certification examinations.

CYTOTECHNOLOGY

Cytotechnologists work in hospitals, clinics, and private physicians' laboratories. They stain and analyze body cells under the microscope for changes that indicate cancer or infection.

Bachelor of Science in Cytotechnology

Students wishing the degree in cytotechnology complete the first three years of the academic curriculum through the Clinical Laboratory Sciences Department of the College of Health Professions and then apply for one year (12 months) at a hospital-based school of cytotechnology.

The senior year of professional education is completed at the Cabell Huntington Hospital (CHH) School of Cytotechnology, which is accredited by the Committee on Accreditation of Allied Health Educational Programs (CAAHEP, 35 East Wacker Drive Suite 1970 Chicago, IL 60601-2208; Tele. 312-553-9355) in collaboration with the American Society of Cytology (ASC). Upon successful completion of the entire curriculum, the student is eligible for the Bachelor of Science degree in Cytotechnology and is eligible to take the certification examination given by the American Society of Clinical Pathologists (ASCP).

Admission to a School of Cytotechnology

CHH typically allocates 4 student positions per year for the School of Cytotechnology.

An applicant for cytotechnology should expect to have earned an overall 2.5 GPA. Applicants for the final year of cytotechnology training provide a letter of application, a completed transcript review form, and two letters of reference to the Clinical Laboratory Sciences Department between January 1 and February 15 of the year they seek admission. Late applications will be accepted on a space-available basis. Copies of applications and transcript evaluations of qualified applicants are supplied to CHH School of Cytotechnology by the CLS Department. The CHH program then selects qualified students to fill available student positions on the basis of Grade Point Average, letters of reference, and a personal interview.

Applicants for cytotechnology preceptorships must meet ASC minimum requirements. ASC requires that students in cytotechnology have completed 60 college semester hours which include 20 credit hours of biological science, 8 of chemistry, and 3 of mathematics. The Board of Registry (ASCP) requires graduates of an accredited school of cytotechnology and a bachelor's degree to be eligible for certification examinations. In order to achieve the requirement of the bachelor's degree, the MU cytotechnology curriculum includes more than the ASC requirements.

Each school of cytotechnology requires admitted students to comply with its internal requirements, which may include attendance at an instructional program on blood-borne pathogens and either begin the Hepatitis B vaccine series or sign a waiver form refusing it. MU students are also required to complete requirements and to provide documentation required by the College of Health Professions.

CHH charges tuition of approximately $5000 for the year-long preceptorship; these charges are subject to change. Students working for the degree in cytotechnology and who have completed at least 24 credit hours at Marshall University may apply for a waiver of Marshall tuition for the clinical year. Cytotechnology students pay the health professions fee to MU.

Individuals seeking admission to the preceptorship for cytotechnology certification, but not in a degree program through MU should contact CHH directly.

COMMUNICATION DISORDERS

Dr. Karen McNealy, Chair
www.marshall.edu/cohp

Professor

McComas, Reynolds

Associate Professors

Holland, McNealy

Assistant Professors

Adams, Agnello, Bailey, Bockway, Clemins, Coleman, Dean, Dixon, Harlow, Kemper, Rutherford, Weidner

The Department of Communication Disorders offers an undergraduate and graduate degree in speech pathology. Speech pathologists specialize in the evaluation, remediation, and prevention of communication disorders and employment opportunities are excellent. A master's degree is the standard entry-level credential in this field; however, a bachelor's degree in communication disorders prepares students for graduate study in a variety of fields and leads to careers in speech pathology, audiology, and other professions.

UNDERGRADUATE PROGRAM: ACADEMIC POLICIES

The first five courses in the program (CD 101, 228, 229, 239, 241) are available to all students who have declared Communication Disorders as their major. Upon completion of these courses, students may apply to gain permission to register for upper-level CD courses. Applications are due prior to April 30 of the year in which this is sought.

Permission to Continue in the CD Program

Category A:

1. Those with a grade of *C* or better in all pre-CD courses and faculty approval are guaranteed continuation in the program;

and

2. Must meet all the following criteria:
   a. 3.0 or higher overall GPA
   b. 3.0 or higher MU GPA
   c. 3.0 or higher CD GPA*,

*CD GPA is calculated using grades from all attempts in CD 101, CD 241, CD 228, CD 229, and CD 239. Marshall University's D & F repeat rule does not apply in the computation of the CD GPA.

Category B:

1. These applicants will be considered on a case-by-case basis as space is available and are eligible to apply to the CD program; however, permission to continue in the program is not guaranteed.
2. Must have grade of *C* or better in CD 101, 241, 225, 229, 229 and faculty approval.
3. Must meet all the following criteria:
   a. 2.5-2.99 overall GPA
   b. 2.5-2.99 MU GPA
   c. 2.5-2.99 CD GPA

Once students are permitted to continue in the undergraduate program, they must maintain the minimum requirements of 2.5 GPA (which includes the following 3 categories: (a) 2.5 overall, (b) 2.50 MU and (c) 2.5 CD) and a grade of *C* or better in all CD courses. Students may not repeat CD courses for the purpose of raising their 'GPA to maintain eligibility in the program.

Continuing students must complete the remaining degree requirements (academic coursework and clinical assignments) leading to a B.S. in Communication Disorders, a pre-professional degree. Students who apply for and/or accept clinical assignments are expected to fulfill the responsibilities of these assignments for the full semester. Students should consult the department chair, their academic advisor, and the clinic handbook regarding all academic and clinical requirements and standards specific to the program.

COMMUNICATION DISORDERS COURSE REQUIREMENTS

In addition to Core I, Core II and university requirements the department also requires the following courses for graduation. A grade of C or better must be obtained for all required courses and a 2.5 overall GPA to meet CD graduation requirements.

CD 101 Intro to Communication Disorders
CD 241 Intro to Communication Science
CD 228 Language & Speech Development
CD 229 Anatomy and Physiology of Speech & Hearing Mechanisms
CD 239 Phonetics
CD 322 Developmental Speech Disorders
CD 328 Developmental Lang. Disorders
CD 330 Acquired Communication & Swallowing Disorders
CD 370L Field Experience
CD 415 Professional Literacies for the SLP-Capstone Course
CD 424 Diagnostic Processes
CD 427 Therapeutic Procedures II
CD 470L Therapeutic Procedures Lab
CD 460 Basic Audiology
CD 463 Aural Rehabilitation
BSC Any biology course (4 hrs. or more)
CISP 421 Special Education: Children with Exceptionalities
EDF 201 Educational Psychology and the Developmental Learner
Foreign Language (9 hours in one language or 6 hours in one language and CD 461, Sign Language)
PHY 101 &101L or CHEM/L (course and lab must be graded)
PSY 223 Elementary Behavioral Statistics or equivalent by permission
PSY 311 Child Development

In addition, the degree in Communication Disorders requires the following courses that are based on but supersede the Core I, Core II and university requirements:

Social Sciences (9 hrs.)
Humanities (3 hrs.)

Minor in Communication Disorders

This 12-hour minor will consist of completion of 4 out of the 5 courses listed below:

CD 101
CD 241
CD 228
CD 229
CD 239

*CD GPA is calculated using grades from all attempts in CD 101, CD 241, CD 228, CD 229, and CD 239. Marshall University's D & F repeat rule does not apply in the computation of the CD GPA.

DIETETICS

Dr. Kelli Williams, Chair
www.marshall.edu/cohp

Professor
Gould, Williams
Assistant Professor
Hovland

The Didactic Program in Dietetics (DPD) leads to a Bachelor of Science degree and prepares students for work in clinical nutrition, community health, and foodservice management positions. The DPD is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-3922, 312/899-4876. The DPD meets the academic standards to qualify students for a dietetics internship (DI). Eligibility to sit for the registration examination, which is necessary to become a Registered Dietitian, requires students to complete both the undergraduate DPD as well as a post-baccalaureate supervised practice experience in a DI.

The mission of the DPD at Marshall University is to provide the depth and breadth of food and nutrition knowledge and skills that prepare a student to enter a supervised practice program in dietetics. More specifically, its focus is to provide graduates with the knowledge, skills, and competencies necessary to successfully compete for and complete a DI, as well as pass the registration examination. Each year, coursework builds upon the students' knowledge base and is often enhanced by hands-on laboratory and field experiences.

Students need to be advised that to be competitive for admission to a supervised practice experience (DI) requires the following: (1) a Grade Point Average of 3.0 or above; (2) work experience related to the profession of dietetics; (3) positive letters of recommendation from faculty and from supervisors of dietetics-related work experience. Completing the Bachelor of Science with a major in Dietetics and receiving an ACEND "Verification of Completion Statement" does not guarantee entrance to a DI, which is awarded on a competitive basis.

All students are required to purchase a laboratory coat for professional laboratory courses. In addition, some field experience sites for senior level courses may require a current test for tuberculosis to be on file. DPD students are required to pay a Health Professions fee listed under the "Financial Information" section of the catalog.

Academic Policies

1. All dietetics and required non-dietetics courses must be completed with a grade of *C* or higher. Students who earn a grade of less than a *C* in a dietetics or required non-dietetics course must repeat that course.
2. All students who receive a grade of less than a *C* in a dietetics or required non-dietetics course may not register for dietetics courses for which that course is a prerequisite.
3. No required course may be taken on a credit/non-credit basis.
4. The last 60 hours of required dietetics courses (including all 300- and 400-level DTS courses) and non-dietetics courses must be completed within three years prior to graduation.
5. All 400-level DTS courses must be completed at Marshall University.
6. All students admitted to the Dietetics program must maintain a cumulative GPA of at least 2.0. In the event that a student's cumulative GPA falls below 2.0, that student will be placed on academic probation and will be notified in writing of this action. Students have one year to raise their cumulative GPA to 2.0. If the GPA is less that 2.0 at the end of one year of probation, the student will be dismissed from the Dietetics program.
7. Students will not be permitted to enroll in 400-level DTS courses is their GPA is below 2.5.
7. Students enrolled in DTS 476 (Senior Seminar in Dietetics) are required to take a series of practice tests in order to better prepare them for the national registration examination. Scores on these examinations will reflect 20% of the final course grade. In addition, students must score a minimum of 80% on the final practice examination in order to complete the course. Those who do not will be given remedial work until such a time that the desired score is achieved.

DIETETICS COURSE REQUIREMENTS

Dietetics students must take the following courses in addition to those listed as Core I, Core II and university requirements to earn their bachelor's degree:

ACC 310 Accounting for Entrepreneurs
BSC 227 Human Anatomy
BSC 228 Human Physiology
BSC 250 Microbiology and Human Disease
CHM 211 and 217 Principles of Chemistry I and Lab
CHM 212 and 218 Principles of Chemistry II and Lab
CHM 327 Introductory Organic Chemistry

CLS 105 Medical Terminology
CLS 200 Clinical Biochemistry
CMM 103 Fundamentals of Speech Communication
ESS 345 Exercise Physiology
MTH 127 College Algebra Expanded or MTH 130 College Algebra
STA 225 Intro Statistics
PSY 201 General Psychology
SOC 200 Introduction to Sociology
DTS 201 Introductory Nutrition
DTS 202 Introductory Foods
DTS 215 Assessment & Education Strategies in DTS
DTS 301 Foodservice Safety & Systems Management I
DTS 302 Foodservice Safety & Systems Management II
DTS 310 Life Span Nutrition
DTS 320 Intermediate Nutrition
DTS 403 Advanced Nutrition
DTS 409 Community Nutrition
DTS 410, Cross-Cultural Foods
DTS 460 Research in Dietetics
DTS 468 Chemistry of Foods
DTS 469 Medical Nutrition Therapy I
DTS 470 Medical Nutrition Therapy II
DTS 476 Senior Seminar in Dietetics

HEALTH SCIENCES

The Health Sciences major offers an interdisciplinary approach designed to develop a strong foundation of core skills in preparation for advanced education in a variety of health careers. All students gain knowledge about critical aspects of health: physical and cognitive function, disease and disability, contemporary public health challenges and opportunities, professional communication, the scientific bases of health care knowledge, and ethical and professional issues associated with our complex health care system. Students learn from accomplished faculty across the disciplines in the College of Health Professions and study side by side with other students who aspire to make a difference in people's lives.

Students will graduate with a Bachelor of Health Sciences degree. Graduates from this program may pursue employment in the health care field (public health, governmental and community agencies, insurance industry, hospitals, or the pharmaceutical industry) or may pursue graduate programs in health informatics, public health, a clinical profession (medicine, occupational therapy, pharmacy, physician assistant, or physical therapy), health administration, business, or law. Careful selection of available courses will optimize admission to desired graduate degree programs. A required capstone will allow students to synthesize what they have learned in their coursework to provide hands-on experience in a health-related environment such as a clinic or agency.

The Health Sciences degree consists of 120 college credit hours. Students may declare the B.H.S. major on admission to the university. Students in the program must maintain a 2.0 grade point average. A maximum of three *D*'s in the Health Sciences required courses will be accepted toward the B.H.S. degree.

A list of approved restricted electives is available in the COHP Student Services Offices and from the academic advisors. Any courses not listed that students wish to take as electives must be approved in advance by the academic advisor.

Required Courses for the Health Sciences major:

HP 110 Introduction to Health Professions (3 hrs.)
HP 210 Health Sciences Seminar (3 hrs.)
HP 320 Introduction to Research (3 hrs.)
HP 420 Administration in Allied Health (3 hrs.)
HP 490 Senior Capstone (3-6 hrs.)
HP 240 Introduction to Human Disease (3 hrs.)
SWK 203 Intro to Social Work (3 hrs.)
HS 200 Medical Terminology (3 hrs.)
HS 201 Introduction to Anatomy and Physiology (3 hrs.)
STA 225 Statistics (3 hrs.)

Two of the following:

PH 101 Introduction to Public Health (3 hrs.)

PH 105 Introduction to Epidemiology (3 hrs.)

PH 270 Global Health (3 hrs.)

BSC 120 Introduction to Biology (3 hrs.)

BSC 250 Microbiology (4 hrs.)

DTS 210 Nutrition (4 hrs.)

HP 480 Special Topics (3 hrs.)

ECN 200 Survey of Economics (3 hrs.)

Other Requirements

- 120 total credits
- University Core Curriculum
- Completion of required Health Science major courses
- 37 hours of restricted electives - 18 must be upper division (300- or 400-level) (maximum of 27 hours of College of Business courses)
- Maximum of 3 *D*s in electives will be applied toward the degree
- Minimum 2.0 GPA is required.

KINESIOLOGY

Dr. Gary McIlvain, Chair

Professors

Mak, McIlvain, Shepherd

Associate Professors

Beckett, Konz

Assistant Professors

Choi, Garrett, Leigh, Powell, Timmons, Toma

The School of Kinesiology offers bachelor's degrees in a variety of health professions including biomechanics, exercise science, and sport management and marketing. In addition, a 3+2 program in athletic training is offered, which begins at the bachelor's level and leads to a Master of Science in Athletic Training. All program-related courses must be taken for a letter grade and cannot be taken under the credit/no credit grading option.

ATHLETIC TRAINING (3+2)

Athletic training is practiced by athletic trainers, health care professionals who collaborate with physicians to optimize activity and participation of patients and clients. Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities (www.NATA.org).

Students who wish to complete the Athletic Training Program (ATP) will begin at the undergraduate level for the first three years and complete the foundation courses that serve as prerequisites to apply to the program. Once completing these courses the student will apply to the program and, if accepted, will directly be admitted into the program which will allow them to finish in two years, thus completing the Professional Master of Science in Athletic Training degree.

Specifically, during the first three years at MU, students will be taking required core courses and Athletic Training prerequisite courses (i.e., anatomy, physiology, kinesiology, exercise physiology, etc.), in addition to courses required to apply to graduate and other professional programs the student may be interested in pursuing. During the final two years and assuming that the student has applied and been accepted into the ATP, he/she will then enroll in the required Athletic Training core courses. The M.S. in Athletic Training prepares students to become entry-level athletic trainers and qualifies them to take the BOC Exam (national board exam). The ATP is a rigorous academic program that includes coursework in athletic training and other science-related courses, in addition to required clinical education experiences.

A degree in Athletic Training offers graduates opportunities to practice in a variety of clinical settings. These settings include, but are not limited to, high school, college, and professional athletics; outpatient clinics; industrial rehabilitation sites; physician practices; the performing arts; safety settings, and higher education. The Athletic Training curriculum includes eight areas of emphasis: Comprehensive, Health Communication, Pre-Med, Pre-Physical Therapy, Pre-Physician's Assistant, Occupational Safety and Health, Pre-Chiropractic, and Safety.

Admission Criteria

Acceptance into the Athletic Training program is competitive and not guaranteed. Prospective students must meet the following minimum criteria to be considered for admission to the program:

- Admission to Marshall University;
- Declared Athletic Training as a major, including area of emphasis;
- An overall minimum cumulative GPA of 2.75.
- A letter grade of *C* or better on all required prerequisite athletic training coursework: BSC 227, BSC 228, DTS 210, EDF 417 (or equivalent), ESS 345, HS 200, HS 215, HS 220, HS 222, HS 365, and PSY 201.
- Completion of all required MU core courses
- Completion of a minimum of 90 credit hours
- Submit all necessary documents to apply to the Athletic Training Program. For information and details go to *www.marshall.edu/athletic-training*.
- Completion of directed observation experience requirements as outlined by the Marshall University ATP
- Successful interview (NOTE: interviews are extended during the spring semester with applications due in early March)
- Ability to meet the Technical Standards of Admission documented by a licensed physician

A. Prerequisites

Prospective students must have already taken or be currently enrolled in the following when applying to the Athletic Training Program.

- All required MU core courses
- BSC 227, Human Anatomy (or equivalent)
- BSC 228, Human Physiology
- DTS 210, Nutrition
- Statistics (BSC 417, EDF 417, PSY 417, or STA 225)
- ESS 345, Exercise Physiology
- HS 200, Comprehensive Medical Terminology (CT)
- HS 215, Introduction to Athletic Training
- HS 220, Personal Health
- HS 222, First Aid
- HS 365, Kinesiology
- PSY 201, General Psychology

Recommended Courses:

Ethics (Sport or Medical Ethics)
Global Health
Intro to Epidemiology
Exercise Testing
Sport Law
Strength & Conditioning

B. Areas of Emphasis

Athletic Training Comprehensive - Students will complete 18 hours of restricted electives in addition to the core courses. Restricted electives must be approved by advisor. Any of the following: BSC 120, 121, 250, 322, 320, 302, 418, 303, 438; CHM 203, 204, 211, 212, 217, 218; COUN 306, 455, 456, 475, 477, 370; PSY 408, 431, 312, 201, 202, 203, 204, 312, 323; SFT 235; ESS 220, 369, 430, 435, 442, 447 478 495H, 496H; HS 201, 221, 430. Or any declared minor approved by advisor.

Athletic Training Pre-Physical Therapy - Students will complete the following – PHY 201, 202, 203, 204; CHM 211, 217, 212, 218, PSY 311, 312; BSC 120 121–in addition to the core courses. Summer school will be required to complete this degree in four years. There are no electives available for students.

Athletic Training Health Communication - Students will complete the following – CMM 303, 374, 411, 474, 478, 479, 302, 308, 406 –in addition to the core courses. There are no electives available for students.

Athletic Training Pre-Physician's Assistant - Students will complete the following – CHM 211, 217, 212, 218, 365; BSC 120 121, 302; PSY 311, 312 – in addition to core courses. Summer School will be required to complete this degree in four years. There are no electives available for students.

Athletic Training Pre-Chiropractic - Students will complete the following – PHY 201, 202; CHM 211, 217, 212, 218, 355, 356; BSC 120, 121; PSY 311, 312 – in addition to core courses. Summer School will be required to complete this degree in four years. There are no electives available for students.

Athletic Training Pre-Med - Students will complete the following – PHY 201, 202, 203, 204; CHM 211, 217, 212, 218, 355, 356, 361; BSC 120, 121, PSY 311, 312 – in addition to core courses. Summer School will be required to complete this degree in four years.

Athletic Training Occupational Safety & Health - Students will complete the following – PHY 201, 202, 203, 204; CHM 211, 217, 212, 218; SFT 235, 372, 373, 373L, 453, 499; PSY 311, 312 – in addition to the core courses. Summer School will be required to complete this degree in four years.

Athletic Training Safety - Students will complete the following – SFT 235, 372, 375, 378, 458, 460; PSY 311, 312 – in addition to the core courses.

The Area of Emphasis must be completed prior to applying for the Professional Master of Science in Athletic Training degree. For additional information and details on the program, including the Athletic Training courses and the clinical education experiences that are required once admitted to the Athletic Training program, please refer to the *Graduate Catalog*.

BIOMECHANICS

Biomechanics is the analysis of human movement to enhance performance, improve training, accelerate rehabilitation, and reduce injury risk. This is done by integrating various mechanical aspects of human movement during static and dynamic activities. The Biomechanics degree applies physics and math principles to study the interactions between humans and various machine systems in both working and living environments. Students will be exposed to specialized equipment to help measure the interaction of humans with their environment. Force plates and accelerometers measure forces generated by various segments of the body and then exerted externally to the body. Muscle activation is measured through electromyography. Motion analysis, using video to create three-dimensional reconstructions, measures body positions, velocities, and accelerations.

The degree in Biomechanics provides students with the background and skills needed to create work and living environments which improve human health and enhance performance. This is a fast growing healthcare related field that is undergoing an increasing demand for this type of specialization. Biomechanical scientists are found in a wide variety of settings, including research and development, universities, sports performance centers, industrial and commercial settings, sports medicine clinics, hospitals, private practice, and the military.

Admission Criteria

Prospective students must meet the minimum criteria listed below to be considered for admission to the program:

- Admission to Marshall University;
- An overall cumulative minimum GPA of 2.75 to continue in the degree program beyond the sophomore year;
- A *C* or better in all required coursework;
- Declared Biomechanics as a major, including preferred area of emphasis if applicable.

Course Requirements

Courses in this category MAY NOT be complete under the credit/non-credit option.

A. Core Curriculum

B. Biomechanics – Professional Core
   BSC 227, Human Anatomy (4)
   BSC 228, Human Physiology *4)
   DTS 210, Nutrition (3)
   ESS 220, Fitness and Wellness (3)
   ESS 345, Exercise Physiologv (3)
   ESS 369, Motor Learning (3)
   ESS 375, Fitness Assessment and Exercise Prescription (3)
   ESS 401, Ethics in Sport (3)
   ESS 410, Principles, Organization and Administration of Phvsical Education and Athletics (3)
   ESS 442, Principles of Strength and Conditioning (3)
   ESS 443, Principles of Strength and Conditioning (1)
   HS 200, Comprehensive Medical Terminology (3)
   HS 215, Introduction to Athletic Training (3)

(continued)

HS 221, Personal Health (3)
HS 222, First Aid (3)
HS 365, Functional Kinesiology (3)
HS 435, Biomedical Instrumentation with Data Procession in MatLab (3)
HS 464, Pathomechanics (3)
HS 465, Biomechanical Analysis of Movement (3)
HS 475, Trends in Biomeehanics 1 (3)}
HS 495, Trends in Biomcchanics 2 (3)
MTH 132, Precalculus with Science (5)
STA 225, Jntroductory Statistics (3)
SFT 235, Introduction to Safety (CT) (3)
SFT 373, Principles in Ergonomics and Human Factors (3)
SFT 373L, Principles of Ergonomics Lab (1)
PHY 201, College Physics 1 (3)
PHY 202, General Physics 1 Laboratory (1)
PHY 203, College Physics 2 (3))
PHY 204, General Physics 2 Laboratory (l)
PSY 201, Introductory Psychology (3)
PSY 311, Child Development (3)
PSY 312, Adult Development (3)

C. Areas of Emphasis

Biomechanics Comprehensive - Students will complete 3 hours of restricted electives in addition to the core courses. Restricted electives must be upper division. Restricted electives must be approved by advisor. One semcster of sum mer school will be required to complete this degree in four years.

Biomechanics Pre-Physical Therapy - Students will complete the following –CHM 211,217, 212, 218; BSC 120 121– in addition to the core courses. Summer school will be required to complete this degree in four years. There are no electives available for students.

Biomechanics Physics - Students will complete the following – PHY 304, 314, 315, 350, and 405 in addition to the core courses. There are no electives available for students.

Biomechanics Pre-Medical - Students will complete the following –CHM 211, 217, 212, 218, 355, 356, 361; BSC 120, 121 in addition to core courses. Summer School will be required to complete this degree in four years. There are no electives available for students.

Biomechanics Safety - Students will complete the following – SFT 372, 375, 378, 458, and 460 – in addition to the core courses.

Other Requirements

D. Summer school will be required to complete this degree in four years.
E. 40 Upper Division Hours
F. Graduation Requirement: Completion of HS 495 and 2.75 overall GPA

EXERCISE SCIENCE

Exercise Science is a scientific program of study that focuses on the anatomy, physiology, biochemistry, and biophysics of human movement, and applications to exercise and therapeutic rehabilitation. Examples of coursework include instruction in clinical exercise physiology, exercise physiology, biomechanics, fitness assessment and exercise prescription, energy metabolism, and strength and conditioning.

Exercise Science prepares qualified professionals for employment in health and fitness centers, hospital based health and wellness programs, corporate based health and wellness programs, cardiac rehabilitation, strength and conditioning, and allied health areas. Additionally, the program prepares students for advanced study in related fields such as exercise physiology, biomechanics, occupational therapy, physical therapy, physician assistant, medicine, and chiropractic medicine.

The Exercise Science program comprises two areas of emphasis, which include Clinical Exercise Physiology and Applied Exercise Physiology.

Prospective students must meet the minimum criteria listed below to be considered for admission to the program.

- Admission to Marshall University
- Declared Exercise Science as a major, including preferred area of emphasis

Courses in this category MAY NOT be completed under the credit/non-credit option.

A. Core Curriculum

B. Exercise Science Professional Core ..... 79 hours

BSC 227, Human Anatomy (4)

BSC 228, Human Physiology (4)

DTS 210, Nutrition (3)

ESS 215, Introduction to Exercise Science (3)

ESS 345, Exercise Physiology (3)

ESS 375, Fitness Assessment and Exercise Prescription (3)

ESS 386, Adult Fitness (3)

ESS 442, Principles of Strength and Conditioning (3)

ESS 443, Principles of Strength and Conditioning Laboratory (1)

ESS 478, Energy Sources, Body Composition and Performance (3)

ESS 491, Internship
(minimum 6 credit hours required; maximum 12 credit hours)

HS 200, Comprehensive Medical Terminology (3)

HS 215, Introduction to Athletic Training (3)

HS 222, First Aid (3)

HS 365, Functional Kinesiology (3)

PSY 201, General Psychology (3)

PSY 223, Elementary Behavioral Statistics (3)

PSY 440, Physiological Psychology (3)

Any 3-credit-hour developmental course (3)

Any 3-credit-hour ethics course (3)

C. Area of Emphasis (Students must choose one)

1. Clinical Exercise Physiology.....26

BSC 120, 121; CHM 211, 212, 217, 218; or other approved. Suggested courses*:

For PT school application: PHY 201, 202, 203, 204
For PA school application: BSC 302, 320, 322, 324
For OT school application: PSY 311, 408; SOC 440; ANT 201, or others
For Cardiac rehabilitation specialist: HP 210, 420, 480; HS 481, or others

2. Applied Exercise Physiology.....19

CHM 203; CMM 207; MKT 340; MGT 320, 350, 354, 360; PHY 101, 101L or other approved.

Other Requirements

D. Core Curriculum

E. Must be at least senior status into the summer of the last academic year and must have completed ESS 375 prior to starting the internship experience (completions of ESS 386, 442, and 443 are strongly recommended).

F. Graduation Requirements:

- An overall cumulative minimum GPA of 2.50
- A *C* or better on all required coursework
- Minimum 120 semester hours

Options

All students who complete this undergraduate program are eligible to take the following exams:

- The Certified Strength and Conditioning Specialist (CSCS)

(continued)

* Students are responsible for knowing the prerequisite courses of the institution to which they are applying.

- The ACSM certifications:
  - Personal Trainer
  - Health Fitness Specialist

Students who complete this undergraduate program and 500 hours (9 credit hours) of internship are eligible to take the ACSM Certified Clinical Exercise Specialist examination.

Minor in Exercise Science

Required:

HS 222, First Aid (3)

DTS 210, Nutrition (3)

ESS 211, Physiology of Fitness (3)

Elective: Select two courses from the following:

HS 220, Personal Health (3)

ESS 369, Motor Learning (3)

HS 365, Functional Biomechanics (3)

ESS 442, Principles of Strength and Conditioning (3)

ESS 345, Exercise Physiology (3)

Minor in Health and Wellness

Required:

HS 200, Comprehensive Medical Terminology (3)

ESS 220, Fitness and Wellness (3)

DTS 210, Nutrition (3)

PH 270, Global Health (3)

PEL (one must be aerobic and one must be strength training)

SPORT MANAGEMENT

The mission of the Sport Management degree program is to educate students to become reflective, principled, knowledgeable, and creative learners who will succeed in the global sport management community in the 21st century. Sports are a major provider of high dollar entertainment which makes the industry very business oriented. Due to the economic magnitude of the sports industry, the demand for higher educated sports managers is at an all-time high. According to the Occupational Outlook Handbook, employment of sports and entertainment managers is much faster than the average increase for all occupations. A larger population will continue to participate in organized and spectator sports for recreation and entertainment. Job growth will also be driven by the increasing number of retirees who are expected to participate in more leisure activities. Additionally, future expansion of new professional teams and leagues as well as college athletic programs will create additional openings for sport administrative staff.

The Sports Management program at MU allows students exposure to modern methods of business communication, sport marketing, sport finance and economics, ethical and legal issues in sport business, event management and more. Students have the opportunity to gain firsthand experience by completing internships within sport business settings. This allows students to network and obtain valuable experiences, giving them an advantage when entering the workforce.

Our faculty is equally committed to teaching and research in the sport industry. We provide a balanced learning environment with mentoring opportunities available to each and every student. The Sports Management program at MU maintains a strong network of alumni who work in all levels of the sport industry, ensuring our students ready access to a vast network of connections. MU has alumni working in the NCAA, PGA, NBA, NFL, NASCAR, National Sport Association, U.S. Olympic Committee, Community and University Recreation, High School Sports, Youth Sport Programs, and more.

The Sport Management curriculum includes seven areas of emphasis: General Management, Sport Marketing, Sport Agency, Facilities and Operation Management, Sport Information, Recreation and Physical Activities, and Sport Studies.

Admission Criteria

Prospective students must meet the minimum criteria listed below to be considered for admission to the program.

- Admission to Marshall University
- Declared Sport Management as a major, including preferred area of emphasis

Course Requirements

A. Core Curriculum

B. Sport Management Professional Core*

ACC 310 Accounting for Entrepreneurs (3 credits)
CMM 207 Business and Professional Communication (3 credits)
ECN 200 Survey of Economics (3 credits)
ESS 218 Sports in Society (CT & Multicultural) (3 credits)
ESS 250 Introduction to Sport Management (3 credits)
ESS 380 Sport marketing (3 credits)
ESS 381 Sport Finance/Economics (3 credits)
ESS 401 Sport Ethics (3 credits)
ESS 410 Administration of Health & Physical Education (3 credits)
ESS 416 Planning and Development of Athletic Facilities (3 credits)
ESS 430 Sport Law (3 credits)
ESS 475 Seminar in Sport Management & Marketing (3 credits) (Capstone)
MGT 218 Business Statistics (3 credits)
MGT 320 Principles of Management (3 credits)
MKT 340 Principles of Marketing (3 credits)
PLS 340 Special Event Management (3 credits)
PSY 201 General Psychology (3 credits)
PEL, Dance or PLS (2 credits)

C. Area of Emphasis (Students must choose one)

1. *General Management* – Students will complete 9 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, 6 hours of ESS 490, JMC 330 and declare a minor in either Management, Entrepreneurship, or Spanish. Restricted electives includes any of the following: ESS 118, 211, 280, 425, 440, 458, 476, 496, HS 222, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
2. *Sport Marketing* – Students will complete 12 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, 6 hours of ESS 490, ESS 452, ESS 458 and declare a minor in Marketing. Restricted electives include any of the following: ESS118, 211, 280, 425, 440, 476, 496, HS 222, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
3. *Sport Agency* – Students will complete 9 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, 6 hours of ESS 490, ESS 458 and declare a minor in Communication Studies. Restricted electives include any of the following: ESS 118, 211, 280, 425, 440, 476, 496, HS 222, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
4. *Facilities and Operation Management* – Students will complete 12 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, 6 hours of ESS 490, and declare a minor in Safety Technology. Restricted electives includes any of the following: ESS118, 211, 280, 425, 440, 458, 476, 496, HS201, 222, PLS320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
5. *Sport Information* – Students will complete 9 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, ESS 452, 6 hours of ESS 490 and declare a minor in Journalism and Mass Communication. Restricted electives include any of the following: ESS 118, 211, 280, 425, 440, 458, 476, 496, HS 201, 222, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
6. *Recreation and Physical Activities* – Students will complete 12 hours of restricted electives in addition to the core courses: ESS 290, ESS 390, 6 hours of ESS 490 and declare a minor in Exercise Science. Restricted electives includes any of the following: ESS 118, 211, 280, 425, 440, 458, 476, 496, HS 201, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.
7. *Sport Studies* – Students will complete 12 hours of restricted electives in addition to the core courses: ESS 118, 425, 440, 496, and declare a minor with approval by advisor. Restricted electives include any of the following: DAN 301, ESS 211, 280, 458, 476, HS 201, HST 360, PLS 320 or other supplemental coursework with approval by advisor. Summer school may be required to complete this degree in four years.

D. 40 Upper Division Hours

E. 120 Minimum Semester Hours

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*Non-College of Business (COB) majors may not exceed a total of 27 hours of COB course offerings.

MEDICAL IMAGING

Dr. Rita Fisher, Program Director
www.marshall.edu/cohp

Program Director
Rita Fisher, Ph.D., RT (R)(CT)(CV)(ARRT)
Clinical Coordinator
Karen Foster, M.S., RT (R)(ARRT)
Faculty
Debby Moore, M.S., RT (R)(CT)(ARRT); Jeff Jobe, B.A., RT (R)(ARRT), Mindy Combs, M.S., RT (QM)(ARRT)
Adjunct Faculty
Pam Hawn, M.S., RT(R)(CT)(ARRT); Katie Hancock, M.S., RT (R) CV); Katherine Porter, B.A., RT (R)CV)(ARRT)

The Bachelor of Science in Medical Imaging is a cooperative program between St. Mary's Medical Center School of Medical Imaging (SOMI) and Marshall University that will prepare the student for professional employment as a radiographer or sonographer. The SOMI is accredited by the Joint Review Committee on Education in Radiography (JRCERT) and recognized by the West Virginia Medical Imaging and Radiation Therapy Technology Board of Examiners. Graduates of the program are eligible to take either the primary certification in radiography administered by American Registry of Radiologic Technologists (ARRT) or sit for the Diagnostic Medical Sonography or Vascular Sonography exam administered by the American Registry of Diagnostic Medical Sonographers. In addition, graduates in the radiography track will be academically prepared to sit for a post-primary certification in an advanced imaging modality.

Graduates must complete all university graduation requirements prior to sitting for the ARRT or ARDMS exam. Due to the time-sensitive nature of the clinical requirements of the certification exams, students must complete all degree requirements within 36 months of entering the SOMI. This does not include the Year One coursework completed at Marshall University. Year One focuses on general education requirements and program-specific prerequisites. Year 2 focuses on basic medical imaging. Students select the radiography track or sonography track in Year 3. Sonography will have a limited number of students and admission will be selective. Year 4 will be advanced imaging modalities in either radiography or sonography. Students are expected to complete all requirements of the SOMI as well as graduation requirements of the university within four (4) years.

ACCREDITATIONS

The Bachelor of Science in Medical Imaging is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182, phone 312-704-5300, status: 8 year accreditation (maximum offered). It is also accredited by the West Virginia Medical Imaging and Radiation Therapy Technology Board of Examiners. 1715 Flat Top Road, PO BOX 638, Cool Ridge, WV 25825, phone 304-787-4398.

TUITION ASSISTANCE PROGRAM

The Marshall University Employee Dependent Undergraduate Tuition Assistance Program cannot be used to cover the tuition and fees of the St. Mary's/Marshall University cooperative programs, which include medical imaging, nursing, and respiratory care. These programs are classified as third-party waiver programs, which are exempted from the Employee Dependent Tuition Assistance Program.

FOUR-YEAR MEDICAL IMAGING PROGRAM

ADMISSION REQUIREMENTS

Year One: Applicants must demonstrate unconditional admission into Marshall University. Year One coursework will occur at Marshall University. Upon completion of the Year One curriculum, students can make separate application to SOMI. Admission to the SOMI is limited to 20-25 students. Applicants are ranked by points.

1 ACT score: 21 (additional points are given for ACT scores of 19 or better in math and science)
2 GPA: 2.50 minimum
3 Grade of *C* or better in: BSC 227, BSC 228, PHY 101, 101L, CHM 203, MTH 121 (or higher)
4 Progression through to Year Four is dependent upon maintaining a minimum GPA of 2.50 and grade of *C* or better in all Medical Imaging coursework.
5 Negative drug screen and background check. Drug screen and background checks will be conducted at the applicant's expense.

PROGRAM REQUIREMENTS

Progression in the program depends upon:

1 Maintaining a minimum GPA of 2.50
2 Grade of *C* or better in all MI coursework
3 Selection of radiography or application to sonography track in Year 3; selections of advanced radiography modality track in Year 4.
4 Acceptable performance in the clinical setting. Any student found guilty of violation of clinical affiliate policy including but not limited to abuse toward a patient, staff member or physician, will be dismissed immediately.
5 Acceptable deportment and ethical behavior according to the ARRT Code of Ethics. All applicants must meet the professional guidelines established by the ARRT to sit for particular certification examinations. Students in violation of the ARRT Code of Ethics may face immediate dismissal.

MEDICAL IMAGING COURSE REQUIREMENTS

Medical Imaging students must meet the following major requirements, in addition to those listed under the Core Curriculum and university requirements, and for their track in radiography or sonography:

BSC 227 Human Anatomy
BSC 228 Human Physiology
MTH 121 Algebra (or higher level of college algebra)
PHY 101 and 101L Concepts of Physics, Statistics
MI 201 Intro to Radiography
MI 202 Patient Care in Imaging
MI 204 Radiographic Anatomy
MI 205 Imaging Procedures I
MI 206 Clinical Practice I
MI 207 Imaging Procedures II
MI 208 Pharm & Drug Admin
MI 209 Intro to Imaging Equipment
MI 210 Clinical Practice II
MI 211 Seminar in Imaging Science
MI 212 Seminar in Imaging Science
MI 402 Quality Management
MI 403 Adv Practice in Medical Imaging
MI 410 Research in Medical Imaging
MI 411 Transcultural Healthcare

AREAS OF EMPHASIS (TRACKS) IN MEDICAL IMAGING

Medical Imaging students must select one track for their senior year. Each track has slightly different course requirements.

Mammography

MI 402, 403, 409, 410, 411, 414, statistics, ACLS certification

Medical Imaging Management Advanced Practice

MI 402, 403, 409, 410, 411, 412, 413, statistics

CT/MRI Advanced Practice Track

MI 402, 403, 404, 405 (or 3 hrs. 406), 409, 410, 411, 415, statistics, ACLS certification

Cardiovascular/Interventional Advanced Practice

MI 402, 403, 407, 408, 409, 410, 411, statistics, ACLS certification

Physics

PHY 211 and 202, 213 and 204, 320 and 421; MTH 229, 230, and 231; STA 345; MI 303, 304, 305, 306, 307, 308, 309, 310, 321, 401, 435

AREAS OF EMPHASIS (TRACKS) IN SONOGRAPHY

Abdominal/OB-GYN

MI 312, MI 313, MI 314, MI 315, MI 316, MI 317, MI 318, MI 319, MI 311, MI 312, MI 403, MI 410, MI 411, MI 416, MI 417, MI 418, MI 419, MI 420, MI 421, MI 422

Vascular

MI 312, MI 313, MI 314, MI 315, MI 316, MI 317, MI 318, MI 319, MI 311, MI 312, MI 403, MI 407 MI 410, MI 411, MI 418, MI 424

MEDICAL IMAGING PROFESSIONAL-LEVEL COMPLETION PROGRAM

Applicants with ARRT certification in Radiography, Nuclear Medicine or Radiation Therapy may apply for admission into the Professional component to complete the criteria for one of the specialization tracks and to earn a Bachelor of Science – Medical Imaging degree. The completion program uses a 2+2 ladder concept.

Admission requirements include:

1. Demonstration of professional credentials
2. Completion of graduation requirements. Students whose radiography coursework or other coursework was not completed at SMMC SOMI/Marshall University, will be required to satisfy the general education graduation requirements prior to enrolling in the MI program.

   This will vary depending upon the applicant's prior college coursework. Each applicant will be considered on an individual basis. Applicant will receive 55 credit hours for their prior radiology education. Applicants will use the independent study option to raise their imaging coursework to the credit hour level of the SMMC SOMI student (year 2-3). The particular course of the independent study will be determined between the student and the program director.

NURSING

Dr. Denise Landry, Chair
www.marshall.edu/cohp

Professors

Appleton, Landry, Pope, Prunty, Ramsburg, Stotts, Walton

Associate Professors

Dyer, Elkins, Ferguson, Greene, Imes, Minor, Taylor, Turner, Welch

Assistant Professors

Booton, Gallion, Nowlin

Clinical Faculty

Hodges, Kovacs

Nursing education has been offered at Marshall University since the inception of an associate degree program in 1960. On July 1, 1978, a School of Nursing was formally established and now, as a member of the College of Health Professions, it is an integral part of the academic health sciences at Marshall University. The primary objective of the nursing program is to respond to the nursing educational needs in the region. It offers a pre-licensure Bachelor of Science in Nursing program, an RN to B.S.N. program and a Master of Science in Nursing program with five areas of emphasis - Family Nurse Practitioner, Nursing Administration, Nursing Education, Nurse Midwifery, and Psychiatric Mental Health Nurse Practitioner. The B.S.N. and M.S.N programs are accredited by the Accreditation Commission for Education in Nursing, Inc. (3343 Peachtree Road N.E., Suite 850; Atlanta, GA 30326. 404-975-5000; *www.acenursing.org*).

PRE-LICENSURE BACHELOR OF SCIENCE IN NURSING (B.S.N.) PROGRAM

The four-year baccalaureate program in nursing prepares professional nurse generalists to work with individuals, families, groups, and communities in a variety of health care settings. The program is available to qualified high school graduates, college students and college graduates. Graduates of the program meet the education requirement to apply to take the National Registered Nurse Licensing Exam (NCLEX-RN).

Baccalaureate nursing education provides a foundation in the humanities and the biological, social and behavioral sciences. Students are able to apply this foundation, as well as a strong base in nursing science, to the professional practice of nursing. In addition to achieving the professional goals of the nursing program, students also become responsible members of society and are required to complete the university general education core requirements.

The program includes a clinical practice component which gives students opportunity to apply nursing theory and skills in caring for individuals, families, groups, and communities in clinical health care settings. The program uses Cabell Huntington Hospital, River Park Hospital, St. Mary's Medical Center, the Veterans Administration Medical Center, Mildred Mitchell Bateman Hospital, Health South Rehabilitation Hospital, Charleston Area Medical Center (CAMC), King's Daughters Medical Center (Ashland, Ky.), Pleasant Valley Hospital (Point Pleasant, W.Va.), Holzer Medical Center (Gallipolis, Ohio) and others for clinical experiences. In addition, various clinics, doctors' offices, health departments and schools are used for student clinical experiences. Students are required to provide their own transportation to clinical experiences.

ADMISSION

Admission is determined on a competitive basis at each entry level. The total number of students admitted to the program is based upon available facilities and faculty.

Students are admitted to the pre-licensure B.S.N. program once per year for the fall semester. Qualified applicants are selected for fall admission beginning after the January 15 application deadline and continuing until all spaces in the class are filled.

Admission Requirements for Pre-Licensure B.S.N. Program

- Currently enrolled high school seniors are eligible to apply for **freshman-level standing** in the nursing program.
- High school seniors must meet the general admission requirements of Marshall University.
- High school seniors must have a composite score of 21 or higher on the ACT, **and** a Grade Point Average on high school coursework at the completion of their junior year of at least 2.5 or higher, with consideration given to college preparatory courses.
- Current or previous college students and college graduates are eligible to apply for **sophomore-level standing** in the nursing program. College students must have a Grade Point Average of at least 2.5 or higher on 12 or more hours of college work with consideration given to specific science and math courses. Grades and credits from developmental courses are not considered.
- College students may apply for sophomore-level standing if they have had, or will have, satisfactorily completed (with a *C* or higher), all freshman-level courses by July 15 of the year they apply. Students who anticipate that they will meet these requirements, but are unable to do so, must reapply for admission to the program.

APPLICATION PROCESS

Freshman-Level Standing/Sophomore-Level Standing

1. Apply for admission to Marshall University.
2. Also apply for admission to the Nursing program, College of Health Professions: form online at www.marshall.edu/nursing/degrees/bachelors/admission.
3. Submit *official* transcripts from **all** schools attended to *both* the university and Nursing program.
   a. High school students should obtain two (2) official copies of their high school transcript and ACT scores. One copy of the ACT scores and transcript should be sent to the School of Nursing and one to the Office of Admissions of Marshall University. Transcripts must at a minimum include all junior year courses and cumulative GPA. Applicants have the option of sending transcripts that include the first semester of the senior year for consideration of science courses taken or improved GPA during that time.
   b. College students must submit two (2) official copies of transcripts from all colleges attended, if not currently attending Marshall. Send one copy to the School of Nursing and one to the Office of Admissions of Marshall University. College transcripts must include the last semester attended. Current Marshall students need not send transcripts as long as all coursework taken at other colleges/universities has been transferred to Marshall University.

Admission Requirements for Advanced Placement

This level is for students who are requesting to transfer from a **baccalaureate** nursing program and who want to receive credit for their previous nursing education. Admission to this level is based on available space. Applicants requesting advanced placement to this level must:

- Meet the general admission requirements of Marshall University.
- Document completion of two or more years of college credit in a **baccalaureate** nursing program with a 2.5 or higher Grade Point Average on all college-level work.
- Provide proof of completion of courses required prior to transfer level.
- Submit course syllabi and other materials that describe the nursing courses taken. Nursing courses will be evaluated by the Admissions, Progressions, and Graduation Committee to determine credit to be given for these courses and level of entry into the program.
- Arrange for the Dean/Director of the Nursing program at which the student is currently (or was previously) enrolled to submit a letter of good standing.

Advanced Placement: Application Process

1. Apply for admission to Marshall University.
2. Also apply for admission to the Nursing program.
3. Submit two (2) official copies of all college transcripts, one to the School of Nursing and one to the Office of Admissions of Marshall University.

(continued)

4. Submit course syllabi and other materials that describe the nursing courses taken.
5. Submit a letter of reference from the Dean/Director of nursing program.

PRE-LICENSURE B.S.N. PROGRAM REQUIREMENTS

Completion of the B.S.N. program requires the completion of 121 semester hours of credits. Credits and grades from developmental courses are not counted.

Acceptance of students in the School of Nursing B.S.N. program is predicated on the understanding that students should be able to complete the curriculum in four years if admitted at the freshman level, and three years if admitted at the sophomore level. Should students need to slow their program plan, for whatever reason (leave of absence, to delay progression due to economic or academic reasons, request to repeat a nursing course, etc.) they must have approval of the Admissions, Progressions, and Graduation Committee.

B.S.N. ACADEMIC POLICIES

1. All Nursing program students admitted to the freshman level must complete the required courses for the freshman year with a *C* or higher by July 15 of the freshman year and maintain a 2.3 overall Grade Point Average. Students who do not complete these minimum requirements will be dropped from the Nursing program and must reapply for admission to the program. Grades and credits from developmental courses are not considered.
2. The Nursing program reserves the right to require withdrawal from nursing of any student whose health, academic record, clinical performance or behavior in nursing is judged unsatisfactory.
3. All students are required to maintain a cumulative GPA of **at least** 2.3. In the event that a student's cumulative GPA falls below 2.3, that student will be placed on probation and will be notified in writing of this action. Students have **one** semester to raise their cumulative GPA to 2.3. During this period, classes taken during the summer would count toward the GPA, but the term would not be counted as the semester. If the GPA remains less than 2.3 at the end of one semester, the student will be **dismissed** from the nursing program.
4. All nursing and required non-nursing courses must be completed with a grade of *C* or higher. Students who earn a grade of less than *C* in a nursing or required non-nursing course **must** repeat that course. Pre-licensure B.S.N. and RN to B.S.N. students may repeat only one nursing course in which a grade of less than *C* is earned with permission of the Admissions, Progressions, and Graduation Committee (pre-licensure B.S.N. students) or the RN to B.S.N. Committee (RN to B.S.N. students). Permission to repeat a nursing course is made on the basis of several factors including, but not necessarily limited to, space availability, overall student performance in the course, academic honesty, and historical course grade.
5. All students who receive a grade of less than *C* in a nursing or required non-nursing course may not progress in nursing courses for which that course is prerequisite.
6. Students who find it necessary for any reason to withdraw from a nursing course must abide by the School of Nursing withdrawal policy as stated in the applicable Nursing Student Handbook (Pre-licensure B.S.N. or RN to B.S.N.) Once starting the sequence of nursing courses, students are expected to progress through the curriculum as shown. Any deviation from the curriculum for whatever reason (Leave of Absence, to delay progression due to economic or academic reasons, request to repeat a nursing course, etc.) must have approval of the Admissions, Progressions, and Graduation Committee (pre-licensure B.S.N. students) or the RN to B.S.N. Committee (RN to B.S.N. students).
7. No more than 9 hours of electives may be taken on a credit/non-credit (pass/fail) basis.
8. All required nursing courses in the pre-licensure and RN to B.S.N. programs must be completed within five (5) years prior to graduation from the program. The five (5) year period begins at the time the first clinical nursing course is taken.
9. Students must be admitted to the School of Nursing in order to enroll in Nursing classes.
10. Other policies are outlined in the Nursing Student Handbook, which can be found online on the School of Nursing website.

OTHER POLICIES

1. Evidence of a current satisfactory health certification must be submitted prior to participation in nursing courses having a clinical component for BSN students, and prior to taking any nursing course for RN to BSN students.
2. Starting in the sophomore year of the Pre-Licensure B.S.N. program, or upon admisssion to the RN to B.S.N. program, students must obtain and maintain a current CPR card (Adult, Infant and Child). Failure to have a current CPR card on file in the nursing office will result in the student being declared ineligible to begin clinical (Pre-Licensure B.S.N. students) or engage in any activities involving agencies other than the School of Nursing (RN to B.S.N. students). It is the student's responsibility to make sure an active CPR card is on file in the nursing office at all times. If the student attends clinical (Pre-Licensure B.S.N. students) or engages in activities involving agencies other than the School of Nursing (RN to B.S.N. students) without an active CPR card, all clinicals or activities will be given an unsatisfactory grade. Contact the School of Nursing or go to the School of Nursing website for acceptable courses.

3. Due to restricted enrollment in the Nursing program, students unable to maintain continuous progression must follow the Leave of Absence Policy.
    a. A student must request permission in writing for a leave of absence from the Nursing program. Notification must be at earliest possible time.
    b. The Student Petition for Leave of Absence Form must be submitted to the Chair of the Admissions, Progression and Graduation Committee **no later than three** (3) weeks after the start of the semester in which the student is requesting leave.
    c. If a Leave of Absence is approved, the student must consult with his or her academic advisor to revise the program plan.
    d. Any student who fails to notify the Nursing program of a Leave of Absence will forfeit his or her space in the nursing program and must reapply for admission.
    e. Permission for a leave of absence may be granted for up to one year.
4. Beginning in the sophomore year of the pre-licensure B.S.N. program and prior to admission to the RN to B.S.N. program, students must successfuly pass a background check and drug screen. Contact the School of Nursing at 304-696-6751 for more information.
5. Other policies are outlined in the Nursing Student Handbook.

PRE-LICENSURE B.S.N. COURSE REQUIREMENTS

B.S.N. majors must take these courses to complete the 4 year program. All core requirements in addition to those specifically listed below, must also be taken to fulfill university general education requirements. See core requirements listed at the beginning of the "College of Health Professions" section of this catalog and at *www.marshall.edu/gened*.

The following curriculum will be phased out beginning in the fall of 2017, but may be applicable to some entering students with advanced standing:

BSC 227 Human Anatomy
BSC 228 Human Physiology*
BSC 250 Microbiology
CHM 203 General Chemistry
CMM 213 Interpersonal Communication*
DTS 314 Diet Therapy
ENG 101 English Composition I*
ENG 201 English Composition II*
MTH 121 or higher Concepts of Mathematics*
PSY 201 General Psychology (CT)
SOC 200 Introductory Sociology (CT)
Statistics (200 level or higher)
NUR 219 Nursing Assessment I
NUR 221 Foundations of Professional Nursing I
NUR 222 Foundations of Professional Nursing II
NUR 318 Family & Chronic Illness
NUR 319 Nursing Assessment II
NUR 321 Nursing and Human Responses I
NUR 322 Nursing and Human Responses II
NUR 323 Nursing and Human Responses III
NUR 324 Nursing and Human Responses IV
NUR 325 Nursing and Human Responses V
NUR 326 Nursing and Human Responses VII
NUR 350 Pharmacology for Nurses
NUR 400 Transcultural Health Care
NUR 416 Introduction to Research for Evidence-Based Practice
NUR 419 Professional Nursing
NUR 421 Nursing and Human Responses VI
NUR 422 Role Synthesis Practicum
NUR 425 Capstone Seminar
Fine Arts Elective*
Humanities Elective*

The following is the new curriculum for students admitted at the freshman level beginning in the fall of 2017 and at the sophomore level beginning in the fall of 2018:

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*General Education Core Requirement.

BSC 227 Human Anatomy
BSC 228 Human Physiology*
BSC 250 Microbiology
CHM 205 General, Organic and Biochemistry
CMM 213 Interpersonal Communication*
DTS 314 Diet Therapy
ENG 101 English Composition I*
ENG 201 English Composition II*
Fine Arts Elective*
Humanities Elective
MTH 121 or higher Concepts of Mathematics*
Statistics (200 level or higher)
NUR 200 Introduction to Professional Nursing
NUR 219 Health Promotion through the Lifespan
NUR 221 Foundations of Professional Nursing I
NUR 222 Foundations of Professional Nursing II
NUR 318 Family and Chronic Illness
NUR 319 Physical Assessment Across the Lifespan
NUR 321 Care of Childbearing Families
NUR 322 Psych/Mental Health Nursing
NUR 327 Adult Nursing I
NUR 328 Adult Nursing II
NUR 350 Pharmacology for Nurses
NUR 400 Transcultural Nursing
NUR 408 Pediatric Nursing
NUR 414 Adult Nursing III
NUR 416 Introduction to Research for Evidence-Based Practice (Writing Intensive)
NUR 419 Professional Nursing
NUR 421 Community and Public Health Nursing
NUR 422 Capstone Practicum
NUR 425 NCLEX Success

*General Education Core Requirement.

Alternate Site (Pre-Licensure B.S.N. Program): Mid-Ohio Valley Center

Students may take Nursing classes at the Mid-Ohio Valley Center in Point Pleasant. With the exception of clinicals for a few courses, students may pursue the complete pre=licensure B.S.N. degree in that location.

MINOR

A minor is not required in this discipline.

ELIGIBILITY TO SIT FOR LICENSURE EXAM

To practice registered professional nursing in West Virginia an individual must be licensed by the West Virginia Board of Examiners for Registered Professional Nurses. Students who successfully complete the pre-licensure Bachelor of Science in Nursing program meet the education requirements to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). However, the Board may refuse to admit persons to its examinations or may refuse to issue a license upon proof that an applicant: (a) is or was guilty of fraud or deceit in procuring or attempting to procure a license to practice registered professional nursing; or (b) has been convicted of a felony; or (c) is unfit or incompetent by reason of negligence, habits or other causes; or (d) is habitually intemperate or is addicted to the use of habit-forming drugs; or (e) is mentally incompetent; or (f) is guilty of conduct derogatory to the morals or standing of the profession of registered nursing; or (g) is practicing or attempting to practice registered professional nursing without a license or registration; or (h) has willfully or repeatedly violated any of the provisions of the licensing law."

A student who wants to take the NCLEX-RN in another state must obtain information regarding requirements and procedures from the agency responsible for professional nurse registration in that state.

Transfer Courses

Transfer courses will be judged in relation to Marshall University courses for acceptability. Evaluation of transfer courses is completed in the Office of Admissions. Please contact that office for questions concerning transfer courses.

RN to B.S.N. ONLINE PROGRAM

The Marshall University School of Nursing offers an RN to B.S.N. program for registered nurses who have a diploma or associate degree in nursing from a nationally accredited program and wish to earn a baccalaureate degree in nursing. The program is designed for part-time study. Applications for the RN to B.S.N. program are processed on a semester basis. **ALL RN TO B.S.N. NURSING COURSES ARE TAUGHT ONLINE.**

ADMISSION REQUIREMENTS for RN to B.S.N. PROGRAM

To be eligible for admission the applicant must:

1. Be a graduate of a nationally accredited diploma or associate degree nursing (ASN) program (i.e., ACEN - Accreditation Commission for Education in Nursing).
2. Meet the general admission requirements of Marshall University.
3. Have an overall Grade Point Average of 2.5 or higher on all college work.
4. Satisfactorily pass a background check and drug screen through the background and drug screen company contracted by the Marshall University School of Nursing. Employer and other background checks and drug screens will not be accepted.
5. Hold an unencumbered RN license*, if already licensed as RN, in one or more states or territories in the United States.
6. Students applying for the program who are completing their associate degree/diploma upon application to the RN to BSN program must hold an unencumbered RN license* PRIOR to beginning the second semester of coursework or they will be withdrawn from the program.

*An unencumbered license has not been subjected to formal discipline by any Board of Nursing. This includes but is not limited to reprimand, revocation, probation, suspension, restriction, limitation, disciplinary action, discretionary review/hearing or encumbrance. An unencumbered license is a license that has no provisions or conditions that limit practice in any way. This applies to all current or past RN licensure in one or more states or territories.

APPLICATION PROCESS: RN TO B.S.N. PROGRAM

1 Apply to Marshall University.

2 Apply to the School of Nursing RN to B.S.N. program; form online at *www.marshall.edu/nursing/online/rn-to-bsn/admissions*.

3. Send official college transcripts to the Marshall University Office of Admissions and Marshall University School of Nursing with attention to the RN to B.S.N. program.

PROGRAM REQUIREMENTS

All Registered Nurse graduates from either diploma or associate degree nursing programs with fewer than 40 credit hours in Nursing will be awarded additional credit hours in Nursing up to a total of 40 hours upon successful completion of 12 credits of upper-level Nursing courses. Students must apply for the additional credit hours. All RN to B.S.N. students are required to meet Marshall University's general education curriculum. Information about the general education requirements is available at *www.marshall.edu/gened*. In addition, RN to B.S.N. students must complete 3 hours of 200-level or higher statistics prior to taking nursing research (NUR 416). A total of 120 credit hours is needed to graduate. See the following for numerical representation of program requirements:

120 credits (minimum required to graduate)
- 40 credits (nursing credits for RN - associate degree/diploma)
80 credits remaining
- 28 credits RN to B.S.N. nursing courses (see below)
52 credits remaining
- 3 credits for required statistics course at 200 level or higher
49 general education credits remaining*

Nursing Courses:

NUR 305 Concepts in Professional Nursing
NUR 318 Family and Chronic Illness
NUR 333 Health and Physical Assessment for the RN
NUR 400 Transcultural Health Care
NUR 410 Community Nursing for the RN
NUR 416 Introduction to Research for Evidence Based Practice
NUR 418 Contemporary Nursing
NUR 427 Professional Engagement in Nursing RN-B.S.N.

Sample Plan for those taking nursing courses along with core requirements

1st Semester		*2nd Semester*	
Nursing 305	4 hours	Nursing 400	3 hours
Nursing 318	2 hours	Nursing 333	3 hours
Core/elective	3 hours	Statistics (200 level or higher)	3 hours
Core/elective	3 hours	Core/elective	3 hours
Total	**12 hours**	**Total**	**12 hours**

3rd Semester		*4th Semester*	
Nursing 410	5 hours	Nursing 427	3 hours
Nursing 416	3 hours	Nursing 418	3 hours
Core/elective	3 hours	Core/elective	3 hours
Core/elective	3 hours	Core/elective	3 hours
Total	**14 hours**	**Total**	**12 hours**

ASSOCIATE IN SCIENCE IN NURSING PROGRAM

www.st-marys.org/education_training

Vice President of Schools of Nursing and Health Professions: Dr. Joey Trader

Director/Professor: Joey Trader, Ed.D. , M.S.N., R.N., C.N.E.

Faculty: Amy Baise, Angela Bartram, Deborah Bridgewater, Nancy Brumfield, Suzanne Bunten, Amanda Burton, Kristi Childers, Misty Cooper, Kimberly Damron, Rejeanne DuVall, Shelia Foster, Angela Graham, Brooke Leaberry, Sara Marriott, Beverly McComas, Timothy Mitchell, Allison Morrison, Natalie Perry, Rebecca Porter, Tonya Taylor

The Associate in Science in Nursing Program is a cooperative effort between the Marshall University College of Health Professions and St. Mary's School of Nursing. This program may be completed in two academic years and requires 72 credit hours. General education courses are offered on the Marshall University campus and nursing courses are offered at St. Mary's School of Nursing. Graduates of this program receive an Associate in Science in Nursing degree from Marshall University and are eligible to make application to the registered nurse licensing examination.

Accreditation

St. Mary's/Marshall University Cooperative Associate in Science in Nursing program is fully accredited by the West Virginia Board of Examiners for Registered Professional Nurses and the Accreditation Commission for Education in Nursing (ACEN). The NLNAC is located at 3343 Peachtree Road N.E., Suite 850; Atlanta, GA 30326; 404-975-5020; *www.acenursing.org*.

ADMISSION REQUIREMENTS: ASSOCIATE IN SCIENCE IN NURSING PROGRAM

All applicants must be either a graduate of an accredited high school or have a high school equivalent through GED testing. All applicants are encouraged to take the ACT and submit results to St. Mary's School of Nursing. Applicants are admitted twice a year for classes beginning in August or January.

High School Seniors and Applicants Who Have Completed Fewer than 12 College Credit Hours Must Have:

- A minimum high school GPA of 3.0
- A minimum of *C* on all college courses completed

The Following High School Courses are Strongly Recommended:

- English - 4 units
- Science - 3 units (chemistry, biology I and biology II)
- Math - 2 units (one should be algebra)
- Social Studies - 3 units

Applicants Who Have Completed at Least 12 College Credit Hours Must Have:

- A minimum of *C* on each required non-nursing course completed
- An overall 2.0 GPA (*C* average) or better on ALL courses completed
- An overall 2.0 GPA on all courses completed at Marshall University
- Taken 12 college semester credit hours at the 100 level or above for a grade

GED Applicants Must:

- Meet criteria for GED admission as stated in the Marshall University undergraduate catalog
- Have completed at least 12 college credit hours at the 100 level and earned grades of *C* or above
- Meet criteria for applicants who have completed at least 12 college credit hours

TUITION ASSISTANCE PROGRAM

The Marshall University Employee Dependent Undergraduate Tuition Assistance Program cannot be used to cover the tuition and fees of the St. Mary's/Marshall University cooperative programs, which include medical imaging, nursing, and respiratory care. These programs are classified as third-party waiver programs, which are exempted from the Employee Dependent Tuition Assistance Program.

PROGRAM REQUIREMENTS: ASSOCIATE IN SCIENCE IN NURSING PROGRAM

Core Curriculum Requirements

Students enrolled in the ASN program are exempt from the Core Curriculum requirements.

General Education Courses

BSC 227 Human Anatomy
BSC 228 Human Physiology
BSC 250 Microbiology
CHM 203 General Chemistry I
DTS 314 Nutrition/Diet Therapy
ENG 101 English Composition I
ENG 201 English Composition II
PSY 201 General Psychology
PSY 311 Child Psychology

Nursing Courses

NUR 101 Strategies for Success in ASN program
NUR 120 Fundamentals
NUR 220 Alterations I
NUR 225 Psy Nursing
NUR 230 Alterations II
NUR 235 Maternal-Child Nursing
NUR 241 Alterations III

RESPIRATORY CARE

www.st-marys.org/education_training

Vice President of Schools of Nursing and Health Professions: Dr. Joey Trader

Program Director: Chuck Zuhars

Faculty: Chris Henderson, Courtney Hieronimus, Ryan Spurlock, Keith Terry

The Bachelor of Science in Respiratory Care Program is a cooperative effort between the Marshall University College of Health Professions and St. Mary's School of Nursing and Health Professions. This program may be completed in four academic years and requires 121 credit hours.

General education courses are offered on the Marshall University Huntington campus and respiratory courses are offered at St. Mary's Medical Center School of Respiratory Care.

Graduates of this program receive a Bachelor of Science in Respiratory Care degree from Marshall University and are eligible to make application to the National Board of Respiratory Care for the advanced respiratory care practitioner credentialing examination.

ACCREDITATION

The St. Mary's/Marshall University Cooperative Bachelor of Science in Respiratory Care program is accredited by the Committee on Accreditation for Respiratory Care (CoARC), 1248 Harwood Road Bedford, TX 76021, 1-817-283-2835, *www.coarc.com.*

ADMISSION REQUIREMENTS

All applicants must be either a graduate of an accredited high school or have a high school equivalent through GED testing. All applicants are encouraged to take the ACT and submit results to St. Mary's School of Respiratory Care. Students who have fewer than 12 hours of college credits are required to have taken the ACT examination.

High School Seniors and Applicants Who Have Completed Fewer than 12 College Credit Hours Must Have:

- A minimum high school GPA of 3.0
- A minimum of *C* on all college courses completed

The Following High School Courses are Strongly Recommended:

- English - 4 units
- Science - 3 units (chemistry, biology I and biology II)
- Math - 2 units (one should be algebra)
- Social Studies - 3 units

Applicants Who Have Completed at Least 12 College Credit Hours Must Have:

- A minimum of *C* on each required non-respiratory course completed
- An overall 2.0 GPA (*C* average) or better on ALL courses completed
- An overall 2.0 GPA on all courses completed at Marshall University
- Taken 12 college semester credit hours at the 100 level or above for a grade

GED Applicants Must:

- Meet criteria for GED admission as stated in the Marshall University undergraduate catalog
- Have completed at least 12 college credit hours at the 100 level and earned grades of *C* or above
- Meet criteria for applicants who have completed at least 12 college credit hours

TUITION ASSISTANCE PROGRAM

The Marshall University Employee Dependent Undergraduate Tuition Assistance Program cannot be used to cover the tuition and fees of the St. Mary's/Marshall University cooperative programs, which include medical imaging, nursing, and respiratory care. These programs are classified as third-party waiver programs, which are exempted from the Employee Dependent Tuition Assistance Program.

RESPIRATORY CARE COURSE REQUIREMENTS

Respiratory care students must complete the following courses in addition to those listed in the Core Curriculum and university requirements:

BSC 227 Human Anatomy
BSC 228 Human Physiology
BSC 250 Microbiology
CHM 203 General Chemistry
CLS 105 Medical Lab Terminology or HS 200 Comprehensive Medical Terminology
MTH 121 Concepts & Application
Statistics
RSP 100 Respiratory Pharmacology
RSP 101 Intro to Respiratory Care
RSP 102 and 102L Intro to Respiratory Care Proc. And lab
RSP 201 Pulmonary Pathophysiology
RSP 202 Mechanical Vent Tech & Mgt
RSP 203 Respiratory Internship I
RSP 204 Pulmonary Rehab/Home Care
RSP 205 Cardiopulmonary Diagnostics
RSP 206 Neonatal/Pediatric Resp. Care
RSP 207 Intro to Critical Care Mgt.
RSP 208 Seminar in Resp Care
RSP 209 Respiratory Internship II
RSP 210 Respiratory Internship III

RSP 211 Dynamics of Pulmonary
RSP 212 Acute/Chronic Respiratory Management
RSP 301 Intro to Respiratory Mgt.
RSP 302 Directed Readings/Seminar Critical Care
RSP 303 Respiratory Education
RSP 304 Advanced Neonatal & Peds
RSP 307 Advanced Techniques Adult Critical Care
RSP 308 Respiratory Management and Performance Improvement
RSP 401 Intro to Sleep Disorders
RSP 402 Trends & Issues in Respiratory Care
RSP 403 Respiratory Care Research
RSP 404 Advance Respiratory Care Practicum
RSP 420 Capstone in Respiratory Care

Students receive Marshall University credit for all courses in the program. Graduates of the cooperative program receive a Bachelor of Science degree in Respiratory Care from Marshall University.

To obtain more information and an application, write to:

St. Mary's/Marshall University Cooperative Bachelor of Science in Respiratory Care Program
2900 First Avenue
Huntington, WV 25702
Telephone: 304-526-1415

RRT to B.S.R.C. TECHNOLOGY ENHANCED PROGRAM

The Marshall University/St. Mary's School of Respiratory Care is planning to offer an RRT to BSRC program for registered respiratory therapists who have diplomas or associate degrees in respiratory care and wish to earn a baccalaureate degree. We expect this program to be available beginning fall 2014. This program may be completed in two semesters of full-time study or extended for part-time study. All courses will be taught through technology enhanced methods.

SOCIAL WORK

Jo Dee Gottlieb, Program Director
www.marshall.edu/cohp

Professors
Carter, Gottlieb, Larsen

Introduction

The Bachelor of Social Work is a professional degree allowing the student to enter an exciting and growing field. Social workers practice in a variety of settings including child welfare agencies, nursing homes, hospitals, schools, group homes, mental health centers, foster care agencies, and probation offices. Social workers work with individuals, families, groups, institutions, and communities and continually work to improve social conditions. The mission of the Marshall University Baccalaureate Social Work Program is to prepare students for the beginning level of practice as social work generalists grounded in the core professional values and competencies with an understanding and appreciation of the populations and institutions of Appalachia.

Our Commitment to Social Justice

The Marshall University Department of Social Work affirms our strong commitment to human rights and social justice. We offer the reassurance of our unflinching commitment to the values of pluralism that have been crucial in weaving the strong fabric of our civil society. We do not support and will stand against any acts of bigotry, hate, harassment, bullying, or discrimination toward any individual or group. We welcome, stand with, and offer a safe place to all students regardless of race, color, immigrant status, culture, LGBTQ identification, disability, religious affiliation, spiritual belief, gender, or any other nuance of identity that may place one at risk of alienation.

Admission

Students may declare a major in Social Work as early as freshman year. In order to become formally accepted into the program, however, students must complete Social Work 203 (Introduction to Social Work) with a grade of C or above and at least 24 hours of general academic requirements with an overall grade point average of 2.0 or above. At that time, a student may complete an application and interview for acceptance into the program. An admission committee made up of Social Work faculty reviews applications and conducts interviews. The committee may recommend accepting students into the program, conditional acceptance, or non-acceptance based on the following criteria:

(continued)

A. Acceptance
   1. Academic requirements: GPA of 2.0 or above and completion of Social Work 203 (Introduction to Social Work) with a grade of C or above.
   2. Ability to maintain positive and constructive interpersonal relationships.
   3. Evidence of communication skill.
   4. Demonstration of self-awareness, ethical behavior and willingness to learn.

B. Conditional Acceptance: based on taking remedial action regarding one or more of the above.

C. Non-Acceptance – with referral – based on:
   1. The student's application and academic requirements.
   2. Information from faculty knowledgeable about the student.
   3. The interview process.

Students who are not satisfied with a decision may appeal in writing, within 10 days of notification, to the program director who will reconvene the committee to re-evaluate the recommendation. Further appeal may be made in accordance with university procedure as designated in The Academic Rights and Responsibilities of Students policy which is published in the Marshall University Undergraduate Catalog.

Credit for Life Experience

The social work program does not grant social work course credit for life experience or for previous work experiences.

Continuation in the Program

It is expected that once a student is accepted into the program, academic requirements and standards will be maintained. Since it is a professional program, continuance in Social Work depends on continuing progress toward a professional level of performance. The B.S.W. degree is reserved for students who have demonstrated that level of competence. In addition to mastering a body of knowledge, a social worker must possess professional attitudes, skills, values and ethics. Academic performance in the B.S.W. program includes classroom performance, class attendance, ethical behavior, communication skills, and psychological well-being sufficient to maintain positive and constructive relationships with clients.

Occasionally, it is determined that a student in the program may not be suited for the field of social work. In that case, the advisor may recommend remedial action or may counsel the student out of the program. When a decision is made to terminate a student fromo the program, the student may appeal that decision to the program director. If not satisfied, the student may appeal in accordance with the university procedure, as designated in the "Academic Rights and Responsibilities of Students" published in the Marshall University *Undergraduate Catalog.*

Requirements

Social Work students complete the general and specific education requirements as listed in the section that follows. Additional requirements for acceptance into the Social Work Program can be obtained by contacting the Social Work office. Electives highly recommended include courses in social work special topics, history, anthropology, sociology, psychology, communications, philosophy, political science, and economics. Students should consult their advisors for recommended electives.

Students should contact the Social Work department faculty for advisement as early as possible.

Accreditation Status

The B.S.W. program is accredited by the Council on Social Work Education.

General Requirements

1. Candidates for graduation must have a Grade Point Average of 2.0 or higher on all work attempted at Marshall University, a 2.0 average in prerequisite courses (ENG 101, 201 or 200H, BSC 105 or anatomy course, PSC 202, ECN 250, SOC 200, PSY 201, Math) and a GPA of 2.5 or higher in Social Work courses.
2. All required social work courses must be completed with a *C* or above.
3. Only SWK 370 and SWK 473 are graded under the credit/no credit option.
4. All social work majors must have their schedules approved by their faculty advisors before they register for classes, or for any schedule adjustment.

SOCIAL WORK COURSE REQUIREMENTS

Social Work majors must meet the following requirements in addition to the core and university requirements listed at the beginning of the "College of Health Professions" section:

BSC 105 or Human Anatomy
CMM 103
ECN 250 Principles of Microeconomics
PSC 202 American State & Government Politics
PSY 201 General Psychology
SOC 200
SWK 203 Intro to Social Work
SWK 310 Human Behavior I
SWK 312 Human Behavior II
SWK 320 Social Work Practice I
SWK 322 Social Work Practice II
SWK 330 Social Welfare Issues in Appalachia
SWK 332 Social Welfare Policy & Legislation
SWK 340 Social Work Research
SWK 370 Social Work Practicum I
SWK 473 Social Work Practicum II
SWK 475 Social Work Capstone

Minor Program

The social work minor provides a structured introductory background to social welfare and the social work profession. A minimum of 15 credit hours includes the following courses:

Requirement	*Credit Hours*
SWK 203, Introduction to Social Work	3
SWK 310, Human Behavior and Social Environment I	3
SWK 330, Social Welfare Issues in Appalachia	3
SWK 332, Social Welfare Policy and Legislation	3
SWK 340, Social Work Research	3

Courses at the Mid-Ohio Valley Center

Students may take Social Work classes at the Mid-Ohio Valley Center in Point Pleasant. Many classes are available at the center, but some attendance at the Huntington campus will be necessary to complete the degree.

Honors College

Dr. Nicki LoCascio, Dean
Dr. Brian Hoey, Associate Dean
www.marshall.edu/honors
honorscollege@marshall.edu

MISSION OF THE COLLEGE

The Honors College at Marshall University fosters academic excellence in a community of learners whose undergraduate education is enhanced through innovative teaching and learning, an engaging interdisciplinary curriculum, creative and critical inquiry with talented faculty, and diverse leadership and service opportunities.

The Marshall University Honors College was established to provide educational opportunities for students of high ability. Honors students, each of whom is concurrently enrolled in a degree-granting college, are encouraged to raise personal expectations by pursuing enriched courses both within and beyond the regular curriculum. The program supports intellectual excellence and creativity by bringing together outstanding students and outstanding professors. To this end, students participating in the Honors College will:

- utilize the flexible thinking required in integrative learning environments;
- negotiate the challenges and rewards of interdisciplinary learning;
- operate both independently and collaboratively in academic contexts;
- demonstrate leadership in a variety of settings;
- practice giving back to the communities to which they belong;
- develop strong critical thinking skills; and
- articulate ideas clearly and effectively in both speech and writing.

ADMISSION TO THE COLLEGE

Honors College admission criteria for entering freshman are enrollment in a bachelor's degree program, an ACT composite score of 26 or higher (SAT equivalent of 1240) on a single attempt, and a 3.5 high school Grade Point Average. Following their acceptance to Marshall University, qualified students are offered admission to the Honors College on a rolling basis. The deadline for accepting the Honors College offer of admission is stated in the offer letter. Qualified transfer students from other four-year honors colleges or programs with no more than 30 credits may petition the dean for admission.

ACADEMIC POLICIES

To remain in good standing with the college, students must maintain a cumulative GPA of 3.30. Additional academic policies are in the college policy handbook at *www.marshall.edu/honors*.

GRADUATION IN HONORS

Students who wish to graduate from the Honors College must complete 24 semester credits of honors experiences. Though these credits are in addition to their college and departmental major requirements, many courses substitute for general education requirements. The 24 credits must include:

- FYS 100H: First Year Seminar, 3 credits
- HON 200: Second Year Seminar, 3 credits

- At least two interdisciplinary honors seminars, 3 credits each
- Any combination of department-offered honors courses or HON courses

Students must earn a C or better in a course to receive honors credit. The official transcript will state that the student has graduated with University Honors through the Honors College.

PROGRAMS

UNIVERSITY HONORS

The university honors curriculum consists of several separate but interconnected components:

1. Entering freshmen register for FYS 100H: **First Year Seminar**.
2. All second-year students will take HON 200, **the Second Year Seminar** in leadership, ethics and civic engagement.
3. Each semester University Honors provides several small, **interdisciplinary seminars** for upperclass students taught by professors from different disciplines. The 3-credit-hour seminars enable students to study in depth a special topic outside and beyond the regular curriculum. Honors seminar credits may fulfill department major or college general education requirements with the approval of a student's primary college dean. Course offerings vary each semester. Seminar titles appear in the official *Schedule of Courses* published each semester by the Registrar's Office under the HON prefix.
4. Individual departments offer **honors versions of regular courses** that can be used to complete University honors. **These** courses are identified in this catalog and the online schedule by an H following the course number.
5. **The Honors Option** allows an honors student enrolled in a regular course to make it an honors course and to receive honors credit. The student contracts with an instructor, within the first two weeks of the semester in which the course is offered, to perform work of a different quality (not merely quantity) than others in the class. Assignments for the H-option should involve greater depth and breadth in grappling with the course materials, higher-level cognitive processes and products, and extra engagement with the professor. H-option instructions and forms are available on the Honors College website.
6. **Other Honors Experiences**

   The Honors College strongly encourages students to consider studying abroad as undergraduates. To that end, the college will waive up to 6 of the required general honors hours for study abroad experiences for which the student receives academic credit through Marshall. Students must request the waiver by submitting the Study Abroad Substitution form available on the Honors College website.

   Participation on the staff of the Honors College student newsletter (HON 484) or on the Steering Committee of the Honors College Student Association (HON 488) earns honors credit.

   For incoming students general honors credit may be waived by college credit with a grade of A or B, AP credit, or IB credit earned in high school according to the following scale:

   15 – 30 credits: 3 credit honors waiver
   31+ credits: 6 credit honors waiver

   To receive honors credit, students must petition the Dean by the end of their first semester using the form found on the Honors College website.

   Additional opportunities for earning honors credits are found in the college policy handbook.

YEAGER SCHOLARS PROGRAM

The Yeager Scholars Program is named for United States Air Force Brigadier General (Retired) Charles E. "Chuck'' Yeager, a West Virginia native and the first person to break the sound barrier in his historic 1947 flight of the Bell-X-1 aircraft. The Yeager Scholars Program offers an enhanced educational experience, providing the scholars with opportunities to expand their intellectual abilities, to develop leadership potential, to become effective communicators, and to gain the skills and knowledge necessary for successful careers. Through the generosity of many donors, especially the Society of Yeager Scholars, students in the Yeager program receive tuition, fees, room and board, a textbook allowance, a personal computer, a stipend, and education-related study abroad expenses. For additional information, see *www.marshall.edu/yeager*.

College of Information Technology and Engineering

Dr. Wael Zatar, Dean
Ms. Elizabeth E. Hanrahan, Associate Dean
www.marshall.edu/cite
cite@marshall.edu

Weisberg Division of Engineering

Dr. Asad Salem, Chair *(salema@marshall.edu)*

Professors
Begley, Bieniek, Chen, Larsen, Salem, Taylor, Zatar

Associate Professor
Wait

Assistant Professor
Boker, Esmaeilpour, Hajjar, Hijazi, Masaud, Michaelson, Pena, Sardahi, Youn

Art and Joan Weisberg Division of Computer Science

Dr. Wook-Sung Yoo, chair (*yoow@marshall.edu*)

Professors
Chaudri

Associate Professor
Biros, Wahjudi

Assistant Professor
Malik

Division of Applied Science and Technology

Dr. Tony Szwilski, Chair (szwilski@marshall.edu)

Professors
Christofero, McIntosh, Simonton, Szwilski

Associate Professor
Liu, Roudebush

Assistant Professor
Dasgupta

MISSION OF THE COLLEGE

CITE will be a recognized leader in practice-oriented teaching and applied research.

CITE is committed to serve the lifelong educational needs of students, new graduates, working professionals, and employees.

CITE builds on combined traditions of student-focused education, entrepreneurship, and funded research and service emphasis. CITE provides education when and where needed, incorporating technology-enhanced methods, by full-time, dedicated faculty complemented by expert adjunct faculty from industry and government. CITE has offices on both the Huntington and South Charleston campuses.

In addition to the undergraduate programs described in this catalog, CITE offers graduate programs and professional education in engineering, environmental science, information systems, safety, and technology management. The *Graduate Catalog* contains further information.

PROGRAMS

The College of Information Technology and Engineering offers the following programs:

1. Bachelor of Science in Computer Science
2. Pre-Computer Science
3. Bachelor of Science in Biomedical Engineering (B.S.B.M.E.)
3. Bachelor of Science in Engineering (B.S.E.) degree, emphasis in Civil Engineering
4. Engineering transfer program
5. Bachelor of Science in Electrical and Computer Engineering (B.S.E.E.)
6. Bachelor of Science in Mechanical Engineering (B.S.M.E.)
7. Pre-Engineering
8. Bachelor of Science in Safety Technology
9. Master of Science in Computer Science
10. Master of Science in Engineering (M.S.E.) with majors in Engineering Management, Environmental Engineering, or Transportation and Infrastructure
11. Master of Science in Environmental Science
12. Master of Science in Information Systems
13. Master of Science in Electrical and Computer Engineering (M.S.E.E.)
14. Master of Science in Mechanical Engineering (M.S.M.E.)
15. Master of Science in Safety with emphases in Occupational Safety and Health or Mine Safety
16. Master of Science in Technology Management with emphases in Environmental Management, Information Security, Information Technology, Manufacturing Systems, or Transportation Systems and Technologies

ADMISSION REQUIREMENTS

CITE minimum admission requirements for students in addition to Marshall general requirements at the freshman level are:

- B.S. in Computer Science - Math ACT of 24 and minimum composite ACT of 21 (Math SAT of 560; composite SAT of 980)
- Pre-Computer Science - Math ACT of 19-23 and minimum composite ACT of 19 (Math SAT of 460-550; composite SAT of 900)
- B.S.E. Engineering, B.S.M.E, B.S.E.E., B.S.B.M.E. - Math ACT of 24 and minimum composite ACT of 21 (Math SAT of 560; composite SAT 980)
- Engineering Transfer program – Math ACT of 24 and minimum composite ACT of 21 (Math SAT of 560; composite SAT of 980)
- Pre-Engineering - Math ACT of 19-23 and minimum composite ACT of 19 (Math SAT of 460-550; composite SAT of 900)
- B.S. in Safety Technology - Math ACT of 17 and minimum composite ACT of 17 (Math SAT of 440; composite SAT of 820)
- CITE Undecided - Math ACT of 19, minimum composite ACT of 19 (Math SAT of 460; composite SAT of 900)

ACADEMIC POLICIES

Advising

The college requires all freshmen and pre-computer science, pre-engineering, engineering transfer, and CITE Undecided students to see their advisors before they register each semester. These students are also required to take UNI 102, "Strategies for Academic Success."

Degree Evaluation

It is important to consult Degree Works, which can be found in the myMU portal, about degree progress. Degree Works is used to verify progress toward degree and degree completion status. All courses completed and all courses needed for the degree are listed. If there are questions about Degree Works, please consult your faculty advisor.

Determining Your Catalog

You must meet the catalog requirements in effect at the time you declare your major. You then have ten years in which to complete your program. If you do not meet graduation requirements in this ten-year period, then you must meet the curriculum requirements of the catalog in effect at the date of graduation. If you decide to change your major within CITE or to transfer to another college at Marshall, you are governed by the catalog in effect at the time of change.

Academic Probation and Suspension

Please consult the university's policy on academic probation or suspension.

Undecided Major

Students are welcome to select undecided as a major, however, students in CITE begin taking classes in the major field of study their freshman year. Students who have selected undecided as a major and are Junior level status or above, 60 credit hours or more, must declare a major in order to register for the next semester of courses. The necessary paperwork is available in the CITE Dean's office.

Core Curriculum

Students in CITE are responsible for meeting the Core Curriculum of Marshall University. Please consult the Core Curriculum section of the catalog, as well as the specific degree requirements, for details. Students in CITE are to consult with their advisors for guidance in how to meet these baccalaureate curricular initiatives.

BIOMEDICAL ENGINEERING (B.S.B.M.E.)

Dr. Asad Salem, Division Chair
salema@marshall.edu

The Biomedical Engineering discipline is the application of engineering principles and design concepts to medicine and biology for health care purposes. This discipline aims to narrow the gap between engineering and medicine, combining the design and problem-solving skills of engineering with medical and biosciences to advance health care treatment, including diagnosis, monitoring, and therapy. Biomedical engineering has only recently emerged as its own study, compared to many other engineering fields. Biomedical engineering is a rapidly growing field, and Marshall University has a unique program that will highlight the technical strengths of the university and garner interest in the development of biomedical industry in the state.

The Marshall University Bachelor of Science in Biomedical Engineering (B.S.B.M.E.) program objectives are as follows:

1. Graduates demonstrate technical and/or professional skills, which may include engineering problem-solving, scientific inquiry, and/or engineering design, to solve challenging problems in biomedical engineering and related fields.
2. Graduates are accomplished at communicating and working collaboratively in diverse work environments.
3. Graduates engaging in life-long learning activities at graduate, medical or other professional programs or workshops. Graduates entering professional careers find appropriate career progression and success.

The student learning outcomes of the B.S.B.M.E. are as follows:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply the engineering design process to produce solutions that meet specified needs with consideration for public health and safety, and global, cultural, social, environmental, economic, and other factors as appropriate to the discipline.

3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which mst consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
6. An ability to recognize the ongoing need to acquire new knowledge, to choose appropriate learning strategies, and to apply this kowledge.
7. An ability to function effectively as a member or leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

Admission Requirements

- Meet Marshall University admission requirements
- Admission to the B.S.B.M.E. program requires a minimum composite ACT score of 21 with a math score of 24, or a minimum SAT composite of 750 with a math SAT of 580.
- Transfer students must have completed MTH 127/130, College Algebra and MTH 132, Pre-Calculus.

Students not meeting the ACT/SAT score requirements above may enroll in Pre-Engineering. Requirements for Pre-Engineering are a minimum composite ACT score of 19 with a math score of 19-23, or a minimum SAT composite of 700 with a math SAT of 500-560. Students who are admitted to the Pre-Engineering program generally will require an additional calendar year to complete the requirements for the B.S.B.M..E. degree. Transfer students must be eligible to take MTH127/130, College Algebra, and MTH132, Pre-Calculus.

Graduation Requirements

The B.S.B.M.E. degree program requires a minimum of 136 credit hours of coursework. In addition to fulfilling the university's requirements for graduation, B.S.B.M.E. students must maintain a minimum GPA of 2.0 in all professional courses. These professional courses include mathematics (MTH 229 or above), required science courses, core engineering (ENGR) courses, biomedical engineering courses (BME), and courses used as technical electives. Entering students with a Math ACT of 24-26 are required to take MTH 132, Pre-Calculus. Such students will likely need an extra semester or summer term to satisfy B.S.B.M.E. requirements.

Curriculum

1. Core Curriculum

A. Core I (9 CH)
- FYS 100 – First Year Seminar or FYS 100H – First Year Seminar – Honors (3 CH)
- Two Critical Thinking courses (CT) (6 CH)

B. Core II (18 CH)
- Composition: ENG 101 – English Composition I (3 CH) and ENG 201 – Advanced Composition (3 CH) (Completion of ENG 201H – English Composition Honors (3 CH) with a *C* or better also satisfies the university composition requirement)
- Communication: CMM 103 – Fundamentals of Speech Communications or CMM 207 – Business and Professional Communication (3 CH)
- Math: (requirement met in major)
- Physical or Natural Science: (requirement met in major)
- Social Science (3 CH)
- Humanities (3 CH)
- Fine Arts (3 CH)

C. Additional University Requirements
- Two Writing Intensive (W) courses (6 CH)
- One Multicultural (M) or International (I) course (3 CH)

D. Transfer Students
- Freshman transfer students must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.
- Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics (16 CH)

- MTH 229 – Calculus with Analytic Geometry I (5 CH)
- MTH 230 – Calculus with Analytic Geometry II (4 CH)
- MTH 231 – Calculus with Analytic Geometry III (4 CH)
- MTH 335 – Differential Equations (3 CH)

3. Required Science (34 CH)

- BSC 120 -Principles of Biology I (4 CH)
- BSC 121-Principles of Biology II (4 CH)
- BSC 227 -Human Anatomy (4 CH)
- BSC 228 -Human Physiology (4 CH)
- CHM 211-Principles of Chemistry I (3 CH)
- CHM 212 - Principles of Chemistry II (3 CH)
- CHM 217 - Principles of Chemistry lab I (2 CH)
- CHM 218 - Principles of Chemistry lab II (2 CH)
- PHY 211 - University Physics I (4 CH)
- PHY 213 -University Physics II (4 CH)

4. Optional Science Courses (19 CH)

- CHM 355- Organic Chemistry I (3 CH)
- BSC 322- Principles of Cell Biology (4 CH)

5. Required Engineering Courses (21 CH)

- ENGR 102 -Introduction to CAD (2 CH)
- ENGR 104 -The Engineering Profession (1 CH)
- ENGR 111- Engineering Computation (3 CH)
- ENGR 213-Statics (3 CH)
- ENGR 214- Dynamics (3 CH)
- ENGR 219- Thermodynamics (3 CH)
- ENGR 245 - Introduction to Circuits & Controls (3 CH)
- ENGR 318-Fluid Mechanics (3 CH)

6. Optional Engineering Courses (6 CH)

- EE 202 - Circuits II (3 CH)
- ENGR 216 -Mechanics of Deformable Materials (3 CH)

7. Biomedical Engineering (25 CH)

- BME 101 Introduction to Biomedical Engineering (1 CH)
- BME 201- Biomedical Engineering Seminar (2 CH)
- BME 302- Engineering Biomechanics (3 CH)
- BME 305- Introduction to Biophysical Measurements (3 CH)
- BME 306-Mechanics of Biological Tissues (3 CH)
- BME 310- Modeling and Simulation of Biomedical Systems (3 CH)
- BME 405: Mechanics and Performance of Biomaterials (3 CH)
- BME 460 Mechanics of Bio-fluids (3 CH)
- BME 465 Capstone I (2 CH)
- BME 466 Capstone II (2 CH)

8. Technical Electives (12 CH)

Four 300 or 400 level biomedical engineering or closely related courses must be taken. The courses must be approved by the student's advisor and the division's chair.

COMPUTER AND INFORMATION SECURITY

The Bachelor of Science in Computer and Information Security program prepares students for careers in computer and information security fields through a strong foundation in the theory and practice and the broad education gained by core curriculum. Computer and information security is an evolving discipline that involves the study of technology, strategy, policy, and standards regarding the security of and operations in cyberspace. The program introduces students to a variety of topics in computer and information security such as computer and network protection, penetration testing and prevention, security in mobile devices and Internet of Things (IoT), and more by using the state-of-the-art security tools and technologies.

Admission and Transfer Criteria

Minimum requirements for admission into the Computer Science major for first-time freshmen are

- an ACT composite score of 21 (SAT 1060) and
- an ACT mathematics score of 24 (SAT math section score of 580).

Minimum requirements for admission into the Computer and Information Security major for transfer students, whether from within Marshall University or from another institution, are:

- 15 earned semester credit hours of college-level coursework,
- an overall Grade Point Average of at least 2.0 in all college-level coursework,
- completion of ENG 101 (or equivalent) with a grade of *C*, and
- completion of MTH 132, Pre-Calculus, or MTH 127/130 and MTH 132 (or equivalent) with a minimum grade of *C*.

For those desiring to major in computer and information security who do not meet the admission or transfer criteria listed above:

- Students may be admitted to "Pre-Computer Science" with a minimum ACT composite of 19 and an ACT mathematics score of 19-23 (composite SAT of 900; Math SAT of 460-550). Transfer students must be eligible for MTH 127/130 and MTH 132.

Pre-Computer and Information Security students must complete the criteria for transfer students to Computer and Information Security.

B.S. Degree Requirements

The B.S. degree program requires 120 credit hours (CH) of coursework. Students are advised to pay careful attention to Core Curriculum requirements; please consult an advisor.

1. Core Curriculum

Core I

FYS 100 or FYS 100H

Two Critical Thinking courses (CT) ..... 6 hrs.
(requirement met in major)

Core II

ENG 101 and ENG 201 ..... 6 hrs.

CMM 103 or CMM 207 ..... 3 hrs.

Fine Arts ..... 3 hrs.
(ART 112, MUS 142, MUS 200, MUS 210, or THE 112)

Humanities ..... 3 hrs.
(CL, ENG, JMC, PHL, or RST labeled Humanities)

Math (requirement met in major)

Physical or Natural Science (requirement met in major)

Social Science ..... 3 hrs.

Additional University Requirements

Writing Intensive courses (W) ..... 6 hrs.

Multicultural (M) or International (I) course ..... 3 hrs.

Freshman transfer students with 29 or fewer hours must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.

(continued)

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics (11 CH)

The following courses are required:

MTH 220: Discrete Structures
MTH 229: Calculus with Analytic Geometry I (CT) (5 CH)
Statistics (STA 225 or STA 345) (3 CH)

3. Science (13 CH)

BSC 120: Principles of Biology I (4 CH) or above

CHM 211: Principles of Chemistry I and
CHM 217: Principles of Chemistry Lab I (5 CH total) or above

PHY 201: College Physics I and PHY 202: Conceptual Physics Lab I (4 CH total) or above

Other science with lab courses may replace the courses listed above with the approval of the program chair

4. Computer Science Core (30 CH)

The following computer science courses are required:

CS 105: Explore the World with Computing CT (3 CH)

CS 110: Computer Science I

CS 120: Computer Science II

CS 210: Data Structures and Algorithms

CS 215: Advanced Data Structures and Algorithms

CS 305: Software Engineering I

CS 310: Software Engineering II

CS 320: Internetworking

CS 330: Operating Systems

CS 402: Computer Architecture

CS 410: Database Engineering

5. Computer and Information Security Core (33 CH)

The following courses are required:

CYBR 210 - Computer and Information Security Principles (NEW) .. (3 CH)

CYBR 240 - Information Security Policies (NEW)" (3 CH)

CYBR 310 - Introduction to Cryptography (NEW) .. (3 CH)

CYBR 330 - Cyber Security (Cross-listed with CS 430) (3 CH)

CYBR 350 - Cyber System Administration (NEW) .. (3 CH)

CYBR 360 - Cyber Infrastructure Security (NEW) .. (3 CH)

CYBR 400 - Computer Security Design (NEW)•• (3 CH)

CYBR 435 - Cyber Risk (Cross-listed with CS 435) (3 CH)

CYBR 442 - Cyber Operations (NEW) .. (3 CH)

CYBR 475 - Internship (3 CH) (Cross-listed with CS 475)

CYBR 490 - Senior Project (Cross-listed with CS 490) (3 CH)

6. General Elective

Student may choose any course in Computer and Information Secuirty, Computer Science liberal arts or course toward a minor, or any other course according to personal preference.

A minimum of 120 credit hours is required for graduation.

COMPUTER SCIENCE

Dr. Wook-Sung Yoo, chair

The Bachelor of Science in Computer Science program prepares students for careers in computer science through learning based on practice and grounded in theory. Students learn how to analyze, design, build, test, and deploy computer based systems by making technical trade offs between performance, scalability, availability, reliability, security, maintainability, cost and societal impact. Marshall's computing facilities are state-of-the-art and readily available to students.

Admission and Transfer Criteria

Minimum requirements for admission into the Computer Science major for first-time freshmen are

- an ACT composite score of 21 (composite SAT of 980) and
- an ACT mathematics score of 24 (Math SAT of 560).

Minimum requirements for admission into the Computer Science major for transfer students, whether from within Marshall University or from another institution, are:

- 15 earned semester credit hours of college-level coursework,
- an overall Grade Point Average of at least 2.0 in all college-level coursework,
- completion of ENG 101 (or equivalent) with a grade of *C*, and
- completion of MTH 132, or MTH 127/130 and MTH 132 (or equivalent) with a grade of *C*.

Since enrollment may be limited, prospective students are encouraged to apply for admission as soon as possible and are urged to contact an advisor.

For those desiring to major in computer science who do not meet the admission or transfer criteria listed above:

- Students may be admitted to "Pre-Computer Science" with a minimum ACT composite of 19 and an ACT mathematics score of 19-23 (composite SAT of 900; Math SAT of 460-550). Transfer students must be eligible for MTH 127/130 and MTH 132.

Students in Pre-Computer Science must complete the criteria for transfer students to Computer Science. Registration for Computer Science courses will be limited until transfer criteria are met.

B.S. Degree Requirements

The B.S. degree program requires 120 credit hours of coursework. Students are advised to pay careful attention to Core Curriculum requirements; please consult an advisor.

1. Core Curriculum

Core I

FYS 100 or FYS 100H

Two Critical Thinking courses (CT) ..... 6 hrs.
(3 hrs. met in major)

Core II

ENG 101 and ENG 201 ..... 6 hrs.

CMM 103 or CMM 207 ..... 3 hrs.

Math (requirement met in major)

Physical or Natural Science (requirement met in major)

Social Science ..... 3 hrs.

Humanities ..... 3 hrs.
(CL, ENG, PHL, or RST labeled Humanities)

Fine Arts ..... 3 hrs.
(ART 112, MUS 142, MUS 210, or THE 112)

Additional University Requirements

Writing Intensive courses (W) ..... 6 hrs.

Multicultural (M) or International (I) course ..... 3 hrs.

Freshman transfer students with 29 or fewer hours must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.

(continued)

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics

The following courses are required:

MTH 220: Discrete Structures
MTH 229: Calculus with Analytic Geometry I (CT) (5 CH)
MTH 230: Calculus with Analytic Geometry II (4 CH)
MTH 329: Elementary Linear Algebra
MTH 345: Applied Probability and Statistics

3. Science

Any three courses with labs from the following science areas:

BSC 120: Principles of Biology I (4 CH) or above

CHM 211: Principles of Chemistry I and
CHM 217: Principles of Chemistry Lab I (5 CH total) or above

GLY 200: Physical Geology and
GLY 210L: Earth Materials Lab (4 CH total) or above

PHY 201 General Physics I (3 CH) or PHY 211: University Physics I I (4 CH)
and PHY 202: Conceptual Physics Lab 1 (1 CH) or above

4. Business and Engineering

The following courses are required:

ENG 354: Scientific and Technical Writing

ENGR 221: Engineering Economy

MGT 320: Principles of Management I

5. Computer Science Core

The following courses are required (professional ethics and social responsibility topics are discussed in CS 490):

CS 110: Computer Science I

CS 120: Computer Science II

CS 210: Data Structures and Algorithms

CS 215: Advanced Data Structures and Algorithms

CS 300: Programming Languages

CS 305: Software Engineering I

CS 310: Software Engineering II

CS 320: Internetworking

CS 330: Operating Systems

CS 340: Cyber Security

CS 360: Automa and Formal Languages

CS 402: Computer Architecture

CS 410: Database Engineering

CS 490: Senior Project I (capstone)

6. Computer Science Electives

Choose two of the following electives:

CS 315: Software Quality Assurance

CS 370: Computer Graphics

CS 404: High Performance Computing

(continued)

CS 405: Computing for Bioinformatics

CS 420: Distributed Systems

CS 425: Computational Intelligence

CS 435 Cyber Risk

CS 440: Image Processing

CS 455: Systems Engineering

CS 460: Multimedia Information Retrieval

CS 480-483: Special Topics

7. Free Electives

Students may choose additional CS courses, liberal arts courses, courses towards a minor, or any other courses according to personal preference.

A minimum of 120 credit hours is required for graduation.

Minor in Computer Science

A student may be awarded a minor in computer science by completing, with a minimum 2.0 GPA, a minimum of 15 credits that include the following courses: CS 110, CS 120, CS 210, and any two CS courses at the 300 or 400 level.

PRE-COMPUTER SCIENCE

Students interested in pursuing a degree in computer science who have a minimum composite ACT score of 19 and Math ACT scores of 19-23 (SAT composite 900; Math 460-550), will be admitted into Pre-Computer Science until all of the following minimum requirements are met:

- 15 earned semester credit hours of college-level coursework;
- Overall college Grade Point Average of 2.0;
- Completion of ENG 101 (or equivalent) with a grade of *C*;
- Completion of MTH 127/130 College Algebra (or equivalent) grade of *C*;
- MTH 132 Pre-Calculus (or equivalent) grade of *C*

In order to transfer into the computer science program offered at Marshall, students must meet the Math ACT requirement or complete the requirements listed above for Pre-Computer Science majors. This pertains to transfer students within Marshall or from another institution.

Once all requirements listed above have been met, students will be transferred to the computer science major.

Each student should meet with his/her faculty advisor early in the program to develop an individual plan of study since requirements will vary based on math courses completed. The following is a suggested schedule for pre-computer science majors.

Math ACT 19-23 (SAT 460-550)

First Semester

Course	*Course Title*	*Credits*
ENG 101	English Composition I	3
FYS 100	First Year Seminar	3
MTH 127	College Algebra– Expanded Version	5
or MTH 130	or College Algebra*	or 3
	Core II Course**	3
CS 105	Exploring the World with Computing	3
	Total Credits:	**13-15**

*Placement in MTH 127/130 is based on ACT/SAT math scores.

**Depending on total semester credit hours.

Second Semester

Course	*Course Title*	*Credits*
	Humanities	3
MTH 132	Pre-Calculus	5
CS 110	Computer Science I	3
	Core II Course	3
	Core II Course	3
	Total Credits:	**17**

ELECTRICAL AND COMPUTER ENGINEERING (B.S.E.E.)

Dr. Asad Salem, Division Chair
salema@marshall.edu

The Marshall University Bachelor of Science in Electrical and Computer Engineering (B.S.E.E.) program goals are as follows:

1. Practice the electrical and computer engineering discipline successfully within community accepted standards
2. Demonstrate teamwork and communication skills for a successful career.
3. Fulfill professional and ethical responsibilities in the practice of electrical and computer engineering, including social, environmental and economic considerations
4. Engage in professional service, such as participation in professional society and community service
5. Engage in life-long learning activities, such as graduate studies or professional workshops
6. Develop a professional career in the prevailing market that meets personal goals, objectives and desires

The student outcomes of the B.S.E.E. are:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply the engineering design process to produce solutions that meet specified needs with the consideration for public health and safety, and global, cultural, social, environmental, economic, and other factors as appropriate to the discipline.
3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
6. An ability to recognize the ongoing need to acquire new knowledge, to choose appropriate learning a strategies, and to apply this knowledge.
7. An ability to functions effectively as a member or leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

Admission Requirements

- Meet Marshall University admission requirements
- Admission to the B.S.E.E. program requires a minimum composite ACT score of 21 with a math score of 24, or a minimum SAT composite of 980 with a math SAT of 560.
- Transfer students must have completed MTH 127/130 College Algebra and MTH 132 Pre-Calculus.

Students not meeting the ACT/SAT score requirements above may enroll in Pre-Engineering. Requirements for Pre-Engineering are a minimum composite ACT score of 19 with a math score of 19-23, or a minimum SAT composite of 900 with a math SAT of 460-550. Students who are admitted to the Pre-Engineering program generally will require an additional calendar year to complete the requirements for the B.S.E.E. degree. Transfer students must be eligible to take MTH127/130 College Algebra and MTH132 Pre-Calculus.

Graduation Requirements

The B.S.E.E. degree program requires a minimum of 132 credit hours of coursework. In addition to fulfilling the university's requirements for graduation, B.S.E.E. students must maintain a minimum GPA of 2.0 in all professional courses. These professional courses include mathematics (MTH 229 or above), required science courses, core engineering (ENGR) courses, electrical and computer engineering courses (EE), and courses used as technical electives. Entering students with a

Math ACT of 24-26 are required to take MTH 132 Pre-Calculus. Such students will likely need an extra semester or summer term to satisfy B.S.E.E. requirements.

Curriculum

1. Core Curriculum

A. Core I (9 CH)
- FYS 100 – First Year Seminar or FYS 100H – First Year Seminar – Honors (3 CH)
- Two Critical Thinking courses (CT) (6 CH)

B. Core II (18 CH)
- Composition: ENG 101 – English Composition I (3 CH) and ENG 201 – Advanced Composition (3 CH) (Completion of ENG 201H – English Composition Honors (3 CH) with a C or better also satisfies the University composition requirement)
- Communication: CMM 103 – Fundamentals of Speech Communications or CMM 207 – Business and Professional Communication (3 CH)
- Math: (requirement met in major)
- Physical or Natural Science: (requirement met in major)
- Social Science (3 CH)
- Humanities (3 CH)
- Fine Arts (3 CH)

C. Additional University Requirements
- Two Writing Intensive (W) courses (6 CH)
- One Multicultural (M) or International (I) course (3 CH)

D. Transfer Students
- Freshman transfer students must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.
- Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics (19 CH)
- MTH 229 – Calculus with Analytic Geometry I (5 CH)
- MTH 230 – Calculus with Analytic Geometry II (4 CH)
- MTH 231 – Calculus with Analytic Geometry III (4 CH)
- MTH 335 – Differential Equations (3 CH)
- MTH 220 –Discrete Structures (3 CH)

3. Science (12 CH)
- CHM 211 – Principles of Chemistry I (3 CH)
- PHY 211 – University Physics I (4 CH)
- PHY 213 – University Physics II (4 CH)
- PHY 204 – General Physics Lab II (1 CH)

4. Engineering (13 CH)
- ENGR 103 – Freshman Engineering Seminar (1 CH)
- ENGR 104 – The Engineering Profession (1 CH)
- ENGR 201 – Circuits I (4 CH)
- ENGR 217 – Engineering Co-Op Preparation (1 CH)
- ENGR 222 - Engineering Cost Analysis & Economy (3 CH)
- ENGR 335 - Advanced Engineering Analysis (3 CH)

5. Computer Science (3 CH)
- CS 110 ─Computer Science I (3 CH)

(continued)

6. Electrical and Computer Engineering (55 CH)

- EE 202 Circuits II (3 CH)
- EE 204 Introduction to Digital Systems (3 CH)
- EE 210 Programming Lab (3 CH)
- EE 211 Intro. to Computer Engineering Concepts & Design (3 CH)
- EE 310 Electromagnetic Fields (3 CH
- EE 320 Signals & Systems (3 CH)
- EE 330 Random Signals & Systems (3 CH)
- EE 340 Computer Architecture & Design (4 CH)
- EE 350 Electric Properties of Materials (3 CH)
- EE 360 Linear System & Control Theory (3 CH)
- EE 370 Electric Machinery (3CH)
- EE 375 Communication Systems I (3 CH)
- EE 380 Microprocessors (3 CH)
- EE 401 Communication Systems II (3 CH)
- EE 415 Introduction to VHDL Design (3 CH)
- EE 425 Electric Power Systems
- EE 440 Digital Control Systems (3 CH)

7. Capstone, Technical Electives, and Free Elective (12 CH)

A. Design*:

- EE 410 Electrical Engineering Design (3 CH) OR
- EE 412 Computer Engineering Design (3 CH)

*To be eligible for EE 410 or EE 412 students must have senior standing in BSEE and have completed the following courses:

- EE 370, EE 375, and EE 380

B. Capstone**

- EE 420 Capstone (3 CH)

**To be eligible to take the capstone design course (EE 420), students must have completed EE 410 or EE 412.

C. Technical Electives (6 CH)

At least 2 technical elective courses related to the area of emphasis must be taken. The courses must be approved by the student's advisor and the division chair. The following is a suggested list:

- EE 445 Radio Frequency and Microwave Engineering (3 CH)
- EE 448 Power Electronics (3 CH)
- ME 465 Mechatronics (3 CH)
- ME 475 Programmable Logic Controls (PLC) (3 CH)
- EE 447 Real-Time Digital Processing (3 CH)
- CS 412 Embedded Systems (3 CH)
- CS 430 Cybersecurity (3 CH)
- CS 440 Digital Image Processing (3 CH)

Co-operative Education

Students may elect to participate in the co-operative education program. Students in the program will have periodic full-time work experiences in their area of interest with participating companies. Information on the program can be obtained from the division chair or academic advisor.

ENGINEERING (B.S.E.)

Dr. Asad Salem, Division Chair
salema@marshall.edu

The Marshall University Bachelor of Science in Engineering (B.S.E.) program educational objectives are as follows:

1. B.S.E. graduates will be recognized for their success in designing engineering systems that promote the health, safety, and welfare of the public.
2. B.S.E. graduates will demonstrate their awareness of an engineer's role in contemporary society and their understanding of the societal and environmental contexts of engineering projects.
3. B.S.E. graduates will practice in specific areas of engineering that are consistent with the needs of the region served by Marshall University.

The student outcomes of the B.S.E. are:

a) Ability to apply mathematics, science and engineering principles.
b) Ability to design and conduct experiments, analyze and interpret data.
c) Ability to design a system, component, or process to meet desired needs.
d) Ability to function on multidisciplinary teams.
e) Ability to identify, formulate and solve engineering problems.
f) Understanding of professional and ethical responsibility.
g) Ability to communicate effectively.
h) The broad education necessary to understand the impact of engineering solutions in a global and societal context.
i) Recognition of the need for and an ability to engage in life-long learning.
j) Knowledge of contemporary issues.
k) Ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Admission Requirements:

- Meet Marshall University admission requirements
- Admission to the B.S.E. Engineering program requires a minimum composite ACT score of 21 with a math score of 24, or a minimum SAT composite of 980 with a math SAT of 560.
- Transfer students must have completed MTH 127/130 College Algebra and MTH 132 Pre-Calculus.

For those needing to complete some requirements first, there is Pre-Engineering. Requirements for Pre-Engineering are a minimum composite ACT score of 19 with a math score of 19-23, or a minimum SAT composite of 900 with a math SAT of 460-550. Students who are admitted to the Pre-Engineering program generally will require an additional calendar year to complete the requirements for the B.S.E. degree. Transfer students must be eligible to take MTH127/130 College Algebra and MTH132 Pre-Calculus.

Graduation Requirements

The B.S.E. degree program requires a minimum of 128 credit hours of coursework as outlined below. In addition to fulfilling the university's requirements for graduation, B.S.E. students must maintain a minimum GPA of 2.0 in all professional courses. These professional courses include mathematics (MTH 229 or above), required science courses, core engineering (ENGR) courses, engineering emphasis courses (CE), and courses used as technical electives. Entering students with a math ACT of 24-26 are required to take MTH 132, Pre-Calculus. Such students will likely need an extra semester or summer term to satisfy BSE requirements.

Engineering Science Minor

A student may be awarded a minor in engineering science by completing 15 credits of ENGR or CE. Two courses are required, ENGR 213 and 216, and at least six credits must be 300-level or 400-level engineering courses. A student must complete all the required prerequisites and have at least a 2.0 average in courses taken and applied to the engineering science minor.

B.S.E. Degree Requirements

1. Core Curriculum

Core I (9 CH)

FYS 100 or FYS 100H

Six credit hours of Critical Thinking (CT) (6 CH)

(continued)

Core II

Composition: ENG 101 and ENG 201 (6 CH)

Communication: CMM 103 or CMM 207 (3 CH)

Math (requirement met in major)

Physical or Natural Science (requirement met in major)

Social Science (3 CH)

Humanities (3 CH)
(CL, ENG, PHL, or RST designated as Humanities)

Fine Arts (3 CH)

Additional University Requirements

*Writing Intensive courses (W) (6 Hrs.)

*Multicultural (M) or International (I) course (3 hrs.)

Freshman transfer students with 29 or fewer hours must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics

MTH 229 Calculus with Analytic Geometry I (CT) (5 CH)

MTH 230 Calculus with Analytic Geometry II (4 CH)

MTH 231 Calculus with Analytic Geometry III (4 CH)

MTH 335 Differential Equations (3 CH)

STA 345 Applied Probability and Statistics (3 CH)

3. Science

CHM 211 Principles of Chemistry I and CHM 217: Principles of Chemistry Lab I (5 CH total)

CHM 212 Principles of Chemistry II and CHM 218: Principles of Chemistry Lab II (5 CH total)

GLY 200 Physical Geology (3 CH)

PHY 211 University Physics I I (4 CH) and PHY 202: Laboratory Methods in Physics I (1 CH)

4. Engineering

ENGR 103 Freshman Engineering Seminar (1 CH)

ENGR 104 The Engineering Profession (1 CH)

ENGR 111 Engineering Computations (3 CH)

ENGR 213 Statics (3 CH)

ENGR 214 Dynamics (3 CH)

ENGR 216 Mechanics of Deformable Bodies (3 CH)

ENGR 217 Engineering Co-Op Preparation (1 CH)

ENGR 318 Fluid Mechanics (3 CH)

ENGR 451 Introduction to Project Management (3 CH)

5. Civil Engineering

CE 102 Introduction to CAD (2 CH)

CE 241 Geomatics (3 CH)

CE 312 Structural Analysis (3 CH)

CE 319 Civil Engineering Fluid Mechanics Laboratory (1 CH)

CE 321 Civil Engineer Materials (3 CH)

CE 322 Geotechnical Engineering (3 CH)

CE 331 Hydraulic Engineering (4 CH)

CE 342 Transportation Engineering (3 CH)

CE 351 Environmental Engineering (3 CH)

6. Senior Design, Design Elective, and Technical Electives

A. ENGR 452 Senior Capstone Design I (2 CH)

To be eligible to take Senior Capstone Design I (ENGR 452), students must have senior standing in engineering. Senior standing is defined for the CE Emphasis as having completed or concurrently taking (1) at least four of these five courses and at least one CE Design Elective or (2) at least three of these five courses and at least two CE Design Electives:

- CE 312 Structural Analysis (3 CH),
- CE 322 Geotechnical Engineering (4 CH),
- CE 331 Hydraulic Engineering (3 CH),
- CE 342 Transportation Engineering (3 CH), and
- CE 351 Environmental Engineering (3 CH).

B. ENGR 453 Senior Capstone Design II (3 CH)

To be eligible to take Senior Capstone Design II (ENGR 453), students must have completed Introduction to Project Management (ENGR 451) and Senior Capstone Design I (ENGR 452).

C. CE Design Electives (6 CH)

At least two CE design electives must be taken from the following courses:

- CE 413 Reinforced Concrete Design (3 CH) or CE 414 Structural Steel Design (3 CH),
- CE 425 Foundation Engineering (3 CH),
- CE 434 Water and Wastewater Treatment Design (3 CH)
- CE 443 Transportation Systems Design (3 CH).

D. CE Electives (6 CH)

At least two CE electives must be taken from the following list of courses, excluding courses that are taken to satisfy the CE Design Electives:

- CE 341 Advanced Geomatics
- CE 413 Reinforced Concrete Design
- CE 414 Structural Steel Design
- CE 425 Foundation Engineering
- CE 433 Hydrologic Engineering
- CE 434 Water and Wastewater Treatment Design
- CE 443 Transportation Systems Design
- Any 300-level or higher CE course not taken to satisfy a CE Design Elective.

E. Technical Elective (3 CH)

One technical elective that satisfies one of the criteria below must be taken.

- Any 300-level or higher CE course not taken to satisfy a CE Design Elective or CE Elective.
- Any 200-level or higher ENGR, ME or EE course, with advance approval from the student's advisor and chair.

F. Free Elective (3 CH)

One additional 3-hour course must be taken to fulfill the requirements of the degree. It is highly recommended that students consider taking a CE Elective or Technical Elective to fulfill this requirement. At a minimum, the course must be 100-level or above. Developmental courses (095, 096, etc.) do not count toward completion of the free elective.

MECHANICAL ENGINEERING (B.S.M.E.)

Dr. Asad Salem, Division Chair
salema@marshall.edu

The Marshall University Bachelor of Science in Mechanical Engineering (B.S.M.E.) program goals are as follows:

1. Practice the mechanical engineering discipline successfully within community accepted standards
2. Demonstrate teamwork and communication skills for a successful career
3. Fulfill professional and ethical responsibilities in the practice of mechanical engineering, including social, environmental and economic considerations
4. Engage in professional service, such as participation in professional society and community service
5. Engage in lifelong learning activities, such as graduate studies or professional workshops.
6. Develop a professional career in the prevailing market that meets personal goals, objectives and desires

The student outcomes of the B.S.M.E. are:

a) Ability to apply mathematics, science and engineering principles.
b) Ability to design and conduct experiments, analyze and interpret data.
c) Ability to design a system, component, or process to meet desired needs.
d) Ability to function on multidisciplinary teams.
e) Ability to identify, formulate and solve engineering problems.
f) Understanding of professional and ethical responsibility.
g) Ability to communicate effectively.
h) The broad education necessary to understand the impact of engineering solutions in a global and societal context.
i) Recognition of the need for and an ability to engage in life-long learning.
j) Knowledge of contemporary issues.
k) Ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Admission Requirements

- Meet Marshall ll University admission requirements
- Admission to the B.S.M.E. program requires a minimum composite ACT score of 21 with a math score of 24, or a minimum SAT composite of 980 with a math SAT of 560.
- Transfer students must have completed MTH 127/130, College Algebra, and MTH 132, Pre-Calculus.

Students not meeting the ACT/SAT score requirements above may enroll in Pre-Engineering. Requirements for Pre-Engineering are a minimum composite ACT score of 19 with a math score of 19-23, or a minimum SAT composite of 900 with a math SAT of 460-550. Students who are admitted to the Pre-Engineering program generally will require an additional calendar year to complete the requirements for the B.S.M.E. degree. Transfer students must be eligible to take MTH 127/130, College Algebra, and MTH 132, Pre-Calculus.

Graduation Requirements

The B.S.M.E. degree program requires a minimum of 132 credit hours of coursework. In addition to fulfilling the university's requirements for graduation, B.S.M.E. students must maintain a minimum GPA of 2.0 in all professional courses. These professional courses include mathematics (MTH 229 or above), required science courses, core engineering (ENGR) courses, mechanical engineering courses (ME), and courses used as technical electives. Entering students with a Math ACT of 24-26 are required to take MTH 132, Pre-Calculus. Such students will likely need an extra semester or summer term to satisfy B.S.M.E. requirements.

Curriculum

1. Core Curriculum
   A. Core I (9 CH)
      - FYS 100- First Year Seminar or FYS l00H - First Year Seminar - Honors (3 CH)
      - Two Critical Thinking courses (CT) (6 CH)
   B. Core II (18 CH)
      - Composition: ENG 101- English Composition I (3 CH) and ENG 201; Advanced Composition (3 CH) (Completion of ENG 201H - English Composition Honors (3 CH) with a *C* or better also satisfies the university composition requirement)

- Communication: CMM 103 - Fundamentals of Speech Communications or
- CMM 207 - Business and Professional Communication (3 CH)
- Math: (requirement met in major)
- Physical or Natural Science: (requirement met in major)
- Social Science (3 CH)
- Humanities (3 CH)
- Fine Arts (3 CH)

C. Additional University Requirements
- Two Writing Intensive (WI) courses (6 CH)
- One Multicultural (M) or International (I) course (3 CH)

D. Transfer Students
- Freshman transfer students must complete Core 1 at Marshall. Core II can be completed with Marshall or transfer courses.
- Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Mathematics (20 CH)
- MTH 229 – Calculus with Analytic Geometry I (5 CH)
- MTH 230 – Calculus with Analytic Geometry II (4 CH)
- MTH 231 – Calculus with Analytic Geometry Ill (4 CH)
- MTH 335 – Differential Equations (4 CH)
- MTH 345 – Applied Probability and Statistics (3 CH)

3. Science (13 CH)
- CHM 211 – Principles of Chemistry I (3 CH)
- PHY 211 – University Physics I (4 CH)
- PHY 202 – General Physics Lab (1 CH)
- PHY 213 – University Physics II (4 CH)
- PHY 204 – General Physics Lab (1 CH)

4. Engineering (39 CH)
- ENGR 102 – Introduction to CAD (2 CH)
- ENGR 103 – Freshman Engineering Seminar (1 CH}
- ENGR 104 – The Engineering Profession (1 CH)
- ENGR 111 – Engineering Computations (3 CH)
- ENGR 213 – Statics (3 CH)
- ENGR 214 – Dynamics (3 CH)
- ENGR 215 – Engineering Materials (3CH)
- ENGR 216 – Mechanics of Deformable Bodies (3 CH)
- ENGR 217 – Engineering Co-Op Preparation (1 CH}
- ENGR 219 – Thermodynamics (3 CH)
- ENGR 222 – Engineering Cost Analysis (3 CH)
- ENGR 240 – Manufacturing Processes (3 CH)
- ENGR 245 – Introduction to Circuits and Controls (3 CH)
- ENGR 318 – Fluid Mechanics (3 CH)
- ENGR 319 – Fluid Mechanics Lab (1 CH)
- ENGR 451 – Introduction to Project Management (3 CH)
- ENGR 452 – Senior Capstone Design I (2 CH)
- ENGR 453 – Senior Capstone Design II (3 CH)

(continued)

5. Mechanical Engineering (26 CH)

- ME 310 - Thermodynamics II (3 CH)
- ME 320 - Fluid Power (3 CH) or ME 330 Manufacturing Methods and Design (3 CH)
- ME 325 - Mechanical Engineering Lab I (1 CH)
- ME 335 - Mechanical Engineering Analysis (3 CH)
- ME 340 - Machine Element Design (3 CH)
- ME 350 - Heat Transfer (3 CH)
- ME 410 - Kinematics and Design of Machines (3 CH)
- ME 420 - Instrumentation and Control (3 CH)
- ME 425 - Mechanical Engineering Lab II (1 CH)
- ME 440 - Design and Analysis of Energy Systems (3 CH)

6. Capstone Design, Design Elective, and Technical Electives

A. Senior Engineering Seminar (1 CH)

To be eligible to take the Senior Engineering Seminar course (ENGR 452), students must have senior standing in mechanical engineering. Senior standing is defined for the B.S.M.E. as having completed or concurrently taking these three courses:

- ME 325 - Mechanical Engineering Lab I (1 CH),
- ME 340 - Machine Element Design (3 CH), and
- ME 350 - Heat Transfer (3 CH)

B. Capstone Design (3 CH)

To be eligible to take the capstone design course (ENGR 453), students must have completed ENGR 451, ENGR 452 and at least one of the design electives (ME 430 or ME 435):

C. Design Elective (3 CH)

At least one design elective must be taken from the following courses:

- ME 440 - Design of Thermal Systems (3 CH)
- ME 435 - Design of Mechanical Systems (3 CH)

D. Technical Electives (6 CH)

At least two technical electives must be taken from the following approved list of courses:

- Any 300-level or higher ME course not taken to satisfy other B.S.M.E. degree requirements
- Any 300-level or higher ENGR course not taken to satisfy other B.S.M.E. degree requirements

Other courses may be taken to satisfy this requirement with the approval of the student's advisor and the division's chair.

ENGINEERING TRANSFER

Dr. Asad Salem, Division Chair
salema@marshall.edu

Marshall University offers an engineering transfer program that consists of three to four semesters of a professional engineering curriculum, including basic mathematics, science, and core engineering courses common to most undergraduate engineering programs. In order to complete the final courses of a specific engineering degree students must transfer to another institution (usually West Virginia University or West Virginia University Institute of Technology).

To qualify for admission a minimum Math ACT score of 24 (Math SAT of 560) and a composite score of 21 (SAT composite of 980) is required. However, students with a composite 19 (SAT 900) and a Math ACT of 19-23 (MTH SAT 460-550) may be admitted as a pre-engineering major. Students admitted to pre-engineering must complete the following minimum requirements in order to declare engineering as a major:

- Overall College Grade Point Average of 2.0
- MTH 127/130 College Algebra, (or equivalents) grade of *C*
- MTH 132 Pre-Calculus, (or equivalents) grade of *C*

In order to transfer into the engineering transfer program, whether from within Marshall University or from another institution, students must meet the Math ACT/SAT requirement or complete the requirements listed above. If transfer students do not meet the above requirements they may be admitted into pre-engineering with the same restrictions as listed above for program admission.

Each student should meet with his/her faculty advisor early in the program to develop an individual plan of study since requirements will vary for different professional schools, desired major, and academic preparation. However, the course sequences described below represent a typical plan of study for engineering transfer students planning to major in one of

the major engineering branches: civil engineering (CE), chemical engineering (ChE), computer engineering (CpE), industrial engineering (IE), electrical engineering (EE), or mechanical engineering (ME). Students who have a Math ACT of less than 24 must take CHM 111 before CHM 211.

First Year

First Semester	*Hrs.*	*Second Semester*	*Hrs.*
MTH 229, Calculus I	5	MTH 230, Calculus II	4
ENG 101, English Composition	3	ENGR 111, CS For Engineers I	3
CHM 211, Chemistry I	3	CHM 212 & 218, Chemistry II* or	
CHM 217, Chem. Lab. I	2	ENGR 102, Intro to CAD	2
ENGR 103 Freshman Engineering Seminar	1	PHY 211/202	5
ENGR 104 The Engineering Profession	1	Humanities/Social Science	3
	15		17

Second Year

First Semester	*Hrs.*	*Second Semester*	
MTH 231, Calculus III	4	MTH 335, Differential Equations	4
ENGR 213, Statics	3	ENGR 214, Dynamics	3
PHY 211, Physics I	4	PHY 213, Physics II	4
PHY 202 or 212, Physics Lab	1	PHY 204 or 214, Physics Lab	1
ENGR 201, Circuits I*	4	ENGR 221 Engineering Economy*	
ENG 201 or		or ENGR 219 Thermodynamics*	
or ENGR 221, Engineering Economy*	3	ENGR 216 Mech. of Materials*	
	19	or ENGR 202, Circuits II*	4
			18-19

* See advisor; course not required by all disciplines.

TRANSFER TO BACCALAUREATE PROGRAMS IN ENGINEERING

Administrative Bulletin No. 23 of the Board of Trustees establishes policies for transfer of students from pre-engineering programs to baccalaureate programs at West Virginia University and West Virginia University Institute of Technology.

POLICIES AND PRACTICES FOR THE TRANSFER PROCESS

A. Any student (1) who is a resident of West Virginia, (2) who meets the admission standards for a receiving institution at the time they are admitted by the sending institution, (3) who maintains a GPA of 2.0 or higher during the equivalent of four terms (64 credit hours) at a sending institution will be assured admission into a baccalaureate program in engineering at the receiving institution, provided the student has satisfactorily completed all prerequisite courses. Qualified students who have completed fewer than 64 credit hours at a sending institution will be considered for admission to a baccalaureate engineering program at a receiving institution in the same manner as the receiving institution's regular returning students. Students should consult the college handbook of the desired receiving institution for admission requirements.

   Students who have completed a pre-engineering program should have completed the following core of courses:

Calculus	12 hrs.
Chemistry	8 hrs.
Physics	8 hrs.
English	6 hrs.
Statics	3 hrs.
Computer Programming	2 hrs.
Graphics	2 hrs.

B. Any student (1) who is **not a resident** of West Virginia, (2) who meets the non-resident admission standards for a receiving institution at the time they are admitted by the sending institution, and (3) who maintains a GPA of 2.0 or higher during the institution will be assured admission into a baccalaureate program in engineering at a receiving institution, provided the student has satisfactorily completed all prerequisite courses. Qualified students who have completed fewer than 64 credit hours at a sending institution will be considered for admission to a baccalaureate engineering program at a receiving institution on a case-by-case basis.

C. Any student who does not qualify under A or B above, but who nonetheless is admitted to a pre-engineering program at a sending institution, must be informed that there is no assurance that he or she will be admitted to a baccalaureate program in engineering at a receiving Institution. These students will be admitted to the College of Engineering and to a curriculum if they have completed at least 8 hours of calculus, 8 hours of applicable physics or chemistry, and 4 hours of graphics and computer programming and one semester of freshman composition with an overall 2.5 GPA and a 2.5 GPA in math and science courses. Students who do not meet the minimum transfer requirements, but who demonstrate special aptitude for engineering studies, may request admission to a baccalaureate program in engineering at a receiving institution by written petition to the appropriate administrator at the receiving institution. Although these guidelines are designed to accommodate students who wish to transfer into a baccalaureate engineering program from an approved two-year pre-engineering program, differences in

the range and scope of offerings at each institution cannot assure that a student will be able to complete the baccalaureate degree in all fields of engineering within a four-year period.

Any student who is admitted by transfer from a pre-engineering program at a sending institution will be treated by the receiving institution like the receiving institution's regular returning student. Access to student housing and other privileges at the receiving institution will be controlled by the usual offices, in accordance with the institution's standard practices.

All pre-engineering students at a sending institution will have an opportunity annually to consult with academic advisors from the receiving institutions to ensure adequate articulation of engineering program requirements.

The number of slots available in certain high demand programs at West Virginia University may be limited. In these cases, West Virginia University may invite qualified applicants to select another field.

PRE-ENGINEERING

Students interested in pursuing a degree in engineering who have a minimum composite ACT score of 19 and Math ACT scores of 19-23 (SAT composite 900; Math 460-550), will be admitted into Pre-Engineering until all of the following minimum requirements are met:

- Overall college Grade Point Average of 2.0
- Completion of MTH 127/130 College Algebra (or equivalent) with a grade of *C*
- MTH 132 Pre-Calculus (or equivalent) with a grade of *C*

In order to transfer into the engineering programs offered at Marshall, students must meet the Math ACT requirement or complete the requirements listed above for Pre-Engineering majors. This pertains to transfer students within Marshall or from another institution.

Once all of the preceding requirements have been met, students will be transferred to the desired engineering major.

Students who are admitted to the Pre-Engineering program generally will require an additional calendar year to complete the requirements for the B.S.E. degree or engineering transfer.

Each student should meet with his/her faculty advisor early in the program to develop an individual plan of study since requirements will vary for different professional schools, desired major, and academic preparation. The following is a suggested schedule for Pre-Engineering majors.

In the tables that follow, the following notation is used:

R = required A = see advisor

Math ACT 19-22 (SAT 460-530)

First Semester

Course	*Course Title*	*Credits*	
ENG 101	English Composition I	3	R
ENGR 103	Freshman Engineering Seminar	1	R
MTH 127 or MTH 130*	College Algebra– Expanded Version or College Algebra	5 or 3	R
SFT 235	Intro to Safety (Int'l)	3	A
FYS 100	First Year Seminar	3	A
UNI 102	Strategies for Academic Success	1	R
	TOTAL CREDITS:	**14-16**	

*Placement in MTH 127/130 is based on ACT/SAT math scores.

Second Semester

Course	*Course Title*	*Credits*	
MTH 132	Pre-Calculus	5	R
CHM 111	Foundations of Chemistry	3	R
	Option: Core II Course (CT)	3	A
	Fine Arts	3	A
	Communication Course	3	A
	TOTAL CREDITS:	**17**	

SAFETY TECHNOLOGY

Dr. Tony Szwilski, chair
szwilski@marshall.edu

The safety profession is an occupational field concerned with the preservation of both human and material resources through the application of various principles drawn from such disciplines as engineering, education, psychology, physiology, enforcement, hygiene, health, physics and management. "Safety Science" is a term for everything that goes into the prevention of accidents, illnesses, fires, explosions and other events which damage people, property and the environment.

The Bachelor of Science degree in Safety Technology offers students the option of preparing for entry-level positions in industry, governmental agencies and related service industries. The need for Safety Professionals has expanded due to Federal and State legislation governing safety and health in the workplace and an increase in public awareness of safety and health factors.

The program is accredited by and follows the recommendations of the Applied Science Accreditation Commission/ Accreditation Board for Engineering & Technology (ASAC/ABET) for the preparation of Safety Professionals.

To qualify for admission to the B.S. in Safety Technology degree program a minimum Math ACT of 17 and minimum composite ACT of 17. (MTH SAT 440; composite SAT 820) is required. Each student in the program will be expected to maintain a 2.0 GPA overall and in areas of specialization. An internship (capstone experience) is required to be completed under the Core Curriculum and the program requirements.

In May 2006, the Board of Certified Safety Professionals ruled that all ABET-accredited schools may now issue to graduating seniors the designation of GSP (Graduate Safety Practitioner). Students will receive an application packet from the department to fill out and it will be sent to the BCSP office. A certificate will be handed out to the students at semester's end. The GSP designation will take the place of the ASP designation as the student graduates and continues work toward becoming a Certified Safety Professional (CSP).

Requirements for B.S. Degree, Pre-Pharmacy option

Students may elect to pursue the Pre-Pharmacy option within the B.S. in Safety Technology degree which allows them to take pre-pharmacy prerequisites for Marshall's School of Pharmacy. A minimum Math ACT of 27 (SAT 610) is required in order to take MTH 229 Calculus I without completing additional prerequisite math courses, which would facilitate four-year degree completion. Completion of this degree option does not guarantee acceptance into the Marshall School of Pharmacy program. Please consult the Marshall School of Pharmacy for the complete admission requirements.

For Pharmacy programs offered by other institutions students should frequently consult the pre-health care professional web site (*www.marshall.edu/preprof*) to keep abreast of the requirements at the institutions and programs of interest. To increase the strength of the applicant's academic credentials, the completeness of the application, and to plan a strategy for successful admission frequent contact with the pre-health care professional advisor in the College of Science is highly recommended.

Requirements for B.S. Degree

Pre-Pharmacy option courses that are in addition to requirements are designated by an asterisk (*).

1. Core Curriculum

Core I (9 Hrs.)

FYS 100 or FYS 100H First year Seminar (3 Hrs.)

Two Critical Thinking courses (CT) (6 Hrs.)

Core II

ENG 101 and ENG 201 (6 hrs.)

CMM 103 or CMM 207 (3 hrs.)

Math (requirement met in major)

Physical or Natural Science (requirement met in major)

Social Science (Requirement met in major)

Humanities (3 Hrs.)
CL, ENG, PHL, or RST labeled Humanities

Fine Arts (3 Hrs.)
ART 112, MUS 142, or THE 112

Additional University Requirements

Writing Intensive courses (W) (6 Hrs.)

Multicultural or International course (Requirement met in major: SFT 235 is an International course) (3 Hrs.)

(continued)

Freshman transfer students must complete Core I at Marshall. Core II can be completed with Marshall or transfer courses.

Transfer students with 30-59 college credits must complete one CT course in Core I, all of Core II and the additional university requirements. Students transferring in 60 or more college credits are exempt from taking Core I, but must complete all of Core II and the additional university requirements. Core II can be completed with Marshall or transfer courses.

2. Scientific and Technical Writing

ENG 354 Scientific and Technical Writing (3 Hrs.)

3. Mathematics

Note: The mathematics a student must take will depend upon several factors such as the student's ACT score and mathematics proficiency. It is very important to talk to your advisor in selecting courses.

17 Math ACT (Math SAT of 440)

1. Math 127 (5 hrs.), and Math 122 or MTH 132 Pre-Calculus (3 hrs.)

19 or 20 Math ACT (Math SAT of 460-490)

1. Math 127 (5 hrs.), and Math 122 or MTH 132 Pre-Calculus (3 hrs.); 8-10 hours total

OR

21 or higher Math ACT (Math SAT of 500)

2. Math 130 (3 hrs.), and Math 122 or MTH 132 Pre-Calculus (3 hrs.); 6-8 Hrs total

Math 140** or Math 229 should also be considered if student is thinking of going on to graduate school in the future. This is a prerequisite for some graduate courses.

OR

24 or higher Math ACT (Math SAT of 560)

3. Math 132 or higher level course such as MTH 229 or 229H
4. *MTH 229 Calculus I

Because the B.S. degree is an accredited program by ASAC/ABET, students must be able to demonstrate "proficiency" in the areas of mathematics and statistics; chemistry, physics, and sciences; communication studies; psychology and physiology; and major field of study, i.e. safety. To demonstrate proficiency in the areas, a grade no less than a *C* is required. Courses in the areas of proficiency listed above cannot be completed under the CR/NC course option.

4. Basic Studies for Safety Technology Program

(CHM 111, Foundations of Chemistry, required if Math ACT < 24)	
CHM 211, Principles of Chemistry I	3
CHM 217, Principles of Chemistry Lab I	2
CHM 212, Principles of Chemistry II	3
CHM 218, Principles of Chemistry Lab II	2
*CHM 355, Organic Chemistry I (3)	
*CHM 356 Organic Chemistry II (3)	
*CHM 361 Intro Organic Chemistry Lab (1)	
PHY 201, College Physics I	3
PHY 202, General Physics Lab I	1
PHY 203, College Physics II	3
PHY 204, General Physics Lab II	1
Biology 104 or *Biology 120	4
*BSC 121, Principles of Biology II	4

5. Management:

Student should choose ONE course from the following:

MGT 320, Principles of Management
ACC 215, Principles of Accounting

6. Statistics Courses

Student should choose ONE course from the following:

STA 225, Introductory Statistics
PSY 223, El. Behavioral Statistics
MGT 218, Business Statistics

7. Psychology Course

PSY 201, General Psychology

8. Anatomy/Physiology

HS 201, Introduction to Applied Anatomy & Physiology
Or * BSC 227, Human Anatomy (4)
*BSC 228 Human Physiology (4)

9. Professional Safety Core

SFT 235, Introduction to Safety	3
SFT 340, Industrial Fire Prevention	3
SFT 372, Safety & Industrial Technology	3
SFT 373, Principles of Ergonomics	3
SFT 373L, Principles of Ergonomics Lab	1
SFT 375, Construction Safety I	3
SFT 378, Safety Evaluation and Measurement	3
SFT 454, Industrial Environmental Protection	3
SFT 454L, Industrial Environmental Protection Lab	2
SFT 460, Safety Training Methods	3
SFT 465, Incident Investigation Techniques	3
SFT 489, Process Safety Management	3
SFT 498, Environmental Safety and Health Legislation	3
SFT 499, Organization, Administration and Supervision of Safety Programs	3
SFT 490 (Capstone), Internship	3

10. Occupational Safety Electives (student must select 9 hours)

SFT 453, International Safety
SFT 458, Hospital Safety
SFT 480–483, Special Topics
SFT 485–488, Independent Study
SFT 491–494, Workshop
SFT 497, Occ. Safety and Health
BSC 250, Microbiology and Human Disease (4)

11. Free Electives (student must select 3 hours)

A minimum of 120 hours is required for graduation.

The Pre-Pharmacy option is an additional 13-23 hours, depending on math prerequisites.

MINORS

Occupational Safety and Health Minor (includes CHM and PHY prerequisites)

A minor in Occupational Safety and Health may be earned by completing the courses taken toward the minor with a minimum average GPA of 2.0.

SFT 235, Introduction to Safety	3
SFT 372, Safety and Industrial Technology	3
SFT 373, Principles of Ergonomics	3
SFT 373L, Principles of Ergonomics Lab	1
SFT 499, Organization, Administration, and Supervision of Safety Programs	3
One additional SFT course	3
Total	**16**

Safety Technology Minor

A minor in Safety Technology may be earned by completing the courses taken toward the minor with a minimum average GPA of 2.0.

SFT 235, Introduction to Safety	3
SFT 372, Safety and Industrial Technology	3
SFT 375, Construction Safety I	3
Two additional SFT courses	6
Total	**15**

College of Liberal Arts

Dr. Robert Bookwalter, Dean
Dr. Cheryl A. Brown, Associate Dean
www.marshall.edu/cola
cola@marshall.edu

MISSION OF THE COLLEGE

The College of Liberal Arts is committed to excellence in higher education. We have the responsibility to preserve, transmit, interpret, and create knowledge in an environment of free inquiry and expression. We will provide instruction that forms the core of the undergraduate curriculum for all Marshall University students so they may think critically and imaginatively, communicate effectively, and understand various dimensions of human experience. Within the disciplines of the college we will provide specialized instruction for undergraduate and graduate students, enabling them to develop the intellectual and moral abilities to live autonomous, sensitive, productive lives. We will be active scholars who contribute to the wider academic community. We will continue to use our expertise in the service of others.

DEGREE PROGRAMS

The College of Liberal Arts offers four-year degrees in these majors:

Anthropology
Classical Language–Latin
Communication Studies
- Health Communication
- Interpersonal Communication
- Organizational Communication
- Public Communication

Economics - B.A.
English
- Creative Writing
- Literary Studies
- Generalist

French
Geography - B.A.
Geography - B.S.
- Meteorology
- Weather Broadcasting

History
Humanities
- Classics
- Philosophy
- Religious Studies

International Affairs
Japanese
Political Science
Psychology
Sociology
Spanish

ADMISSION TO THE COLLEGE

1. Regular admission to the university constitutes admission to the College of Liberal Arts for students entering as freshmen and as transfers from other institutions. There is no separate admissions process.
2. The College of Liberal Arts will accept inter-college and college transfers.

ACADEMIC POLICIES

Changing Your Major or College

If you want to declare a major, change your major, or transfer to a different college at Marshall, you must do this in the College of Liberal Arts office, Old Main 110.

Advising: General

Your advisor is a member of the faculty or a professional staff person in your major. Advisors help you select appropriate courses for the major, minor, and general education requirements. In addition, your advisor can give you advice about career and graduate school opportunities. Although you most often will see your advisor during registration periods, all advisors are available during office hours throughout the semester. You should arrange an appointment with your advisor at any time during the semester when you need their advice.

As a Marshall University student, you are responsible for understanding and following the degree requirements outlined in this catalog as they apply to university and college degree requirements, the requirements for the major, and the requirements for other programs you may be pursuing. Changing your schedule by adding and dropping courses may affect your program of study and the time required to complete your degree.

Advising: Preregistration

If you are a freshman or sophomore and have declared a major, you must meet with your advisor before registering for classes. The advisor is the only person who can remove your "advisor hold" so you may register for courses.

All students majoring in Classics, Communication Studies, Philosophy, and Religious Studies must meet with an advisor before registration. Therefore, you should check your department listing in this catalog to determine the exact advising requirements.

Before you meet with your advisor, you should prepare a tentative list of courses for your advisor to review with you. Specifically, you should complete the advising sheet for your major. These sheets are available on the website for the department (these are listed below) and in the College of Liberal Arts office, Old Main 110.

Determining Your Catalog

When you declare your major the catalog current on that date will then become the official document specifying the requirements for your major. You will have ten years to complete the requirements for the major. If you do not meet these requirements within ten years of declaring your major, then you will need to meet the requirements for the then-current catalog. If you decide to change your major or to transfer to another college, you are governed by the catalog in effect at the time of change.

Credit Evaluations for Rising Juniors and Seniors

Once you have completed 60, and again when you have completed 90 credit hours, the staff of the College of Liberal Arts will review your academic record to ensure you are on the right track for graduation. You will receive notification that you will need to meet with the Academic Advisor in the College of Liberal Arts main office to review your academic record. After the meeting, the advisor will lift the hold, which will allow you to register for courses.

Academic Standing

- **Good Standing**

  You are in good standing when both your Marshall GPA and overall GPA are 2.0 or above.

- **Academic Probation**

  If you have a deficit of quality points in your Marshall or overall GPA you are classified as on "academic probation." Quality point deficits accumulate as a result of excessive grades of *D* or *F*, causing your GPA to fall below a 2.0. If you are on academic probation, an academic obligation hold is placed on your registration status. This means that you cannot use Web registration. You must also secure approval from the Associate Dean of the College of Liberal Arts before you can register or change your schedule in any way. You will not be able to register for more than 14 semester hours. If you are on probation and are subject to mandatory advising, first take your proposed schedule to your advisor. Once your advisor

approves your schedule, take it to the College Office for approval by the Associate Dean. The Associate Dean will help you set goals for academic progress through an Academic Improvement Plan. One strategy is to repeat courses taken before the 60th attempted hour in which you received a *D* or *F*. (See "*D/F* Repeat Rule" in this catalog.) When your quality point deficit is zero, you are no longer on academic probation.

DEGREE REQUIREMENTS

Students completing requirements in the College of Liberal Arts receive the Bachelor of Arts (B.A.) degree or a Bachelor of Science (B.S.) degree in Geography. Each degree requires a minimum of 120 hours of credit. Within the 120 credit hours, you must meet these general and specific requirements.

General Requirements for Graduation

1. **Core Curriculum**: All students must complete the Core Curriculum defined in this catalog;
2. **Grade Point Averages**: All students must have a Grade Point Average of 2.0 or higher for (a) all work attempted at Marshall University and (b) all attempted collegiate work (Marshall University and other institution credit). Students must also earn a minimum Grade Point Average of 2.0 for the major unless the major requires a higher average (see major descriptions for specific requirements).
3. **Residency Requirement**: All students must complete 15 credit hours in the major field and 12 credit hours of upper division coursework within the College of Liberal Arts at Marshall University. Students must also be enrolled for at least 12 Marshall University credit hours during the year in which they will graduate.
4. **Transfer**: No student may count more than 72 credit hours which were transferred from an accredited West Virginia two-year institution of higher education. Students planning to transfer credit to Marshall University should consult with the Associate Dean to determine whether the credit will apply to the degree program.

College of Liberal Arts Degree Requirements

Students completing requirements in the College of Liberal Arts receive the Bachelor of Arts (B.A.) degree with the exception of the Bachelor of Science (B.S.) degree in Geography. A minimum of 120 credit hours is required for graduation.

Students in the College of Liberal Arts must complete the following requirements:

1. **Total University Hours**: All students must complete a minimum of 120 credit hours of college-level work (100-level or greater).
2. **Major**: All students must complete the requirements for the declared major.
3. **Upper Division Hours**: All students must complete a minimum of 48 credit hours in courses numbered 300-499. Courses transferred from two-year or community colleges or Advanced Placement credit cannot be used to satisfy the upper division requirement regardless of the Marshall University course equivalent. Courses completed at a four-year regionally accredited college transfer at the level at which they were completed at the other institution.

FOREIGN LANGUAGE..... 12

Successful completion of 12-hour sequence ending with FRN 204; GER 204; GRK 204; JPN 204; LAT 204; or SPN 204. Students must complete the sequence beginning with the first course they take. Students with at least 2 years of high school Spanish or French can begin with SPN or FRN 112 for which they will receive 6 hours of credit (for FRN 101 or SPN 101) if they earn at least a *C*. The next course in the sequence would then be Spanish 203 or French 203. Up to 3 semesters may be waived by the Modern Language Department for language taken in high school. This requirement also may be waived through conclusive proof of native proficiency in a foreign language and its culture.

HUMANITIES (in addition to the Core II requirement) 3

Any 3-hour course must be taken from among the following: any Classics course except CL 200, 230, 231, 232, 233, 234, 235, 336, or 237; any Philosophy course; or any Religious Studies course except 304, 320, 325, or 351. Other courses may apply as listed in the *Schedule of Courses*.

LITERATURE.....6

Hours may be taken from any of the following: Classics, any 200-level course except CL 200; any English 200, 300 or 400 level course in literature (writing courses do *not* count); any Latin 300 or 400 level course; Religious Studies 220, 225, 304, 310, 351; any course in French, German, Japanese or Spanish literature. Other courses may apply as listed in the *Schedule of Courses*.

SOCIAL SCIENCES (in addition to the Core II requirement).....9

Courses are to be taken in at least three fields. (Check prerequisites before registering):

Anthropology
Criminal Justice and Criminology
Economics (any course except 328 or 423)
Geography (any course except 101, 230, 350, 425, 430)
History
Political Science
Psychology
Sociology
Women's Studies 101

NATURAL AND PHYSICAL SCIENCES (in addition to the Core II requirement).....4

Choose one four hour course from one of the following fields (Check prerequisites before registering):

Biology
Chemistry
Geography 101, 230, 350
Geology
Natural Resources
Physical Science
Physics

MULTICULTURAL requirement (in addition to the Core II requirement).....3

INTERNATIONAL requirement (in addition to the Core II requirement) 3

FOUR-YEAR CURRICULA

DEPARTMENT OF COMMUNICATION STUDIES

Dr. Camilla Brammer, Chair
www.marshall.edu/commstu/
commstu@marshall.edu

Professors

Bookwalter, Brammer, Tarter

Associate Professors

Gilpin, J. Underhill, S. Underhill

Instructors

C. Adkins, D. Adkins, Cole, Cook, Jackson, Lane, Woods

The Department of Communication Studies offers a variety of courses and major concentrations designed to provide current knowledge, cognitive abilities, and competencies in communication. The concentrations prepare graduates for various communication roles and functions in personal life, organizations, and society. The department's offerings are augmented by the Forensics and Debate program.

Communication Studies majors must fulfill the general and specific requirements for the B.A. degree. Courses which fulfill a general education requirement in Communication Studies (CMM 103, CMM 104H, or CMM 207) may not be used to satisfy major requirements.

All Communication Studies concentrations require the following classes: CMM 302, CMM 303, CMM 411, and CMM 478. The specific requirements for each concentration are listed in the following sections.

(continued)

Health Communication

The Health Communication concentration is intended for students seeking careers in health settings or services, public health professions, and/or administrative positions in the health professions as well as graduate work in the field of Communication Studies.

The following departmental courses are required for this concentration: CMM 374, CMM 474, and CMM 479 Students will select three additional Communication Studies courses from the following: CMM 213, CMM 308, CMM 315, CMM 322, CMM 345, CMM 406, CMM 409 or CMM 421. Students must also select two Communication Studies electives for a total of six credit hours.

Interpersonal Communication

The Interpersonal Communication concentration is intended for students seeking careers in business, service industries, professions requiring face-to-face collaborative interaction, and/or graduate work in the field of Communication Studies.

The following departmental courses are required for this concentration: CMM 213, CMM 311, CMM 315 or CMM 322, CMM 345, CMM 413, and CMM 420. An additional 6 hours of electives in Communication Studies are required. The department recommends forming a minor, in consultation with an advisor, in one of the following departments: Counseling, Psychology, or Sociology.

Organizational Communication

The Organizational Communication concentration is intended for students seeking communication roles in organizations, industries, corporations, and/or government institutions, as well as graduate work in the field of Communication Studies. The following departmental courses are required for this concentration: CMM 302, CMM 315, CMM 319 or CMM 322, CMM 401, CMM 408, and CMM 420. An additional 9 hours of electives in Communication Studies are required. The department recommends forming a minor, in consultation with an advisor, in one of the following departments: Journalism (Public Relations), Management, Political Science, Psychology, or Sociology.

Public Communication

The Public Communication concentration is intended for students seeking public roles in the legal, political, and/or other communication settings of democratic society, as well as graduate work in the field of Communication Studies. The following departmental courses are required for the concentration: CMM 205, CMM 302, CMM 308, CMM 310, CMM 402, and CMM 409. An additional 9 hours of electives in Communication Studies are required. The department recommends forming a minor, in consultation with an advisor, in one of the following departments: Criminal Justice, English, History, Journalism, Marketing, or Political Science.

Minor in Communication Studies

A minor in Communication Studies consists of 12 hours, but may not include CMM 103, CMM 104H, or CMM 207 as those courses are used to fulfill general education requirements.

Minor in Business Communication

This minor will include an additional 12 hours beyond the Core II communication classes. The 12 hours may be composed of any of the following classes: CMM 319: Superior/Subordinate Communication; CMM 302: Advanced Public Speaking; CMM 308: Persuasion; CMM 315: Group Communication: CMM 322: Intercultural Communication; CMM 374: Health Communication; CMM 345: Listening and Feedback; CMM 403: Nonverbal Communication; CMM 406: Interviewing; CMM 420: Conflict.

Course Descriptions

Course descriptions in Communication Studies may be found alphabetically in the "Courses of Instruction" section.

ECONOMICS: B.A. through College of Liberal Arts

Dr. Richard Agesa, Head, Division of Finance and Economics
agesa@marshall.edu

Professors

R. Agesa

Associate Professor

McCutcheon

Assistant Professor

Biswas, Duang, Feng, Yemba

The Division of Finance and Economics, housed in the College of Business, offers College of Liberal Arts students the option to earn a B.A. in Economics. This option gives students an opportunity to develop their ability to analyze economic

problems and issues (e.g., unemployment, inflation, economic growth and development, government taxation and spending policies, environmental degradation and protection, the distribution of income and wealth, international trading, and financial arrangements). Students will, in the process, deepen their understanding of the U.S. economy and other economies around the world.

Students who select this option must fulfill all COLA requirements for the B.A. degree and complete the following coursework: Economics 250, 253, 326, 328, 423, 466 (Capstone); 9 additional hours in Economics to be chosen with the advice and approval of the Academic Advisor; and Management 218. Students, alternatively, may earn a Minor in Economics by completing 15 hours in Economics, with no more than 6 of those hours at the 200 level or lower.

The B.A. option in Economics prepares students for several types of careers. For example, this option helps students prepare for:

1. *Law School.* Law schools place a high value on economics as an undergraduate major.
2. *Graduate School.* The B.A. in Economics is an excellent preparation for the M.B.A., as well as for further studies in Economics.
3. *Administration or research positions in business firms, government agencies, labor organizations, or private foundations.*

For further information, please contact Dr. Richard Agesa in the College of Business.

Course Descriptions

Course descriptions in Economics may be found alphabetically in the "Courses of Instruction" section.

DEPARTMENT OF ENGLISH

Dr. Allison Carey, Chair
www.marshall.edu/english
english@marshall.edu

Professors

Burbery, Carey, Hong, Hood, Riemer, Schray, Van Kirk, Viola, Young

Associate Professors

Aftanas, Hatfield, Lillvis, R. Peckham, Prejean, Schiavone, S. Smith, Squire, Treftz

Assistant Professors

Angus, Brewster, Damai, Ellison, Marshall, J. Peckham, Schoeberlein, E. Smith, Tigchelaar

Instructors

Armel, Daniel, Jones, Lawrence, Lewis, Lilly, Lumpkin, Magnusson, Nolte, O'Malley, Oudghiri-Otmani, Rinehart, Rollins, Roth, Sowards, Steele, Sullivan, Walker

The Department of English offers a wide range of courses in literature, language, and writing designed to meet the needs and interests of general-education students, English majors and minors, and students majoring in other fields.

B.A. students may choose from Literary Studies, Creative Writing, English Education Content, and Generalist majors. College of Education students in English Education 5-Adult qualify for a second major in English in the College of Liberal Arts by completing their Teaching Specialization. English 5-Adult majors should go to the English Department main office in Corbly Hall 346 to declare the second major in English.

Although the areas differ, the goals are essentially the same: an acquaintance with English and American literature necessary for the liberally educated person; a knowledge of the practices necessary for perceptive reading and writing; an ability to write English with competence and grace; and a sense of English studies as a discipline. The capstone experience for English majors consists of ENG 499: Senior Capstone, which requires a capstone project to be determined by the student in collaboration with the instructor.

The B.A. program in each of the four majors requires 36 hours of coursework in the major.

- No more than 6 hours at the 200 level may count toward the degree.
- A minimum of 12 hours in the major at the 400 level is required to enroll in ENG 499.
- Appropriate courses for a specific major should be selected in consultation with assigned advisor.
- No course in which a grade lower than *C* is earned may count toward completion of the major.

Major Core Courses (must be taken by all majors)

ENG 350: Introduction to Textual Analysis (taken within first 9 hours of coursework).....3

ENG 355: Introduction to Critical Theory.....3

(continued)

ENG 499: Senior Capstone (not to be taken until at least 12 hours of major coursework at the 400 level have been completed) 3

Additional Major Courses for Literary Studies

Courses *Hours*

I. British Literature before 1800 (Choose from 409, 410, 411, 412, 436, or 480-488 [when so designated by the chair]) 3

II. American Literature before 1900 3
(Choose from 421, 422, 423, or 480-488 [when so designated by the chair])

III. Individual Author 3
(Choose from 409, 410, 411, 412, 427, or 480-488 [when so designated by the chair])

IV. Literary Studies 15
(Choose from 200, 200H, 203, 206, 207, 209, 210, 211, 212, 213, 214, 215, 220, 221, 225, 231, 232, 235, 236, 240, 241, 242, 263, 280-289 (when so designated by the chair), 344, 409, 410, 411, 412, 414, 415, 416, 421, 422, 423, 424, 427, 428, 430, 432, 433, 434, 435, 436, 437, 438, 440, 442, 447, 450, 451, 455, 458, or 480-488 [when so designated by the chair])

V. Any upper-division English course (300- or 400-level) 3

Additional Major Courses for Creative Writing

Courses *Hours*

I. Contemporary Literature 3
(Choose from 424, 432, 433, 434 or 480-488 [when so designated by the chair])

II. Any 400-level literature course **not** used to satisfy Contemporary Literature requirement 3
(Choose from 409, 410, 411, 412, 414, 415, 416, 421, 422, 423, 424, 426, 427, 428, 430, 432, 433, 434, 435, 436, 437, 438, 440, 442, 447, 450, 451, 455, 458, or 480-488 [when so designated by the chair])

III. Creative Writing Sequence 12
[Choose one genre and then 12 hours from the courses attached to that genre: **Poetry** (360, 377, 491, **and** 378 **or** 379); **Fiction** (360, 378, 492, **and** 377 or 379); **or Creative Nonfiction** (360, 379, 493, **and** 377 **or** 378)]

IV. Teaching Creative Writing (469) OR Form and Theory of Creative Writing (470) [Choose one] 3

V. English Electives 6
(Choose from any 200-, 300-, or 400-level ENG class)

Additional Major Courses for Generalist

English Electives 27

College of Education and Professional Development, English Education 5-Adult teaching specialization

Please see the College of Education and Professional Development section.

Minor in English

A minor in English requires 15 hours in English beyond 201 or 201H, with no more than six hours on the 200 level.

Minor in Creative Writing

A minor in Creative Writing requires 15 hours in English beyond 201 or 201H, as follows:

- ENG 360 (Introduction to Creative Writing);
- Six (6) hours from ENG 377 (Creative Writing: Poetry), ENG 378 (Creative Writing: Fiction), ENG 379 (Creative Writing: Nonfiction), ENG 491 (Creative Writing: Poetry Workshop), ENG 492 (Creative Writing: Fiction Workshop), or ENG 493 (Creative Writing: Nonfiction Workshop);
- Six (6) additional hours of ENG coursework.

Course Descriptions

Course descriptions in English may be found in the alphabetical “Courses of Instruction” section.

DEPARTMENT OF GEOGRAPHY

Dr. James M. Leonard, Chair
www.marshall.edu/geography/
geography@marshall.edu

Professors

Law, Leonard

Associate Professors

Walz

Assistant Professors

Cordoba, Kozar

Geography is the systematic study of the spatial aspects of human activity, the natural world, and human-environment interaction. The discipline of Geography occupies a unique position as a bridge between the social sciences (Human Geography), natural sciences (Physical Geography), and STEM fields (GIScience). As a result, the Geography Department offers both a Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degree. Both degrees offer students broad exposure to the various subfields of Geography and provide specialized career training and preparation. From this interdisciplinary perspective, Geography helps us understand and address numerous contemporary challenges ranging from economic development, urban planning, and ethnic conflict to climate change, environmental sustainability, and natural resource management. Geography is a rapidly expanding discipline with diverse career opportunities across the environmental sciences, social sciences, and technological fields in both the public and private sectors.

The Geography Department prepares students to succeed as professionals in today's job market through an innovative curriculum focusing on building critical thinking, technical expertise, and practical skills across a range of Human Geography, Physical Geography, and Geospatial Information Science (GIScience) courses. The curriculum includes a mixture of classroom and lab instruction, hands-on projects, and professional internship experiences that actively engage students in the learning process and provide the skills necessary for life-long learning. The Department maintains state-of-the-art facilities, including technology-enhanced classrooms, a Physical Geography lab, and a GIScience computer lab supporting students as they utilize the latest software and hardware. The Department provides a supportive learning environment where students work closely with faculty and peers while enjoying numerous opportunities to participate in campus, state, and national professional activities.

Geography alumni have successfully applied their knowledge and practical skills in a variety of career paths in both the public and private sectors, including urban and regional planning, economic development, environmental science, natural resource and energy management, weather forecasting, emergency response and homeland security, GIScience analysis, and education. Other alumni have continued with Geography studies at the graduate level. The Department also offers an Accelerated Master's program which allows qualifying students to begin earning graduate student credit during their senior year.

Geography Core Requirements (B.A. or B.S.): 24 credit hours

GEO 100: Human Geography (CT) (3 credits)
GEO 101: Physical Geography (CT) (4 credits)
GEO 317: Any regional geography course (3 credits)
GEO 300: Methods in Geography (3 credits; prerequisite STA 225 [preferred] or MGT 218, PSY 223, SOC 345/ANT 301 or equivalent)
GEO 423: Cartography and GIS (3 credits)
GEO 426: Principles of GIS (4 credits)
GEO 498: Senior Capstone I (2 credits)
GEO 499: Senior Capstone II (2 credits)

All Geography Core Requirements and many electives are also offered online on a regular basis, sufficient to meet all Geography degree requirements online. All Geography majors are required to earn a C or better in their Geography courses if those hours are to count toward the major requirements.

B.A. in Geography

The B.A. in Geography is for students interested in the spatial and human dimensions of places, cities, and regions. Students will explore concepts and issues related to population dynamics and migration, globalization, economic development, transportation systems, connectivity and accessibility, segregation, urban growth and decline. These themes are explored at the local, regional, and global scales. Students will have a chance to benefit from our current areas of regional specialization: West Virginia, Appalachia, U.S. & Canada, and Latin America.The B.A. in Geography degree requires a minimum total of 39

hours of geography coursework. Beyond the Geography Core Requirements, students choose a minimum of 9 credit hours from Human or Regional Geography. Remaining electives may be chosen from any GEO courses.

B.S. in Geography

The B.S. in Geography is for students interested in natural science—concepts and issues related to the environment, earth processes, atmospheric processes, and climate—or in GIScience. Students will have a chance to benefit from our expertise in ecology, weather analysis, meteorology, climatology, hurricanes and other types of severe weather, plus GIS spatial analysis and technologies. The B.S. in Geography requires a minimum total of 45 credit hours of Geography coursework. Beyond the Geography Core Requirements, students choose a minimum of 15 credits from Physical Geography or GIScience. Remaining electives may be chosen from any GEO courses. To compensate for the increased number of hours for the B.S. in Geography (including the Meteorology and Weather Broadcasting areas of emphasis), students are exempted from the College of Liberal Arts foreign language requirement.

Electives

Human Geography Courses
GEO 203: Economic Geography (CT) (3 credits)
GEO 222: Global Environmental Issues (3 credits)
GEO 401: Historical Geography (3 credits)
GEO 406: Population Geography (3 credits)
GEO 410: Urban Geography (3 credits)
GEO 422: Environmental Geography (3 credits)

Regional Geography Courses
GEO 206: Geography of West Virginia (3 credits)
GEO 305: Geography of North America (3 credits)
GEO 402: Geography of Appalachia (3 credits)
GEO 404: Geography of Europe (3 credits)
GEO 408: Geography of South and Middle America (3 credits)
Other regional geography courses offered infrequently

GIScience Courses
GEO 110: Basic GIS (1 credit)
GEO 111: Air Photos and Satellite lmagery (1 credit)
GEO 112: lntroduction to Global Positioning Systems (GPS) (1 credit)
GEO 113: Web GIS (1 credit)
GEO 429: Principles of GIS 2 - Vector Analysis (3 credits)
GEO 430: GIS - Raster Analysis {4 credits)
GEO 431: Principles of Remote Sensing and Photogrammetry (4 credits)
GEO 432: Enterprise GIS (3 credits)
GEO 433: GPS and Mobile Geospatial Technologies (3 credits)
GEO 440 Spatial Statistics and GIS (4 credits)
GEO 454 Drones for Remote Sensing and GIS (3 credits)

Physical Geography Courses
GEO 222: Global Environmental Issues (CT) (3 credits)
GEO 230: lntroduction to Meteorology (CT) (4 credits)
GEO 350: Severe Local Storms and Natural Hazards (4 credits)
GEO 360: Weather Analysis (3 credits)
GEO 422: Environmental Geography (3 credits)
GEO 425: Climatology (3 credits)

B.S. in Geography with an Area of Emphasis in GIScience

Students specializing in the Geospatial Information Science (GIScience) area of emphasis must complete the Geography Core Requirements (24 credit hours) and the following GIScience courses.

GIScience Area of Emphasis Courses

GEO 431: Remote Sensing and Photogrammetry (3 credit hours)

Technologies: Choose at least six credits from: GEO 110 Basic GIS (1 credit), GEO 111 Air Photos and Satellite lmagery (1 credit), GEO 112 Smartphone GPS (1 credit), GEO 113 Web GIS (1 credit), GEO 433 GPS and Mobile Geospatial Technologies (3 credits), GEO 434 Geodatabases and GIS Programming, GEO 454 Drones for Remote Sensing & GIS

Analysis and Applications: Choose a minimum of six credits from: GEO 429 Principles of GIS 2 - Vector Analysis (4 credits), GEO 430 GIS - Raster Analysis (4 credits), GEO 432 Enterprise GIS (3 credits), GEO 440 Spatial Statistics and GIS (4 credits), GEO 490 Internship (1-6 credits)

Electives: Choose additional GIScience (GEO) courses to reach a minimum of 21 credit hours beyond the Geography Core Requirements.

B.S. in Geography with an Area of Emphasis in Meteorology

Students specializing in the Meteorology area of emphasis must complete the Geography Core Requirements (24 credit hours) and the following Meteorology courses (22 credit hours) for a total of 46 credit hours minimum.

Meteorology Area of Emphasis Courses (22 credit hours)

GEO 230: Introduction to Meteorology (CT) (4 credits)

GEO 350: Severe Storms and Natural Hazards (4 credits)

GEO 360: Weather Analysis (4 credits)

GEO 425: Climatology (4 credits)

GEO 431: Remote Sensing (3 credits)

[1]PHY 308: Thermal Physics (3 credits) or [2]ENGR 219: Engineering Thermodynamics (3 credits) or [1]PHY 330: Mechanics (3 credits) or [3]ENGR 214 Dynamics (3 credits)

B.S. in Geography with an Area of Emphasis in Weather Broadcasting

Students specializing in the Weather Broadcasting area of emphasis must complete the Geography Core Requirements (24 credit hours) and the following Weather Broadcasting courses (22 credit hours) for a total of 46 credit hours minimum.

Weather Broadcasting Area of Emphasis Courses (22 credit hours)

GEO 230: Introduction to Meteorology (CT) (4 credits)

GEO 350: Severe Storms and Natural Hazards (4 credits)

GEO 360: Weather Analysis (4 credits)

GEO 425: Climatology (4 credits)

GEO 490: Internship (3 hours)

JMC 332: Video Production (3 credits)

Minor in Geography

Non-majors can earn a minor in Geography. This minor consists of a minimum of 12 credit hours of Geography coursework chosen in consultation with a faculty advisor. At least half of these credits must be earned at Marshall. Students are required to earn a *C* or better in all their Geography courses if those courses are to count for the minor.

Minor in Meteorology

A minor in Meteorology, which provides a specialized program for students interested in Physical Geography and Meteorology, consists of a minimum of 16 credit hours. At least half of these credits must be earned at Marshall. Students are required to earn a *C* or better in all their Geography courses if those courses are to count for the minor. GEO 230, 350, and 360 are required and either GEO 101, GEO 425, or GEO 481-483 may be taken to fulfill the minor.

Certificate or Minor in GIScience

Geospatial Information Science is a research field that utilizes specialized computer hardware, software, and procedures for the capture, presentation, and analysis of all types of natural and social science data referenced (mapped) to the earth's

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[1]Requires that the student must have taken the following: PHY 211 and 202 (lab), General Physics and General Physics Laboratory; PHY 213 and 204 (lab), Principles of Physics and Laboratory Methods in Physics; MTH 229, Calculus with Analytic Geometry I; MTH 230, Calculus with Analytic Geometry II; MTH 231, Calculus with Analytic Geometry III.

[2]Requires that the student must have taken MTH 230.

[3]Requires that the student must have taken ENGR 213 and MTH 230.

surface. The minor/certificate program provides knowlege, training, applications, and research skills for successful careers or graduate work across a number of disciplines. Students who complete the minor or certificate should be able to:

- perform GIScience capture, analysis, and presentation using vector, raster, and remote sensing data;
- use GIScience data to investiage research questions in the social ornatural sciences;
- employ geographic concepts such as projections, coordinate systems, and scale;
- recognize and apply information science concepts such as data collection, representation, queries, and storage;
- enter a career that utilizes GIScience principles and practices; and
- continue GIScience work at the graduate level.

GIScience minor/certificate credits can count toward a bachelor's degree in several departments such as Geography, Biology, Physical Science, Health Informatics, Natural Resources and the Environment, or Management Information Systems. Please see an advisor in the appropriate department. Students may not earn a GIScience minor and a GIScience undergraduate certificate.

Requirements

- Minimum of 18 credit hours
- Required Geographic Information Systems course: GEO 426 or NRE 423, 3-4 credit hours
- Required Remote Sensing course: BSC 410, BSC 411, GEO 431, or PLS 433, 3-4 credit hours
- Students must take courses from at least two different departments.
- Students must have a B (3.0) average in their GIScience courses for the minor or certificate and no grade below a C (2.0) in thier GIScience courses to earn the minor or certificate.

GIScience Courses

BSC 410: Remote Sensing with GIS Applications (4 credit hours; cross-listed as PS 410 or NRE 420))
BSC 411: Digital Image Processing and Computer Simulation Modeling (4 hrs.; cross-listed as PS 411 or 421))
CE 241: Geomatics (3 hrs.)
GEO 110: Basic GIS (1 hr.)
GEO 111: Introdution to Remote Sensing: Aerial Photos and Satellite Imagery (1 hr.)
GEO 112: Introduction to GPS (1 hr.)
GEO 426: Principles of GIS (4 hrs.)
GEO 429: Principles of GIS 2 – Vector Analysis (4 hrs.)
GEO 430: GIS – Raster Analysis (3 credits)
GEO 431: Principles of Remote Sensing and Photogrammetry (3 hrs.)
GEO 432: Enterprise GIS (3 hrs.)
GEO 433: GPS and Mobile Geospatial Technologies (3 hrs.)
GEO 490: Internship (3 hrs.; must be GIScience approved by adviser to qualify)
GLY 212: Geological Field Mapping (2 hrs.)
NRE 365: Database Information Management (3 hrs.)
NRE 423: GIS and Integrated Data Systems (3 hrs.)
NRE 428: CAD and Terra Modeling (3 hrs.)
NRE 470: Internship (1-4 hrs.; must be GIScience approved by adviser to qualify)
NRE 491: Senior Project II (3 hrs.; must be GIScience approved by adviser to qualify)
MIS 340: Database Management Systems (3 hrs.)
NRE 322: Terrestrial Systems (3 hrs.)
NRE 323: Aquatic Ecology (3 hrs.)
PLS 433: GIS and Remote Sensing for Natural Resource Management (3 hrs.)
Special Topics courses as approved by the GIScience Curriculum Committee.
Independent Study courses as approved by the student's adviser in consultation with the GIScience Curriculum Committee

Accelerated Master's Degree in Geography

Students who have completed at least 90 hours towards their bachelor's degrees, have at least a 3.5 overall undergraduate GPA, and a 3.5 GPA in Geography are eligible to apply for our Accelerated Master's Degree program. A GRE score is not required. Students accepted into the program can begin taking graduate coursework up to a maximum of 12 hours in place of elective undergraduate courses. Students reduce the number of hours required to complete the bachelor's degree by the number of graduate hours they complete (up to a maximum of 12). They must meet all the other degree requirements for their bachelor's degrees while they work on their master's degrees. Interested students are encouraged to discuss this option with their advisors to obtain further details and information on the application process.

Course Descriptions

Course descriptions in Geography may be found alphabetically in the "Courses of Instruction" section.

DEPARTMENT OF HISTORY

Dr. Greta Rensenbrink, Chair
www.marshall.edu/history/
history@marshall.edu

Professors

Barksdale, Holbrook, Miller, Palmer, Rutherford, Williams, White

Associate Professors

Deal, Diener, Rensenbrink, Tabyshalieva, Trowbridge, Woods

The study of History provides an essential component of liberal arts education and offers valuable preparation for careers in law, journalism, teaching, government, the ministry, library and museum work, and in those areas of the business world where a knowledge of foreign affairs and culture is desirable. History also serves as an indispensable adjunct to careers in the humanities and social sciences. More broadly, by exposure to a variety of cultures and human experiences, the discipline of History seeks to prepare students for the responsibilities of citizenship and for dealing with the ambiguities of human existence. The Department of History at Marshall also makes every effort to help students think critically, to view events with perspective and objectivity, and to appreciate the complexity of human experience and the difficulty of interpreting it.

The major in History requires a minimum of 36 credit hours of History, including HST 101, 102, 103, 200, 230, 231, 400. Students must also take at least one course from each group of courses listed below. At least twelve credit hours in History must be in courses above the 200 level.

United States

HST 250, 303, 312, 330, 333, 342, 343, 344, 347, 360, 365, 366, 405, 407, 408, 409, 413, 414, 415, 424, 431, 432, 433, 434, 440, 441, 443, 444, 450, 451, 452.

European

HST 205, 206, 219, 220, 223, 304, 306, 392, 406, 421, 425, 426, 428, 430, 446, 448, 462, 464, 465

World

HST 208, 218, 260, 265, 301, 302, 305, 307, 311, 361, 362, 378, 380, 390, 392, 427, 435, 436, 439, 445, 446, 447, 460, 467

Capstone

By successful completion of HST 400, History majors fulfill the capstone experience requirement.

Minors

There are four distinct minors in History from which students may select:

A. History (15 hours): Only two of the following general surveys (History 101, 102, 103, 230 and 231) can be used to fulfill the requirements of this minor. All courses offered by the History Department are acceptable.
B. United States History (15 hours): Both of the general surveys of United States History (History 230 and 231) can be used to fulfill the requirements of this minor. All courses in United States History offered by the History Department are acceptable.
C. European History (15 hours): Only two of the general surveys of World History (History 101, 102 and 103) can be used to fulfill the requirements of this minor. All courses in European History offered by the History Department are acceptable.
D. World History (15 hours): Only two of the general surveys of World History (History 101, 102 and 103) can be used to fulfill the requirements of this minor. All courses on the history of Africa, Asia, the Developing World, Latin America and the Middle East offered by the History Department are acceptable.

Students may also choose one of the interdisciplinary minors in African and African American Studies, Asian Studies, Latin American Studies, Sexuality Studies, or Women's Studies.

Students can also obtain a minor in History online. For information please see *www.marshall.edu/history/students/history-minor.*

Teacher Certification in Social Studies

Students interested in pursuing teaching certification, Social Studies 5-9 Endorsement, or Social Studies 5-Adult, should consult with the dean's office, College of Education and Professional Development, Jenkins Hall 220.

Master of Arts in Teaching

History majors should explore as early as possible in their undergraduate program the graduate option of the Master of Arts in Teaching. The MAT combines the academic content of a history undergraduate degree with graduate professional education and clinical experiences. The MAT provides an alternative and accelerated means for teaching certification in grades 5-12. For information please see *www.marshall.edu/coepd/m-a-t.*

Course Descriptions

Course descriptions in History may be found alphabetically in the "Courses of Instruction" section.

HUMANITIES
Dr. John N. Vielkind, Chair
vielkind@marshall.edu

Professors

Barris, Ormiston, Powell, Vielkind

Associate Professors

Chrol, Franzen, Ruff

The Humanities major offers concentrations in Classics, Philosophy, and Religious Studies (CL/PHL/RST). This major is unique in two ways: Students may choose coursework equivalent to a major in a single department or create a broader curriculum of their choice from various humanities courses, and our program also has a strong interdisciplinary side. The goal of the program is to help us deepen our understanding of ourselves and our culture by exploring the way human beings find meaning in their experience. We explore these ways by studying both our own individual insights and the artistic, philosophical and religious works that have expressed and shaped human experience.

The program consists of 33 hours of coursework in three parts:

Three courses introducing the specific goals and methods of the three disciplines (9 hours). These courses place special emphasis on the particular discipline's approaches to knowledge, critical thought, skills of expression, and human development. Students must choose from those listed as follows, one for each discipline:

Classics: Any 200-level course, except CL 200

Philosophy: any 200 or 300 level course, except 302 and 304

Religious Studies: 205, 206, 300

Three interdisciplinary, team-taught courses (9 hours), in any combination of levels, but including at least one at the 400 level as the senior capstone experience. We offer CL/PHL/RST 250 (Orientation in Humanities), CL/PHL/RST 390, 391, 392, 393, 394, and CL/PHL/RST 490, 491, 492, 493, 494 (Humanities Seminar). These courses make use of the combined resources of any two of our disciplines to gain insight into a wide variety of topics, depending on the current interests of students and faculty. The capstone course also aims to reflect on skills and themes the students have explored in their progress through the program.

Department-Approved Courses (15 hours) to be chosen by the student, usually with the advice of a committee of faculty members. Each major may select a small advisory committee to assist with course selection, advising, and long-range planning. The committee may consist of two or more faculty members from at least two disciplines. Department-approved courses need not be restricted to those our departments offer and may be structured on the basis of chronological period, comparative cultures, traditional departmental emphasis, theme, or topic. Further information may be obtained from any faculty member in Humanities.

Languages

Students can fulfill their foreign language requirement by taking twelve hours of Greek or Latin.

Opportunities

Degrees in Humanities and Latin offer the same variety of career opportunities as other Liberal Arts degrees. In general, they provide a broad base of knowledge and intellectual skills that enable individuals to be flexible and versatile in a constantly changing job environment. In particular these degrees provide: a) a solid basis for professional training in law

and medicine; b) preparation for occupations connected with Classical Archaeology; c) a basis for work in various government positions where there is a long tradition of hiring people with a classical background; and d) preparation for occupations connected with education, which include teaching in public and private schools as well as at the college and university level.

B. A. in Latin (Classical Language - Latin)

The B.A. in Latin can be acquired through the College of Liberal Arts. The degree consists of Classics 436 (Roman Civilization) and thirty hours of Latin, eighteen of which must be above Latin 204.

In addition to the specific major requirements, students must fulfill the general and specific requirements for the B.A. degree in the College of Liberal Arts and must demonstrate a proficiency in writing through examination by the department.

Latin Capstone Experience: The Latin Capstone Experience consists of LAT 499, Senior Project, a three credit-hour course in which the student works with a project director to develop a paper written in an advanced Latin class into an expanded version that incorporates primary and secondary sources, and will be delivered in a public forum.

Minors

There are three minors in Classics. A minor in Classics consists of fifteen hours drawn from any Classics course except CL 200. A minor in Classical Culture consists of fifteen hours selected from CL 230, 319, 370, 435, 436 and 460, 470 and 471. A minor in Classical Literature consists of fifteen hours of CL 230, 231, 232, 233, 234, 235, 236, or 237.

A minor in Latin consists of twelve hours of Latin, nine of which must be above the 100-level, and one 400-level course taught in English: either CL 436, 471 (by permission of chair), 472, 473, or 475.

A minor in Greek consists of Greek 201, 202, 301 and 302, and either CL 435, 471, or 472.

A minor in Religious Studies consists of 15 hours.

A minor in Philosophy consists of 15 hours.

A minor in General Humanities consists of 6 credit hours each from CL, PHL and RST. Variations of distribution must be cleared with the Humanities department chair.

Course Descriptions

Course descriptions for Humanities may be found alphabetically in the "Courses of Instruction" section under Classics, Philosophy, and Religious Studies.

INTERNATIONAL AFFAIRS

Dr. Jess Morrissette, Program Director
www.marshall.edu/polsci/academic-programs/international-affairs/

A major in International Affairs requires a minimum of 57 hours and combines studies in Economics, Geography, History, and Political Science and emphasizes the study of a foreign language.

A major in International Affairs must meet the specific and general requirements for the B.A. degree except as altered by the following requirements:

a. The student will concentrate on a single foreign language. A minimum of six hours beyond the 204 level is required, including at least one conversation and/or composition course (FRN 305/306, GER 315/316, JPN 307, SPN 305/306).

b. The following courses are required:

Economics 250, 253, and any two of 408, 420 or 460
Geography 405 or 317
History 103 and 231
Political Science 207, 209, 406 and three hours from PSC 405, PSC 412, PSC 415, PSC 420, PSC 423, or PSC 424

c. History: Choose six hours from the following: HST 206, HST 208, HST 223, HST 265, HST 301, HST 302, HST 303, HST 304, HST 305, HST 306, HST 307, HST 313, HST 361, HST 378, HST 404, HST 405, HST 423, HST 425, HST 426, HST 428, HST 430, HST 434, HST 435, HST 436, HST 439, HST 442, HST 445, HST 446.

d. Electives: A minimum of 9 hours from among the following:

Anthropology: ANT 201, ANT 440, ANT 441, ANT 465, ANT 468

History: HST 206, HST 208, HST 223, HST 265, HST 301, HST 302, HST 303, HST 304, HST 305, HST 306, HST 307, HST 313, HST 361, HST 378, HST 404, HST 405, HST 423, HST 425, HST 426, HST 428, HST 430, HST 434, HST 435, HST 436, HST 439, HST 442, HST 445, HST 446

Political Science: PSC 405, PSC 407, PSC 408, PSC 409, PSC 410, PSC 411, PSC 412, PSC 415, PSC 416, PSC 417, PSC 420, PSC 422, PSC 423, PSC 424, PSC 428, PSC 429, PSC 431, PSC 444

Geography: GEO 100, GEO 203, GEO 222, GEO 317, GEO 403, GEO 404, GEO 405, GEO 406, GEO 407, GEO 408, GEO 409, GEO 412, GEO 422.

(continued)

e. With the approval of the advisor other courses may be substituted or added such as special topics offerings, area studies courses, summer workshops or internships.

f. International Affairs majors shall, in their senior year, take the designated capstone course, INT 499.

g. A minor in International Affairs requires 12 credit hours.

All International Affairs minors will take PSC 209. In addition, they will choose 9 credit hours from the list below. In the interest of promoting interdisciplinary learning within the minor, students must select these 9 hours from at least two different departments listed below:

ANT 201
ECN 408, ECN 420, ECN 421, ECN 460
CMM 322
GEO 222, GEO 317, GEO 403, GEO 404, GEO 405, GEO 407, GEO 408, GEO 409, GEO 412
HST 103, HST 208, HST 223, HST 260, HST 265, HST 302, HST 303, HST 304, HST 305, HST 306, HST 307, HST 311, HST 313, HST 361, HST 378, HST 404, HST 405, HST 425, HST 426, HST 428, HST 430, HST 434, HST 435, HST 436, HST 439, HST 442, HST 445
INT 499
PSC 207, PSC 405, PSC 406, PSC 407, PSC 408, PSC 409, PSC 410, PSC 411, PSC 412, PSC 415, PSC 416, PSC 420, PSC 422, PSC 423, PSC 424, PSC 428, PSC 429, PSC 431, PSC 444

Appropriate special topics courses may also count toward the minor with approval of the International Affairs Director.

Course Descriptions

Course descriptions for International Affairs may be found alphabetically in the "Courses of Instruction" section under Economics, Geography, History, International Affairs, and Political Science.

DEPARTMENT OF MODERN LANGUAGES

Dr. Natsuki Anderson, Chair
www.marshall.edu/language/
language@marshall.edu

Professors

Burgueño, Migernier, Morillo

Associate Professors

Anderson, Butler, Gratchev, Quintana-Villamandos, Rivas

Assistant Professors

Day, Shangler

The study of foreign languages emphasizes the development of critical thinking skills–increased powers of observation, analysis, logical reasoning, memory, and adaptability–that are immediately transferable to other areas of higher education and to a diversity of careers. In learning to understand, speak, read, and write a foreign language a student acquires direct access to another view of the world at a time when intercultural understanding, at both the national and international levels, has become an urgent priority.

Languages

Students can fulfill their foreign language requirement by taking 12 hours of French, German, Greek, Japanese, Latin, or Spanish (101-204) or by passing the 204 course in any of the languages offered by the department. The Department of Modern Languages offers a major in French, Japanese, and Spanish; or a minor in French, German, Japanese, and Spanish. The department has created special designators, MDL 280-283 and MDL 480-483, in order to offer courses in languages not in the catalog that may be offered from time to time. The MDL designators also allow students to transfer credit in languages not regularly taught in this department.

Opportunities

Majors in foreign languages have opportunities in the fields of law, government, translation and interpretation, education, communications media, library and museum science, publishing, law enforcement, international business, and the travel industry.

Major in a Modern Language

A major in one of the modern foreign languages consists of ten courses, typically thirty semester hours, in the same language. Courses taken at Marshall are three credit hours each. Courses that transfer from study abroad may transfer as four credit hours, but each of these courses is to be considered equivalent to one three-hour Marshall course. Courses numbered 101 do not count toward the major. The French major must include seven courses, typically twenty one hours, in courses numbered above 204 and must include three courses, typically nine hours, of 400-level courses. The Japanese major also must include twenty-one hours numbered above 204. JPN 305, 315, 401, 490 and one other 400-level course are required. Please note that JPN 407 cannot be used to fulfill major requirements in the College of Liberal Arts. The Spanish major also must have twenty-one hours above 204 and must include SPN 305 or 306; SPN 315, 316, 323, or 324; SPN 490; and eighteen hours of elective courses selected from SPN 240, 245, 335, 336, 408, 411, 412, 413, 414, 415, 416, 417, 418, 419, 433, 435, 436, 440, or 444, of which two must be 400 level. Please note that SPN 407 cannot be used to fulfill major requirements in the College of Liberal Arts. In French and Japanese, two 3-hour courses taught in English will be allowed to count toward the completion of the required hours for the major. In Spanish, one three-hour course taught in English will be allowed to count toward the completion of the required hours for the major.

Minor in a Modern Language

A minor in French, German, Japanese, or Spanish may be earned by successful completion of 15 hours in the designated language. Requirements are as follows:

French: FRN 102, 203, 204, and two 300- or 400-level courses. One of the upper-level courses may be a FRN course taught in English.

German: 102, 20-3, 204 and two 300- or 400- level courses. One of the upper-level courses can be a German course taught in English.

Japanese: JPN 102, 203, 204, and two 300- or 400-level courses. One of the upper-level courses may be a JPN course taught in English.

Spanish: SPN 102, 203, 204, and two 300- or 400-level courses. One of the upper-level courses may be a SPN course taught in English.

Minor in Japanese Studies

The minor in Japanese Studies consists primarily of courses taught in English and is therefore different from the minor in Japanese, which consists entirely of courses taught in Japanese. It gives a strong alternative to students who are interested in Japanese culture, but not necessarily in Japanese language. To earn the minor in Japanese Studies, students must complete fifteen hours from the following: JPN 101, 102, 240, 245, 250, 304, 403, 408 and HST 435. A minimum of six hours must be at the 300 or 400 level.

Minor in Spanish Studies

The minor in Spanish Studies consists primarily of courses taught in English and is therefore different from the minor in Spanish, which consists entirely of courses taught in Spanish. It gives a strong alternative to students who are interested in Spanish culture, but not necessarily in Spanish language. To earn the minor in Spanish Studies, students must complete fifteen hours from the following: SPN 101, 102, 240, 245, 408, 419, and 420.

Course Sequence/Prerequisites

Courses must be taken in sequence except by permission of the chair. Students enrolled without proper course prerequisites will be administratively withdrawn. A grade of *C* or better is required in the 101, 102, 112, and 203 language courses in order to continue to the next course.

Placement Tests

Students who have had 1-2 years of language in high school and wish to continue in that language should register for 101. Students who have had three or more years of a language in high school should take a placement test to see where in the elementary/intermediate (101-204) sequence they should begin their language. All students wishing to take a placement exam in any of the languages (French, Japanese or Spanish) must register with the department office administrator. Students cannot take a placement examination after they have started a language at Marshall or any other university. Students also should not take the placement test until they are ready to start a language. Students who successfully place into a course above 101 can receive up to nine hours back credit for the courses they have placed out of provided that they take and pass with a grade of *C* or better the next course in the sequence. Back credit is awarded only in the semester in which the student takes the next course.

Policy on Native Speakers

A native or heritage speaker of a language must take a placement test before enrolling in courses numbered 101-204 in his or her native tongue.

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Credit Transfer

The Department of Modern Languages does not accept the transfer of credits earned in courses taken in online courses. Students wishing to receive foreign language credit from other schools or from study abroad programs must consult the Department of Modern Languages prior to enrolling in any of those programs.

Capstone Policy and Final Skills Assessment

Graduating majors in French will designate one 400-level literature or culture course in their senior year as the capstone experience. In exceptional cases another upper-division course may be so designated with permission of the chair. In addition to completing the normal capstone course requirements the student will also complete a language project that will demonstrate his/her integration of the various competencies developed throughout his or her foreign language study. The project will be delivered in a class presentation toward the end of the term. Graduating majors in Japanese and Spanish will take JPN 490 or SPN 490 to fulfill their capstone requirement.

Summer Study Programs Abroad

- *Spanish Language and Culture Program in Madrid, Spain:* Students can earn six hours of academic credit in a month (June or July) or twelve hours of academic credit in two months (June and July) by studying at the Centro de Estudios Hispánicos of the Universidad Antonio de Nebrija in Madrid, Spain. The program offers courses in the Spanish language at elementary, intermediate, and advanced levels. It also offers courses in composition, conversation, literature, history and art. The instructors are native speakers of Spanish who hold advanced university degrees and who are fully accredited by the Spanish Ministry of Education. A Marshall University professor will accompany the group and will provide supervision, assistance and supplemental instruction.

  Every year the students enrolled in the program depart the 30th of May and return June 30 or July 31st. While in Madrid, students reside with families. The cost of the program includes tuition (6 or 12 hours) and room and board (two meals a day) for a month or two. Contact the Dept. of Modern Languages for specific information and to obtain application forms.

Course Descriptions

Course descriptions for Modern Languages may be found alphabetically in the "Courses of Instruction" section under the name of the language.

DEPARTMENT OF POLITICAL SCIENCE

Dr. Shawn Schulenberg, Chair
www.marshall.edu/polsci/
polsci@marshall.edu

Professors

Behrman, Brown, Morrissette, Warner, Schulenberg

Associate Professors

Beller, Davis

Assistant Professors

Arthur

Instructor

Proctor

The Political Science curriculum has two objectives: first, to provide a basic understanding of the functioning of government in preparation for democratic citizenship and second, to give a specialized foundation to those planning to enter law school, government service (foreign service, public administration), teaching, research, politics, or business.

A major in Political Science must fulfill the general and specific requirements for the B.A. degree and must complete 36 hours in Political Science, including Political Science 104, 105, 211, and 499 (Capstone Experience). In addition, each major must take at least three courses in any one of the five fields into which Political Science offerings are divided and at least one course in any three of the remaining four fields.

The fields of the Political Science curriculum with courses in each are as follows:

- American National, State, and Local Politics: 202, 301, 307, 376, 381, 383, 423, 427, 436, 440, 442, 446, 460, 484
- International and Comparative Politics: 207, 209, 405, 406, 407, 408, 409, 410, 411, 412, 415, 416, 420, 422, 423, 424, 428, 429, 431, 442, 444
- Constitutional Democracy: 417, 418, 421, 427, 429, 436, 444, 446, 460, 484
- Political Theory: 200, 418, 419, 421, 425, 426, 428, 429, 430, 446

- Public Administration, Public Policy and Urban Politics: 233, 311, 333, 433, 450, 452, 453, 454, 461

Courses that appear in more than one field may not be counted twice.

A **minor in Political Science** consists of completing 15 credit hours, in any combination, from the courses listed above.

Recommended electives include Economics (especially 250 and 253); History 205 and 206 (for pre-law students), 230, 231; Accounting 215 and 216 (for pre-law students); Philosophy; Psychology; Sociology; Communications Studies 310; and English 408.

Accelerated Master's Degree Program

Students who have completed at least 90 hours towards their bachelor's degrees, have at least a 3.3 overall undergraduate GPA, and a 3.3 GPA in Political Science are eligible to apply for our Accelerated Master's Degree program. A GRE score is not required. Students accepted into the program can begin taking graduate coursework up to a maximum of 12 hours in place of elective undergraduate courses. Students reduce the number of hours required to complete the bachelor's degree by the number of graduate hours they complete (up to a maximum of 12). They must meet all the other degree requirements for their bachelor's degrees while they work on their master's degrees. Interested students are encouraged to discuss this option with their advisors to obtain further details and information on the application process.

Course Descriptions

Course descriptions for Political Science may be found alphabetically in the "Courses of Instruction" section.

DEPARTMENT OF PSYCHOLOGY

Dr. Marianna Linz, Chair
www.marshall.edu/psych/
linz@marshall.edu

Professors

Beard, Footo-Linz, Fugett-Fuller, LeGrow, Lindberg, Mewaldt, Muellerleile, Mulder, Pittenger

Associate Professors

Hinton, Linz, Howerton, Koontz, Tiano

Assistant Professors

Atkins, Canady, Chapman, Day-Brown

Psychology is the scientific study of human cognition, affect, behavior, and relationships. Psychologists seek to understand, predict and influence behavior through research into a wide range of issues which affect human functioning, including social, physiological, developmental, cognitive and emotional factors. Research methodology is central to the discipline, and all Psychology majors learn about research strategies and methods of data analysis.

The Psychology major earns a liberal arts B.A. degree while also preparing for a variety of post-baccalaureate options. These include: a) graduate education in such fields as Psychology, Medicine, Law or Business; b) work in business, industry and organizations; and c) work in mental health and social service settings.

Since graduate education is essential for students hoping to become psychologists and since admission into graduate programs in Psychology is quite competitive, students with graduate education goals are encouraged to work particularly closely with their advisors throughout their undergraduate careers.

Please note that for all upper division (300- and 400-level) Psychology courses, prerequisites include successful completion of at least 12 college credits at the 100-level or higher.

Required Courses: (21 credits)

1. General Psychology - PSY 201.
2. Elementary Behavioral Statistics - PSY 223.
3. Experimental Psychology - PSY 323.
4. Choose at least one from the *Social/Personality Perspective:* PSY 302, PSY 360, PSY 408, PSY 418, PSY 420, PSY 426, PSY 430, PSY 433.
5. Choose at least one from the *Experimental/Biopsychology Perspective:* PSY 324, PSY 350, PSY 391, PSY 416, PSY 417, PSY 440.
6. Choose at least one from the *Developmental/Individual Perspective:* PSY 311, PSY 312, PSY 330, PSY 406, PSY 465, PSY 475.
7. *Capstone Course:* After consulting with your advisor, choose one of the capstone options. PSY 456, PSY 457, PSY 460, PSY 470, PSY 471, PSY 480, PSY 499. Not all will be available every semester, so you may not be able to enroll in your first choice. See description of "capstone" below.

Electives: (12 credits)

Students may select any additional 4 courses (12 credits) in Psychology to complete their major requirements. Students are strongly urged to consult with their advisors about these important choices. The groupings of courses listed as follows are intended to guide the selections of students with specific educational and career objectives.

1. Majors intending to apply for graduate/professional schools (*e.g.,* Psychology, Medical School, Law School): PSY 302, PSY 311/312, PSY 406, PSY 408, PSY 416, PSY 417, PSY 440, PSY 456, PSY 460. Suggestions for minor: consult with your advisor.
2. Majors intending to work in business and industry after completing their B.A. degree: PSY 302, PSY 406, PSY 416, PSY 418, PSY 427, PSY 470, Economics 100, Accounting 215. Suggestions for minor: Marketing, Management, Safety Technology.
3. Majors intending to work in mental health settings after completing their B.A. degree: PSY 204, PSY 311/312, PSY 330, PSY 360, PSY 380, PSY 408, PSY 433, and PSY 471. Suggestions for minor: Counseling, Social Work or Special Education.
4. Majors who wish to use Psychology as a general Liberal Arts degree: Follow requirements and any minor (whatever interests you, in consultations with advisor).

Minor in Psychology

Students may choose to minor in Psychology, which requires a total of 15 credit hours in Psychology. Students are free to choose any 15 hours, but are encouraged to consult with a department faculty member about the appropriate choices, given their educational and career goals.

Accelerated Master's Degree Program

Students who have completed at least 90 hours towards their bachelor's degrees, have at least a 3.5 overall undergraduate GPA, and a 3.5 GPA in Psychology are eligible to apply for our Accelerated Master's Degree program. Students accepted into the program can begin taking graduate coursework up to a maximum of 12 hours in place of elective undergraduate courses. Students reduce the number of hours required to complete the bachelor's degree by the number of graduate hours they complete (up to a maximum of 12). They must meet all the other degree requirements for their bachelor's degrees while they work on their master's degrees. Interested students are encouraged to discuss this option with their advisors to obtain further details and information on the application process.

Capstone

Psychology majors can satisfy the capstone requirement by successfully completing one of several courses: Research in Psychology (PSY 456-457); an undergraduate practicum in either Clinical or Industrial/Organizational Psychology (PSY 470 or 471); Nonverbal Behavior (PSY 480); the capstone seminar (PSY 499), which will focus on a variety of topics, or History and Systems of Psychology (PSY 460).

In order to enroll as a capstone student in any of these courses, a student must have a 2.0 GPA in Psychology and overall, have completed at least 80 credit hours of undergraduate coursework, and satisfy the specific course prerequisites. Permission to enroll as a capstone student is required from the instructor, and there is an application process for admission to PSY 470, 471, 456, and 457. Advanced students can take more than one of these courses, but only one will be used for the capstone experience. Check with your advisor in your junior year for specific capstone requirements.

Course Descriptions

Course descriptions for Psychology may be found alphabetically in the "Courses of Instruction" section.

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY
Dr. Martin Laubach, Chair
www.marshall.edu/dosa/

Professors

Freidin, Hoey, Laubach, Roth

Associate Professors

Conley, Fondren, Garnett, Sullivan

Sociology

Sociology is the study of human societies. We ask basic questions like "why do humans do what we do" and "how does society work." Along the way we pick up essential human questions like: What does it mean when we say that we live in a socially constructed reality? What is the place of the individual in society? Do we have "free will," or are our personal actions

determined by social forces? Is social life really what Thomas Hobbes called the "war of all against all"? Why do we have social order?

If you have ever thought about questions like these, you might want to consider a degree in Sociology. Humans are social beings and we interact in a social environment. Sociology is the scientific discipline that studies human behavior and social interactions of individuals, groups, organizations and whole societies. Sociology is a science, and was identified in the 1830s as one of the five "mother sciences" along with astronomy, chemistry, physics, and biology, and as such overlaps with other social sciences (Political Science, Economics, Psychology, and Anthropology) though we maintain our unique perspective. Sociology focuses primarily on contemporary societies, though we incorporate a historical and developmental perspective.

The Sociology program at Marshall University offers students the opportunity to study the intricacies of social life: how to negotiate the collaboratively constructed institutions through which our social world works, how social stratification affects opportunities for individuals and groups, how to critically analyze the problems inherent in the way we construct society, how to empirically determine the facts we construct into truths. The social and analytical skills developed through the program are essential for any job dealing with people and organizations – especially those dealing in multiethnic and global environments and that require breadth and adaptability.

You don't often see jobs with "sociologist" in the title, but a Sociology B.A. is recognized as an excellent preparation for a wide variety of occupations, especially for careers in social policy, education, union organizing or other social movements, health care, criminology, aging network, industrial or public relations, marketing, human resource management, organizational research, or community and social services. Of course, Marshall's Sociology program also offers an excellent preparation for professional degrees and/or advanced degrees in Sociology. A recent study by CareerCast.com ranked Sociology as the eighth most appealing job in its analysis of 200 occupations based on job characteristics such as perceived work environment, income, employment outlook, physical demands, security, and stress.

The Sociology program at Marshall seeks to ensure that each student develops a solid foundation in the principles, theories and techniques of analysis in the discipline. While allowing for flexibility to accommodate students' diverse interests, the curriculum ensures that students are introduced to social theory, learn to employ the basic methods of the discipline, and take courses that provide a good orientation in the discipline both in breadth and depth.

Major in Sociology

To graduate with a major in Sociology, a student must take 39 credits of required core classes and electives as described as follows.

The required core of the Sociology major consists of 18 credits (6 classes):

SOC 200 Introductory Sociology
SOC 344 Social Research I
SOC 345 Social Statistics I
SOC 360 Sociological Theory
SOC 492 Senior Seminar I
SOC 493 Senior Seminar II (Capstone)

An additional 21 credits (7 classes) of electives must be chosen from classes with the SOC prefix. These electives must include:

a) a minimum of three classes from courses in one of the focus areas listed below to develop program depth; this selection must include the italicized course as the foundation course for that focus area.
b) classes that contribute to three other focus areas to develop program breadth.
c) free electives: the remaining 3-9 credits can be fulfilled by any class with the SOC prefix, including Independent Study and Internship. The number of remaining credits will vary dependent on the selection of courses to satisfy requirement a) and b) above. Some classes are listed in more than one focus area and a student can count such classes in more than one focus area for this requirement; however, the requirement for the total number of credit hours must of course still be met.

The focus areas are as follows:

Organizations & Institutions

SOC 300 Social Organization
SOC 362 Health, Culture, and Society
SOC 408 The Family
SOC 433 Sociology of Work
SOC 450 Sociology of Religion
SOC 464 Complex Organizations

(continued)

Stratification/Diversity

SOC 375 Social Stratification
SOC 423 Social Class, Power and Conflict
SOC 425 Race and Ethnicity
SOC 432 Sociology of Appalachia
SOC 440 Introduction to the Sociology of Aging

Social Problems & Collective Behavior

SOC 310 Individual and Society
SOC 311 Deviance and Social Control
SOC 313 Contemporary Social Issues and Problems
SOC 413 Social Movements and Social Change
SOC 420 Criminology
SOC 435 Juvenile Delinquency
SOC 460 Holocaust & Genocide

Demography, Health, and Human Environments

SOC 362 Health, Culture, and Society
SOC 401 Population and Human Ecology
SOC 432 Sociology of Appalachia
SOC 440 Introduction to the Sociology of Aging
SOC 442 Urban Sociology
SOC 452 Sociology of Death and Dying
SOC 466 Culture and Environment

Capstone Requirement

Sociology majors fulfill the capstone requirement by completing the sequence of SOC 492, Seminar I, in the Fall semester and SOC 493 in the Spring semester and submitting the capstone portfolio.

Minor in Sociology

A minor in Sociology requires at least 15 credits. As listed below, 9 of these credits constitute the core of the minor. The remainder of the required credits can be taken from any class with the prefix SOC. A maximum of 6 credits below 300-level can be counted towards the minor.

The required core of the Sociology minor consists of 9 credits (3 classes):

SOC 200 Introductory Sociology
SOC 344 Social Research I
SOC 360 Sociological Theory

Students majoring or minoring in Sociology are strongly encouraged to discuss with an advisor (in the department and/or in the office of the dean of the College of Liberal Arts) ways in which the requirements in the major/minor simultaneously cover parts of the general education requirements in the College of Liberal Arts and/or the Core Curriculum.

Accelerated Master's Degree Program

Students who have completed at least 90 hours towards their bachelor's degrees, have at least a 3.5 overall undergraduate GPA, and a 3.5 GPA in Sociology are eligible to apply for our Accelerated Master's Degree program. Students accepted into the program can begin taking graduate coursework up to a maximum of 12 hours in place of elective undergraduate courses. Students reduce the number of hours required to complete the bachelor's degree by the number of graduate hours they complete (up to a maximum of 12). They must meet all the other degree requirements for their bachelor's degrees while they work on their master's degrees. Interested students are encouraged to discuss this option with their advisors to obtain further details and information on the application process.

Honors in Sociology

The very best Sociology students are encouraged to consider graduating with program honors. To graduate with Honors in Sociology a student must enroll in two subsequent 3 credit courses for a total of 6 credits over one year. A 3 credit SOC 485, Independent Study, followed by SOC 493, Senior Seminar II (Capstone) will be the ordinary sequence, but if necessary the courses can be taken in the reversed order.

The prerequisites for obtaining permission to pursue the Honors in Sociology option are: the student must be a declared Sociology major in Junior or Senior standing, have a GPA in all concluded Sociology classes of a minimum of 3.5, and have a written agreement with a faculty member, who will act as the advisor. In the first term, the student will prepare a study plan

and literature review for an independent research project; at the end of the term, this work must be presented to a committee of at least three faculty members who will together determine the grade.

The prerequisites for pursuing the second term of the honors option include: an "A" in the first term, a GPA in all concluded Sociology classes of a minimum of 3.5, and written permission by the advisor. In the second semester, the student will conduct the proposed research project and report her/his findings (the report will ordinarily be a written paper, but can be supplemented by presentations in other media – an exhibition, a film, etc.). At the end of the term, this work must be presented to a committee of at least three faculty members who will together determine the grade. The grade "A" for the work in the second term will be recognized on the student's transcript as "Graduating with Honors in Sociology."

Anthropology

Anthropology is the systematic study of humans, their practices, and the myriad ways they experience these practices. Anthropologists study humanity in its diverse cultural, social, physical and linguistic forms. As an academic discipline, Anthropology bridges the humanities and social sciences in addressing fundamental questions having to do not only with how the human world works and how people negotiate their social and cultural realities but also with what it *means* to be human. Anthropology draws from prehistorical, historical, and contemporary cases and is distinct in addressing all levels of sociopolitical organization and subsistence strategies ranging from foraging bands and horticultural tribes to modern industrialized states and the globalized realities of the world today. Anthropology is, by its nature, interdisciplinary and international in both theory and practice.

Our program offers students from diverse backgrounds the opportunity to thoroughly and creatively explore the world and peoples around them. Anthropology classes stress the exchange of ideas and build strength in critical thinking, communication, and intellectual exploration. An anthropological perspective will become increasingly important in the 21st century. There is today a growing demand for sensitivity to the values, beliefs, and cultural structures of other groups that might be different from one's own. In all parts of society, people progressively need the ability to live, work, and appreciate diversity while simultaneously becoming more aware of the relations that connect various groups and the commonalities they share.

As reported by the American Anthropological Association and the Society for American Archaeology, demand for graduates with degrees in Anthropology is high. Anthropology graduates work in many fields in which research on humans and their behavior is needed, including private corporations, nonprofit organizations, and government agencies. Anthropology majors commonly find employment in state and federal governments, non-governmental and other international aid organizations, education, business, human resources, social work, historical resource management/field-technicians in archaeology, and, increasingly, health care. Many Anthropology majors continue to graduate school in such fields as: Anthropology, History, Law, Geography or Medicine.

The Anthropology program at Marshall University seeks to ensure that each student develops a solid foundation in the basic principles, theories and techniques of analysis within the discipline. The curriculum ensures that students are introduced to all four disciplinary subfields: social-cultural anthropology, physical-biological anthropology, archaeology, and linguistics. Since students majoring in anthropology vary in their interests and career goals, the curriculum allows for flexibility in developing individual courses of study, including opportunities for involvement in faculty research through course offerings and independent study.

Major in Anthropology

To graduate with a major in Anthropology, a student must take 39 credits of required core classes and electives as described following.

The required core of the Anthropology major consists of 24 credits (8 classes):

ANT 201 Cultural Anthropology
ANT 322 Archaeology
ANT 331 Physical Anthropology
ANT 361 Ethnographic Methods
ANT 371 Linguistic Anthropology
ANT 491 Theory in Ethnology
ANT 492 Senior Seminar I
ANT 493 Senior Seminar II (Capstone)

An additional minimum of 15 credits of electives must be chosen from classes with the ANT prefix. A student with a particular anthropological interest that can be best served by courses without the ANT prefix may suggest a coherent selection of up to 9 credits from such classes to be counted towards the major as electives. A plan for such a selection must be presented to and approved by the student's advisor and the department chair in the student's junior year or, for those students entering the program at the junior level, at a time stipulated by the chair.

Areas of Emphasis in Anthropology

Anthropology of Health.

Required:

- The introductory course for medical anthropology (ANT 362)
- The ethnographic research methods course (ANT 361)
- A theory course in socioculutral anthropology (either ANT 467 or ANT 491)

Elective

- Choice of two topical ANT courses from the following list (or as approved by the faculty in Anthropology):
    - Design, Planning and Health (ANT 464)
    - Disaster, Culture and Health (ANT 465)
    - Culture and Environment (ANT 466)
- Choice of one spatial or quantitative data analysis course from the following list (or as approved by the faculty in Anthropology):
    - Geographic Information Systems (ANT 402, cross-listed with GEO 426)
    - Social Statistics (ANT 301, cross-listed with SOC 345)

Sociocultural Anthropology.

Required:

- The introductory course in cultural anthropology (ANT 201)
- The ethnographic research methods course (ANT 361)
- The theory course in sociocultural anthropology (ANT 491)

Elective

- Choice of 3 topical ANT courses from among those listed in the 350s, 360s, 450s, 460s, and 470s (or as approved by the faculty in Anthropology) other than those required in this Area of Emphasis.)

Anthropology.

Required:

- The introductory course for archeaeological anthropology (ANT 322)
- An Archaeological research methods course (ANT 323 or ANT 324)
- The theory course in archaeological anthropology (ANT 428))

Elective

- Choice of 3 topical ANT courses from among those listed in the 320s and 440s (or as approved by the faculty in Anthropology) other than those required in this Area of Emphasis.)

Capstone Requirement

Anthropology majors fulfill the capstone requirement by completing the sequence of ANT 492, Senior Seminar I, in the Fall semester and ANT 493, Senior Seminar II, in the Spring semester and submitting the capstone portfolio.

Minor in Anthropology

The undergraduate Minor in General Anthropology requires 12 credit-hours made of choices from two blocks of courses. From Block I, students are required to choose two courses (6 hours) from foundational, subdisciplinary courses: ANT 201; ANT 322; ANT 331; and ANT 371. From Block II, students are required to choose any two ANT courses (6 hours) from either the 300 or 400 level that are not listed in Block I. General Anthropology is intended to provide flexibility to explore introductions to four major sub-disciplines of the field and freely sample related upper-level courses in a way that accommodates students with diverse majors ranging from pre-medicine, pre-law, geography, art history, computer science, engineering, business, environmental sciences, to social work.

Block I. Required Courses (6 hrs.)

Choose two of the following Foundational Sub-disciplinary Courses.

- ANT 201, Cultural Anthropology
  Introduction to scientific study of culture with emphasis on cultures of small-scale societies.
- ANT 322, Archaeology
  Introduction to the methods and theory of archaeology.
- ANT 331, Physical Anthropology
  The study of human physical evolution, from the earliest hominins to the present day, based on the study of primatology, human genetics, and the paleontological record.

- ANT 371, Linguistic Anthropology
  Introduction to the theories and methodologies of linguistic anthropology and to language as a cultural phenomenon and form of diversity

Block II. Elective Courses (6 hrs.)

Choose two ANT courses from either the 300 or 400 level that are not listed in Block I. Students should seek advice from the program and plan for Block II courses that build on choices made in Block I.

Honors in Anthropology

The very best Anthropology students are encouraged to consider graduating with program honors. To graduate with Honors in Anthropology a student must enroll in two subsequent 3 credit courses for a total of 6 credits over one year. A 3 credit ANT 485, Independent Study, followed by ANT 493, Senior Seminar II (Capstone) will be the ordinary sequence, but if necessary the courses can be taken in the reversed order.

The prerequisites for obtaining permission to pursue the Honors in Anthropology option are: the student must be a declared Anthropology major in Junior or Senior standing, have a GPA in all concluded Anthropology classes of a minimum of 3.5, and have a written agreement with a faculty member, who will act as the advisor. In the first term, the student will prepare a study plan and literature review for an independent research project; at the end of the term, this work must be presented to a committee of at least three faculty members who will together determine the grade.

The prerequisites for pursuing the second term of the honors option include: an "A" in the first term, a GPA in all concluded Anthropology classes of a minimum of 3.5, and written permission by the advisor. In the second semester, the student will conduct the proposed research project and report her/his findings (the report will ordinarily be a written paper, but can be supplemented by presentations in other media – an exhibition, a film, etc.). At the end of the term, this work must be presented to a committee of at least three faculty members who will together determine the grade. The grade "A" for the work in the second term will be recognized on the student's transcript as "Graduating with Honors in Anthropology."

Course Descriptions

Course descriptions for Anthropology and Sociology may be found alphabetically in the "Courses of Instruction" section.

INTERDISCIPLINARY MINORS

ADDICTION STUDIES

Kristin J. Steele
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www.marshall.edu/addictionstudies

Instead of focusing strictly on treatment for addiction, the aim of this minor is to take advantage of the interdisciplinary structure of the university in order to incorporate the perspectives and expertise of as many faculty, students, and community members as possible. The goal is to create innovative thinkers on this issue in order to provide evidence-based models of dealing with possibly the biggest drug epidemic in world history. In addition to a focus on substance use disorder, approved courses for this minor may address behavioral addictions as well.

Students must take at least 15 hours of courses related to addiction (as approved by the Addiction Studies committee), in at least two disciplines, at least 9 of which must be upper level. Each semester additional approved courses are updated on the addiction studies webpage listed above.

Approved Addiction Studies Courses:

HST 305: Drug Wars In the U.S. and Latin America
SWK 260: Substance Abuse in Social Work
CJ 340: Drugs and Crime
PSY 440: Physiological Psychology

AFRICAN AND AFRICAN AMERICAN STUDIES

Dr. David J. Trowbridge
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The minor in African and African American Studies is designed to supplement a student's academic major with an interdisciplinary understanding of the history, social and political life, culture, and geography of the African Diaspora. The program utilizes an interdisciplinary approach whereby students engage in critical thinking across the spectrum of various

disciplines such as geography, literature, history, social work, Political Science, fine arts, education, and sociology. The AAAS program serves students who are interested in understanding the cultural contributions and historical legacies of peoples of African ancestry in the United States and throughout Asia, Africa, South America and the Caribbean. The AAAS program also serves Marshall University and the Huntington community through local research and programming in the field of African and African American Studies.

Program Requirements

Students must complete at least 12 credit hours in approved AAAS courses with a minimum cumulative GPA of 2.5. At least six of the 12 credit hours must be in courses numbered 300 or above. Because this is an interdisciplinary minor, students must complete coursework in at least 2 academic programs. In addition to the courses on the following list, students may use up to six credit hours earned in Special Topics courses and up to six credit hours earned in Independent Study to complete the requirement for the AAAS minor upon approval by the Director of African and African American Studies. At least 6 credits must have been completed at Marshall University; up to six credit hours in AAAS coursework completed at another accredited institution may be approved by the Director of African and African American Studies. No more than 3 credit hours taken on a credit/no credit basis may count toward completion of the minor.

Approved AAAS Courses:

ANT 440: African Cultures
CI 459: Multicultural Influences in Education
CJ 406: Race, Ethnicity, Gender & Crime
ENG 240: Intro to African American Literature
GEO 407: Geography of Sub-Saharan Africa
GEO 409: North Africa and the Middle East
HST 301: Latin America: Discovery to Independence
HST 312: African American History
HST 360: Race and Sport in American History
HST 365: Modern Civil Rights Movement
JMC 455: Women, Minorities, and the Mass Media
MGT 150: Diversity Issues in Business
MUS 171: African Drum and Dance
MUS 426: American Music and its Influences
PSC 376: Black Politics
PSC 422: African Political Systems
PSC 460: Civil Rights and Liberties
SOC 425: Race and Ethnicity
SOS 207: Problems of a Multicultural Society

ASIAN STUDIES

Dr. Anara Tabyshalieva
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A student may earn a minor in Asian Studies by completing at least 15 credit hours from the courses listed below and/or any Special Topics or Independent Study courses that focus mainly on Asia and that have been approved by the Director of Asian Studies. No more than 3 credit hours from courses taken on a credit/no credit basis can count toward the minor. Up to 6 credit hours can be transferred from another accredited institution; such courses must be approved by the Director of Asian Studies.

Asian Studies Courses

GEO 403: Geography of Asia
HST 265: Modern East Asia
HST 378: The Emergence of Modern Asia
HST 380: Civilizations of Asia to 1600
HST 435: Modern Japan
HST 436: Modern China
HST 439: Modern China through Film
JPN 203: Intermediate Japanese III
JPN 204: Intermediate Japanese IV
JPN 304: Japanese Literature
JPN 315: Advanced Japanese II
PSC 407: Asian Politics
RST 206: Introduction to the Religious Traditions of Asia
RST 360: Hindu Mysticism
RST 361: Buddhism

CONSTITUTIONAL DEMOCRACY

Patricia Proctor
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The minor in Constitutional Democracy, administered through the Simon Perry Center for Constitutional Democracy, brings together different disciplines to study our Constitutional government and different perspectives related to our law and politics. It is designed to promote the study of the U.S. Constitution, the Supreme Court, the legal application of the Constitution, and U.S. politics and governance. It is also focused on developing critical thinking skills and learning about subject matter useful in understanding the law. It includes courses that demonstrate the role of powerful forces in shaping the nature of our constitutional system over a long period of time and highlights the roles of some of America's greatest leaders in this effort. In addition, this minor is particularly useful for students considering applying to law school after graduation, as it includes courses from a variety of disciplines that will be useful in the study of law.

The interdisciplinary minor in Constitutional Democracy is a 15-hour minor that requires students to take PSC 104 plus one of the following courses: PSC 427 (Shapers & Definers), PSC 446 (Politics in History), PSC 484 (Constitutional Law), HST 342 (American Legal History) or PHL 460 (Philosophy of Politics and Power), plus an additional 9 hours selected from the following list:

PSC 207: Comparative Politics (CT)
PSC 303: American Political Parties
PSC 307: Public Opinion and Propaganda
PSC 376: Black Politics
PSC 417: Homeland Security and Civil Liberties
PSC 418: American Political Thought II
PSC 419: Women and Political Thought
PSC 421: American Political Thought I
PSC 427: Shapers and Definers
PSC 429: The Politics of Conflict and Revolution
PSC 436: The American Judiciary
PSC 440: Power in American Society
PSC 444: Dictatorship and Democracy
PSC 446: Politics in History
PSC 460: Civil Rights and Liberties
PSC 484: Constitutional Law
ENG 220: The Political Novel (English and American)
HST 342: American Legal History
HST 409: American Revolution
HST 414: Civil War and Reconstruction
HST 433: In Our Time: America Since 1945
PHL 200: Intro to Philosophy: Ancient Period
PHL 201: Introduction to Philosophy: Modern Period
PHL 303: Ethics
PHL 304: Logic & Interpretation
PHL 451: Philosophy of History and Culture
PHL 460: Philosophy of Politics and Power
SOC 342: American Society
SOC 423: Social Class, Power and Conflict
SOC 425: Race and Ethnicity
SOC 468: National Identity

Full descriptions for all of these courses can be found alphabetically in the "Courses of Instruction" section of this catalog.

DIGITAL HUMANITIES

Dr. Kristen Lillvis
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www.marshall.edu/digitalhumanities

To earn a minor in Digital Humanities, a student must complete at least 15 credits in approved Digital Humanities courses with a minimum GPA of 2.5. Other requirements:

- Students must take DH 201: Introduction to Digital Humanities
- 12 additional credit hours in courses related to Digital Humanities.
- Because this is an interdisciplinary minor, students must complete coursework in at least 3 academic departments.

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- At least 9 credit hours must have been completed at Marshall University. Students may utilize up to 6 credit hours in Digital Humanities coursework completed at another accredited institution with the approval of the Director of Digital Humanities.
- At least 6 of 15 credit hours must be in courses numbered 300 or above.
- In addition to the courses on the following list, students may include up to 9 credits earned in Special Topics courses, including Honors Seminars, and up to 3 credits earned in Independent Study, provided these courses have been approved by the Director of Digital Humanities for completion of the Digital Humanities minor.
- No courses taken on a credit/no credit basis can count toward completion of the minor.

Courses

Among the courses that may fulfill the Digital Humanities minor are the following:

ANT 464: Design, Planning, and Health
ANT 465: Disaster, Culture and Health
ART 219: Gaze/Animate:
ART 318: Art and Design for Websites
CS 110: Computer Science I
CS 120: Computer Science II
DH 201: Introduction to Digital Humanities
ENG 263: Digital Literary Studies
ENG 408: Writing in the Digital World
GEO 110: Basic GIS
GEO 111: Air Photos and Satellite Imagery
GEO 112: Introduction to Global Positioning Systems (GPS).
GEO 113: Web GIS
GEO 426: Principles of GIS.
JMC 241: Media Design
JMC 260: Digital Imaging for JMC
JMC 361: Digltal Presence
JMC 462: Web Design

The following courses count toward a Digital Humanities minor only when taught by approved faculty. Please check the program website or e-mail the Director of Digital Humanities for a list of approved faculty.

ENG 344: Introduction to Film Studies
ENG 440: Selected Topics in Film
HST 303: The American Military Experience
HST 312: African-American History, 1619 to Present
HST 437: Seminar in Publlc History
HST 438: Material Culture and History

Full descriptions for all of these courses can be found alphabetically in the "Courses of Instruction" section of this catalog.

FILM STUDIES

Dr. Walter Squire
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www.marshall.edu/filmstudies

To earn a minor in Film Studies, a student must complete at least 15 credits in approved Film Studies courses with a minimum GPA of 2.5. Other requirements:

1. ENG 344: Introduction to Film Studies, a 3-credit course, is required.
2. 12 additional credits in courses that focus primarily upon film or related art forms.
3. Because this is an interdisciplinary minor, students must complete coursework in at least 3 academic departments or schools.
4. No more than 9 credits in any one department or school.
5. At least 9 credits must have been completed at Marshall University. Students may utilize up to six credits in Film Studies coursework completed at other accredited institutions with the approval of the Director of Film Studies.
6. No more than 3 credits in independent study.

7. 6 of the 15 credits must be in courses numbered 300 and above.
8. No credits taken on a credit/no credit basis.

Courses

Among the courses that may fulfill the Film Studies minor are the following:

ANT 365: Anthropology through Film
ART 315: Introduction to Photography
ART 325: Image Visualization
ART 453: Advanced Digital Media
CMM 239: Development and Appreciation of Film
CMM 441: Development and Appreciation of Film Since 1930
ENG 232: Good Films
ENG 344: Introduction to Film Studies
ENG 440: Selected Topics in Film
ENG 442: Gender and Sexuality in Film
ENG 445: Screenwriting
FRN 417-418: Contemporary French Film
HST 439: Modern China through Film
HST 447: Film and Empire
JMC 260: Digital Imaging for JMC
JMC 332: Introduction to Video Production
JMC 432: AD-PR Video Production
JMC 434: Advanced Video
JMC 475: Documentary Journalism
JPN 250: Japanese Manga and Anime
JPN 403: Japanese Film in English
MUS 219: Digital Recording Techniques
SPN 417: Spanish Film
SPN 418: Latin American Film
SPN 419: Against Oppression: Spanish and Latin American Film Study
THE 111: Introduction to Acting
THE 201: Critical Analysis of Theatre Literature
THE 240: Introduction to Stage Lighting
THE 354: Stage Makeup
THE 421: Acting for the Camera

In addition to the courses on this list, students may use up to nine credits earned in Special Topics courses, including Honors Seminars, and up to three credits earned in Independent Study to complete the requirement for the Film Studies minor, provided these courses have been approved by the Director of Film Studies for completion of the Film Studies minor.

LATIN AMERICAN STUDIES

Dr. Chris White
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A student may earn a minor in Latin American Studies by completing at least 15 credit hours from the courses listed below and/or any 300- and 400-level Special Topics or Independent Study courses that focus on Latin America and that have been approved by the Director of Latin American Studies. Since it is an interdisciplinary program, students are not confined to taking courses in one department; however, all 15 credit hours can be from a single department. Up to 6 credit hours can be transferred from another accredited institution with the approval of the Director of Latin American Studies. The director may allow up to 12 credit hours to apply if earned at a Latin American university during study abroad. No more than 3 credit hours taken on a credit/no credit basis may count toward the minor. A student must have a minimum GPA of 2.5 in the courses counting toward the minor.

Latin American Studies Courses

GEO 408: Middle and South America
HST 301: Latin America from Discovery to Independence
HST 302: Latin America from Independence to Present
HST 305: Drug Wars in the U.S. and Latin America
HST 423: U.S. Latin American Relations

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PSC 411: Latin American Politics
SPN 335: Latin America Culture and Civilization
SPN 411: PreModern Latin American Literature
SPN 412: Contemporary Latin American Literature
SPN 413: Literary Genres and NonCanonical Issues in Latin America
SPN 417/418: Hispanic Film and Literature
SPN 435: Culture and Civilization: Contemporary Latin American Culture

SEXUALITY STUDIES

Dr. Shawn Schulenberg
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Through the Sexuality Studies minor a new generation engages in research and understanding of a critical aspect of human experience. The minor offers students a greater understanding of the histories of, development of, and variations in sexual cultures, sexual identities, sexual discourses, intimate relationships, and sexual health. Foregrounding sexuality as a central, rather than peripheral, category of social and cultural analysis, it encourages students to apply the category across disciplines of cultural studies, history, literature, social sciences, and sciences.

A student may earn a minor in Sexuality Studies by completing Introduction to Sexuality Studies and at least 12 additional credit hours. Those credit hours must be earned in courses that focus primarily on human sexuality issues, with at least 3 hours from each of the following two categories: Literary and Cultural Studies and Social Sciences (Anthropology, Classics, Communication Studies, Economics, English, Fine Arts, History, Modern Languages, Political Science, Sociology); Behavioral and Natural Sciences (Biology, Psychology, Allied Health Professions, Nursing, Social Work). A student must obtain approval from the chair of the Sexuality Studies Committee for all courses the student wants counted toward the minor. No more than 9 credit hours can be earned in any one department. At least 9 credit hours must be earned in 300- and 400-level courses. No more than 6 credit hours in Independent Study courses can count toward the minor. No courses taken on a credit/no credit basis can count toward the minor. Up to 6 credit hours can be transferred from another accredited institution; such courses must be approved by the Chair of the Sexuality Studies Committee.

Some approved courses are below. The full list of approved courses can be found on the Sexuality Studies website at *www.marshall.edu/sexualitystu*. Note that all courses that follow, except the Introduction to Sexuality Studies, are approved for certain instructors only.

Political Science/History/Anthropology/English 280: Introduction to Sexuality Studies. Rotating faculty.
Classics 471: Ancient Sexuality. Dr. Del Chrol.
English 344: Film & Fiction. Special Section: Sexuality in Cinema, Dr. Walter Squire. (Make sure you sign up for the section taught by Dr. Squire.)
English 434. Sexuality and the Beats. Dr. Alan Gravano.
English 455. Queer Theory. Dr. Alan Gravano.
History 407. The History of Sexuality. Dr. Greta Rensenbrink.
History 408. History of LGBT Peoples. Dr. Greta Rensenbrink.
History 480/580. Writing and Re-Writing the Norse Saga. Dr. Laura Michele Diener.
Philosophy 330. Philosophy of Sex. Dr. John Vielkind.
Political Science 481/581. The Politics of Gender and Sexuality. Dr. Shawn Schulenberg.
Psychology 330. Human Sexual Behavior. Dr. Paige Muellerleile.
Psychology 465. Love, Intimacy and Attachment. Dr. Keelon Hinton.

Contact: Dr. Shawn Schulenberg by phone at 304-696-2767 or by e-mail at *schulenberg@marshall.edu*.

WOMEN'S STUDIES MINOR

Dr. Laura Michele Diener
Old Main 357/304-696-3643
www.marshall.edu/womenstu

Marshall University offers a minor in Women's Studies. It consists of 12 credit hours in courses designated as Women's Studies Courses, including regularly offered courses as well as other popular special topic courses.

The program has the following major objectives:

- To understand the unique contributions of women of all races, sexual orientations, and classes in a global context.
- To complement the existing curriculum where systematic attention to women's experiences and contributions is needed.
- To encourage students to understand the subjective, gender and culture-specific nature of their values, beliefs and customs, and those of others.

- To understand the historical and contemporary social mechanisms that promote or limit women's development as full participants in society.
- To use gender- and culture-inclusive language in written and oral communication, and understand language as a means of liberation or discrimination.
- To promote the equitable treatment of all members of society.

Women's Studies Courses

The following courses will always count toward a Women's Studies minor. Please check the program website for frequency taught and faculty information. The website will also list Special Topics courses.

ART 404	Iconography of Mary
CJ 406	Race, Gender, Ethnicity and Crime
CJ 440	Criminal Justice Response to Domestic Violence
CL 210	Love and War
CL 231	Women in Greek and Roman Literature
CL 460	Ancient Goddess Religions
CL 471	Ancient Sexuality
GEO 419	Geography of Gender
HST 250	Women in US History
HST 407	The History of Sexuality
HST 443	20th Century US Women's History
HST 451	History of Women in Sports
JMC 455	Women, Minorities, and the Media
PHL 340	Philosophy of Sex Orientation and Gender
PSC 419	Women and Political Thought
PSY 330	Human Sexual Behavior
PSY 430	Psychology of Women and Gender
SOC 455	Sociology of Sex and Gender
SPN 408	Latin American Women
WS 101	Introduction to Women's Studies

The following courses count toward a Women's Studies minor only when taught by approved faculty. Please check the program website or e-mail the director for a list of approved faculty.

ENG 240	African American Literature
ENG 242	Women Writers
ENG 344	Introduction to Film Studies
ENG 414	19 Cent. British Novel

College of Science

Dr. Charles Somerville, Dean
Dr. Evelyn Pupplo-Cody, Associate Dean
www.marshall.edu/cos/
cos@marshall.edu

The College of Science was established in 1976 and is composed of nine departments within four schools: School of Biological and Environmental Sciences, School of Forensic and Criminal Justice Sciences, School of Mathematics and Applied Informatics, and School of Physical Sciences. While the College of Science Dean's Office is located in Science Building 270, the college operates out of several buildings including the Science Building, Morrow Library, Prichard Hall, and Smith Hall. Some lecture and laboratory classes and faculty offices also are in the Robert C. Byrd Biotechnology Science Center and the Weisberg Applied Engineering Complex.

MISSION OF THE COLLEGE

Scientific and technologically trained people are essential to our nation's health and prosperity in a rapidly expanding global economy. Students majoring in baccalaureate degree programs in the College of Science receive a broad education conducive to pursuing a wide range of career options. Course requirements include solid grounding in the student's chosen area of scientific interest along with studies in humanities and the social sciences. Students receive instruction in a learning environment that encourages competency in written and oral communication skills along with the ability to work in groups. Special emphasis is placed on experiential learning through participation in activities such as undergraduate research and internships. For non-science majors, departments in the College of Science offer a series of courses which focus on enhancing science literacy through instruction in integrated science and practical applications of mathematics.

School of Biological and Environmental Sciences - Dr. David Mallory, Director

The School of Biological and Environmental Sciences (SBES) is committed to teaching students about the science of life from molecular to population scales, and all of the myriad interactions between living and non-living parts of our world. The School includes the Department of Biological Sciences and the Department of Natural Resources and the Environment. These departments offer courses in cell, molecular and medical biology, ecology and evolutionary biology, biotechnology, environmental science, and natural resources and recreation management, among others. Students in SBES are actively engaged in research with faculty mentors, and they frequently publish their work, and make presentations at national meetings. Programs in SBES have been designed to prepare students for careers in the life sciences, or to continue their education in graduate school, or through professional degrees in a variety of health care disciplines. Alumni of these programs have chosen diverse career paths and are now working as health professionals, teaching at all educational levels, serving as environmental researchers and regulators, conducting biomedical and pharmaceutical research, and operating bioscience and consulting businesses that help grow and diversify the West Virginia economy.

School of Forensic and Criminal Justice Sciences - Dr. Dhruba Bora, Director

The School of Forensic and Criminal Justice Sciences (SFCJS) includes the Department of Criminal Justice and Criminology and the Department of Forensic Sciences. The SFCJS unites the top Master of Science in Forensic Science program in the country with a well-established undergraduate and graduate program in Criminal Justice, and a rapidly growing undergraduate major in Digital Forensics and Information Assurance. The School is also working to develop a new major in Forensic Science at the undergraduate level that will follow the guidelines established by the Forensic Science Education Programs Accreditation Commission (FEPAC), and will provide new opportunities for our undergraduates. SFCJS programs focus on real-world application of criminology and scientific detection technologies. Coursework in these programs is multidisciplinary and prepares students for careers in the criminal justice system as well as graduate programs or law school. Our BA, BS, and MS graduates work throughout the country and the world in classic forensic science, digital forensic science, law enforcement, and information assurance professions.

School of Mathematics and Applied Informatics - Dr. Alfred Akinsete, Director

The School of Mathematics and Applied Informatics (SMAI) offers undergraduate and graduate programs in the departments of Mathematics and Computer and Information Technology (CIT). CIT students can receive degrees in Web and Mobile Application Development, Computer Applications, or Gaming and Simulation Development, with a new program under development in Analytics and Data Science. Students of mathematics can earn degrees in Mathematics, Applied Mathematics and Statistics. The award-winning faculty of SMAI take pride in teaching excellence, both in the classroom and in research settings. Our students benefit from small classes, faculty access, and support services designed to ensure their success. Graduates of both Mathematics and CIT programs frequently go on to graduate school. Those who go into the workforce are employed in virtually every sector of the economy.

School of Physical Sciences - Dr. Michael Castellani, Director

The School of Physical Sciences (SPS) includes the departments of Chemistry, Geology, and Physics. All three departments offer classes with expert faculty complemented by hands on experience in the laboratory or field. Research opportunities for students of the Physical Sciences range in size from nanotechnology to cosmology, and in scope from the theoretical aspects of quantum mechanics to the applied discipline of oil and gas exploration. Class sizes and student to faculty ratios are small, providing some of the best educational experiences available anywhere. A major in Chemistry provides students with preparation to work in the chemical industry, to go on to graduate education in chemistry, or to apply to professional schools in many health-related fields. Majors in Geology receive extensive field training and practical experience, which helps explain our exceptional placement rate (over 95%) of Geology graduates either entering graduate school or securing professional positions in their field of study. A major in Physics provides students with a broad understanding of the laws that govern the universe, from the cosmos to the quark. Physics students acquire a set of highly transferable skills in problem-solving, data analysis, and an understanding of how things work. These skills are in high demand in diverse sectors, opening career paths to physics graduates across different industries, like aerospace, healthcare, energy, materials, technology, computing, education, defense, etc.

Course offerings by all departments within the college are available to science majors and to students in other disciplines who are interested in broadening their skills and knowledge in basic science, mathematics, and computers.

ADMISSION REQUIREMENTS

The ACT scores required for full admission to the College of Science are a minimum mathematics score of 21 and a minimum composite score of 21. For the SAT, a score of 530 in math and a 1060 composite score are required. Students who are fully admitted are allowed to enroll in the major of their choice.

A student who does not meet these admission requirements but still wishes to pursue a program in the College of Science may gain admission by enrolling as a pre-science major* and completing the following requirements:

1. Completion of ENG 101, 200H or 201H with a grade of *C* or higher.
2. Completion of one of the following: MTH 127, 130, 132, 122, 140 or 229 with a grade of C or higher. (For Criminal Justice majors, MTH 160 will fulfill the math requirement.)
3. A transfer student with a GPA of less than 2.0 who has not passed college algebra with a *C* or better will be placed in pre-science until he or she has a *C* or better in one of the following: MTH 127, 130, 132, 122, 140 or 229.

After meeting these requirements students will become fully admitted and will be allowed to declare a major.

PROGRAMS

The following programs are available through the departments in the College of Science:

Applied Mathematics (B.S.)

Biochemistry (B.S.)

Biological Science (B.S.)

- Cell, Molecular and Medical Biology Emphasis
- Ecology and Evolutionary Biology Emphasis
- Microbiology Emphasis

(continued)

*pre-biology, pre-chemistry, pre-computer information & technology, pre-criminal justice, pre-digital forensics, pre-environmental science, pre-geology, pre-mathematics, pre-natural resources & recreation management, and pre-physics

- Natural History and Conservation Emphasis
- Plant Biology Emphasis

Chemical Sciences (B.S.)

Chemistry (B.S. - ACS Certified)

Computer and Information Technology (B.S.)

- Game/Simulation Development Emphasis
- Web/Mobile Application Development Emphasis
- Computer Application Development Emphasis

Criminal Justice (B.A.)

- Law Enforcement
- Legal Studies
- Corrections

Digital Forensics and Information Assurance (B.S.)

Environmental Chemistry (B.S.)

Environmental Science (B.S.)

- Applied Environmental Science Emphasis
- Conservation and Wildlife Emphasis
- Environmental Science Emphasis

Forensic Chemistry (B.S.)

Geology (B.S.)

- Engineering Geology Emphasis
- Environmental Geoscience Emphasis

Mathematics (B.S.)

Natural Resources and Recreation Management (B.S.)

Physics (B.S.)

- Applied Physics Emphasis
- Bio Physics Emphasis
  Medical Imaging Emphasis
- Medical Physics Emphasis

Statistics (B.S.)

- Mathematical Statistics Emphasis

In addition to satisfying the requirements for a specific major, students must meet the college requirements outlined below and the university requirements as described in this catalog.

Students entering any baccalaureate degree program in the College of Science are responsible for meeting core foundations, which are baccalaureate program initiatives approved by the faculty and the university president for all students. Students are to consult with their academic/program advisors or the chairperson of their major departments for guidance in determining the specific details of meeting the above-referenced baccalaureate curricular initiatives.

GENERAL COLLEGE REQUIREMENTS

1. Candidates for graduation must complete all Marshall University's Core Curriculum requirements as defined in this catalog.
2. Candidates for graduation must apply for graduation through the office of the dean.
3. Candidates for graduation must have a Grade Point Average of 2.0 or higher on all work attempted at Marshall University, and must have an average of 2.0 or higher in their major. Quality point deficiencies in the major cannot be reduced by taking lower division (100/200 level) courses within the major department, except as provided for by the *D/F* Repeat Rule; exceptions may be allowed by the department chair with the concurrence of the dean.
4. A minimum of 120 semester hours of credit is required for graduation. Forty (40) hours must be earned in courses numbered 300-499. Courses taken more than once will only count one time for graduation hours. Courses transferred from two-year or community colleges cannot be used to satisfy the upper division requirement.
5. The CR/NC option cannot be used: (1) for any course taken to meet the specific requirements for a B.S. degree (see below); (2) for any course taken to fulfill the requirements for a departmental major; or (3) for any course taken to fulfill the requirements for a minor.

6. Juniors and seniors are required to meet with an advisor in the Dean's Office to review an evaluation to determine if they are making satisfactory progress toward graduation.

COLLEGE OF SCIENCE REQUIREMENTS FOR THE B.A. AND B.S. DEGREES

(Requirements vary for some programs. See major-specific requirements for details.)

Requirements	*Credit Hours*
I. Natural and Physical Sciences	11
Courses to be distributed in at least two fields.	
II. Mathematics - Calculus	3-5
Requirement varies by department. Students with lower ACT or SAT scores will be placed in the mathematics sequence at an appropriate level.	

DEGREE PROGRAMS

ACADEMIC POLICIES

For students transferring from another institution to Marshall, the College of Science will permit the application of any appropriate transfer credits accepted by the university to meet general education requirements. For coursework to be accepted as fulfilling upper division requirements, that work must have been earned at institutions accredited to offer junior/senior level courses.

DEPARTMENT OF BIOLOGICAL SCIENCES

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Professors

Fet, Georgel, Joy, Mallory, O'Keefe, Price, Strait, Trzyna, Valluri, Zhu

Associate Professors

Antonsen, Axel, Schultz, , Spitzer, Waldron

Assistant Professors

Chirchir, Mays, Mosher, Welch

Courses offered by the Department of Biological Sciences are intended to meet the needs of students preparing themselves for careers in the biological and related sciences, or who want a knowledge of the life sciences as part of their general education and/or to satisfy science requirements in other departments or programs.

A major in the life sciences provides preparation that can lead directly to a variety of careers in industry, government agencies, and the basic and applied health fields. It also provides excellent preparation for pursuing graduate studies leading to professions in the biological and health sciences. In addition to fulfillment of college requirements, a degree in Biological Sciences requires a minimum of 40 hours of coursework in the Department of Biological Sciences. These include BSC 120, BSC 121 and at least 11 hours of core courses, a 2 hour capstone experience requirement (BSC 491) and a minimum of 18-20 hours of electives chosen under the guidance of the faculty advisor. Students are invited to visit the departmental website for details on course content and offerings. Additional requirements include the specific university core requirements, College of Science requirements in mathematics and science, and support courses in chemistry, physics, and mathematics listed as follows:

REQUIRED COURSES

Biological Science 120, 121*	8 hrs.
Biological Science core courses: 302, 320, 322, 324 (minimum of three)	11-15 hrs.
Biological Science 491** (Capstone)	2 hrs.

(continued)

Chemistry 211, 212, 217, 218, 355, 356, 361 ..... 19 hrs.
Physics 201, 202, 203, 204 ..... 8 hrs.
Mathematics 132 OR (122 AND 127,130 or 140); AND (140 or 229) (depending on ACT/SAT Math score) ..... 5-8 hrs.

*Students must pass BSC 120 and earn a grade of *C* or better in BSC 121, CHM 211, and CHM 212 before they can enroll in any upper-level BSC course except BSC 227, 228 and 250. BSC 104 and 105 will not substitute for BSC 120 and 121 for a major in the Department of Biological Sciences.

**CAPSTONE EXPERIENCE: It is the responsibility of each student to consult his/her advisor regarding details of meeting the capstone requirement. The capstone may be a traditional independent study research project under the supervision of a faculty member selected by the student, participation in a classroom-based capstone course, or the development and implementation of an internship, co-op, or community-based project.

Students may (but do not have to) choose one of the following five Areas of Emphasis (AOE) that require completion of the following courses. Students may only declare one AOE but may change their choice any time during their enrollment.

AREA OF EMPHASIS REQUIREMENTS

Cell, Molecular and Medical Biology

An Area of Emphasis in cell, molecular and medical biology provides preparation for careers in biotechnology, cell biology, medicine and/or medical research.

Required:

BSC 302 – Principles of Microbiology - 3 cr.
BSC 322 – Principles of Cell Biology - 3 cr.
BSC 324 – Principles of Genetics - 3 cr.
BSC 365 – Introductory Biochemistry - 3 cr.
BSC 310 – Comparative Vertebrate Anatomy - 4 cr.
BSC 420 – Plant Physiology - 4 cr. or BSC 422 – Animal Physiology - 4 cr.
BSC 450 – Molecular Biology - 3 cr.

Three additional courses from the following:

BSC 301 – Vertebrate Embryology - 4 cr.
BSC 304 – Microbiology Laboratory – 2 cr.
BSC 413 – Principles of Organic Evolution - 3 cr.
BSC 417 – Biostatistics - 3 cr.
BSC 424 – Animal Parasitology - 4 cr.
BSC 428 – Neuroscience - 3 cr.
BSC 438 – Emerging Infectious Diseases - 3 cr.
BSC 448 – Immunology - 4 cr.
BSC 426 – Medical Entomology - 4 cr.
BSC 442 – Advanced Microbiology - 4 cr.
BSC 454 – Principles of Advanced Methods in Molecular Biology - 3 cr.
BSC 456 – Genes and Development - 3 cr.

Ecology and Evolutionary Biology

An Area of Emphasis in ecology and evolutionary biology offers opportunities for careers in areas such as environmental health, resource management, and basic and applied ecological research.

Required:

BSC 320 - Principles of Ecology - 4 cr.
Two of the following - 7-8 cr.
  BSC 302 – Principles of Microbiology - 3 cr.
  BSC 322 – Principles of Cell Biology - 4 cr.
  BSC 324 – Principles of Genetics - 4 cr.
BSC 413 - Principles of Organic Evolution - 3 cr.
BSC 417 - Biostatistics - 3 cr.
BSC 482 - Biosystematics - 3 cr.

Four additional courses from the following:

BSC 302 - Principles of Microbiology - 3 cr.
BSC 304 - Principles of Microbiology Lab - 2 cr.
BSC 310 - Comparative Vertebrate Anatomy - 4 cr.
BSC 312 - Invertebrate Zoology - 4 hrs.
BSC 365 - Introductory Biochemistry - 3 cr.
BSC 406 - Herpetology - 4 cr.
BSC 408 - Ornithology - 4 cr.
BSC 410 - Remote Sensing/GIS Applications - 4 cr.
BSC 411 - Digital Imaging Processing/GIS Model - 4 cr.
BSC 416 - Plant Taxonomy - 4 cr.
BSC 422 - Animal Physiology - 4 cr.
BSC 424 - Animal Parasitology - 4 cr.
BSC 430 - Plant Ecology - 4 cr.
BSC 456 - Genes and Development - 3 cr.
BSC 460 - Conservation Biology - 4 cr.

Microbiology

Students with an Area of Emphasis in microbiology will be prepared for career opportunities in environmental, pharmaceutical, and industrial microbiology. Students will also be prepared to continue specialization at the graduate level in clinical, food and dairy, soil and sanitary bacteriology, as well as industrial microbiology.

Required:

BSC 302 - Principles of Microbiology - 3 cr.
BSC 324 - Principles of Genetics - 4 cr.
One of the following
BSC 320 Principles of Ecology - 4 cr.
BSC 322 Principles of Cell Biology - 4 cr.
BSC 304 - Principles of Microbiology Lab - 2 cr.
BSC 365 - Introductory Biochemistry - 3 cr.
BSC 442 - Advanced Microbiology - 4 cr.
BSC 443 - Microbial Genetics - 3 cr.

Three additional courses from the following:

BSC 417 - Biostatistics - 3 cr.
BSC 424 - Animal Parasitology - 4 cr.
BSC 438 - Emerging Infectious Diseases - 3 cr.
BSC 448 - Introductory Immunology - 3 cr.
BSC 467 - Intermediate Biochemistry – 3 cr.

Natural History and Conservation

An Area of Emphasis in natural history and conservation offers opportunities for careers in areas such as zoology and conservation.

Required:

BSC 320 Principles of Ecology - 4 cr.
Two of the following
BSC 302 - Principles of Microbiology - 3 cr.
BSC 322 Cell Biology - 4 cr.
BSC 324 - Principles of Genetics - 4 cr.
BSC 413 - Principles of Organic Evolution - 3 cr.
BSC 417 - Biostatistics - 3 cr.
BSC 482 - Systematics 3 cr.
BSC 460 - Conservation Biology - 3 cr.

Three additional courses from the following:

BSC 302 – Principles of Microbiology - 3 cr.

(continued)

BSC 304 – Microbiology Laboratory – 2 cr.
BSC 310 - Comparative Vertebrate Anatomy - 4 cr.
BSC 312 - Invertebrate Zoology - 4 hrs.
BSC 365 - Introductory Biochemistry - 3 cr.
BSC 406 - Herpetology - 4 cr.
BSC 408 - Ornithology - 4 cr.
BSC 410 - Remote Sensing/GIS Applications - 4 cr.
BSC 411 - Digital Imaging Processing/GIS Model - 4 cr.
BSC 416 - Plant Taxonomy - 4 cr.
BSC 422 - Animal Physiology - 4 cr.
BSC 424 - Animal Parasitology - 4 cr.
BSC 430 - Plant Ecology - 4 cr.
BSC 456 - Genes and Development - 3 cr.

Plant Biology

The Plant Biology Area of Emphasis will prepare students for careers in agricultural and pharmaceutical research or industry.

Required:

BSC 322 - Principles of Cell Biology - 4 cr.
Two of the following (7-8 cr.):
BSC 302 - Principles of Microbiology - 3 cr.
BSC 320 - Principles of Ecology - 4 cr.
BSC 324 - Principles of Genetics - 4 cr.
BSC 416 - Plant Taxonomy - 4 cr.
BSC 420 - Plant Physiology - 4 cr.
BSC 430 Plant Ecology - 4 cr.

Three additional courses from the following:

BSC 302 – Principles of Microbiology - 3 cr.
BSC 304 – Microbiology Laboratory – 2 cr.
BSC 365 - Introductory Biochemistry - 3 cr.
BSC 410 - Remote Sensing/GIS Applications - 4 cr.
BSC 411 - Digital Imaging Processing/GIS Model - 4 cr.
BSC 412 - Biogeography for Biology Majors - 3 cr.
BSC 445 - Microbial Ecology - 3 cr.
BSC 460 - Conservation Biology - 3 cr.

Minor Requirements in Biological Sciences

A student may qualify for a minor in Biological Sciences by successfully completing BSC 120, 121, at least one BSC core course (BSC 302, 320, 322 or 324) and a minimum of 4 additional hours at the 300-400 level. This is a minimum of 15 hours. In order to qualify, courses taken toward the minor in Biological Sciences must be completed with an average of 2.0 or higher.

DEPARTMENT OF CHEMISTRY

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Professors

Castellani, Frost, Norton, Schmitz

Associate Professors

Day, Kolling, McCunn, Morgan, O'Connor, Price, Wang

Assistant Professors

Markiewicz, Quiñones, Rakus

Courses offered by the Department of Chemistry provide programs of study that allow the individual to:

1. Obtain high quality instruction in chemistry as a scientific discipline.
2. Obtain a sound background in preparation for advanced studies.
3. Meet the qualifications of professional chemists and accrediting agencies.
4. Prepare for a professional career in chemistry, medicine, dentistry, pharmacy, medical technology, engineering, nursing and other fields.

High school students planning to major in chemistry are advised to take one year of high school chemistry, one year of high school physics, and at least three years of high school mathematics (including geometry, algebra, and trigonometry).

The curriculum and facilities of the department have been approved by the Committee on Professional Training of the American Chemical Society.

Curricula in Chemistry

B.S. Degree, Major in Chemical Sciences: This major in chemistry is intended for students needing a broadly based, flexible science background. The requirements are as follows:

Requirements		*Credit Hours*
A. Science		62-69
Chemistry 211, 212, 217, 218, 305, 355, 356, 361, 357 or 358, 345, 432, 448	32	
Upper division Chemistry electives	3	
Capstone Experience - Chemistry 490 or 491	2	
Mathematics 229	5	
Physics 201-204 or (211, 202, 213, 204)	8	
Science and Mathematics electives	12-19	
B. General Electives from any college		9-21
Students interested in careers in technical sales, management, and marketing in the chemical industry are encouraged to take the following courses as electives: Economics 250, 253, Marketing 340, 440 or 442; Management 320.		

B.S. Degree, Major in Biochemistry – Students completing the Biochemistry degree will be prepared for career opportunities in the biotechnology, forensics, environmental, pharmaceutical, agricultural, and medical fields. Students will also be well prepared for graduate-level study in biochemistry, biotechnology, and genetics and molecular biology. Additionally, Biochemistry is an excellent choice for students preparing for careers in Medicine, Dentistry, Pharmacy, Law or Engineering. The requirements are:

Requirements		*Credit Hours*
A. Science		63
Chemistry 211, 212, 217, 218, 305, 355, 356, 361, 357 or 358, 365, 366, 432, 467	32	
Capstone Experience (Biochemistry Related) – Chemistry 490 or 491	2	
Mathematics 229	5	
Physics 201-204 or (211, 202, 213, 204)	8	
Biological Sciences 120, 121, 322, and 324	16	
B. Electives*		10-12
Biological Sciences 302, 422, 428, 443, 448, 450, 466		
Chemistry 345, 357, 358, 411, 448, 451, 465, 466		
* At least one must be 4 hours and at least one must be from Chemistry.		

Note 1: CHM 358 or 411 is recommended for students considering graduate school.

Note 2: The BSC coursework provides a Biological Sciences minor.

B.S. Degree, Major in Forensic Chemistry: This major is intended for students who wish to pursue a career in fields involving forensics. Students are strongly encouraged to engage in a Forensic Chemistry related Capstone Experience (CHM 491). The requirements are:

Requirements	*Credit Hours*
A. Science	81-84
Chemistry 211, 212, 217, 218, 305, 355, 356, 361, 345, 357 or 358, 365, 411, 432	35
Upper division Chemistry elective	3
Capstone Experience – Chemistry 490 or 491	2
Mathematics 229	5
Mathematics 225 or 345	3-4
Physics 201-204 or (211, 202, 213, 204)	8
Biology 120, 121, 322 and 324	16
CIT 163	3
Two courses from BSC† 450, or CHM† 428 or 467	6-8
B. General Humanities and Social Science Requirements	6
Criminal Justice 314, and either 323 or 422	

†Selection of one of the BSC courses provides a Biological Sciences minor. Chemistry courses may not be counted both as a chemistry elective and in this category.

B. S. Degree, Major in Environmental Chemistry: Students completing the environmental chemistry major will be prepared for career opportunities in environmental chemistry, toxicology, environmental policy, and consulting. Additionally, Environmental Chemistry is an excellent choice for students desiring to attend Professional training in Law, or Safety, or Industrial Hygiene. The requirements for this major are:

Requirements	*Credit Hours*
A. Science	83
Chemistry 211, 212, 217, 218, 305, 355, 356, 361, 357 or 358, 365, 411, 423, 432	35
Capstone Experience (Environmental chemistry related)- 490 or 491	2
Statistics: either BSC 417, STA 225, or MTH 345	3
Mathematics 229	5
Physics 201-204 or (211, 202, 213, 204)	8
Biological Sciences 120, 320, and 445	11
Natural Resources and the Environment 322 and 323	8
Geology 200	3
Environmental Science Electives^	8
B. General College Humanities and Social Science Requirements	3
GEO 416 or 422	

^Students should choose at least 8 credit hours from courses in the list below. Courses from a maximum of two departments may be selected. Students wishing a physical science emphasis may take all of the Geology electives and not take either BSC 445 or IST 323.

BSC 431, 446

CHM 467
GLY 320L, 420, 455, 455L, 456, 456L

NRE 320, 321

PHY 412

B.S. in Chemistry Degree, ACS Certified: This curriculum meets the standards of the American Chemical Society and is recommended for students intending to enter the chemical profession or intending to pursue graduate work in chemistry. Students who successfully complete the requirements for the B.S. in Chemistry degree will receive a certificate from the American Chemical Society indicating that their degree meets the standards of the Committee on Professional Training. The requirements for this degree are:

Requirements		*Credit Hours*
A. Chemistry		45 hours
Principles of Chemistry 211, 212, 217, 218	10	
Organic Chemistry 355, 356, 361	9	
Physical Chemistry 357, 358	8	
Instrumental Methods 411	4	
Research Methods in Chemistry 305	1	
Introductory Biochemistry 365	3	
Inorganic Chemistry 448	4	
Capstone Experience - Chemistry 491	6	
Seminars 331, 332, 431, 432	CR	
B. Physics 211, 202, 213, 204 or equivalent		10
C. Mathematics through 231		13-16

Grade Point Average: A Grade Point Average of 2.0 in 1) all required Chemistry courses; 2) all Chemistry courses; and 3) all required Chemistry courses taken at Marshall will be required for all degrees.

Honors, Research, and Special Programs in Chemistry: The department offers a number of unique enrichment programs outside the above curricula that are open to students in either degree program. All entering students in chemistry should contact either the department office or their advisor for full details.

Minors: The Department of Chemistry does not require a minor with any of its majors.

Double Majors

Double majors within the Department of Chemistry may include any majors other than the B.S., Major in Chemical Sciences. Double majors that include majors outside the Department of Chemistry may include any Department of Chemistry majors. For example, the B.S. Major in Chemical Sciences could be used as a double major with any Biological Sciences major.

Minor in Chemistry

The Department of Chemistry awards a minor in chemistry to students who have completed the following courses with a minimum *C* average: CHM 211, 212, 217, 218, and any two additional courses chosen from CHM 345, 355, 356, 357, 358, or 448.

DEPARTMENT OF COMPUTER AND INFORMATION TECHNOLOGY

Mr. Brian M. Morgan, Chair
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cit@marshall.edu

Professor
Morgan

Associate Professor
Chahryar

Assistant Professors
Cartwright, Mauro, Mundell

(continued)

Major in Computer and Information Technology

Just what is a major in Computer and Information Technology? A major in Computer and Information Technology provides a solid grounding in the information technology field. CIT is a cutting-edge program rooted and grounded in courses that are both highly theoretical while also extremely applied in nature. Students are constantly exposed to the latest technology and trends in class, making them immediately employable upon graduation. A major in Computer and Information Technology provides graduates with the necessary tools and skills to succeed in today's global, technology-driven world. Majors must choose to specialize in an area of emphasis which allows them to enrich their studies in a focused discipline. These areas of emphasis include:

- Computer Application Development
- Web/Mobile Application Development
- Game/Simulation Development

CIT graduates' skills are highly marketable and graduates are prepared for careers in any of today's industries that use Information Technology. The integrated nature of the educational experience enables graduates to combine their IT skills with the intellectual flexibility needed to be critical thinkers and problem solvers. They are also effective communicators able to interact with clients, coworkers and managers. CIT faculty work to help students develop real-life employable skills through hands-on experience while providing students access to emerging technologies.

Even so, CIT is not Computer Science. While CIT has strong roots in CS and the study of computers in general, there are important distinctions between the two disciplines, from professional and curricular perspectives.

Professional Aspect: Computer science students typically are motivated by the computer itself and how it works through an engineering perspective. In other words, computer scientists are interested in how the computer works under the hood. Information technologists, on the other hand, are intrigued by using the computer to solve problems. Information technologists identify needs for technology, which the computer scientists and engineers create. Information Technologists would then help people to use the CS professionals' creations effectively. CIT does not focus on a single domain, but instead focuses on the selection, integration and deployment of computers and technology throughout society in the areas of computer application development, web/mobile application development, and game/simulation development. CS focuses on producing graduate/PhD students or software engineers.

Curricular Aspect: Computer science curricula have a stronger emphasis on programming and hardware than in the Computer and Information Technology curriculum. CIT students obviously need to be able to build software applications and systems, but the typical CIT project will involve building software from existing components with high-level languages such as C++ or C# and applying an accessible interface, rather than engineering large applications from scratch, focusing on software engineering principles, data structures and algorithm development issues.

Another significant difference in the disciplines is that a computer curriculum is seen as being deeper in the sense that intermediate and advanced courses require more prerequisites. CIT courses typically have a flatter prerequisite structure, which allows non-technical majors to take CIT courses to add to their learning, tool set, and even lead to a minor.

ADMISSION STANDARDS

- A composite score on the ACT of at least 21 or the SAT equivalent.
- A mathematics score on the ACT of at least 21 or the SAT equivalent.

DEGREE REQUIREMENTS

The Computer and Information Technology major is a four-year program that requires a minimum of 120 credit hours, 40 of which must be at the 3xx-4xx level.

CIT Major Requirements *Hours*

GENERAL EDUCATION 28-30

See the College of Science section for requirements.

FOUNDATION COURSES 15

IST 150: Spreadsheet & Database Principles (3)

IST 264: Technology Foundations (3)

CIT 163: Intro to Programming: C++ (3)

MGT 320: Principles of Management (3)

ART 214: Propaganda/Surface 2D Images (3)

ANALYTICAL METHODS/MATH 8

MTH 160: Applied Math Reasoning (CT) (5)

MTH 140: Applied Calculus (3)

NATURAL SCIENCES 11

NRE 111: Living Systems or BSC 104: Introduction to Biology (4)

NRE 212: Energy (3)

Physical/Natural Science w/Lab (4)

CIT CORE 30

CIT 236: Data Structures (3)

CIT 238: Algorithms (3)

CIT 260: Instrumentation (3)

CIT 263: Web Programming I (3)

CIT 313: Web Programming II (3)

CIT 265: C# Programming (3)

CIT 332: Software Engineering I (3)

CIT 333: Software Engineering II (3)

CIT 352: Network Protocols/Admin (3)

CIT 365: Database Systems (3)

AREA OF EMPHASIS COURSEWORK 18-21

See specific area of emphasis requirements that follow.

FREE ELECTIVES 6-9

CAPSTONE 3

IST 491: Senior Project (3) or IST 470 (Internship (3)

- Areas of Emphasis are specific focuses recognized on a student's transcript within the CIT major. Majors in CIT must choose an area of emphasis.
- Minors are 12-18 hours of courses designed for non-majors. Please consult your advisor for specifics.

AREAS OF EMPHASIS

Computer Application Development Area of Emphasis

This area of emphasis focuses on the development of computer applications for business, industry, and education that run on the personal computer or that integrate various hardware pieces into the computer system as a whole. Students will learn the software engineering process and project management and learn to program in languages such as C++ and C#. Students also learn to specify, design, and build large-scale software systems for existing hardware.

Courses for this area of emphasis include those required for the Computer and Information Technology major, plus: NRE 423, CIT 410, 466, and 3 CIT 3xx-4xx programming related courses.

Game/Simulation Development Area of Emphasis

Game development is a very popular venue in higher education. This area of emphasis combines sound principles of computer application development with computer game development. This connection between application development and game development better serves students who are coming to Marshall University with aspirations of developing computer, console, and mobile games.

A computer lab is dedicated to gaming (Marshall's Advanced Gaming and Interactive Computing Lab – MAGIC Lab) where students utilize the environment to play and analyze different types of interactive media, to research the latest trends and graphics, and to discuss gaming. The space will also be available to students designing and developing their own games for courses taught in the area of emphasis and for their senior project, which will consist of the development of an advanced computer game.

Courses for this area of emphasis include those required for the Computer and Information Technology major, plus: CIT 340, 440, 441, 443, 446, 447, and 448; MTH 329; and an ART elective.

Web Application/Mobile Development Area of Emphasis

This area of emphasis allows students to specialize in developing Web applications and content using web-based development languages, such as HTML5, PHP, .Net, CSS, JavaScript, and the effective design and organization of databases, including the development of fully functional web application systems. We have added courses in mobile application

development as well which will teach students how to build apps for Android and iOS while integrating those apps with web apps.

Courses for this area of emphasis include those required for the Computer and Information Technology major, plus: CIT 410, 413, 414, 416, 466, and DFIA 445.

MINORS

Computer and Information Technology Minor

Students must complete 15 hours of CIT designated courses, 12 of which must be at the 200 level or above. Students wishing to obtain a minor in CIT must work from an approved curriculum plan developed in consultation with a CIT advisor.

Game Development Minor

This minor combines the sound principles of computer application development through computer game development. Game development is a very popular venue in higher education and this minor gives students in other IT-related disciplines the opportunity to explore the ever-growing popularity of game development as an option. The minor allows students to explore gaming through the Marshall University's Computer and Information Technology department's computer lab for gaming (Marshall's Advanced Gaming and Interactive Computing Lab-MAGIC Lab) where students can interact with each other, playing different types of computer games to research latest trends and graphics and discuss gaming, as well as, design and develop their own games as projects for courses required for the minor.

Required Courses for this minor (18 hours): CIT 163, 236, 340, and 440. Plus, pick 2 from: CIT 441, 443, 446, 447, or 448.

Web Development Minor

Students are introduced to HTML5, CSS, JavaScript, databases, SQL, PHP and .NET scripting, and advanced web programming techniques while receiving a fundamental understanding of the latest hardware and computer technologies.

Required courses for this minor (15 hours): CIT 263, 313, 365, 410, and 416.

DEPARTMENT OF CRIMINAL JUSTICE AND CRIMINOLOGY

Dr. Dhruba Bora, Chair
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Professors

Bora, Brown, DeTardo-Bora

Assistant Professors

Perkins, Quick, Young

The Department of Criminal Justice and Criminology provides undergraduate and graduate students with a high quality criminal justice education to prepare them for future success in: (1) public service (i.e., law enforcement, courts and administration, probation, parole, jails and prisons, juvenile justice, victims' services, and training/teaching); (2) law school; (3) graduate school; or (4) the private sector (i.e., loss prevention/security and corrections). A unique contribution of the Criminal Justice and Criminology program is to develop students' intellectual abilities, critical thinking skills, research skills, language/ communication skills, and problem-solving skills within a broadly based exposure to the study of the law, the legal system, and the practical realities of how social, economic, and political contexts influence the roles of professionals/ practitioners and also the operation of the criminal justice system. The Department of Criminal Justice and Criminology is also committed to: (1) applied and basic research; (2) leadership in public service to the community; (3) educating students in forensic applications and technological integration; and (4) developing insight into multicultural and global issues.

Major in Criminal Justice

Candidates for a Bachelor of Arts degree in Criminal Justice must fulfill the general education requirement of the College of Science (with the exception of calculus) and the specific requirements listed below for the major in Criminal Justice.

A major in criminal justice consists of 39 total credits: 15 credits of Core CJ Requirements and 24 credits of CJ electives. Students may select an Area of Emphasis in Law Enforcement, Legal Studies or Corrections in which they may wish to focus their elective choices. Students interested in a more generalized major should choose eight elective courses that suit their needs and career goals. Please see the COURSES OF INSTRUCTION section in this catalog for course descriptions and to determine which courses have prerequisites.

Requirements

Technology Core

IST 150: Spreadsheet and Database Principles (3 cr.)

IST 264: Technology Foundations (3 cr.)

Mathematics Core

MTH 160: Applied Mathematical Reasoning (5 cr.)

(For Criminal Justice majors, MTH 160 fulfills the College of Science mathematics requirement in place of calculus.)

Natural Science Core

IST 224: Introduction to Forensic Science (4 cr.)

8 additional credit hours of natural or physical science courses from the following list: NRE 111: Living Systems, NRE 212: Energy, or any other 4 credit hour Biological Sciences, Chemistry, or Physics course.

CJ Core Requirements (15 cr.)

CJ 200: Introduction to Criminal Justice (3 cr.)

CJ 302: Criminal Justice Research Methods (3 cr., prerequisite: CJ 200 and junior status)

CJ 322: Criminal Law (3 cr., prerequisite: CJ 200)

CJ 404: Theoretical Criminology (3 cr., prerequisite: CJ 200 and senior status)

CJ 492: Senior Seminar (3 cr., prerequisites: CJ 200, CJ 302, CJ 404 and senior status)

CJ Electives (24 cr.)

Criminal Justice majors are required to complete 24 credit hours of electives. To do so, students may complete these electives as part of an Area of Emphasis (e.g., Law Enforcement, Legal Studies, or Corrections). Students who opt to complete an Area of Emphasis, comprising 18 hours of coursework, will still need to take an additional 6 hours of CJ coursework to fulfill the elective requirement. An area of emphasis is not required for the major. Students who do not select an area of emphasis are encouraged to take both CJ 211 and CJ 231 as well as a variety of criminal justice electives to suit their career interests.

Area of Emphasis in Law Enforcement (18 cr.): This Area of Emphasis is intended for students interested in pursuing professional careers within federal, state, or local law enforcement agencies, investigative agencies, as well as private security.

- CJ 211: Introduction to Law Enforcement
- 15 credit hours of coursework from the following list CJ 300, CJ 312, CJ 314, CJ 323, CJ 400, CJ 406, CJ 410, CJ 416, CJ 424, CJ 426, and CJ 490.
- Other options may include, but are not limited to: CJ 325, CJ 340, CJ 341, CJ 351, and CJ 440. These courses can be used with permission from the department chair.
- Students are encouraged to complete an internship in this area (CJ 490) in the summer before their senior year.

Area of Emphasis in Legal Studies (18 cr.): This Area of Emphasis is intended for students interested in pursuing professional careers within the legal system and/or entering law school.

- CJ 221: Introduction to Criminal Courts
- 15 credit hours of coursework from the following list: CJ 223, CJ 323, CJ 400, CJ 422, CJ 424, CJ 426, and CJ 490.
- Other options may include, but are not limited to: CJ 325, CJ 341, CJ 406, CJ 416, and CJ 440. These courses can be used with permission from the department chair.
- Students are encouraged to complete an internship in this area (CJ 490) in the summer before their senior year.

Area of Emphasis in Corrections (18 cr.): This Area of Emphasis is intended for students interested in pursuing professional careers in the federal or state prison system, regional jail system, probation, parole, or juvenile justice.

- CJ 231: Introduction to Corrections
- 15 credit hours of coursework from the following list: CJ 325, CJ 331, CJ 332, CJ 400, CJ 406, CJ 433, and CJ 490.
- Other options may include, but are not limited to: CJ 300, CJ 340, CJ 341, and CJ 426. These courses can be used with permission from the department chair.
- Students are encouraged to complete an internship in this area (CJ 490) in the summer before their senior year.

Criminal Justice Minor

A minor in Criminal Justice consists of 15 credit hours of courses that include CJ 200 and 12 other hours. These hours should be chosen with the assistance of a Criminal Justice advisor.

DEPARTMENT OF FORENSIC SCIENCES

Prof. John Sammons, Chair
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Professors

Cohenford

Associate Professors

Brunty, Sammons

Assistant Professors

Gardner

Major in Digital Forensics and Information Assurance

The Bachelor of Science in Digital Forensics and Information Assurance prepares students to meet the challenges of today's cyber threats. Digital forensic and information assurance skills are in high demand in law enforcement, business, government, defense, intelligence, and the private sector. The program has a solid foundation in science, technology, and communication skills. Students learn to conduct forensic analysis on a variety of devices and systems, defend a network, testify in court, and conduct penetration tests among other skills.

Hands-on labs and experiences are a central part of the program. Students are exposed to a wide array of professional tools including hardware and software. As part of the curriculum, students can sit for multiple certification exams including the AccessData Certified Examiner and the Cellebrite Certified Logical Operator. This provides students with the opportunity to leave the university with a degree and sought-after real world credentials. Emphasis is placed on hands-on training and ability to utilize modern tools to find electronic evidence for the purpose of civil litigation and law enforcement and to defend computer network from intrusion. Students are given the opportunity to apply for multiple internship opportunities that afford them the chance to gain even more hands-on experience.

Candidates for the Bachelor of Science degree in Digital Forensics and Information Assurance are required to complete the general education requirements of the College of Science along with those of Marshall University. In addition, candidates must also complete the required courses specified below. Transfer students with prior college experience can receive equivalent credit for required courses. A minor in a relevant field of study such as Business or Criminal Justice would be recommended.

Prior to entering their junior year, students are required to pass a background check (no arrests or convictions) and supply two letters of reference that attest to the student's character. Under certain very limited circumstances, this requirement may be waived. That decision will be made by a review committee comprised of the university digital forensic and information assurance faculty along with the department chair. The background check is done at the student's expense.

Requirements

Technology Core

IST 264: Technology Foundations (3 cr.)
CIT 163: Programming C++ (3 cr.)
CIT 263: Web Programming (3 cr.)
CIT 352: Network Admin & Protocols (3 cr.)
CIT 365: Database Management (3 cr.)

Mathematics Core

MTH 140: Applied Calculus (3 cr.)
NRRM 200: Analytical Methods I (statistics) (3 cr.)

Natural Science Core

BSC 120 (4 cr.) & 121(4 cr.) or
CHM 211(3 cr.) & 217 (2 cr.) and 212 (3 cr.) & 218 (2 cr.) or
PHY 201 (3 cr.) & 202 (l cr.) and 202 (3 cr.) & 203 (l cr.)

Criminal Justice and Forensic Science Core

CJ 200: Introduction to Criminal Justice (3 cr.)
CJ 314: Crime Scene Investigation (3 cr.)
CJ 424: Computer Crime (3 cr.)
IST 224: Introduction to Forensic Science (4 cr.)

DFIA Core Requirements (42 cr.)

DFIA 261: Introduction to Linux (3 cr.)
DFIA 305: Open Source Intelligence (3 cr.)
DFIA 357: Network Penetration and Attack (4 cr.)
DFIA 400: Introduction to Digital Forensics (3 cr.)
DFIA 440: Digital Evidence (4 cr.)
DFIA 448: Forensic Image/Video Analysis (3 cr.)
DFIA 454: Network Defense (4 cr.)
DFIA 460: Applied Digital Forensics (4 cr.)
DFIA 462: Network Forensics (4 cr.)
DFIA 467: Mobile Device Forensics (4 cr.)
DFIA 490: Capstone (3 cr.)
DFIA 491: Research (3 cr.)

DFIA Elective (3 cr.) [choose one]

DFIA 420: Incident Response (3 cr.)
DFIA 430: Exploit Development (3 cr.)
DFIA 445: Mobile and Web Pen Testing (3 cr.)
DFIA 461: Cyber Warfare (3 cr.)
DFIA 464: Network Security and Cyber Crime (3 cr.)

Computer Forensics Minor

This minor is recommended for students in disciplines such as Criminal Justice who want to focus in computer forensics as a part of their curriculum. Students must complete 15 hours, including IST 264, three courses of the sequence in Digital Forensics and Information Assurance (DFIA 400, 440, 448, 460) and CJ 424.

Certificate Program in Information Assurance

Evidence of information assurance coursework is required for many government and private industry positions. This certificate will meet the government requirements for certification and continuing education for several information security certifications including Security+, CEH, and CISSP.

Admission Requirements:

Students may pursue the certificate while enrolled in Marshall University or as a certificate-only student. Students already enrolled in the undergraduate degree program should submit to the Office of Admissions a Secondary Program Request form.

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 Undergraduate Certificate in Information Assurance.

Requirements (14 cr.)

IST 264: Technology Foundations (3 cr.)
DFIA 357 Network Penetration and Attack (4 cr.)
DFIA 454 Network Defense (4 cr.)
DFIA 461 Cyber Warfare (3 cr.)

All courses are required for the certificate. A student must maintain a grade of C or better for each of the required courses to complete the certificate.

DEPARTMENT OF GEOLOGY

Dr. Ron Martino, Chair
www.marshall.edu/geology
martinor@marshall.edu

Professor

Martino

Associate Professors

El-Shazly, Niemann

(continued)

Assistant Professor
Horst

Programs of study offered by the Department of Geology are designed for individuals seeking a career as an earth scientist. The greatest numbers of geologists are employed by natural resource industries. These include metallic and non-metallic mining companies as well as petroleum, natural gas, and coal companies. New and challenging careers are also available in environmental and engineering geology. The majority of graduates in the past few years have found employment with environmental and geotechnical companies. Other employers include geological surveys, and local, state, and federal regulatory agencies. Career opportunities in the teaching profession at the high school and university level may also be available to those with advanced degrees.

The Department of Geology offers a B.S. degree that has been recognized and approved by the American Institute of Professional Geologists. The B.S. degree is intended for those who wish to enter the Geology/Earth Science profession or further their education at the graduate level.

In addition, the department offers a Bachelor of Science in Geology with emphasis in engineering geology. This area of specialization has its own specific curriculum and has been added to meet the increasing demand for geoscientists who are trained in the acquisition, interpretation, and use of earth materials (rock, soil, ground water) for the solution of engineering problems. The program provides geologists with specific training that will enable them to effectively interact with, and support, engineers. Its curriculum involves a heavy emphasis on math, physics, and engineering. By completing this curriculum, candidates would automatically complete the requirements for a minor in engineering.

A second area of emphasis in environmental geoscience has been developed to meet the increased demand for this field of employment. This area accounts for 30% of all geoscientists who are currently employed in the U.S. This area of emphasis utilizes an interdisciplinary curriculum, which will prepare graduates for careers involving the application of geologic concepts to the solution of environmental problems. These problems include 1) the protection of human health and natural ecosystems from adverse biochemical or geochemical reactions to naturally occurring chemicals or to chemicals and chemical compounds released into the environment by human activities, and 2) the protection of life, safety and well-being of humans from extreme geological processes such as floods, earthquakes, and landslides through land-use planning.

The department offers local and distant field trips to provide experience in a variety of natural geological settings. Students also have ample opportunity to participate in independent or cooperative research projects with faculty. The Geology Department currently has networked with several engineering and resource management companies to allow students to work part time while pursuing their degrees. Geology majors may also participate in Marshall University's cooperative program with the U.S. Army Corps of Engineers. A co-op student's schedule is crafted by the Department of Geology and the Division of the Corps that employs the student. Following the first year, the student alternates semesters of coursework with semesters of work experience. Completion of the cooperative program normally takes five years.

The capstone experience (GLY 491, 492) is an individualized research project or internship experience requiring a written report and an oral presentation. The capstone requirement may be met alternatively by attending geology summer field camp or by completing the capstone seminar offered each spring.

High school students interested in geology as a career option are advised to take one year of chemistry, one year of physics, and mathematics through at least geometry, algebra and trigonometry. Courses in Geographic Information Systems and computer-aided drafting are also highly recommended.

Requirements

B.S. in Geology (including engineering and environmental areas of emphasis):

CHM 211 and CHM 217
PHY 201 and PHY 202
MTH 229
Geology 100 (minimum *B* grade required) or 200; 210L; 201; 21IL; 212; 313; 314; 320L; 325; 420; 421 or 423; 455 and 457; 491 or 492
11 additional hours selected from GLY 330, 418, 426, 427, 451, and 456

Additional Recommended Courses:

MTH 230, 231 - especially for those planning graduate work.
ENG 354, GEO 426

GLY 485-488 may be substituted for required courses with approval from the Chairman of the Department of Geology.

(continued)

Requirements for Engineering Geology area of emphasis:

In addition to the common requirements listed in the previous section, the following courses are needed:

Mathematics 230 9
PHY 211, 202, 213, 204 10
Geology 200, 210L, 201, 211L, 212, 313, 314, 325, 330 OR 426, 451, 455, 455L, 456, 457, 491 OR 492 41
Engineering 111, 213, and 216 10
Civil Engineering 322 3
English: 354 3

A total of 12 hours of engineering coursework is required. Other engineering courses may be substituted (maximum of 7 hours) for the required ones where deemed appropriate by the Geology and Engineering Department Chairs.

Additional Requirements for the Environmental Geoscience area of emphasis

		Hours
I.	English Composition	
	ENG 354 Scientific & Technical Writing	3
II.	Social Sciences	
	GEO 222 Global Environmental Issues	3
	GEO 426 Principles of GIS	4
III.	Natural Sciences	
	PS 410 Remote Sensing	4
	GLY 426 Geophysics	3

The courses listed here do not include College of Science and university requirements.

Minor in Geology

The Department of Geology awards a minor in geology to any student who has successfully completed, with at least a *C* average, 12 hours of Geology coursework. At least 9 hours must be in courses at the 300 level or above.

DEPARTMENT OF MATHEMATICS

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Professors
Adkins, Akinsete, Aluthge, Brooks, Carlton, Cusick, Drost, Lawrence, Mitchell, Pupplo-Cody, Sarra, Saveliev

Associate Professors
Horwitz, Karna, Mallick, A. Mummert, C. Mummert, Niese, Schroeder

Assistant Professors
A. Al-Aqtash, R. Al-Aqtash, Duhon, Elkadry, Jung, Otunuga

Instructors
Crytzer, Johnson, Mace, Marsh, Miller-Mace, Scudder, Smith, Stapleton, Subedi, Wright

The Department of Mathematics offers three majors, Mathematics, Applied Mathematics, and Statistics, leading to the Bachelor of Science degree. These majors prepare students for a vast variety of careers in the mathematical sciences and in numerous related disciplines. Graduating students will have a solid foundation that enables them to perform successfully in industry, business, government, and further studies. Graduates may pursue advanced degrees in mathematics, applied mathematics, statistics, and related areas such as engineering, actuarial science, and economics. They may also prepare for secondary mathematics certification or for professional degree programs such as law and medicine.

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Students with an interest in mathematics should consult sites on the Internet hosted by the Mathematical Association of America *(www.maa.org)*, the American Mathematical Society such as *www.ams.org/employment* and *www.maa.org/students/undergrad/career.html*, and the Society of Industrial and Applied Mathematics (SIAM) at *www.siam.org*. Those interested in statistics may consult the American Statistical Association website at *www.amstat.org*.

Mathematics serves as an essential tool for many other majors, and it plays an important role in the general education of all students. The Department of Mathematics at Marshall University makes every effort to help students learn valuable critical thinking and problem-solving skills.

Majors must fulfill the general and specific requirements for the B.S. degree in the College of Science except for the minor (see requirements that follow). Students should go to the College of Science Dean's Office, Science 270, in order to declare a minor or major.

Mathematics, Applied Mathematics and Statistics Major Requirements

Any of the majors requires 14 mathematics/statistics courses and one programming course, a minimum of 50 credit hours. Students with a second major or a minor outside of the Department of Mathematics can count some of those credit hours towards their Mathematics, Applied Mathematics or Statistics major. This is explained in the section on Elective Requirements below.

Since the major is quite flexible, students are expected to consult with the undergraduate coordinator in the department. Moreover, before graduation, the undergraduate coordinator must approve the selection of sequences and electives.

Core Requirements for All Majors (24 CH; 6 courses)

The following are required for majors in Mathematics, Applied Mathematics and Statistics:

MTH 229	(5 CH)	Calculus with Analytic Geometry I
MTH 230	(4 CH)	Calculus with Analytic Geometry II
MTH 231	(4 CH)	Calculus with Analytic Geometry III
MTH 300	(4 CH)	Introduction to Higher Mathematics
MTH 331	(4 CH)	Linear Algebra
CS 110	(3 CH)	Computer Science I

Capstone Requirement for All Majors (2 CH; 1 course)

Mathematics, Applied Mathematics and Statistics majors must complete one of the following:

MTH 490	(2-12 CH)	Internship
MTH 491	(2 CH)	Senior Seminar

Sequence Requirements for Mathematics Majors (12 CH; 4 courses)

Mathematics majors must complete two of the following elective sequences:

MTH 427 and MTH 428	Advanced Calculus
MTH 430 and MTH 431	Topology
MTH 450 and MTH 452	Modern Algebra

Sequence Requirements for Applied Mathematics Majors (12 CH; 4 courses)

Applied Mathematics majors must complete two of the following elective sequences:

MTH 335 and (MTH 415 or MTH 416)	Differential Equations
MTH 443 and (MTH 411 or MTH 442)	Numerical Methods
STA 445 and STA 446	Probability and Statistics

Core Requirements for Statistics Majors (12 CH; 4 courses)

Statistics majors must complete the following courses:

STA 412	Regression Analysis
STA 413	Experimental Designs
STA 445	Probability and Statistics I
STA 446	Probability and Statistics II

Elective Requirements for All Majors (0–12 CH; 0–4 courses)

Mathematics, Applied Mathematics, and Statistics majors are not required to satisfy the College of Science requirement of a minor in another discipline. However, Mathematics, Applied Mathematics, and Statistics majors often elect to complete a second (or more) major(s) and/or one (or more) minor(s). The Department of Mathematics encourages students to pursue broad interdisciplinary studies. The elective courses in this section may not duplicate those used for the sequence

requirements. The number of elective courses required depends on outside minors and majors. The following are the three options:

(1) **No Outside Major or Minor:** A student may graduate with a major in either Mathematics, Applied Mathematics, or Statistics, without a second major or a minor, by completing an additional 4 elective mathematics courses from the list of elective courses. At least 3 of the 4 electives must be chosen from among the STA-designated courses for students majoring in Statistics. The major requires 50 credit hours.

(2) **Outside Minors:** A student graduating with a single major in Mathematics, Applied Mathematics, or Statistics, and at least one minor outside the department, must complete at least 2 additional elective mathematics courses from the list below. Statistics majors must choose these electives from the statistics courses listed below. Effectively, the Mathematics major, Applied Mathematics major, and Statistics major require 44 credit hours.

(3) Outside Double Majors: A student graduating with multiple majors, including either Mathematics, Applied Mathematics, or Statistics, need not take any additional elective courses. Effectively, the Mathematics major, Applied Mathematics major, and Statistics major require 38 credit hours.

Elective Courses for All Majors

MTH 335 (3 CH), Ordinary Differential Equations
MTH 360 (3 CH), Introduction to Complex Variables
MTH 361 (3 CH), Vector Calculus
MTH 405 (3 CH), History of Mathematics
MTH 411 (3 CH), Mathematical Modeling
MTH 415 (3 CH), Partial Differential Equations
MTH 416 (3 CH), Advanced Differential Equations
MTH 427 (3 CH), Advanced Calculus I
MTH 428 (3 CH), Advanced Calculus II
MTH 430 (3 CH), Topology I
MTH 431 (3 CH), Topology II
MTH 440 (3 CH), Graph Theory and Combinatorics
MTH 442 (3 CH), Numerical Linear Algebra
MTH 443 (3 CH), Numerical Analysis
MTH 448 (3 CH), Modern Geometry
MTH 449 (3 CH), Projective Geometry
MTH 450 (3 CH), Modern Algebra I
MTH 452 (3 CH), Modern Algebra II
MTH 455 (3 CH), Number Theory
STA 412 (3 CH), Regression Analysis
STA 413 (3 CH), Experimental Designs
STA 420 (3 CH), Nonparametric Methods
STA 422 (3 CH), Time Series Forecasting
STA 425 (3 CH), Sampling Designs and Estimation
STA 445 (3 CH), Probability and Statistics I
STA 446 (3 CH), Probability and Statistics II
STA 464 (3 CH), Statistical Computing
STA 466 (3 CH), Stochastic Processes
STA 470 (3 CH), Applied Survival Analysis

Double Majors

1. **Math/Applied Math Double Major**

   A student may graduate with a double major in Mathematics and Applied Mathematics by completing 4 different sequences that satisfy both Sequence Requirements plus 4 Elective courses not in those sequences; that is, the full Mathematics requirements plus 2 Applied Mathematics sequences, without duplication.

2. **Statistic and Mathematics Double Major or Statistics and Applied Mathematics Double Major**

   A student may graduate with a double major in Statistics and either one of Mathematics or Applied Mathematics by first completing the core requirements for Statistics, and any two different sequences that satisfy any of the above listed Sequence Requirements in Mathematics or Applied Mathematics Majors. At least 12 additional credit hours are required from the list of elective courses, with no less than 6 credit hours of these chosen from among the statistics courses. Specifically, students taking double majors in Statistics and Applied Mathematics must take one additional sequence of two courses from the Applied Mathematics sequence, or two statistics courses from the elective courses not already listed under the Core Requirements for Statistics Majors.

Effectively, any of the double majors requires 62 credit hours. Students with an outside minor or major should consult with the undergraduate coordinator or chair of the department for details.

Area of Emphasis in Mathematical Statistics

The Department of Mathematics offers an Area of Emphasis in Mathematical Statistics that is available only to Mathematics Majors or Applied Mathematics Majors. Students who completed an area of emphasis in mathematical statistics must have a demonstrated knowledge and understanding of statistical theory, techniques and methodologies, working with real data, and understanding of data analysis. An area of emphasis in mathematical statistics provides a window of job opportunities in business, government, industry and health sectors, and further studies in statistical sciences. For example, students with area of emphasis in mathematical statistics may be eligible to pursue the Master of Arts in Mathematics with an area of emphasis in statistics, with additional academic years of coursework. Students pursuing the mathematics major may choose an area of emphasis in mathematical statistics, while those pursuing the applied mathematics major must take a minimum of 15 CH in statistics-designated courses, none of which may count toward their major. The area of emphasis in mathematical statistics is not intended for students pursuing a major in statistics.

The requirements for an undergraduate Area of Emphasis in Mathematical Statistics consist of the following courses:

Core Required Courses (27 CH, 7 Courses)

MTH 229 (5 CH), Calculus with Analytic Geometry I
MTH 230 (4 CH), Calculus with Analytic Geometry II
MTH 231 (4 CH), Calculus with Analytic Geometry III
MTH 300 (4 CH), Introduction to Higher Mathematics
MTH 331 (4 CH), Linear Algebra
STA 445 (3 CH), Probability and Statistics I
STA 446 (3 CH), Probability and Statistics II

Elective Courses (9 CH):

Any three additional courses from the following electives

STA 412 (3 CH), Regression Analysis
STA 413 (3 CH), Experimental Designs
STA 420 (3 CH), Nonparametric Methods
STA 422 (3 CH), Time Series Forecasting
STA 425 (3 CH), Sampling Designs and Estimation
STA 464 (3 CH), Statistical Computing
STA 466 (3 CH), Stochastic Processes
STA 470 (3 CH) Applied Survival Analysis

Transfer Students

Transfer students must take at least 12 hours of 300/400 level coursework in the College of Science and at least 15 hours in their major field, including at least nine hours of 300-400 level coursework at Marshall University.

General Education and Placement

The American College Test (ACT) score in Mathematics (or equivalent SAT) is utilized for the placement of students. Relevant information regarding such placement is included under prerequisites in the Courses of Instruction. Students wishing to challenge their placement in a mathematics course may do so by taking the Accuplacer Placement Exam administered by University College.

Students with prior credit for any college algebra course (i.e., MTH 127, MTH 130, or MTH 132) may not receive credit for any other of these courses.

A student enrolled at Marshall may receive credit for certain courses in mathematics by successfully completing the appropriate examination of the College Level Examination Program (CLEP).

Advanced placement in mathematics is granted on the basis of Educational Testing Service Advanced Placement Test scores. Students who score 4 or 5 on the Calculus AB examination are given credit for Mathematics 130 and Mathematics 229, and those who score 4 or 5 on the Calculus BC examination are given credit for Mathematics 229 and Mathematics 230. Students who score 3 on BC are given credit for MTH 229; those who score 3 on AB are given credit for Mathematics 132.

Teacher Certification in Mathematics

Students interested in pursuing teaching certification in mathematics should visit the main office of the College of Education. Students who plan to complete a 5-Adult certification are encouraged to consult with the undergraduate coordinator in the Mathematics department about a second major in Applied Mathematics or Mathematics. Mathematics Education majors may count MTH 450 and (MTH 335 or MTH 427) as a sequence toward the Applied Mathematics Major.

Master of Arts

The Department of Mathematics also offers an M.A. degree program in mathematics. Graduate assistantships carrying stipends and tuition benefits are available. Please contact the Mathematics department or consult the *Graduate Catalog* for further details.

Minor in Mathematics

The Department of Mathematics offers a minor in mathematics available to all students at Marshall University. Students choosing this minor will find expanded job opportunities in business, education, government, and industry.

This minor can be helpful to students in pre-professional programs in the health sciences. A solid grounding in the fundamentals of mathematics is needed in order to perform satisfactorily on aptitude examinations that must be taken prior to admission to a professional school. This minor can be used as an important component of a student's preparation for admission to law school.

The Department of Mathematics will award a minor in mathematics to every student who completes the following four courses, with at least a 2.0 grade point average and with at least two of the courses taken at Marshall University: MTH 229, MTH 230, MTH 300, and one of the following: MTH 231, MTH 329, MTH 331, and those listed under "Elective Courses for All Majors."

Minor in Statistics

The Department of Mathematics offers a minor in statistics available to all students at Marshall University. Students who completed a minor in statistics must have a demonstrated knowledge and understanding of statistical techniques and methodologies, working with real data, and understanding of data analysis with job opportunities in business, government, industry and health sectors. The minor provides a window of opportunities for further study in statistical sciences. Students with a statistics minor may be eligible to pursue further degree programs in statistical sciences. The minor in statistics is not to be taken by students pursuing any degree majors in mathematics department. Students pursuing a minor in statistics must complete the General Education requirements at Marshall and in addition, the requirements for their major degree option(s).

The requirements for an undergraduate Minor in Statistics consist of a total of 16 credit hours. The student must have at least a 2.0 grade point average, and a grade of *C* or better in the required core courses (10 credit hours), and two additional courses (6 credit hours) chosen with permission from the list of elective courses. At least 9 credit hours of the required 16 credit hours must be taken at Marshall University.

Core Required Courses (10 CH)

MTH 231 (4 CH) Calculus with Analytic Geometry III

STA 326 (3 CH) Applied Statistical Methods or STA 345 (3 CH) Applied Probability and Statistics

STA 445 (3 CH) Probability and Statistics I

Elective Courses with permission (6 CH)

Any two additional courses from the following electives:

STA 412 (3 CH) Regression Analysis

STA 413 (3 CH) Experimental Designs

STA 420 (3 CH) Nonparametric Methods

STA 422 (3 CH) Time Series Forecasting

STA 425 (3 CH) Sampling Designs and Estimation

STA 446 (3 CH) Probability and Statistics II

STA 464 (3 CH) Statistical Computing

STA 466 (3 CH) Stochastic Processes

STA 470 (3 CH) Applied Survival Analysis

DEPARTMENT OF NATURAL RESOURCES AND THE ENVIRONMENT

Dr. Mindy Armstead, Chair
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Professor

Armstead

Associate Professors

Jones, Kim

Assistant Professors

Graefe

Instructors

Colvin, Shank

Man's interaction with the environment is the focus of the Department of Natural Resources and the Environment (NRE) as we seek to prepare students for careers or advanced studies in management, conservation, protection, regulation, and

restoration of natural resources. Integration of the human dimensions of resource use with conservation and management forms the foundation of the Natural Resources and Recreation Management Program. Environmental Science merges concepts in geology, ecology, biology, chemistry and physics to provide students with a strong science foundation which forms the basis for understanding of environmental issues. Both programs incorporate technology such as geographic information systems, remote sensing, and discipline specific instrumentation to provide students with state-of-the-art educational experiences so they move confidently on to future endeavors. Additionally, both programs integrate understanding of laws and regulations relevant to aspects of conservation, protection, and management of natural resources preparing students for decision making in our modern world.

Program Requirements

There are three components of a student's education which are compiled into the NRE requirements:

- General education core requirements
- Departmental requirements
- Major-specific requirements

Degree Requirements	**Hours**
General Education	**34-36**
Core NRE Courses	**25-28**

IST 150: Spreadsheet and Database Principles (3)
NRE 120: Discussions in Environmental Science (3)
NRRM 200: Analytical Methods: Statistics (4)
NRE 220: Human Dimensions (CT) (3)
Mathematics: MTH 140: Applied Calculus (3) or MTH 229: Calculus I (5) for Environmental Science majors; MTH 130, MTH 127, or MTH 160 (5) for NRRM majors
NRE 423: GIS (3)
NRE 490: Capstone Preparation for both ES and NRRM Majors
NRE 491: Senior Project; or NRE 470: Internship; or NRRM 490: Internship

Additional Major-Specific Requirements and Electives (described in following section)

Total Credit Hours Required for Graduation **120**
(a minimum of 40 hours must be 300-400 level)

Majors in Natural Resources and the Environment

Major in Environmental Science

The Bachelor of Science in Environmental Science degree is an integrated program requiring math, communication, and environmental studies courses and basic science courses from Geology, Biology, Chemistry, and Physics departments. The integrated coverage of broad topics prepare students for the complex problems facing a modern world. Areas of Emphasis help focus student efforts toward individual goals and interests with consideration to obtaining rewarding careers the fields of environmental science or conservation or pursuing advanced studies.

A minor in a relevant field of study such as Business, Anthropology, History or the natural sciences of Biology, Chemistry, Geography, Geology, Natural Resources and Recreation Management, or Physics is encouraged for Environmental Science majors. Transfer students with prior college experience can receive equivalent credit for required courses.

Basic Science Requirements:

CHM 211, 217, 212, and 218; one of IST 111, BSC 120 or equivalent depending on emphasis; NRE 212 or PHY 201/202 depending on emphasis; GLY 200/210L for ES/AES emphasis

Upper-Level Science requirements:

Students must complete additional hours of 300 or 400 level coursework from the Chemistry, Biology, Geology, or Physics Departments as described in the requirements of individual Areas of Emphasis.

Areas of Emphasis in the Environmental Science Major

Applied Environmental Science

NRE 260, Instrumentation
CIT 264 Technology Foundations
NRE 320, Nature of Environmental Problems
NRE 321, Resolving Environmental Problems
NRE 322, Assessment 1: Terrestrial Systems
NRE 323, Assessment 2: Aquatic Systems
NRE 425, Water Policy and Regulations
NRE 435, Biomonitoring, or NRE/IST 436, Advanced Aquatic Invertebrates
NRE 470 or 491, Internship or Senior Project

Conservation and Wildlife

PHY 203/204, College Physics II and Lab
BSC 320, Ecology, or NRE 322, Assessment I: Terrestrial Systems
NRE 323, Assessment II: Aquatic Systems
NRE 425, Water Policy and Regulations
NRE 470 or 491, Internship or Senior Project

Electives. . In consultation with the COS advisors, students will select electives from the College of Science offerings best suited to prepare students to apply for professional credentials as a certified ecologist, certified wildlife biologist, or certified fisheries professional. Once a student has satisfied all of the requirements for one of these certifications, he or she should select additional electives in consultation with NRE/COS advisers to reach to 120 credit hours required for graduation. Additional electives may be used to satisfy general education requirements (e.g., writing intensive) and/or to fulfill the requirements of a second major, minor, or certificate.

Environmental Science

NRE 212, Energy
PHY 203/204, Physics II and Lab
BSC 320, Ecology
NRE 322, Assessment I: Terrestrial Systems
NRE 323, Aquatic Systems
NRE 425, Water Policy and Regulations
NRE 470 or 491, Internship or Senior Project

Upper-Division Electives. Recommended: NRE 321, 322, 431, 435; BSC 406, 408, 410, 416, 417, 430, 431, 460; GLY 420, 427, 455, 456

Major in Natural Resources and Recreation Management

The Department of Natural Resources and the Environment offers a B.S. in Natural Resources and Recreation Management. The NRRM program is focused on the management of natural resource and recreation areas such as parks, forests, coastal areas, and other natural areas located on public and private lands. The NRRM program offers an interdisciplinary Bachelor of Science degree, in which students will study the fields of natural resource management, recreation and leisure studies, environmental science, biology, sociology, psychology, and business. The program prepares qualified professionals for employment with municipal, state, or national park and recreation agencies, land conservation organizations, the US Forest Service, the US Army Corps of Engineers, resident and day camp institutions, zoos, nature centers, living history museums, and a variety of tourism entities to name a few.

1. Science (11): NRE 111 or equivalent, and two Natural or Physical Science Electives
2. NRRM Core Foundations (27): NRRM 101, 310, 350, 361, 380, 402, 405 or equivalent (related to ecology), 411, 432, 433
3. NRRM Capstone (6): NRRM 490
4. NRRM Electives (9): three 300-400 level NRRM Electives (NRRM 231 may be used; electives must be approved by student's NRRM faculty advisor)
5. Electives (14): four or five free electives (use toward 2nd major, minor, or certificate)

Minor in Natural Resources and Recreation Management

Students who wish to pursue a minor in Natural Resources and Recreation Management may do so by successfully completing the following courses (15 credit hours):

NRRM 101.....3 cr.
NRRM 301, 330, or 350.....3 cr.
NRRM 360, 361, or 362.....3 cr.
NRRM 380, 410, or 411.....3 cr.
NRRM 310, 311, or 432.....3 cr.

DEPARTMENT OF PHYSICS

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Professor

Nguyen, Oberly, Wilson

Associate Professor

Hamilton, Fan, Saken

Assistant Professor

Foltz, McBride, Richards, Wehner

The Department of Physics offers coursework leading toward the B.S. degree in physics, or the B.S. degree in physics with an Area of Emphasis in Applied Physics, Biophysics, Medical Imaging, and Medical Physics. The department works with the College of Education and Professional Development, which offers a B.A. in Secondary Education through the Physics 9-Adult program with courses of study toward teaching certification for middle and high school. The Department of Physics also offers a minor in physics and physical science, and provides courses in support of other programs in science and technology and courses for general education. A course of study in physics, resulting in a B.S. degree in physics, prepares students for a wide variety of opportunities, such as engineering careers in the private sector, careers in the health professions, employment in industry and government laboratories, advanced technology jobs in science and technology related fields, and careers as science teachers. The B.S. degree program is also excellent preparation for advanced degrees in physics, astronomy, engineering, medicine, or law.

In order to graduate, students must maintain a 2.00 Overall GPA and receive a grade of *C* or better in each course required for the major. In addition to the general Marshall University requirements, specific requirements for the B.S. degree in physics are:

B.S. Degree, Major in Physics

Designed for those who are interested in future study or work in a pure physics or physics-related field.

1. Physics 211 and 202, 213 and 204
2. One (1) additional semester hour in Physical or Natural Science electives, required by the College of Science
3. Physics 300, 302, 304, 308, 320, 330, 405, 421, 442, 443, 445, 446 and 491/492 (capstone).
4. Five (5) additional semester hours of 300-400 physics courses selected from the catalog (PHY 425 and 444 recommended)
5. Mathematics 229, 230, 231, 335

Please note that since any College of Science elective belongs to another science, with requirements (2) and (5) students could easily fit a minor or major in mathematics or another science. Please talk with an advisor if you are interested in doing this.

The B.S. degree in physics with areas of emphasis already includes the basic science courses that will fulfill college requirements of one (1) additional hour in a second/third science, so that these are not an extra requirement.

B.S. Degree, Major in Physics, Area of Emphasis in Applied Physics

Designed for those who are interested in future study or work in an applied physics or engineering field.

1. Physics 211 and 202, 213 and 204
2. Chemistry 211 and 217, CIT 163, and ENGR 111, CIT 236 and CIT 238, fulfilling the COS requirements
3. Physics 300, 304, 308, 320, 330, 405, 421, 442, 445, 446, and Physics 491/492 (capstone).

4. Physics 425 is required as a core course for Applied Physics, plus three (3) additional semester hours of 300-400 courses selected from the catalog (PHY 314 and PHY 444 are recommended for applied physics).
5. Mathematics 229, 230, 231, 335

B.S. Degree, Major in Physics, Area of Emphasis in Bio Physics

Designed for those who are interested in future study or work in a biophysics or biotechnological field.

1. Physics 211 and 202, 213 and 204
2. Chemistry 211, 212, 217 and 218, Biology 120, 121, 322 and 417, fulfilling the COS requirements
3. Physics 300, 304, 308, 320, 330, 350, 405, 421, 442, 445, 446 and Physics 491/492 (capstone).
4. Five (5) additional semester hours of 300-400 physics courses selected from the catalog (PHY 340 and PHY 360 are recommended for bio physics).
5. Mathematics 229, 230, 231.

B.S. Degree, Major in Physics, Area of Emphasis in Medical Imaging

Designed for those who are interested in future study or work in medical imaging or medical physics.

Students are strongly urged to simultaneously pursue the B.S. Degree, Major in Medical Imaging, Area of Emphasis Physics.

1. Physics 211 and 202, 213 and 204
2. Biology 227 and 228, fulfilling the COS requirements
3. Physics 300, 302, 304, 308, 320, 330, 360, 405, 421, 442, 445, 446, and Physics 491/492 (capstone)
4. Medical Imaging 201, 202, 204, 205, 206, 207, 208, and 210 (MI 411 recommended)
5. Mathematics 229, 230, and 231, and Statistics 345

B.S. Degree, Major in Physics, Area of Emphasis in Medical Physics

Designed for those who are interested in going to the medical school, or work in a biochemical physics field.

1. Physics 211 and 202, 213 and 204
2. Chemistry 211, 212, 217, 218, 355, 356, 361 and 365, Biology 120 and 121, fulfilling the COS requirements
3. Physics 300, 304, 308, 320, 330, 360, 405, 421, 442, 455, 446 and Physics 491/492 (capstone).
4. Three (3) additional semester hours of 300-400 physics courses selected from the catalog (PHY 350 and/or PHY 450 are recommended for medical physics).
5. Mathematics 229, 230, 231.

Related Programs Supported by the Department

The department also works closely with the College of Education and Professional Development, which offers a B.A. in Secondary Education through the Physics 9-Adult program; it is in this program where the Physics Department ensures students are well prepared to become teachers with a strong background in physics.

Minor in Physics and Physical Science

The Department of Physics awards a minor in physics and physical science to students who have completed the following courses with at least a *C* average: PHY 201 (or 211), 202, 203 (or 213), 204, and any two additional physics or physical science courses at the 300-400 level.

Among the elective coursework options open to physics and other science majors are applied physics courses, which emphasize applications of Solid State Physics (PHY 425), Photonics & Solid State Physics Lab (PHY 444), Electronics (PHY 314 and PHY 415), Biological and Medical Physics (PHY 350 and PHY 360), Atmospheric Physics (PHY 412), Labview (PHY 120), Investigating the Universe (PHY 222), Computing (PHY 340 and PHY 435) as well as Special Topics and Independent Study courses..

PREPARATION FOR PROFESSIONAL CAREERS IN THE HEALTH CARE PROFESSIONS

Even though many freshmen plan to major in pre-medicine, it is not, by itself, a major. It is a set of courses taken as part of a major, by which a student acquires a solid science background in preparation for applying to a professional school of choice. Students interested in the health care professions may choose any major, provided they complete the courses required for admission to any professional school to which they apply. Choosing a science major, however, gives the applicant the advantage of greater scientific breadth and depth of knowledge over non-science majors on the Medical College Admission

Test (MCAT) and other professional school entrance exams. Because the courses required for admission to most professional schools often mirror the requirements for a biology or chemistry degree, many successful applicants choose one of those two majors, but many routes will prepare the student for the MCAT or other entrance exam and for the challenges of a professional health care curriculum.

Because most professional schools require a similar set of courses for admission, flexibility can be maintained in the selection of a career choice until the junior year. A typical applicant should plan to complete the following:

BSC 120, 121
CHM 211, 217, 212, 218, 355, 356, 361
PHY 201, 202, 203, 204

These courses should be regarded as a minimum. Completing these courses as part of a science major provides a sound science background. Additional required or recommended courses are subject to change, and vary among schools and programs. The responsibility lies with the student to become aware of all courses required and recommended by the professional schools to which he or she intends to apply and incorporate those courses into his or her curriculum. Elective courses can be chosen that simultaneously meet both the requirements for a major and admission to a professional school. With careful planning, the required and recommended courses can be combined with major coursework, progressing toward both admission to a professional school and graduation with a baccalaureate degree. Check with your assigned academic advisor frequently for guidance and assistance.

Admissions policies and procedures can vary considerably among professional health care schools. It is, therefore, strongly recommended that pre-professional students discuss their programs at least once each year with Dr. Evelyn Pupplo-Cody, Associate Dean and Chief Pre-Professional Health Care Advisor, in Science Building 270. For current information, visit *www.marshall.edu/preprof.*

PRE-HEALTH CARE PROFESSIONAL PROGRAMS

Because each professional school may determine its own requirements, and because those requirements can vary among institutions and are subject to change, students should regard the courses listed below as examples only. This not a comprehensive statement of what actually is required by every professional school.

PRE-DENTISTRY

Courses: BSC 120, BSC 121, BSC 227 or 310
CHM 211, CHM 212, CHM 217, CHM 218, CHM 355, CHM 356, CHM 361, CHM 365
ENG 101 and 201 or ENG 200H or ENG 201H
PHY 201, PHY 202, PHY 203, PHY 204
Exam: DAT, during calendar year before anticipated start of dentistry school

PRE-MEDICINE

Courses: BSC 120, BSC 121
CHM 211, CHM 212, CHM 217, CHM 218, CHM 355, CHM 356, CHM 361, CHM 365
ENG 101 and 201 or ENG 200H or ENG 201H
PHY 201, PHY 202, PHY 203, PHY 204
6 credit hours, Social Science
Exam: MCAT, during calendar year before anticipated start of medical school

PRE-OPTOMETRY

Courses: BSC 120, BSC 121, BSC 227, BSC 228, BSC 250 or BSC 302 and 304
CHM 211, CHM 212, CHM 217, CHM 218, CHM 355, CHM 356, CHM 361, CHM 365
ENG 101 and 201 or ENG 200H or ENG 201H
MTH 140 or 229
PHY 201, PHY 202, PHY 203, PHY 204
6 credit hours, Social Science
3 credit hours, Statistics
Exam: OAT, during calendar year before anticipated start of optometry school

PRE-PHARMACY

Courses: BSC 120, BSC 121, BSC 227, BSC 228, BSC 250 or BSC 302 and 304
CHM 211, CHM 212, CHM 217, CHM 218, CHM 355, CHM 356, CHM 361
ENG 101 and 201 or ENG 200H or ENG 201H

MTH 140 or 229
PHY 201, PHY 202, PHY 203, PHY 204
3 credit hours, Social Science
3 credit hours, Statistics

Exam: PCAT, during calendar year before start of pharmacy school

PRE-PHYSICAL THERAPY

Courses: BSC 120, BSC 121, BSC 227, BSC 228
CHM 211, CHM 212, CHM 217, CHM 218
ENG 101 and 201 or ENG 200H or ENG 201H
MTH 127 or higher
PHY 201, PHY 202, PHY 203, PHY 204
6 credit hours, Psychology
3 credit hours, Statistics

Exam: GRE, during calendar year before start of physical therapy school

PRE-VETERINARY MEDICINE

Courses: BSC 120, BSC 121, BSC 302, BSC 304, BSC 422
CHM 211, CHM 212, CHM 217, CHM 218, CHM 355, CHM 356, CHM 361, CHM 365
CMM 103 or CMM 104H or CMM 207
ENG 101 and 201 or ENG 200H or ENG 201H
MTH 140 or 229
PHY 201, PHY 202, PHY 203, PHY 204
6 credit hours, Humanities or Social Science
3 credit hours, Statistics

Exam: GRE or MCAT, during calendar year before start of veterinary school

COMBINED COLLEGE AND PROFESSIONAL DEGREES

A student who is granted early admission to a doctoral-level program will be granted a leave of absence during his or her senior year at Marshall University. At the end of the first year of professional school, the student is then eligible to receive a bachelor's degree from Marshall University, provided that at least 90 undergraduate credit hours must have been completed with a grade point average of 2.0, and that all requirements for graduation are met except the completion of a major. An applicant for a bachelor's degree must present certification from the professional school that he or she has successfully completed the first year of coursework and that a sufficient number of credit hours has been completed to total 120 when added to the hours earned at the undergraduate level.

Office of Outreach and Continuing Studies

Dr. David J. Pittenger, Interim Associate Vice President for Outreach and Continuing Studies

The Marshall University Office of Outreach and Continuing Education (OCS) provides students with convenient access to college-level courses and programs with special emphasis on regional centers and adult learners.

With offices located on the Huntington and South Charleston campuses, OCS maintains regional centers at these locations:

- *Mid-Ohio Valley Center*, Point Pleasant
- *Southern Mountain Center* (on Southern West Virginia Community and Technical College campuses-Logan and Williamson)
- *Teays Valley Regional Center,* Teays Valley
- *Erma Byrd Higher Education Center,* Beckley

The Marshall University Office of Outreach and Continuing Education serves:

- Adult students who wish to complete a college degree;
- Students who live far from the main campuses;
- Military personnel and their families;
- High school students who meet the requirements to take college courses.

The OCS delivers educational content and services through a number of traditional and non-traditional formats, which include:

- College courses in the high school
- Courses at National Guard bases for military personnel and their families.
- Online courses.

REGENTS BACHELOR OF ARTS (RBA)

Andrew Gooding, Director
Smith Hall 223/304-696-6400
RBA@marshall.edu

The Regents Bachelor of Arts degree program (RBA) is a nontraditional program designed for the adult student. It has several differences from other baccalaureate degree programs. While the program provides the RBA student with a sound general educational foundation, there are no required major courses. Instead, with the assistance of an advisor, a student creates the course plan that best fits his or her individual needs. Students in the program have the opportunity to request College Equivalent Credits (CEC's) for documented course-level learning resulting from life and work experiences. Examples of CEC credit may include military credits, standard awards for certain licenses, certifications and corporate training, CLEP and DSST examinations, and portfolio petitions for credit. All failing grades received four years or more before admission to the program are forgiven and disregarded in the calculation of the GPA required for graduation. (Note: This policy does not pertain to GPA calculated for special academic recognition, such as graduating with honors.)

Admission:

- The student must meet all general Marshall University admission requirements
- The student **must** be at least 4 years out of high school. For those students who passed the GED, admission must be at least 4 years after their class graduated from high school. No person out of high school fewer than 4 years will be admitted.

Students who have already completed a bachelor's degree from an accredited institution of higher learning may not pursue the RBA degree.

The RBA degree by state statute is a degree completion program and students may not double major in the RBA or use it as a subsequent degree.

Graduation requirements:

- Total credit hour requirement: 120 credit hours, including any CEC's
- General education hours: 36
- Upper division hours (300-400 level): 39
- Grade Point Average at Marshall and overall: 2.00
- Residency: 24 graded semester credit hours earned at any of the WV public institutions of higher education. At least 3 credit hours must be earned at Marshall University.
- No more than 72 hours of community college credit can be applied toward the RBA.

General Education Requirements: 36 semester hours (including applicable CEC general education hours) distributed among the following categories:

- Communications – 6 semester hours
- Natural sciences – 6 semester hours
- Mathematics/Computers – 3 semester hours
- Social Sciences – 6 semester hours
- Humanities – 6 semester hours
- Additional approved credit hours from any of the above categories – 9 semester hours

While RBA students do not declare a major, they may earn a minor in any academic program offered at Marshall by following the minor requirements of that program.

The RBA staff assists students in all aspects of their college needs: admission, program design, course selection, enrollment, assessment for CEC's, and many other factors.

Areas of Emphasis: Marshall University Regents Bachelor of Arts

An Area of Emphasis gives RBA students the opportunity to show a focus as part of the RBA degree. Areas of Emphasis are not required for the degree and are not all available online. An RBA area of emphasis, by state statute, requires a minimum of 15 hours of 3-400 level courses with a C or higher for each course. Substitutions are only allowed with the appropriate department's written permission.

Computer-Related

Area of Emphasis in Digital Forensics (25 hours):

DFIA 261 – Intro to Linux (3 hrs.); IST 264 – Technology Foundations (3 hrs.); DFIA 400 – Intro to Digital Forensics (3 hrs.); DFIA 440 – Digital Evidence (4 hrs.); DFIA 460 – Applied Digital Evidence (4 hrs.); DFIA 462 – Network Forensics (4 hrs.); DFIA 467 – Mobile Device Forensics (4 hrs.).

Area of Emphasis in Information Assurance (23 hours):

DFIA 261 – Intro to Linux (3 hrs.); IST 264 – Technology Foundations (3 hrs.); CIT 352 – Network Admin & Protocols (3 hrs.); DFIA 305 – Open Source Intelligence (3 hrs.); DFIA 357 – Network Penetration and Attack (4 hrs.); DFIA 454 – Network Defense (4 hrs.); DFIA 461 – Cyber Warfare (3 hrs.).

Area of Emphasis in Web Application Development (24 hours):

CIT 163 – Programming Practicum with C++; CIT 263 – Web Programming; CIT 313 – Web Programming II; CIT 365 – Database Information Management; CIT 410 – Electronic Commerce; ART 454 – Designing for Multimedia. Other courses can be substituted with the permission of the CIT department chair.

Area of Emphasis in Game Development (24 hours):

CIT163 – Programming Practicum with C++; CIT 236 – Data Structures; CIT 340 – Game Development I; CIT 440 – Computer Graphics for Gaming; CIT 441 – Game Development II; CIT 443 – Game Development III; ART 454 – Designing for Multimedia and choose one of the following: CIT 446 – 3D Modeling and Game Development or CIT 447 – Modeling/ Simulation Development or CIT 448 – Mobile Game Development.

Area of Emphasis in Instructional Technology and Library Science (15 hours):

ITL 350 — Advanced Digital Literacy; ITL 365 — Orientation to Technology Applications, ITL 466 — Production of Instructional Technology Material, ITL 400 — New Literacies and ITL 455 — Pedagogy of New Literacies.

Health-Related

Area of Emphasis in Worksite Wellness (18 hours)

HS 235 (Introduction to Worksite Wellness), HS 335 (Worksite Health Assessment), HS 336 (Organization and Administration of Worksite Wellness Programs), HS 345 (Worksite Wellness Prescription), HS 346 (Evaluation of Worksite Wellness Programs), and 3 additional hours of 3-400 level coursework related to worksite wellness as decided by the HS chair.

(continued)

Writing-Related

Area of Emphasis in Creative Writing in English (15 hours):

15 hours of 3-400 level courses listed as Creative Writing by Marshall's Department of English.

Humanities-Related

Area of Emphasis in Religious Studies (18 hours):

Any 18 hours of 300-400 level Religious Studies courses. At least 6 hours must be taken through Marshall University.

Area of Emphasis in Literature in English (15 hours):

15 hours of 3-400 level courses listed as Literature by Marshall's Department of English.

Social Science-Related

Area of Emphasis in Anthropology (18 hours):

ANT 201 (Cultural Anthropology), ANT 322 (Archeology), ANT 361 (Ethnographic Methods) or ANT 491 (Theory in Ethnology), and 3 additional Anthropology courses at the 300-400 level.

Area of Emphasis in Criminal Justice (18 hours):

CJ 200 (Intro to Criminal Justice) and 15 additional hours of Criminal Justice courses at the 3-400 level.

Area of Emphasis in Geography (18 hours):

3- 4 hours of 1-200 level Geography courses and 15 additional hours of Geography courses at the 3-400 level.

Area of Emphasis in Geography - GIScience (18 hours):

At least 18 hours from the following: GEO 110 (1 hr.), GEO 111 (1 hr.), GEO 112 (1 hr.), GEO 113 (1 hr.), GEO 423 (3 hrs.), GEO 426 (4 hrs.), GEO 429 (4 hrs.), GEO 430 (4 hrs.), GEO 431 (3 hrs.), GEO 432 (3 hrs.), GEO 433 (3 hrs.), GEO 440 (4 hrs.), GEO 454 (3 hrs.), GEO 490–6 hrs.). At least 15 hours must be at the 3-400 level.

Area of Emphasis in Geography - Human (18 hours):

At least 18 hours from the following: GEO 100 (3 hrs.), GEO 203 (3 hrs.), GEO 222 (3 hrs.), GEO 206 (3 hrs.), GEO 305 (3 hrs.), GEO 317 (3 hrs.), GEO 401 (3 hrs.), GEO 402 (3 hrs.), GEO 404 (3 hrs.), GEO 406 (3 hrs.), GEO 408 (3 hrs.), GEO 410 (3 hrs.), GEO 422 (3 hrs.), GEO 426 (4 hrs.). At least 15 hours must be at the 3-400 level.

Area of Emphasis in Geography - Physical (18 hours):

One of the following: GEO 101 (4 hrs.), GEO 222 (3 hrs.), GEO 230 (4 hrs.); and at least 15 hours from the following GEO 350 (4 hrs.), GEO 360 (4 hrs.), GEO 422 (3 hrs.), GEO 425 (4 hrs.), GEO 431 (3 hrs.).

Area of Emphasis in Military Science (15 hours)

At least 15 hours of 3-400 level Military Science, including MS 301, 301L, 302, 302L, 401, 401L, 402, 402L. Note that MS 101, 101L, 102, 102L, 201, 201L or MS 251 or departmental permission is required to begin this sequence with MS 301, designed for ROTC students.

Area of Emphasis in Political Science (15 hours)

Any 15 hours of 300-400 level PSC courses.

Area of Emphasis in Psychology (18 hours):

PSY 201 and 15 additional hours of Psychology courses at the 300-400 level.

Area of Emphasis in Sociology (18 hours):

SOC 200 (Introductory Sociology), SOC 344 (Social Research I), SOC 360 (Sociological Perspectives), and 9 additional hours of Sociology courses at the 300-400 level.

Area of Emphasis in Women's Studies (18 hours):

WS 101 (Introduction to Women's Studies) and 15 hours of WS designated courses at the 300-400 level. To be acceptable courses must have the WS designator.

Education-Related

Area of Emphasis in Preschool Development (21 hours):

ECE 215 – Family Relationships: ECE 303 – Child Development; ECE 322 – Language, Literacy, and Numeracy for Young Children; ECE 323 – Assessment in Early Childhood; ECE 430 – Preschool Curriculum and Methods; CISP 320 – Special Education: Survey of Exceptional Children I; CISP 420 - Special Education: Survey of Exceptional Children II.

The most current list of Areas of Emphasis is found on the RBA website (*www.marshall.edu/rba/businessaoe.html)* or by contacting the RBA office. CEC's may not be used in completing an Area of Emphasis.

SOUTH CHARLESTON CAMPUS

100 Angus E. Peyton Drive
South Charleston, WV 25303-166

304-746-2500
schas@marshall.edu

REGIONAL CENTERS

Mid-Ohio Valley Center, Point Pleasant

304-674-7200
www.marshall.edu/movc
movc@marshall.edu

Southern Mountain Center
(on Southern West Virginia Community and Technical College campuses-Logan and Williamson)

304-746-2030
jsharrah@marshall.edu

Teays Valley Regional Center, Teays Valley

304-757-7223
www.marshall.edu/tvrc
tvrc@marshall.edu

Erma Byrd Higher Education Center, Beckley

University College

Dr. Sherri Stepp, Associate Dean of Undergraduate Students and Director of University College
www.marshall.edu/uc

University College (UC) was created in 1999 to unite several important academic and student services. UC is the official college of undecided students, conditionally admitted students, some pre-nursing students, students enrolled in college courses in the high schools/early entry high school students, special admits, transient students and exchange students. In addition to academic advising for undecided, conditionally admitted and some pre-nursing students, UC provides many opportunities to all Marshall University students including Tutoring Services, University Studies (UNI) courses, the Textbook Loan Program, the National Student Exchange Program, and math placement exams.

Mission Statement

University College offers students a solid foundation of academic skills for progression into another Marshall University college to declare a major and graduate. University College is dedicated to adhering to national academic advising standards, providing professional academic guidance in a holistic and caring manner, understanding and practicing inclusion, operating with high ethical standards, embracing innovation and creativity, collaborating with the university community to ensure student success, safeguarding the privacy of students, and encouraging student engagement in their own educational process. University College extends this mission to all Marshall students by providing a broad range of academic services and transitional support programs.

Academic Advising

University College provides advising for undecided students, conditionally admitted students, some pre-nursing students, students enrolled in college courses in the high schools/early entry high school students and special admits. Undecided, conditionally admitted and pre-nursing students will be assigned a specific University College advisor. Advising is provided in a supportive atmosphere where students may obtain information regarding various majors and academic opportunities. Appointments are encouraged, but not required.

Undecided Students

Advisors will work with undecided students to help them identify a major that meets their interests and abilities while enrolling in courses meeting general education requirements and recommended exploratory courses in majors of interest. In addition, students will be provided with opportunities to improve their student success skills and development of a career path. Students must declare an academic major upon completion of the 45th credit hour of coursework.

Conditionally Admitted Students

Marshall University offers a limited number of conditional admissions to entering freshman students whose academic credentials fall slightly below regular admission requirements. Students not meeting the requirements for regular admission should contact the Office of Admissions to inquire about this opportunity.

Conditional students are admitted to University College and are not eligible to declare an academic major. Students must meet specific requirements within three semesters to gain full admission to the university. Some requirements are based on individual exam scores for placement in English and math courses. Requirements include:

- Attendance on the Huntington campus.

- For students having Verbal ACT scores of less than 18 or SAT ERW 480, successful completion of required corequisite English course.
- For students having Math ACT scores of less than 19 or SAT Math 500, successful completion of required prerequisite or corequisite math course(s).
- Successful completion of academic support class (UNI 100).
- Completion of 18 graded hours with a 2.00 GPA (cumulative and MU).

Students will be assigned an academic advisor, who will guide them through their conditional requirements while enrolling in courses meeting general education requirements and recommended exploratory courses in majors of interest. Once all requirements and prerequisites are met, students are eligible to declare a major in a degree-granting college at Marshall University. (Note: Some majors and colleges require a separate application and have additional requirements for admission into their programs.)

Pre-Nursing Students

Pre-Nursing students will be assigned an academic advisor who is knowledgeable of the nursing major and course requirements, as well as the nursing application requirements and application procedures required by the College of Health Professions. The assigned advisor will assist students in selecting required general education courses and will assist in the exploration of other health-related academic majors.

Placement in English and Math

Students are required to obtain a Verbal ACT score of 18 (SAT ERW 480) to be eligible to enroll in college-level English composition courses. Students with verbal scores below 18 must enroll in a corequisite English course, ENG 101P, where remedial work is combined with college-level coursework. Students are required to obtain a Math ACT score of 19 (SAT Math 500) to be eligible to enroll in college-level math courses. Students with math scores below 19 must enroll in a prerequisite course to prepare for college-level math or a corequisite math course where remedial work is combined with college-level coursework. University College offers opportunities to take placement exams if students wish to challenge their math scores. To schedule an exam, please call 304-696-3169.

Dismissal from University College

Students who are conditionally admitted to Marshall University must meet specific requirements within three semesters to gain full admission to the university. Failure to meet these defined requirements (see above) in the allotted three semesters will result in dismissal from University College and Marshall University. University College students may have the opportunity to appeal dismissal based on extenuating circumstances and appropriate documentation.

Academic Probation and Suspension Policy for University College Students

All Marshall University students are subject to the Academic Probation and Suspension Policy as defined in the "Academic Information" section of this catalog.

Early Entry High School Students

Under certain circumstances, high school students may enroll for college credit in their high schools, in college courses on a Marshall campus or at one of the regional centers. For requirements, see entry under the "Admissions" section of this catalog.

Early enrollment students have the same rights and responsibilities as on-campus students and are subject to the University's Academic Probation and Suspension Policy.

Transient Students (Students Visiting from Other Institutions)

Students enrolled in a degree program at another accepted, accredited institution during the previous year who would like to enroll at Marshall for no more than two consecutive semesters (excluding summer terms) can be admitted as transient students. See the entry under "Admissions" for further information. For assistance in enrolling in classes, transient students should contact University College by calling 304-696-3169.

UNI 100: Freshman First Class (1 Credit Hour; Graded)

UNI 100 is made up of two parts: (1) the workshops and group sessions that are part of the Week of Welcome (WOW); and (2) additional weekly, 1-hour class meetings for the first eight weeks of the semester. Successful completion of this course earns one credit hour of elective credit. The course is graded. To earn the one hour of elective credit, attendance at WOW workshops, group sessions and class meetings is required along with successful completion of course activities and assignments. Students are encouraged to take advantage of this opportunity to learn about Marshall University, college-level expectations, and student success. (See also "Week of Welcome" in the "Academic Information" section of this catalog.) University College students who have been conditionally admitted are required to successfully complete the course and will be enrolled in a section instructed by their assigned academic advisor.

UNI 101: New Student Seminar (1 Credit Hour; Graded)

UNI 101, New Student Seminar, is designed as an introduction to college life for freshmen. The course provides students with an opportunity to adjust to the academic and social environment of college under the guidance of a mentor and in the presence of a small group of peers. The course is one credit hour and is graded.

UNI 102: Strategies for Academic Success (1 Credit Hour; Graded)

UNI 102 is an academic enrichment course which provides students with strategies and practical experience for academic success. Topics to be covered include research skills, critical thinking applications, and effective study skills.

UNI 103: Career Planning for Undecided Students (1 Credit Hour; Graded)

UNI 103 is a course designed for undecided students to explore career options and majors. Topics include interest testing, career information, decision-making skills and job-finding strategies.

UNI 201: Peer Mentoring (1 Credit Hour; Graded)

Students trained as peer mentors will lead discussions and activities and work with faculty advisors in the design and implementation of UNI 100, Freshman First Class, or UNI 102, Strategies for Academic Success.

UNI 400: Graduate School Preparation (2 Credit Hours; Graded)

UNI 400 is a course designed to provide the necessary steps, tools, and resources future graduates need in completing their undergraduate careers and pursuing graduate degrees. It is designed for students who will be graduating within the year (junior or senior class standing) and are interested in researching and applying for graduate school in order to continue their education.

Tutoring Services

Please see description under "Learning Opportunities and Resources."

Textbook Loan Program

Please see description under "Learning Opportunities and Resources."

National Student Exchange

Please see description under "Learning Opportunities and Resources."

Week of Welcome (WOW)

Week of Welcome is an opportunity for freshmen to familiarize themselves with the Huntington campus and learn what it means to be a student at Marshall University. Arriving on campus a few days early, freshmen participate in the President's Freshman Convocation and sessions with the dean, faculty and staff of their academic college, along with other large group sessions and small group seminars. WOW programs are also offered to students attending the South Charleston campus, the Mid-Ohio Valley Center, and the Teays Valley Regional Center. Week of Welcome (WOW) is an integral part of Freshman First Class (UNI 100), an introduction to academic structures and expectations of college life. Week of Welcome includes optional evening activities and social events for both residential and commuter students. Information about Week of Welcome is available at *www.marshall.edu/wow*.

Graduate College

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. Since then, the Graduate College has steadily expanded the scope and depth of its offerings. Post-master's Education Specialist degrees (Ed.S.) are available in adult and technical education, counseling, curriculum and instruction, educational administration, and school psychology. Marshall also offers an Ed.D. in either Leadership Studies or Curriculum and Instruction, a Psy.D. in Clinical Psychology, and a Ph.D. in Biomedical Sciences.

As the variety of these programs would indicate, the Graduate College offers the graduate student an opportunity to acquire research techniques in many fields of knowledge; to participate under the guidance of the graduate faculty in basic research and in the application of the insights gained in such research to the solution of the pressing problems of our times; and to become skilled professionals.

Admission to the Graduate College is based on a baccalaureate degree from a regionally accredited college or university and on the information provided on the Application for Admission form. The applicant must also submit scores from the Graduate Record Examination (GRE), the Miller Analogies Test (MAT), or the Graduate Management Admissions Test (GMAT) as required by the individual program area. Test scores must be sent directly to Graduate Admissions, Marshall University.

On recommendation by the department chair and with the approval of the undergraduate dean and the dean of the Graduate College, Marshall University seniors with superior academic undergraduate records may be permitted to enroll in graduate courses. When combined with the College Level Examination Program (CLEP), in which thirty undergraduate semester credit hours or more can be earned by examination, this provision enables the superior student to earn both a baccalaureate and a master's degree in four years or fewer.

Students who want more information about any of the graduate programs should consult the *Graduate Catalog* or address their inquiries to: Graduate Admissions Office, Marshall University, 100 Angus E. Peyton Drive, South Charleston, WV 25303.

Joan C. Edwards School of Medicine

Established in 1976, the School of Medicine quickly developed a reputation for providing students with a high-quality, hands-on medical education delivered in an atmosphere of caring and respect. Since that time, the school has also dramatically expanded its scope of research and clinical services, giving students an energized learning environment in which to become physicians. With three new educational facilities, two new clinical departments and more progress on the horizon, the school continues to expand opportunities for students.

Marshall's School of Medicine selects students from a variety of academic, socioeconomic and personal backgrounds. Although most applicants are science majors, it encourages its applicants to meet its basic sciences requirements and then pursue their personal educational interests and abilities. The Admissions Committee considers the quality of students' work more important than the field in which it is taken.

As a state-assisted medical school, Marshall gives preference to West Virginia residents. Some positions also are available for well-qualified nonresidents who live in states adjoining West Virginia or who have strong ties to this state. To be considered, all applicants must be U.S. citizens or have permanent resident visas.

Entrants should have a bachelor's degree from an accredited college or university. Exceptionally well-qualified students may be considered after ninety semester hours of academic work if other requirements are met.

Minimum course requirements are 6 hours each of English and social or behavioral sciences and 8 hours each (with lab) of general biology or zoology, inorganic chemistry, organic chemistry and physics. All required courses must be passed with a grade of *C* or better by June 1 of the year of matriculation.

All applicants must take the Medical College Admissions Test, preferably in the spring of the year of application, but no later than the fall. The test must be taken within three calendar years of enrollment.

Applicants must exhibit excellence in character, motivation and ideals and should possess the many personal qualities essential for a career in medicine. Applicants are evaluated on the basis of four criteria: scholastic records, MCAT scores, academic references, and interviews.

The School of Medicine encourages qualified members of groups underrepresented in medicine to apply. It does not discriminate because of race, gender, religion, age, sexual orientation, disability or national origin.

Detailed information on the admissions process and a copy of the School of Medicine catalog are available at *http://musom.marshall.edu/admissions*.

School of Pharmacy

The Marshall University School of Pharmacy strives to educate compassionate, ethical, and competent students to become innovative thinkers, problem solvers, and the future leaders of our profession. To accomplish these goals, the school has developed a curriculum that fuses local practice standards and vision to the evolving trends within our discipline. The school's vision of the skills, knowledge, and abilities required for the success of future pharmacists is central to its Pharm.D. curriculum.

School of Pharmacy Prerequisite Coursework

In order to optimally be prepared for the rigors of the program, students will require knowledge and understanding of the basic principles of communication (composition), science (biology, chemistry, and physics), human anatomy, human physiology, and math. The program's prerequisite coursework is designed to provide the student with sufficient breadth and depth of knowledge to facilitate program success. A summary of the Pharm.D. program prerequisite coursework is provided below:

- English Composition 6 credit hours or 2 semesters,
- Calculus 3 credit hours or 1 semester,
- Statistics 3 credit hours or 1 semester,
- Biology w/Lab 8 credit hours or 2 semesters,
- Chemistry w/Lab 8 credit hours or 2 semesters,
- Human Anatomy w/Lab 4 credit hours or 1 semester,
- Human Physiology w/Lab 4 credit hours or 1 semester,
- Microbiology w/Lab 4 credit hours or 1 semester,
- Organic Chemistry w/Lab 8 credit hours or 2 semesters,
- Physics w/Lab 4 credit hours or 1 semester
- Social Science 3 credit hours or 1 semester

Admission to the School of Pharmacy

Students interested in pursuing admission to the Pharm.D. program at Marshall must apply through the Pharmacy College Application Service (PharmCAS at *www.pharmcas.org*) and complete the Pharmacy College Admission Test (PCAT). The suggested minimum undergraduate Grade Point Average (GPA) for admission consideration is a 2.50 on a 4.00 scale and the suggested prerequisite GPA minimum is 2.75. While there is not a minimum PCAT score requirement, a suggested composite score of 50 or greater is preferred. Prerequisite coursework need not be completed prior to application, but must be completed prior to matriculation into the Pharm.D. program.

The school admits students only for the fall semester. Admission to the professional program is competitive and the admission process considers each candidate holistically. Students are initially screened based upon academic accomplishments (overall and prerequisite GPA), PCAT performance, and reference letters in support of the application.

Students admitted to the program must have the physical, mental and emotional ability to learn and accomplish the competencies required of a pharmacy practitioner, as well as the character and thought processes necessary to make professional judgments that benefit the patients being served. Applicants with exceptional scholastic performance, PCAT scores, and reference letters will be considered for an on-site interview. On-site interviews will focus upon assessing student leadership skills, character, motivation, critical thinking skills, communication abilities, problem-solving ability and group work skills.

The Marshall University School of Pharmacy encourages qualified members of groups underrepresented in pharmacy to apply. The school does not discriminate because of race, gender, religion, age, sexual orientation, disability or national origin. Detailed information on the admissions process and a copy of the School of Pharmacy catalog are available at *www.marshall.edu/pharmacy*.

3+4 Accelerated Pathways

The Marshall School of Pharmacy, Marshall College of Science, and Marshall College of Health Professions have partnered to provide Marshall undergraduate students with three opportunities to earn a joint Bachelor of Science or Bachelor of Health Science and Doctor of Pharmacy degree.

The three 3+4 pathways programs allow students to complete three years of undergraduate education and four years of pharmacy school enroute to earning a bachelor's and Pharm.D. degree. The Marshall College of Science and College of Health Professions will recognize the first year of the pharmacy curriculum as the student's senior year and will award students the bachelor's degree after the first year is successfully completed.

For more information please visit *www.marshall.edu/pharmacy/academic-partnerships/marshall-university-34-accelerated-pathways/*.

Courses of Instruction

College of Arts and Media
College of Business
College of Education
College of Health Professions
Honors College
College of Information Technology and Engineering
College of Liberal Arts
College of Science
Joan C. Edwards School of Medicine

Courses listed in this catalog are subject to change through approved academic channels. New courses and changes in existing coursework are initiated by the particular departments or programs, approved by the appropriate academic dean and/or curriculum committee, by the Faculty Senate, and the president.

Before the beginning of each semester, a "Schedule of Courses" is printed announcing the courses that will be offered by the college and schools. Copies may be obtained in the Registrar's Office and at various sites on campus. Course schedules are available online at *www.marshall.edu/myMU*.

STANDARDIZED COURSE LISTINGS

All departments include among their offerings the following undergraduate course numbers and titles:

280-283 Special Topics. 1-4 hrs.
297-298 Instructional TV Courses. 1-4 hrs.
480-483 Special Topics. 1-4 hrs.
485-488 Independent Study. 1-4 hrs.
497-498 Instructional TV Courses. 1-4 hrs.

Departments that offer practica and internships use the following undergraduate course numbers:

Practicum. 270-272, 370-372, 470-472.
Internship. 290, 490.

ABBREVIATIONS

PR	Prerequisite
CR	Corequisite
CR/NC	Credit/Non-Credit grading
Lec-lab.	Lecture and laboratory hours per week (e.g. 2 lec-4 lab. means two hours lecture and four hours laboratory per week).
Rec.	Recommended
I,II,S.	Offered first semester, second semester, summer.

COURSE DESCRIPTIONS

ACCOUNTANCY (ACC)

198 **Accounting Professionalism. 1 hrs.**
Introduction to the accounting profession, career options, professional responsibilities, and codes of conduct. Professionalism, networking, interviewing, job search, and technical writing skills are developed.

215 **Accounting Principles (CT). 3 hrs.**
Introduction to principles and procedures of double-entry accounting records and reports. This course meets a Core I/Critical Thinking requirement.

216 **Principles of Accounting. 3 hrs. I,II.**
Using accounting information to assist in managerial control and decision making. (PR: ACC 215)

280-281 **Special Topics. 1-4; 1-4; hrs.**

310 **Accounting for Entrepreneurs. 3 hrs.**
Principles, concepts, and problems of accounting relevant to decision making for entrepreneurs, including pro forma financial statements, cash flow, securing financing, and cost structures. NOT OPEN TO STUDENTS IN THE COLLEGE OF BUSINESS.

311 **Intermediate Accounting I. 3 hrs. I, II.**
Study of U.S. and International accounting standards related primarily to assets and financial statement preparation. Accounting standards research and application of Excel are integrated throughout the course. (PR: ACC 215 with a *C* or better and ACC 216 with a *C* or better)

312 **Intermediate Accounting II. 3 hrs. I, II.**
Study of U.S. and International accounting standards related primarily to assets and financial statement preparation. Accounting standards research and application of Excel are integrated throughout the course.(PR: ACC 198, ACC 311 with a *C* or better, and MIS 200)

318 **Cost Accounting I. 3 hrs. I, II.**
A study of fundamental cost accounting concepts and objectives including product cost accumulation, cost-volume-profit analysis, direct costing, budget techniques, standard costing, and differential cost analysis. (PR: ACC 215 with a C or better, ACC 216 with a *C* or better, and MGT 218)

341 **Accounting Information Systems. 3 hrs. I, II.**
Introduction to accounting systems. Emphasis on concepts of analysis, design, and implementation of accounting systems with attention on internal and audit trail. (PR: ACC 198 and ACC 311 with a *C* or better)

348 **Federal Taxation. 3 hrs. I, II.**
Problems and procedures of income tax accounting (PR: ACC 215 with a *C* or better)

364 **Forensic and Investigative Accounting 3 hrs.**
This course introduces students to forensic accounting focusing on criminal litigation and investigations of fraud. (PR: ACC 311 with a grade of *C* or better)

412 **Governmental Accounting. 3 hrs.**
A study of the use of accounting information in the financial management of governmental and nonprofit entities. (PR: ACC 311 with a *C* or better)

414 **Advanced Accounting Problems. 3 hrs.**
Selected problems in advanced accounting principles and procedures. (PR: ACC 312 with a *C* or better)

415 **Controllership. 3 hrs.**
A comprehensive study of the controller's objectives, responsibilities, functions, organizational roles, etc. (PR: ACC 318 with a *C* or better)

418 **Managerial Accounting. 3 hrs.**
The managerial approach to budgetary control. (PR: ACC 318 with a *C* or better)

429 **Auditing I. 3 hrs. I, II.**
A study of the theory and procedures of auditing and the legal and social responsibilities of the auditor. (PR: ACC 312 with a *C* or better, ACC 341 with a *C* or better, and MGT 218)

430 **Auditing Theory and Research. 3 hrs.**
A critical examination of contemporary professional attestation theory and practice including a comprehensive review of AICPA statements on audit procedures. (PR: ACC 429 with a *C* or better)

435 **Internal Auditing. 3 hrs.**
The course discussed the applicable current internal auditing theory and procedures, including a review of corporate governance and risk assessment. (PR: ACC 341 with a *C* or better)

448 **Federal Income Tax II. 3 hrs.**
Advanced course in taxation with emphasis on corporations, partnerships, estates, trusts, gifts, valuation and liquidity problems, and tax administration and practice. (PR: ACC 311 with a *C* or better and ACC 348 with a *C* or better)

451 **Accounting Theory. 3 hrs.**
An examination of accounting concepts, standards, rates, conventions, principles and practices with primary emphasis on study of authoritative pronouncements comprising generally accepted accounting principles. (PR: ACC 312 with a *C* or better)

480-482 **Special Topics. 1-4; 1-4 hrs.**
Study of an advanced topic not normally covered in other courses. Accounting majors only, with permission of division.

485-486 **Independent Study. 1-4; 1-4 hrs.**
(PR: Permission of Division Head)

490 **Internship. 3-12 hrs. (CR/NC)**
A supervised internship in which the student works for a business firm/agency to gain practical experience in the student's major. The program of work and study will be defined in advance and the student's performance will be evaluated. This course may not be used as an accounting elective. (PR: Permission of Division Head)

499 **Professionalism and Ethics Seminar. 3 hrs. I, II.**
Designed to increase the student's awareness of the accounting environment, emphasizing ethics. Communication skills are improved through impromptu speaking, written reports, group projects and formal presentations. Capstone Course. (PR: ACC 312 with a *C* or better and ACC 318 with a *C* or better, ACC 414, and ACC 429 as a prerequisite or taken concurrently)

ANTHROPOLOGY (ANT)

201 **Cultural Anthropology (CT). 3 hrs.**
Introduction to the scientific study of culture with emphasis on the cultures of small-scale societies. This class emphasizes critical thinking skills.

201H **Cultural Anthropology Honors (CT). 3 hrs.**
Introduction to the scientific study of culture with emphasis on the cultures of small-scale societies. This class emphasizes critical thinking skills. For the honors student. (PR: Admission to Honors College)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

301 **Social Statistics I.**
Introduction to statistical analysis of social data. (Same as SOC 345)

322 **Archaeology. 3 hrs.**
Introduction to the methods and theory of archaeology.

323 **Archaeological Field Training. 3-6 hrs.**
Supervised instruction in on-site archaeological data collection, survey and excavation techniques.

324 **Archaeological Analysis. 3 hrs.**
Supervised instruction in processing and analyzing archaeological materials recovered by fieldwork. (PR: ANT 322 or departmental permission)

325 **World Prehistory. 3 hrs.**
An introduction to the archaeology of pre-literate cultures, from the emergence of Homo sapiens to the present.

326 **Classical Archaeology. 3 hrs**.
Archaeology of ancient Greece and Rome, and their colonies and imperial domains.

331 **Physical Anthropology. 3 hrs.**
The study of human physical evolution, from the earliest hominins to the present day, based on the study of primatology, human genetics, and the paleontological record.

361 **Ethnographic Research. 3 hrs.**
A project-based introduction to ethnographic research design and practice.

362 **Health, Culture and Society. 3 hrs.**
A cross-cultural, historical, and bio-cultural examination through case study of social and environmental factors that affect human health and disease

363 **U.S. Culture and the Family. 3 hrs.**
An historically and ethnographically informed consideration of the changing meaning and place of family and work in everyday American life, media, and politics.

364 **Expressive Culture. 3 hrs.**
Exploration of expressive cultural forms in the construction of personal and communal identities and their meaningful attachment to particular geographic places.

365 **Anthropology through Film. 3 hrs.**
Exploration of film as a general anthropological field of interest with an emphasis on understanding selected films as cultural texts and their association with particular and changing cultural, political, economic and historical contexts.

371 **Linguistic Anthropology. 3 hrs.**
Introduction to the theories and methodologies of linguistic anthropology and to language as a cultural phenomenon and form of diversity.

402 **Principles of Geographic Information Systems. 3 hrs.**
Introduction to Geographic Information Systems (GIS) principles, techniques, and applications for the social and natural sciences with emphasis on foundational geographic principles in a lecture/lab format.

411 **Deconstructing Appalachia. 3 hrs.**
Exploration of the historical and cultural significance of Appalachia in the American experience and imagination.

412 **Appalachian Field Experience I. 3-6 hrs.**
Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. (PR: ANT 411 or departmental permission)

413 **Appalachian Field Experience II. 3-6 hrs**
Supervised field work in an Appalachian community studying the social and cultural characteristics of the area. (PR: ANT 411 or departmental permission)

428 **Archaeological Theory and Analysis. 3 hrs.**
An introduction to archaeological theory and its application to the material record of cultures, past and present.

440 **African Cultures. 3 hrs.**
Comparative analysis of the ethnic groups of Africa, using archaeological and ethnographic data.

441 **Oceania. 3 hrs.**
Comparative analysis of the indigenous peoples and cultures of Melanesia and Polynesia, using archaeological and ethnographic data.

442 **The Native Americans. 3 hrs.**
Comparative analysis of the indigenous inhabitants of North America, using archaeological and ethnographic data.

460 **Crime and Custom. 3 hrs.**
This course examines law and legal processes in diverse cultures from anthropological and law and society perspectives.

445 **American Ethnicities. 3 hrs.**
Comparative overview of historical and contemporary patterns of immigration, settlement, and inter-ethnic relations in the United States.

464 **Design, Planning and Health. 3 hrs.**
Social scientific study of how places where people live, work, and recreate affect quality of life and overall health with an emphasis on design decisions within urban and regional planning.

465 **Disaster, Culture and Health. 3 hrs.**
Study of contemporary environmental and social problems emphasizing health impacts of natural and technological disasters on communities around the world.

466 **Culture and Environment. 3 hrs.**
This course will examine the symbbolic and structural dimensions of struggles over defining, organizing, and controlling the natural environment from a biocultural perspective.

467 **Culture in Ethnographies. 3 hrs.**
In depth exploration and comparison of diverse cultural groups through reading and discussing ethnographic texts.

468 **National Identify. 3 hrs.**
Exploration of the cultural, political and economic processes that contribute to the creation and maintenance of the modern nation state as an imagined community. .

472 **Language, Gender and the Body. 3 hrs.**
Uses methods and theories from anthropology, linguistics and sociology to examine how gendered bodies in different cultures are constructed through ways of acting in the world.

478 **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. (Same as English 478) (PR: ENG102 or ENG302 or ENG201H)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs**.
Study of topics of interest not covered in regularly scheduled courses. (PR: Six hours of anthropology or departmental permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
Individual study of topics not offered in regularly scheduled courses. Advance permission required.

489 **Internship. 1-4 hrs.**
Supervised practicum founded on anthropological knowledge in a host institution. 40-45 hours of internship work correspond with 1 credit hour. (PR: Six hours of anthropology)

491 **Theory in Ethnology. 3 hrs.**
Introduction to major theoretical traditions of cultural anthropology with emphasis on the connection between fieldwork and development of theory.

492 **Senior Seminar I. 3 hrs.**
Application of anthropological theory and practice to individually designed projects. This course fulfills the capstone requirement for undergraduate anthropology majors. (PR: Anthropology major in senior standing or departmental permission)

493 **Senior Seminar II. 3 hrs.**
Application of anthropological theory and practice to individually designed projects. Fulfills the capstone requirement for undergraduate majors. (PR: Anthropology major in senior standing or departmental permission)

ART AND DESIGN (ART)

101 **Visual Culture and Research. 3 hrs.**
Introduction to the functions of art applications of media, elements, and principles of design, artists, and aesthetics. (Required for Art majors)

112 **Introduction to Visual Art. 3 hrs.**
An introduction to the methods and principles of the visual arts. Students will consider the work of major artists in thematic contexts. (For non-art majors only.)

113 **Art Education: Elementary. 3 hrs.**
An introduction to the materials and methods for teaching art in early childhood and elementary (PreK-6). Stages of development, integrated curriculum design, assessment, and instructional strategies are emphasized.

201 **History of Art. 3 hrs.**
A survey of the history of art, with emphasis on European traditions. Chronology will cover pre-history through the Middle Ages. (PR: ART 112 with a minimum grade of *C* for non-majors; ART 101 with a minimum grade of *C* for majors)

202 **History of Art. 3 hrs.**
A survey of the history of art from the Renaissance to the present. (PR: ART 201 with minimum grade of *C* or permission)

214 **Propaganda/Surface: 2D Images. 3 hrs.**
Basic and related problems in design dealing with the plastic elements - line, color, form, space, and texture. Exploring these elements in context. (Open to art majors; others must have permission of the department).

215 **Space/Amalgam: 3D Forms. 3 hrs.**
Design with emphasis on three-dimensional form, using a variety of media. Exploring these forms in context.

217 **Mapping/Body: Drawing. 3 hrs.**
Freehand drawing and introductory printmaking with emphasis on working from nature and the posed model, using a variety of media.

218 **Experience/Site: Art in Time. 3 hrs.**
Introduction to performance and site-specific work, and how it functions in context. (PR: ART 217)

219 **Gaze/Animate: Digital Images. 3 hrs.**
Introduction to skills in still and moving digital images using both cameras and computers as creative and practical tools for artists and designers. Conceptual design will be emphasized.

220 **Local/Global: Art in Context. 3 hrs.**
Concept-driven and theme-based, this course allows students to solve visual problems through community outreach with skills learned in foundation classes. Variety of media explored. (PR: ART 214, 215, 217, 218 and 219)

270-272 **Practicum. 3 hrs.**

280-283 **Special Topics. 1-4 hrs.**
To be used for experimental courses. By permission only.

298 **Foundations Review: BFA. 1 hr.**
Students must present art and design work from all foundations studio courses for faculty review. Required for program advancement. Art majors only. (PR: ART 101,214,215,217,218, 219)

299 **Foundations Review: BA. 0 hrs**.
Students present artwork from foundations courses for faculty review. (Art Education 5-Adult: 218 not required). Successful completion of 299 is a prerequisite for advanced studio courses. (PR: 214, 215, 217, 218, 219)

301 **Printmaking Processes. 3 hrs.**
Experiments in the media of intaglio, lithography, serigraphy, relief collagraphs and new techniques in printmaking. (PR: ART 217)

302 **Relief Printmaking. 3 hrs.**
Traditional and experimental approaches to relief printmaking, including woodcut, linocut, wood engraving, relief etching, Japanese techniques, monoprints, and other press and handprinting relief processes. (PR: 301; and ART 298 or ART 299)

303 **Surface Design. 3 hrs.**
Introduction to surface design. Students will learn various techniques to apply color on fabric surface.

305 **Ceramics. 3 hrs.**
Search for form and personal expression through clay. Emphasis on handbuilding techniques, decorative processes, and glaze application. (PR: Art 215 or permission of the department)

306 **Design in Metal. 3 hrs.**
Advanced design in metal. Emphasis on copper, silver, pewter, and brass. Problems involve soldering, enameling, and shaping metal by hand.

307 **Sculpture. 3 hrs.**
Emphasis on modeling in clay and exploring the potential of plaster, wood and other materials relevant to the area of sculpture. (PR: ART 215)

308 **Weaving. 3 hrs.**
The student will demonstrate the ability to carry through the entire process for planning, through warping, threading, and weaving. Each will create unique art works while developing traditional technical skills.

312 **Typography. 3 hrs.**
An introduction to the study and technology of Typography and practical studio skills, emphasizing type and design principles in print and digital media. (PR: ART 214)

313 **Installation Art with Fibers. 3 hrs.**
The student will create installation art using a variety of fibers tools, materials, and processes with focus on self-expression and the exploration of structure, space, color, form, and meaning. (PR: ART 214)

314 **Graphic Design 3 hrs.**
Sign combinations and visual structure, in relation to meaning of visual messages. Assignments include posters, advertising, information design, and corporate identity. Introduction to materials and procedures in the design process. (PR: For art majors -Sophomore standing, ART 214 and 312. For JMC majors - JMC 241, MKT 341)

315 **Introduction to Photography. 3 hrs.**
Introduction to black and white photography through basic techniques of camera controls, lighting, traditional wet lab, and digital imaging. (PR: ART 214 or 217 or permission of the department)

316 **Graphic Design. 3 hrs.**
Applies the use of type and images to design for advertising, editorial, or instructional purposes. Involvement with extended design and layout problems. (PR: 314; and ART 298 or ART 299)

317 **Illustration. 3 hrs.**
Conceptual and technical development of illustrations for editorial and advertising purposes. (PR: ART 218)

318 **Art and Design for Web Sites. 3 hrs.**
This course will focus on art and design considerations in creating Web sites. Current software will be used to create graphics, video, and audio for Web page and Web site design. (PR: ART 214)

319 **Wood Fundamentals: Furniture. 3 hrs.**
The fundamental methods of wood furniture design and construction, including joinery techniques, will be tauoht. Domestic and exotic woods will be used. (PR: ART 215)

320 **Silk Screen Printmaking. 3 hrs.**
Experience with screen-printing stencil processes. The advanced student may also explore photographic stencil-making and printing and a variety of surfaces. (PR: 301; and ART 298 or ART 299)

322 **Collagraphs. 3 hrs.**
Printmaking using the collagraph plate or matrix, an additive method that employs both intaglio and relief techniques. (PR: 301; and ART 298 or ART 299)

324 **Image Visualization: Darkroom Techniques. 3 hrs.**
ART 324 is a continuation of material presented in ART 315. Students will explore black and white photography through a variety of cameras and techniques. (PR: 315; and ART 298 or ART 299)

325 **Image Visualization: Digital Techniques. 3 hrs.**
ART 325 is an exploration of color photography using digital techniques. Students will refine their personal vision using digital cameras, lighting and digital imaging software. (PR: 219; and ART 298 or ART 299)

331 **Cast Metal Sculpture. 3 hrs.**
Several major art casting procedures will be studied and employed in the production of original sculptures. Emphasis will be placed on the lost wax process using ceramic shell molds. (PR: 307; and ART 298 or ART 299)

332 **Carved Sculpture. 3 hrs.**
Emphasis will be on the tools, materials and processes of subtractive sculpture. Both traditional and modern techniques will be explored in carving from a variety of woods, stones and other materials.(PR: 307; and ART 298 or ART 299)

333 **Welded Sculpture. 3 hrs.**
A variety of techniques including oxygen/acetylene, arc and TIG welding will be studied and practiced in the process of direct metal sculpting. (PR: 307; and ART 298 or ART 299)

335 **Art Education: 2D-3D Media & Methods. 3 hrs.**
Philosophy, media, and methods for teaching art (emphasis for elementary level); includes laboratory experience.

340 **Art Education: Secondary. 3 hrs.**
An introduction to the methods for teaching art at the secondary level (7-12). Authentic instruction and classroom assessment strategies are emphasized. (PR: ART 113).

342 **Technologies for Art Education Majors. 3 hrs.**
This course will give art education majors an introduction and experience in graphic design skills, computers and photography. Not applicable to the BFA degree. (PR: ART 214)

343 **Introduction to the Potter's Wheel. 3 hrs.**
Basic throwing skills, surface enrichment and glaze application emphasized. Design analysis and production of functional form stressed. (PR: ART 215)

344 **Primitive Ceramic Techniques. 3 hrs.**
The study of local clay preparation and primitive firing and decorating techniques. (PR: ART 305 or 343; and ART 298 or ART 299)

345 **Problems in Porcelain. 3 hrs.**
The formulation and use of porcelain in the production of utilitarian and sculptural form. (PR: ART 305; ART 343; and ART 298 or ART 299)

350 **Watercolor Painting. 3 hrs.**
Watercolor medium in expressing still life, landscape, and the human figure. (PR: ART 214 or ART 217)

351 **Advanced Watercolor. 3 hrs.**
Advanced exploration of watercolor, inks and other fluid media. Emphasis will be on experimental methods and personal originality. (PR: ART 350; and ART 298 or ART 299)

353 **Painting I. 3 hrs.**
Basic techniques using color creatively based on an understanding of visual structural elements; various media including water, acrylic and oil based paints. (PR: ART 214 or 217)

354 **Painting II. 3 hrs.**
Continuing development of basic techniques using color creatively based on an understanding of visual structural elements; various media including water, acrylic and oil based paints. (PR: ART 353)

355 **Painting III. 3 hrs.**
Continued development for the intermediate level painter with emphasis on techniques and form, including varied supports, grounds, media such as encaustics, synthetic resins, egg tempera, acrylics and oils. (PR: ART 214 or 217)

369 **Mold Making and Casting. 3 hrs.**
Advanced processes of piece and flexible mold making will be studied and practiced for the purpose of casting complex forms and limited edition sculpture. (PR: ART 307 or 305; and ART 298 or ART 299)

370-372 **Practicum. 3 hrs.**

389 **20th-Century Art. 3 hrs.**
A survey of major 20th-Century artists' work, styles, movements, and media, in a broad historical context with discussion of research methods and directed research project. (PR: ART 202 with a minimum grade of *C* or permission)

390 **Professional Practice for Visual Artists. 3 hrs.**
Current views and practice: contemporary issues in art, safe practices in the studio, career opportunities, technology and art, and professional skills for artists. (PR: ART 298 or ART 299)

404 **Iconography of Mary. 3 hrs.**
Traces the sources and evolution of Catholic doctrine and images of the Virgin Mary.

406 **Figure Drawing. 3 hrs.**
Practice in drawing from the posed human figure. (PR: ART 217 and 218)

407 **Tribal Art. 3 hrs.**
An introduction to the unique arts of so-called pre-civilized peoples with a twofold emphasis: First, the European prehistoric; second, the non-European primitive. *Does not fulfill art history requirements for B.F.A. art and design majors.* (PR: ART 202 with a minimum grade of *C* or permission)

408 **Art and Architecture of Ancient Egypt. 3 hrs.**
History of the visual arts of ancient Egypt in the context of social and religious influences. (PR: ART 202 with a minimum grade of *C* or permission)

409 **19th-Century Art. 3 hrs.**
A survey of the development of architecture, painting, and sculpture in the Western World during the 19th century. (PR: ART 202 with a minimum grade of *C* or permission)

410 **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. (PR: ART 202 with a minimum grade of *C* or permission)

411 **Art and Architecture of Ancient Rome. 3 hrs.**
Explores the art and architecture or ancient Rome in light of social and religious influences. (PR: ART 202 with a minimum grade of *C* or permission)

413 **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. (PR: ART 202 with a minimum grade of *C* or permission)

414 **Art and Architecture of the Italian Renaissance. 3 hrs.**
Explores the art and architecture of the Italian Renaissance in the context of social and religious influences. (PR: ART 202 with a minimum grade of *C* or permission)

415 **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. (PR: ART 202 with a minimum grade of *C* or permission)

416 **Baroque Art. 3 hrs.**
Analyzes Baroque art and the social milieu that influenced, commissioned, financed, and produced it. (PR: ART 202 with a minimum grade of *C* or permission)

417 **Figure Sculpture. 3 hrs.**
Interpretive sculpture based on the gesture and structure of the human figure. A variety of stylistic persuasions and media will be explored according to individual interests. (PR: ART 298 or 299)

418 **Advanced Drawing. 3 hrs.**
Drawing problems designed and executed by the individual student, in a variety of media, to develop unique imagery and increased technical skill. (PR: ART 218)

419 **Textile Construction. 3 hrs.**
Explore various textile materials using ancient and contemporary processes and their applications in the development of 21st century crafts and products.

420 **Textile Design. 3 hrs.**
Textile design for possible commercial production, emphasizing creation of numerous fabric samples and limited amounts of yardage. (PR: ART 308)

421 **Product Design with Textiles. 3 hrs.**
This course explores the design and production of handmade textile objects. Students will learn functional product design and efficient ways to produce multiples.

422 **Digital Process for Textiles. 3 hrs.**
Students will use graphics software to produce original designs emphasizing the strength of these programs to quickly manipulate color palette, scale, and pattern to develop functional textiles for industrial use.

423 **Photographic Lighting. 3 hrs.**
Advanced course for students who have completely mastered the basics of photography. Covers basic studio setup, creative use of the studio situation in portraits, still life and photo illustration. (PR: ART 325; and ART 298 or 299)

424 **Woman and Art. 3 hrs.**
Explores the relationship of women to art historically; as artists, as subject matter, and as patrons/consumers. (PR: ART 202 with a minimum grade of *C* or permission)

425 **History of Photography. 3 hrs.**
Selected survey of the history of photography investiaging the prehistory and invention of photography, portraiture, landscape, social documentary, aesthetic and experimental practice, post-modernism, and the digital age. (PR: ART 202 or permission)

426 **19th Century Photo Processes. 3 hrs.**
Explores traditional photographic processes that were prevalent during the 19th century combined with contemporary practices using digital techniques. Emphasis on creative development and technical proficiency. (PR: ART 324 or ART 325; ; and ART 298 or 299)

427 **Photographic Portfolio/Exhibit. 3 hrs.**
Continued development of creative work with emphasis on preparation of portfolio and exhibition. (PR: ART 324 or 325; and ART 298 or 299)

440 **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. (PR: ART 316)

441 **Advanced Problems in Illustration. 3 hrs.**
Continued development of illustration with emphasis on personal style. (PR: ART 317; and ART 298 or 299)

442 **Monumental Sculpture. 3 hrs.**
Emphasis will be on the planning and production of fountains, architectural reliefs, and other large environmental sculptures. (PR: ART 307; and ART 298 or 299)

443 **Mixed Media and Assemblage Sculpture. 3 hrs.**
Combinations of found, fabricated, and mixed materials will be assembled into original sculpture compositions. (PR: ART 215, 307)

444 **Papermaking/Bookbinding. 3 hrs.**
The preparation and processing of fibers for papermaking including experiences in sheet forming, casting, laminating; also, traditional and experimental bookbinding methods as well as producing creative art forms. (PR: ART 298 or 299)

445 **Graphic Design for Corporate Identity. 3 hrs.**
Application of graphic design, including typography, photography and illustrations in developing and implementing identity systems. (PR: ART 314; and ART 298 or 299)

446 **Intermediate Potter's Wheel. 3 hrs.**
Continuation of Art 343. The student will master basic wheel and decorative processes developing a personal style in their work. (PR: ART 343; and ART 298 or 299)

447 **Combined Ceramic Processes. 3 hrs.**
Exploration of a variety of ceramic building and firing processes such as hand building, wheel, and slip casting. (PR: ART 305 or ART 343; and ART 298 or 299)

448 **Ceramic Materials and Processes. 3 hrs.**
Practical and empirical investigation of ceramic materials, techniques, and approaches to their use in clay and glazes. (PR: ART 305 or ART 343)

449 **Ceramic Sculpture. 3 hrs.**
Contemporary ideas and techniques of ceramic fired and unfired sculpture. (PR: ART 305; and ART 298 or 299)

450 **Two and Three Dimensional Design for Fabrics. 3 hrs.**
Exploring the potentialities of fabric as an art experience in two and three dimensional art form.

451 **Advanced Ceramics. 3 hrs.**
The advanced student will explore individual problems and interests in clay. (PR: ART 305 0r343; ; and ART 298 or 299)

452 **Three-Dimensional Graphic Design. 3 hrs.**
Graphics for display design and packaging. (PR: ART 316; and ART 298 or 299)

453 **Advanced Digital Media. 3 hrs.**
Hands-on experience with electronically generated images. Survey of recent developments in imaging technology. Topics may include computer graphics, video, and projected media. (PR: ART 298 or 299; or AM 299)

454 **Designing for Multimedia. 3 hrs.**
Current topics and techniques in multimedia design. Topics include animation, incorporating digital video and sound, interaction design, information design, Web site design and advanced image processing. (PR: ART 298 or 299; or AM 299)

455-456 **Painting: Acrylic and Oil. 3; 3 hrs.**
Study and practice of painting in expressing still life, landscape, and the human figure. (PR: ART 353; and ART 298 or 299)

457 **Figure Painting. 3 hrs.**
Painting the nude model using modern and classical methods. (PR: ART 353 or permission)

458 **Advanced Problems in Painting. 3 hrs.**
Refinement and development of individual concerns with content, form, and techniques in painting. (PR: ART 456)

459 **Digital Drawing and Painting. 3 hrs.**
Students will create conceptual illustrations for books, gaming, storyboards and movies by integrating traditional drawing and painting techniques with digital media. (PR: ART 298 or 299)

460 **History and Philosophy of Art Education. 3 hrs.**
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. (PR: ART 340)

463 **Advanced Intaglio Printmaking. 3 hrs.**
Development of individualized form using intaglio techniques and incorporating multiple colors, plates, assemblages, collagraphs, photo-etching, and mixed media. (PR: ART 301; and ART 298 or 299)

464 **History of Modern Design. 3 hrs.**
History of print and object design from the beginning of the nineteenth through the twentieth century will be studied in terms of art history, technology, politics, economics, and consumer behavior. (PR: ART 202 with a minimum grade of *C* or permission)

465 **Lithography. 3 hrs.**
Basic techniques of hand lithography, both stone and metal plate. (PR: ART 301; and ART 298 or 299)

466 **Curriculum Development for Public School Art K-12. 3 hrs.**
(Same as CI 466) Exploring considerations for curriculum development in art education; developing individualized curriculum for specific situations on grade levels K-6 or 7-12.

468 **Secondary Education: Teaching Art. 3 hrs.**
This course focuses on instructional standards and methods for teaching art at the secondary level with an emphasis on middle grades. A clinical experience provides observation and teaching.

470-473 **Practicum. 3 hrs.**
To be used for learning activities that involve the application of previously learned processes, theories, systems, or techniques.

475-479 **Advanced Studio Sequence. 3 hrs.**
To be used to complete studio specialization and may be repeated. By permission only.

480-483 **Special Topics. 1-4 hrs.**
To be used for experimental courses. By permission only.

485-488 **Independent Study. 1-4 hrs.**
To be reserved for tutorials, directed and independent readings, directed and independent research, problem reports, and other activities designed to fit the needs of individual students within the major.

489 **Graphic Design Portfolio. 2 hrs.**
This course will cover the preparation of a professional graphic design portfolio for presentation upon graduation. Included will be a resume development, printwork, and multimedia components. (PR: ART 316)

490 **Apprenticeship/Field Training. 1-3 hrs.**
Student is placed in a supervised work situation, offering the opportunity to perform professional design work. This will include 60 hours per each registered credit hour.

491 **Graphic Design Workshop. 3 hrs.**
Students in the workshop will engage in actual design problems with non-profit groups or small businesses to gain graphic design experience. (PR: ART 298 or 299)

498 **Senior Capstone Project BFA. 3 hrs.**
Students develop their creative visual productions and a supporting capstone statement that culminate in a public gallery exhibition. Art majors only. (PR: ART 390)

499 **Senior Capstone Project. 1 hr.**
Students document and exhibit their production from courses completed during their senior year in their areas of concentration. (PR: ART 298 or 299

ART EDUCATION

(Listed under Art and Design)

ARTS AND MEDIA (AM)

299 **Portfolio Review. 0 hrs.**
Students present work from major courses for review by video production teaching faculty. Successful completion of AM 299 is a prerequisite for advancing to additional coursework in the major.

490 **Video Internship. 1-3 hrs.**
For juniors or seniors to gain experience working with industry professionals; to be exposed to, understand, and work toward real deadlines, practice professionalism, and start networking to find a career.

498 **Senior Pre-Capstone. 3 hrs.**
A preparatory class for AM 499. Students will conceive, pl.an and start production of a culminating senior video project.

499 **Senior Capstone Project. 3 hrs.**
A discipline-based experience combining video production capabilities and range of knowledge outside the field, resulting in a culminating senior video project.

BIOLOGICAL SCIENCES (BSC)

104 **Introduction to Biology. 4 hrs.**
Fundamentals of biology with emphasis on the unity of life, energetics, genetics, evolution, classification of organisms in the kingdoms of life. Intended for non-science majors. Does not count toward a major in Biological Science. 3 lec-2 lab.

105 **Human Biology. 4 hrs.**
Fundamentals of biological human structure, function, and interactions with the environment. Intended for non-science majors. Does not count for health professions credit. 3 lec-2 lab.

111 **Life in the Universe. 4 hrs.**
An investigation of the prospects for the the existence of life elsewhere in our solar system, galaxy, and the wider universe. Includes an integrated 2-hour lab.

120 **Principles of Biology. 4 hrs.**
Study of basic biological principles common to all organisms through lecture and laboratory activities. Chemistry of life, cell biology, metabolism, heredity, and evolution. Intended for science majors and pre-professional students. 3 lec-2 lab. (PR: at least 21 on Math ACT, or *C* or better in MTH 121 or higher)

121 **Principles of Biology. 4 hrs.**
A continuation of the study of basic biological principles common to all organisms. Diversity of life, phylogeny, structure, function, and ecology. Intended for+ science majors and pre-professional students. 3 lec-2 lab. (PR: BSC 120; Grade of *C* or better in BSC 120 recommended)

227 **Human Anatomy. 4 hrs.**
Principles of gross and microscopic anatomy of human body systems and their development. Provides preparation for degrees in health professions. Does not count toward a major in Biological Sciences. 3 1ec-2 1ab. (PR: ACT composite 19 or higher or 12 hrs. college credit, 100 level or above with minimum GPA of 2.3)

228 **Human Physiology. 4 hrs.**
Basic concepts of human physiology, including an introduction to physiological control mechanisms operating at cellular, tissue, organ, and systems levels. Provides the scientific background for understanding pathophysiology. Open to candidates in BSN program. Does not count toward a major in Biological Science. 3 lec.-3 lab. (PR: BSC 227 with grade of *C* or better)

250 **Microbiology and Human Disease. 4 hrs.**
Introduction to microbiology with emphasis on the role of microorganisms in the disease process. Does not count toward a major in Biological Science. (PR: BSC 104 with grade of *C* or better or BSC 227 or equivalent with grade of *C* or better)

301 **Vertebrate Embryology. 4 hrs.**
Vertebrate development based chiefly on frog, chick and pig embryos. 2 lec-4 lab. (PR: BSC 121 with grade of *C* or better)

302 **Principles of Microbiology. 3 hrs.**
Basic microbiological techniques, fundamental principles of microbial action, physiological processes, immunology, serology, disease process. 2 lec.-4 lab. (PR: BSC 121 with grade of *C* or better)

304 **Microbiology Lab.**
A laboratory courses emphasizing basic microbiological techniques, including preparation of culture media, gram staining, isolation and identification of bacteria from diverse environments, and evaluation of antiseptics and disinfectants. (PR or CR: BSC 302)

310 **Comparative Vertebrate Anatomy. 4 hrs.**
Structure, function and relationships of systems of selected vertebrates with an emphasis on embryology and evolution. 2 lec.-4 lab. (PR: BSC 121 with grade of *C* or better)

312 **Invertebrate Zoology. 4 hrs.**
Survey of invertebrate phyla from protists through non-vertebrate chordates. Emphasis is placed upon identification of taxa, development, micro-anatomy, life histories and evolutionary relationship. (PR: BSC 121 with grade of *C* or better)

320 **Principles of Ecology. 4 hrs.**
A fundamental approach to the basic principles underlying the interrelationships of organisms with their biotic and abiotic environments. A variety of aquatic and terrestrial ecosystems will be studied in the field and in the laboratory. 3 lec-3 lab. (PR: BSC 121 with grade of *C* or better)

322 **Principles of Cell Biology. 4 hrs.**
A fundamental approach to the principles of cell biology covering the molecular basis of cellular structure and function, and gene regulation. Explores intercellular interactions, molecular interactions with modern cellular and molecular methods. 3 lec-3 lab. (PR: BSC 121 with a grade of *C* or better; CHM 355 recommended)

324 **Principles of Genetics. 4 hrs.**
The fundamental principles and mechanisms of inheritance. 3 lec-3 lab. (PR: BSC 121 with a grade of *C* or better; CHM 211 and 212 recommended)

365 **Introductory Biochemistry. 3 hrs.**
A survey course including introduction to basic biochemical concepts, metabolic pathways, and bioenergetics. (PR: BSC 121 with a grade of *C* or better *and* CHM 356)

401 **Ichthyology. 4 hrs.**
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)

406 **Herpetology. 4 hrs.**
Taxonomy, morphology, distribution, life history, and ecology of reptiles and amphibians with a special emphasis on representatives native to West Virginia. 2 lec-4 lab. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

408 **Ornithology. 4 hrs.**
An introduction to avian biology: identification, distribution, migration, and breeding activities of birds. 2 lec.-4 lab. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

409 **Mammalogy. 4 hrs.**
A study of the morphology, evolution and classification, ecology, zoogeography, behavior, and economic importance; survey techniques and recognition of native mammals of West Virginia. 3 lec-3 lab. and field. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

410 **Remote Sensing/GIS Applications. 4 hrs.**
A study of the physical systems for collecting remotely sensed data. Statistical/spacial analysis and modeling using image processing/geographic information/spatial computer software systems with earth resources applications. (PHY 203, 204 recommended)

411 **Digital Image Processing/GIS Model. 4 hrs.**
A study of image processing/geographic information/spatial analysis systems, concurrent and parallel image process, 3-D modeling scenarios utilizing geophysical data for computer simulation modeling. (PHY 203, 204 recommended)

412 **Biogeography For Biology Majors. 3 hrs.**
Biogeography studies distributions of animals and plants in space and time; it combines knowledge from evolutionary biology, ecology, zoology, botany, genetics, and conservation science with basics of geography and geology. (PR: BSC 320 or BSC 324)

413 **Principles of Organic Evolution. 3 hrs.**
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: BSC 302 *or* 320 *or* 322 *or* 324)

416 **Plant Taxonomy. 4 hrs.**
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 302 *or* 320 *or* 322 *or* 324)

417 **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. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

420 **Plant Physiology. 4 hrs.**
Experimental study of plant life processes to include applicable biophysical and biochemical principles, water relations, molecular biology, stress physiology, and growth and development. 3 lec-3 lab. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

422 **Animal Physiology. 4 hrs.**
Physiological principles operating in cells, organs, and systems of animals, with a focus on vertebrate, including human, function. 3 1ec-3 1ab. (PR: BSC322; CHM355; MTH140 or 132 or 229; or permission)

424 **Animal Parasitology. 4 hrs.**
Morphology, life histories, classification, and host relationships of common parasites. 2 lec-4 lab. (PR: BSC 302 *or* 320 *or* 322 *or* 324; or permission)

425 **Systematics. 3 hrs.**
Systematics 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). (CR/PR: BSC 121 with a *C* or better)

426 **Medical Entomology. 4 hrs.**
Role of certain insects and other arthropods in the transmission of disease organisms and methods of control. 2 lec.-4 lab. (PR: BSC 302 *or* 320 *or* 322 *or* 324; or permission)

428 **Neuroscience. 3 hrs.**
The fundamentals of cellular and systems neuroscience, with application toward understanding current research and biomedical problems. (PR: BSC 120 and one of the following with a *C* or better: BSC 322, BSC 422, CHM 355)

430 **Plant Ecology. 4 hrs.**
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. (PR: BSC 320)

431 **Limnology. 4 hrs.**
Study of inland waters; ecological factors affecting lake and stream productivity and various aquatic communities. (PR: BSC 320)

438 **Emerging Infectious Diseases. 3 hrs.**
Introduces students to infectious diseases that are either newly emergent or have returned to prominence within the last decade. (PR: BSC 302 *or* 320 *or* 322 *or* 324)

442 **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 *or* 320)

443 **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. (CR/PR: BSC 121 with a grade of *C* or better and BSC 302 with grade of *C* or better)

445 **Microbial Ecology. 3 hrs.**
This course introduces students to the vital roles that microbes play in sustaining life on earth. Includes both theoretical and practical concepts ranging from the origin of life to biodegradation. (PR: BSC 121 with grade of *C* or better and BSC 302 with grade of *C* or better))

446 **Microbial Ecology Lab. 2 hrs.**
A laboratory course emphasizing the recovery, cultivation, enumeration, and identification of bacteria from environmental samples. Also introduces students to molecular-based methods for studying microbial community structure and dynamics. (PR/CR: BSC 445 *or* permission)

448 **Introductory Immunology. 3 hrs.**
Comprehensive study of the molecules, cells, and processes of the immune system. Also covered are diseases with an immunologic basis and technological applications of immunological principles. (PR: BSC 322)

450 **Molecular Biology. 3 hrs.**
Advanced principles in molecular function emphasizing current research using recombinant DNA methodology. (PR: BSC 322)

454 **Principles of Advanced Techniques in Molecular Biology. 3 hrs.**
Students will gain an understanding of modern molecular biology through standard and novel methods and understand and criticize the published literature. Co-requisite/Prerequisite: BSC 450; BSC 452.

456 **Genes and Development. 3 hrs.**
Focuses on mechanisms of complex organismal development including cell specification, morphogenesis, and induction. Genetic manipulations of the model organism *Drosophila* will illustrate current information. (PR: BSC 322 *or* 324)

460 **Conservation Biology. 3 hrs.**
This course focuses on the North American model of wildlife conservation (and its history), principles of biological diversity, threats to habitats and species of concern, and conservation policy. (PR: BSC 320 *or* permission)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs., CR/NC**
(PR: Permission)

491 **Capstone Experience. 2 hrs.**
An independent study involving a research project, an internship, or a classroom-based capstone course. Must be approved by Biological Science Faculty. (PR: Junior/Senior Status)

BIOMEDICAL ENGINEERING (BME)

101 **Introduction to Biomedical Engineering. 1 hr.**
Students will be introduced to the interdisciplinary nature of Biomedical Engineering research and design through the use of lectures, discussions, homework and design projects.

201 **Biomedical Engineering Seminar. 2 hrs.**
Introduce students to contemporary issues and research in Biomedical Engineering. (PR: BME 101)

302 **Engineering Biomechanics. 3 hrs.**
The application of engineering mechanics and anatomy to study and anlyze human movement. Lectures and in-class labs will introduce students to experimental and theoretical techniques. (PR: ENGR 214, BSC 228; CR: BME 305)

305 **Introduction to Biophysical Measurement. 3 hrs.**
Biomedical Engineering involves measurement of physiological processes in living organisms. An understanding of the variety of instruments used and the limitations are introduced. (PR: BSC 228; CR: BME 302)

306 **Mechanics of Biological Tissue. 3 hrs.**
The mechanical properties of musculoskeletal tissues are presented along with modeling techniques and testing procedures. (PR: BME 302 BME 305, CR: BME 310)

310 **Modeling and Simulation Bio Systems. 3 hrs.**
Modeling and simulation of physiological systems and their interactions with therapeutic devices, such as the artificial kidney. (PR MTH 334, BME 302, ENGR 245; CR: BME 306)

405 **Mechanical and Performance Bio Materials. 3 hrs.**
Structure of materials and behavior, material selection and biocompatibility, failure modes of applied biomaterials, failure analysis and performance, body responses, immunological, cell and tissue interaction, toxicity and safety. (PR: BME 306)

460 **Mechanics of Biofluids. 3 hrs.**
I Introduction to the fundamentals of fluid mechanics and their application to biological, cardiovascular, respiratory and other biofluid systems. (PR: BME 302)

465 **Biomedical Engineering Capstone I. 2 hrs.**
The design process will be further discussed utilizing case studies and detailed biomedical engineering design projects. (PR: Senior standing; CR: BME 405)

466 **Biomedical Engineering Capstone II. 2 hrs.**
The design process will be further discussed utilizing case studies and detailed biomedical engineering design projects. Projects will be required to be interdisciplinary in nature. (PR: BME 465)

BUSINESS (BUSN)

141 **Business in the News (CT). 3 hrs.**
This critical thinking course examines current events in business and how they impact consumers, competition and the economy as a whole. Students are also introduced to business ethics.

CHEMISTRY (CHM)

(The Department of Chemistry is certified by the Committee on Professional Training of the American Chemical Society.)

109 **Chemistry in the Home. 4 hrs.**
Introduction to basic concepts of chemical science as it applies to materials commonly found within the household. Students will be expected to learn to evaluate potential hazards of such materials. (PR: MTH 121 or MTH 123 or MTH 127 or MTH 130 or MTH 229).

111 **Foundations of Chemistry. 3 hrs.**
This course will introduce students to basic chemical facts and concepts. Topics will include units, dimentional analysis, nomenclature, solutions, atomic structure, and stoichiometry. (PR: MTH ACT of 21 or better or *C* or better in MTH 127 or MTH 130)

204 **General Chemistry II. 3 hrs. II, S.**
A continuation of Chemistry 203 with emphasis on introductory organic and biochemistry. 3 lec. (PR: CHM 203)

205 **General, Organic and Biochemistry. 3 hrs.**
Introductory course for health professions students and non-science majors covering basic chemical principles with applications in organic chemistry and biochemistry.

211 **Principles of Chemistry I. 3 hrs. I, II, S.**
A study of the properties of materials and their interactions with each other. Development of theories and applications of the principles of energetics, dynamics and structure. Intended primarily for science majors and pre-professional students. 3 lec. (PR or CR: CHM 217; PR: MTH ACT of 23 or better or *C* or better in CHM 111 or pass placement exam)

212 **Principles of Chemistry II. 3 hrs. I, II, S.**
A continuation of Chemistry 211 with emphasis on the inorganic chemistry of the representative elements and transition metals. 3 lec. (PR: *C* or better in CHM 211; PR or CR: CHM 218)

217 **Principles of Chemistry Laboratory I. 2 hrs.**
A laboratory course that demonstrates the application of concepts introduced in Chemistry 211. (CR or PR: CHM 211)

218 **Principles of Chemistry Laboratory II. 2 hrs.**
A laboratory course that demonstrates the application of concepts introduced in Chemistry 212. (CR or PR: CHM 212)

218H **Principles of Chemistry Honors Laboratory II. 2 hrs.**
An advanced laboratory class designed for Principles of Chemistry II students. This lab will introduce students to concepts and/or techniques important to later laboratory classes and research. (CR or PR: CHM 212 and admission to the Honors College)

254 **Basic Concepts of Organic Chemistry. 3 hrs.**
An intensive review of chemical principles intended to better prepare students for organic chemistry (CHM 355). (PR: *C* or better in CHM 212)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

290H-291H Honors in Chemistry. 1-4 hrs.
Independent study or undergraduate research project for outstanding students. (PR: permission of department chair and admission to the Honors College)

305 **Research Methods in Chemistry. 1 hr. I.**
A course concerning the searching and use of the chemical literature, ethical issues relating to the conduct of scientific research, proposal writing, scientific presentations, and proper scientific laboratory conduct. (PR: *C* or better in CHM 356)

327 **Introductory Organic Chemistry. 3 hrs. I.**
A one semester introduction to organic chemistry emphasizing structure, nomenclature, and reactivity. (Cannot fulfill an upper division chemistry elective.) 3 lec. (PR: CHM 212).

331-332 **Chemistry Seminar. Credit. I, II.**
Students attend lectures presented by internal and external speakers to learn about the nature and variety of chemical research.

345 **Introduction to Analytical Chemistry. 4 hrs. I, S.**
Introduction to the basic techniques of analytical chemistry and data analysis through statistical procedures. Traditional wet and contemporary instrumental methods are covered with an emphasis on experimental care and craftsmanship. (PR: C or better in both CHM 212 and 218)

355 **Organic Chemistry I. 3 hrs. I, II, S.**
A systematic study of organic chemistry including modern structural theory, spectroscopy, and stereochemistry; application of these topics to the study of reactions and their mechanisms and applications to synthesis. 3 lec. (PR: C or better in CHM 212)

356 **Organic Chemistry II. 3 hrs. I, II, S.**
Continuation of Chemistry 355. 3 lec. (PR: C or better in CHM 355)

357 **Physical Chemistry: Quantum. 4 hrs. I**
A study of quantum mechanics applied to atomic structure, chemical bonding, and spectorscopy. 3 lec.-2 lab. (PR: *C* or better CHM 212, MTH 229, and PHY 211 or PHY 201)

358 **Physical Chemistry: Thermo. 4 hrs. II.**
A study of chemical thermodynamics, equilibrum, and kinetics. 3 lec.-2 lab. (PR: *C* or better CHM 212, MTH 229, and PHY 211 or PHY 201)

361 **Introductory Organic Chemistry Lab. 3 hrs. I, II, S.**
An introduction to experimental organic chemistry with emphasis on fundamental techniques and their application to the preparation and identification of organic compounds. 6 lab. (PR or CR: CHM 356)

361H Introductory Honors Organic Chemistry Lab. 3 hrs.
This laboratory will introduce students to advanced concepts and tehniques in organic synthesis and spectroscopy. It requires students to engage in an independ synthetic project from the chemical literature. (PR or CR: CHM 356, and admission to the Honors College)

365 Introductory Biochemistry. 3 hrs. I, S.
A survey course including introduction to basic biochemical concepts, metabolic pathways, and bioenergetics. 3 lec. (PR: C or better in either CHM 327 or CHM 356)

366 Introductory Biochemistry Laboratory. 2 hrs. II.
Introduction to basic biochemical laboratory techniques including chromatography, electrophoresis, and enzyme kinetics; methods for identification and characterization of biochemical systems. 4 lab. (PR: *C* or better in CHM 365)

390H-391H Honors in Chemistry. 1-4 hrs.
Independent study or undergraduate research project for outstanding students. (PR: permission of department chair and admission to the Honors College)

401 Research for Undergraduates. 1-4 hrs. I, II, S.
Students engage in a research project in collaboration with a faculty member. (PR: Permission of instructor and department chair; CHM 345 or 358 depending on area of interest)

411 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 applicability of various techniques to specific analytical problems. (PR: *C* or better in CHM 357 or 358)

423 Environmental Analytical Chemistry. 4 hrs.
Sampling and modern instrumental analysis of water, air and sediments according to EPA methodology. For students enrolled in the B.S.; Major in Environmental Chemistry program. (PR: C or better in CHM 411)

428 Introduction to Forensic Science Methods. 3 hrs.
Introduction to crime scene investigation, physical evidence collection, serology and DNA technologies (PCR, RFLP). Discussion of statistical, analysis of DNA and managing a DNA database, using CODIS as an example. (PR: CHM 365 and either BSC 322 or 324)

431 Chemistry Seminar. Credit I, II.
A graduation requirement for all seniors enrolled in the B.S. in Chemistry program. 1 lec.

432 Chemistry Seminar. Credit I, II.
Students attend lectures presented by internal and external speakers to learn about the nature and variety of chemical research. Students also present oral and written presentations of their capstone experiences. 1 lec. (PR: CHM 490 or CHM 491)

448 Advanced Inorganic Chemistry I. 4 hrs.
Study of physical properties and periodic relationships of inorganic materials. 3 lec.-2 lab. (PR: CHM 356 and either 357 or 358)

449 Advanced Inorganic Chemistry II. 3 hrs.
A detailed consideration of bonding, structure, reaction rates and equilibrium involving inorganic materials, 3 lec. (PR: CHM 448)

451 Biological Mass Spectrometry. 4 hrs.
This course investigates the theory and applications of mass spectrometry. It includes a laboratory component in which you will learn to run the mass spectrometers and interpret mass spectral results. (PR: CHM 357 or 358 with a *C* or better)

465 Advanced Organic Chemistry I. 3 hrs. I.
Studies of the dynamics of organic reactions with emphasis on mechanisms and stereochemistry. 3 lec. (PR: *C* or better in CHM 356)

466 Advanced Organic Chemistry II. 3 hrs. II.
A continuation of Chemistry 465 with emphasis on synthetic methods. 3 lec. (PR: *C* or better in CHM 465)

467 Intermediate Biochemistry. 3 hrs. II.
An intermediate level discussion of the biochemistry of mammalian cells. (PR: *C* or better CHM 365)

480-483 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.

485-488 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.

490 Chemistry Internship. 1-6 hrs. I, II.
Students engage in supervised chemical laboratory work in a professional setting. (PR: 8 hours of required 300/400 chemistry classes and pre-approval of project by instructor)

491 Capstone Experience. 2-4 hrs. I, II.
Students engage in a collaborative research project with a faculty member. (PR: 8 hours of required 300/400 chemistry classes and pre-approval of project by instructor)

495H-496H Honors in Chemistry. 3-4; 3-4 hrs. I, II, S.
Open only to chemistry majors of outstanding ability. (PR: permission of department chair and admission to the Honors College)

CIVIL ENGINEERING (CE) EMPHASIS

102 Introduction to CAD. 2 hrs. II.
An introduction of scales, plan reading, engineering graphics and computer aided design (CAD). Introduction to the operation of modern 2D and 3D CAD software used in civil engineering applications. 2 lec. (CR: MTH 127, 130, 132, 229, or 229H)

241 Introduction to Geomatics. 4 hrs. I.
Introduction to methods and tools used to measure, analyze, and present surveying data: horizontal distances, elevation, angles, areas, and volumes. Includes both field and CAD lab exercises. 3 lec.-3 lab. (PR: CE 102 and ENGR 111)

312 Structural Analysis. 3 hrs. I.
Stability and determinacy of civil engineering structures. Forces and deflections in statically determinate trusses, beams, and frames. Influence lines for planar structures. Elementary indeterminate structural analysis. Computer applications. 3 lec. (PR: ENGR 213; Concurrent PR: ENGR 216)

319 Civil Engineering Fluid Mechanics Lab. 1 hr. I.
Laboratory experiments to support study of civil engineering fluid mechanics, including fluid properties, buoyancy, hydrostatic forces, flow visualization , jet impact, pipe flow, and open channel flow. 3 lab. (PR: ENGR 214 and MTH 231; CR: ENGR 318)

321 Civil Engineering Materials. 4 hrs. I.
The study of civil engineering materials; metals and alloys, mineral aggregates, cements, concrete and concrete products, bituminous materials, lumber and timber. Laboratory testing of materials. 3 lec.-3 lab. (PR: ENGR 216)

322 Geotechnical Engineering. 4 hrs. II.
The study of the engineering behavior of soils. Soil compaction, consolidation, settlement, shear strength, lateral earth pressures, bearing capacity and slope stability. Laboratory testing of soil composition and properties. 3 lec.-3 lab. (PR: ENGR 216, GLY 200)

331 Hydraulic Engineering. 3 hrs. II.
Hydraulic flow in pipe networks, water hammer, surge tanks, pumps and turbines. Basic open channel flow. Storm and sanitary sewer design. Dams and reservoirs. 3 lec. (PR: ENGR 318)

341 Advanced Geomatics. 3 hrs. I.
Introduction to advanced geo-spatial data collection instrumentation, processes and capabilities. Goe-spatial data display, integration and analyses software tools are preseented and utilized in a lecture/lab format. 3 lec. (PR: CE 241 or permission)

342 **Transportation Engineering. 3 hrs. II.**
Introduction to transportation systems: highway, rail, water, and air transportation; organization and administration; vehicle and human characteristics; rectilinear and curvilinear vehicle motion; location, design and planning of transportation systems. 3 lec. (PR: CE 241)

351 **Environmental Engineering. 3 hrs.**
Environmental issues, problems, and evaluation methodology; fundamental concepts in pollution modeling and control, and engineering management approaches; material transport, balance, and separations; kinetics and reactor design. 3 lec. (PR: ENGR 318, CHM 212)

413 **Reinforced Concrete Design. 3 hrs. II.**
Behavior and design of reinforced concrete elements according to ACI 318 Design of beams, one-way slabs, columns, and beam-columns based on strength and serviceability requirements. 3 lec. (PR: CE 312)

414 **Structural Steel Design. 3 hrs. II.**
Behavior and design of structural steel elements according to AISC 360. Design of tension members, bolted and welded connections, columns, beams, and beam-columns based on strength and serviceability requirements. 3 lec. (PR: CE 312)

421 **Groundwater & Seepage. 3 hrs.**
Fundamentals of groundwater flow; permeability; seepage principles; flownet interpretation; analytical and numerical solutions of confined and unconfined flows; filter design; geofabrics; subsurface drainage; groundwater contamination; disposal systems. (PR: CE 322)

425 **Foundation Engineering. 3 hrs. I.**
Earth pressure theories and design of earth retaining structures. Design of shallow and deep foundations. Settlement analysis. Slope stability analysis. Soil and site improvement. Subsurface exploration; design project. (PR: CE322)

433 **Hydrologic Engineering. 3 hrs. I.**
Introduction to the water cycle, including precipitation, evaporation, infiltration, and runoff. Methods of modeling surface runoff, routing, and floodplain analysis. Computerized design of culverts, storm sewers, and watershed modeling. (PR: CE 331)

434 **Water and Wastewater Treatment Design. 3 hrs. II.**
Physical, chemical, and biological principles and water and wastewater treatment. Design of treatment systems, including flocculation, sedimentation, disinfection, activated slidge, fixed-growth, and solids treatment. Includes bench-scale demonstrations of treatment steps. 3 lec. (PR: CE 351)

443 **Transportation Systems Design. 3 hrs. I.**
Application of transportation engineering principles to evaluate existing transportation systems and design necessary improvements. Transportation systems include roadway segments, intersections, sidewalks, and interchanges. Course includes a design project. 3 lec. (PR: CE 342)

480-483 **Special Topics in Civil Engineering. 1–4 hrs.**
Current topics in civil engineering to be selected depending on the interest of students and faculty. (PR: Senior Standing)

CLASSICS (CL)

General humanities courses, taught in English, open to all students at the academic level listed.

200 **Building English Vocabulary Through Latin and Greek. 3 hrs. I, II.**
Study of Latin and Greek word elements to build skill in English vocabulary, both general and technical (or scientific-medical).

210 **Love and War in the Ancient World (CT). 3 hrs.**
Taught in English, this course examines the themes of love and war in Greek and Roman poetry and prose.

230 **Ancient Greek and Roman Epic (taught in English). 3 hrs., I or II.**
Introduction to the genre of ancient epic through reading Homer's Iliad and Odyssey and Vergil's Aeneid (or other ancient epics). (PR: ENG 101 or YGS 161)

231 **Women in Greek and Roman Literature. 3 hrs. I or II.**
Taught in English, a thematic study of women in Greek and Roman literature focusing on how a culture's attitudes towards women reflect social, political or ethnic concerns. (PR: ENG 101 or YGS 161)

232 **Ancient Greek and Roman Drama (CT). 3 hrs. I or II.**
Taught in English, this is an introduction to Greek and Roman dramatic genres of tragedy and comedy using selected plays of Aeschylus, Sophocles, Euripides, Aristophanes, Seneca, Plautus, and Terence. (PR: ENG 101 or YGS 161)

233 **Greek and Roman Historians (CT). 3 hrs. I or II.**
Taught in English, this is a thematic study of Greek and Roman historiography by topic as much as by historian, including ancient rhetorical sources on the theory of history. (PR: ENG 101 or YGS 161)

234 **Greek and Roman Poetry (CT). 3 hrs.**
Taught in English, this course examines three periods of Greek and Roman poetry: the Archaic and Hellenistic Ages of Greece, and the Golden Age of Rome.

235 **The Ancient Novel. 3 hrs.**
Taught in English, this course introduces students to the genre of ancient novel through selected examples by Heliodorus, Longus, Achilles Tatius, Xenophon of Ephesus, Petronius, Apuleius, or others. (PR: ENG 101 or YGS 161)

236 **Murder in the Ancient World (CT). 3 hrs.**
Taught in English, this is a thematic study of the topic of murder as it appears in the genres of tragedy, oratory and history. (PR: ENG 101 or YGS 161)

237 **Literature in the Time of Nero (CT). 3 hrs.**
Taught in English this course examines the literature of the first century, CE, and includes the writings of Lucan, Petronius, Seneca, Martial, Juvenal and Tacitus. (PR: ENG 101 or equivalent)

250 **Studies in Humanities. 3 hrs. I, II**.
An interdisciplinary course to introduce students to the elements of a humanistic education. (Same as Philosophy 250 and Religious Studies 250; PR or CR: ENG 101)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Selected topics not covered in regular course offerings. (PR: Permission of department chairman)

319 **Classical Mythology. 3 hrs. I, II.**
Study of the development of myth in ancient Greece and Rome; its place in ancient culture and its survival in the modern world. (PR: ENG 101 or YGS 161)

320 **Love and Friendship in Ancient Greek and Roman Literature. 3 hrs.**
A literary survey of ancient Greco-Roman love and friendship as shaped by family, marriage, religion, philosophy and politics. Ancient and modern texts read. (PR: ENG 101 or YGS 161)

326 **Classical Archaeology. 3 hrs. I or II.**
Archaeology of ancient Greece and Rome, and their colonies and their imperial domains. (Same as Anthropology 370.) (PR: ENG 101 or YGS 161)

390-394 **Junior Seminar in Humanities. 3 hrs.**
A structured interdisciplinary study offered by the departments of Classics, Philosophy, and Religious Studies in the foundations of human thought, myth, literature, religion, philosophy, and art (Same as PHL 390-394 and RST 390-394). (CR/PR: ENG 102, 201, 302, 201H,YGS 152, IST 201, or one course from CL 231, 232, 233, 319, PHL 200, 201, 303, 321, 340, 353, RST 205, 206, 300, 304, 320, 325)

435 **Greek Civilization. 3 hrs. II.**
Study of ancient Greek culture, emphasizing parallels with present-day issues. (PR: ENG 101 or YGS 161)

436 **Roman Civilization. 3 hrs. II.**
Study of ancient Roman culture, emphasizing parallels with present-day issues. (PR: ENG 101 or YGS 161)

460 **Ancient Goddess Religions. 3 hrs.**
Study of the mythology and cults of the goddesses of Greece, Asia Minor, Crete and Rome, with a view to discovering cultural contexts.

470 **Transformations of Myth. 3 hrs.**
An examination of how ancient myth transforms into the psychological and fictional works of more modern times.

471 **Ancient Sexuality. 3 hrs.**
A comprehensive study of current theories about Greek and/or Roman sexualities and evaluation of the evidence, textual and otherwise, to which these theories apply. (PR: ENG 201 or 201H)

472 **Rhetoric of Seduction. 3 hrs.**
Taught in English, this course investigates the overlap of public and private persuasion through reading philosophical, political and romantic works, and analyzing contemporary campaigns.

473 **Body, Sex and Violence in Rome. 3 hrs.**
This class aims to explore the gross violation of the boundaries of the Roman body sexually, politically and socially, and how that symbolizes a breakdown of identity, personally and nationally. (PR: ENG 101 or equivalent)

475 **Roman Law. 3 hrs.**
Taught in English, this course provides an introduction to basic tenets of Roman law with particular attention to court cases and speeches.

476 **Rome: The Eternal City. 6 hrs.**
On-site study of the archaeology and material culture of ancient Rome in its social, literary and historical context. Taught in English in Rome, Italy (students fund their own travel). (PR: ENG 101, CL 436 and permission)

477 **Reacting to the Past: Greece and Rome. 3 hrs.**
Reacting to the Past: Greece and Rome is a semester-long game/simulation where students play historical characters in Athens in 403 B.C., then in Rome just after Julius Caesar's assassination. (PR: ENG 101, CMM 103)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Topics like "Values in Ancient Greece/Rome" or "The Cult of the Leader in Ancient Greece/Rome" have recently been offered. Consult chairman for current offerings. (PR: Departmental permission) (PR: ENG 101 or YGS 161)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490-494 **Senior Seminar in Humanities. 3 hrs.**
Designed for majors as a senior humanities seminar and the culminating interdisciplinary study in the Humanities program. (Same as PHL 490-494 and RST 490-494.) (CR/PR: ENG 201 or 201H, YGS 152, IST 201, or one course from CL 231, 232, 233, 319, PHL 200, 201, 303, 321, 340, 353, RST 205, 206, 300, 304, 320, 325)

495H-496H **Readings for Honors in Classics. 4; 4 hrs. I, II.**
Open only to students of outstanding ability. See Honors Courses.

CLINICAL LABORATORY SCIENCES (CLS)
(MLT Associate Degree Program and MLS Bachelor's Degree Program)

100 **Introduction to Health Professions. 1 hr. CR/NC. I.**
Introduction to health sciences careers and professions, emphasizing programs at Marshall University. Features practitioners involved in health care delivery and educational programs.

105 **Medical Terminology and Introduction to Laboratory Medicine (CT). 3 hrs.**
An introductory course for students to develop critical thinking skills and apply them to medical and laboratory terminology concepts and other health care topics related to laboratory medicine.

200 **Clinical Biochemistry. 4 hrs. I.**
Theory and practice of clinical laboratory testing of serum, plasma, urine, body fluids in disease diagnosis. 3 lec-3 lab. (PR: CHM 211, 212, min. 2.0 GPA, with *C* grade in MTH 120, and permission)

210 **Clinical Immunohematology. 4 hrs. II.**
Theory of immune mechanisms in the body and applications for diagnostic testing and blood transfusion. 3 lec-3 lab. (PR: CLS 110, 200, and permission)

220 **Clinical Microbiology. 4 hrs. II.**
A study of bacterial, fungal, and parasitic related diseases, including diagnostic approach and techniques. 3 lec-3 lab. (PR: CLS 200, permission)

230 **Clinical Hematology. 4 hrs. I.**
Theory and practice of clinical laboratory tests of red and white blood cells, as well as blood clotting. 3 lec-3 lab. (PR: BSC 227 or equivalent with minimum *C*; minimum 2.0 GPA, and permission)

255 **Clinical Laboratory Problems. 3 hrs. II.**
Case studies of instrumental and diagnostic problems encountered by the laboratory technician. 3 lec. (PR: CLS 110, 200, permission)

270 **Clinical Practicum, Hematology. 3 hrs. S, I.**
Total of 4 weeks (160 hours) of hospital-based practice, performance of diagnostic tests of blood cells, urine, coagulation, and clinical microscopy under supervision. One of four courses, CLS 270-273, taken concurrently. (PR: CLS 255, permission)

271 **Clinical Practicum, Chemistry. 3 hrs. S, I.**
Total of 4 weeks (160) hours of hospital-based supervised practice performing diagnostic tests on body fluids using chemical methods. One of four courses, CLS 270-273, taken concurrently. (PR: CLS 255, permission)

272 **Clinical Practicum, Immunohematology. 3 hrs. S, I.**
Total of 3 weeks (120 hours) of hospital-based supervised practice performing blood typing, antibody screening and identification, and conduct of pre-transfusion tests. One of four courses, CLS 270-273, taken concurrently. (PR: CLS 255, permission)

273 **Clinical Practicum, Microbiology. 3 hrs. S, I.**
Total of 4 weeks (160 hours) of hospital-based supervised practice performing isolation, identification, and susceptibility testing of bacteria, fungi, and parasites. One of four courses, CLS 270-273, taken concurrently. (PR: CLS 255, permission)

285-288 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs. S, I, II.**
(PR: Permission)

310 **Clinical Immunology and Molecular Diagnosis. 3 hrs. II.**
Theory and practice of basic human immunoloyg and genetics as applied to clinical laboratory diagnostic and treatment procedures. Emphasizes use of immunoglobulin and DNA as diagnostic tools. (PR: CLS 210)

400 **Advanced Clinical Chemistry. 2 hrs.**
Advanced theory, practice, problem solving, and critical thinking in the laboratory specialty of clinical chemistry. (PR: CLS 200, permission)

410 **Advanced Clinical Immunohematology. 2 hrs. I.**
Advanced theory in clinical immunohematology. Students learn in-depth diagnostic work-up problem solving involving patients with anemia, leukemia, and bleeding disorders. (PR: CLS 272, CLS 310)

420 **Advanced Clinical Microbiology. 2 hrs. I.**
Advanced theory, practice, problem solving, and critical thinking in the laboratory specialty of diagnostic microbiology. (PR: CLS 271, 273, 310)

430 **Advanced Clinical Hematology. 2 hrs.**
Advanced theory in clinical hematology. Students learn in-depth diagnostic work-up problem solving involving patients with anemia, leukemia, and bleeding disorders. (PR: CLS 230, permission)

460 **Clinical Laboratory Management and Education. 3 hrs. I.**
Laboratory personnel and resource management, cost control, cost analysis, lab marketing, accreditation and CLS education practices. (PR: ECN 200 and permission)

464 **Clinical Laboratory Instrumentation and Information Systems. 3 hrs. I.**
Principles of instrumental electronics and data systems; interpretation of instrumental outputs, troubleshooting, computerized statistical methods. 3 lab. (PR: PHY 201-204 and CLS 272)

466 **Diagnostic Physiology. 2 hrs. II.**
Pathologic aspects of laboratory medicine with case studies, diagnostic problem solving, student projects. 3 lec. (PR: CLS 270-273, permission)

468 **Clinical Laboratory Research. 2 hrs. II.**
Directed independent research in the hospital laboratory setting during 16-week period. Capstone experience, writing intensive. (PR: CLS 450-466, permission; CR: CLS 472, CLS 472, CLS 491)

472 **Advanced CLS Clinical Practicum I. 1-3 hrs. II.**
Advanced theory, practice, problem solving, and critical thinking in the clinical laboratory areas of clinical hematology and/or transfusion services. (CR: 473; PR: CLS 410)

473 **Advanced CLS Clinical Practicum II. 1-3 hrs. II.**
Advanced theory, practice, problem solving, and critical thinking in the clinical laboratory areas of clinical chemistry and/or clinical microbiology. (CR: CLS 472; PR: CLS 421)

480-483 **Special Topics. 1-4 hrs. I, II, S.**
(PR: Permission)

485-488 **Independent Study. 1-4 hrs. S, I, II.**
(PR: Permission)

499 **Seminar: Readings in Laboratory Medicine. 2 hrs. II.**
For Medical Laboratory Science students. Students and faculty present and critique articles from recent clinical laboratory-related publications. (PR: CLS 468)

COMMUNICATION DISORDERS (CD)

101 **Introduction to Communication Disorders. 3 hrs.**
Introduction to the field of Communication Disorders for majors. Discussion of the various communication disorders, as well as the roles and responsibilities of the speech-language pathologist.

228 **Language and Speech Development. 3 hrs.**
Theories of language acquisition; sequential patterns in the acquisition of prelinguistic communication, speech and language in relationship to general child development. (PR/CR: CD 101)

229 **Anatomy and Physiology of the Speech and Hearing Mechanism. 3 hrs.**
Introduction to the anatomy and physiology of the speech and hearing mechanism and the neurological system. (PR/CR: CD 101)

239 **Phonetics. 3 hrs.**
Introduction to articulatory phonetics; study of the International Phonetic Alphabet and practice in broad transcription of normal and disordered speech; discussion of social dialects. (PR/CR: CD 101)

241 **Introduction to Communication Science. 3 hrs.**
A survey of the physical and psychophysical bases of communication with discussion of elementary communication models. (PR/CR: CD 101)

322 **Developmental Speech Disorders. 3 hrs.**
Introduction to developmental speech disorders; etiologies and symptoms; principles of assessment and treatment.(PR: admission to program and permission of advisor) (PR: Permission of advisor)

328 **Developmental Language Disorders. 3 hrs.**
Introduction to theoretical bases of developmental language disorders; etiologies and symptoms; principles of assessment and treatment. (PR: Permission of advisor)

330 **Acquired Communication and Swallowing Disorders. 3 hrs.**
Introduction to acquired disorders; etiologies and symptoms; principles of assessment and treatment. Emphasis on communication and swallowing disorders resulting from CVA, traumatic brain injury, the dementias, and other neurological disorders. (PR: Permission of advisor)

370L **Field Experience: Speech and Language. 3 hrs.**
Experience with preschool age children; planning and implementing speech and language stimulation activities. (PR: Permission of advisor)

401 **Inquiry in Communaication Disorders. 1-3 hrs.**
Course designed to expose undergraduate students to research in the field of CD through participation in a Community of Research Practice and individual study under the guidance of a mentor. May be repeated for credit, not to exceed a total of 12 credit hours. (PR: Permission of advisor)

415 **Professional Literacies for SLP's. 3 hrs.**
Investigation into contemporary understandings of literacy using current communication and information technologies and resources. Capstone experience. (PR: Permission of advisor)

420 **Voice and Fluency Disorders. 3 hrs.**
Introduction to voice and fluency disorders; etiologies and symptoms; principles of assessment and treatment. (PR: Permission of advisor)

424 **Diagnostic Processes with Communication Disorders. 3 hrs**.
Examination of assessment procedures for differential diagnosis of various communication disorders; a study of symptom complexes; interpretation of diagnostic data. (PR: Permission of advisor)

424L **Diagnostic Processes Laboratory. 1 hr.**
Observation and practice in evaluating individuals with communication disorders. (PR: Permission of advisor)

427 **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 advisor)

460 **Basic Audiology. 3 hrs.**
Introduction to hearing disorders; examination of the auditory system, psychophysical processes and preferred practice and procedures for assessment. Includes laboratory. (PR: Permission of advisor)

461 **Sign Language for the SLP. 3 hrs.**
Introduction to basic signs and finger spelling. Overview of different sign systems. (PR: permission of advisor)

463 **Aural Rehabilitation. 3 hrs.**
Examination of various intervention strategies appropriate for individuals with hearing impairments; techniques for assessing degree of handicap. (PR: Permission of advisor)

470L **Therapeutic Procedures Laboratory. 2 hrs. CR/NC.**
Guided and independent observation and analysis of the clinical process. (PR: Permission of advisor)

472 **Clinical Practicum with School Children. 6 hrs. CR/NC**
Supervised clinical practice with school-aged children; fulfills student teaching requirements for West Virginia Certification as a Speech Language Pathologist. (PR: Permission of advisor)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of advisor)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of advisor)

495H-496H **Readings for Honors in Communication Disorders. 1-4 hrs.**
Open only to CD majors of outstanding ability. (PR: Permission of advisor)

COMMUNICATION STUDIES (CMM)

103 **Fundamentals of Speech Communication. 3 hrs.**
A course designed to enhance the development of critical thinking skills and their application to verbal and nonverbal interaction in interpersonal and public communication contexts.

104H **Honors in Speech Communication. 3 hrs.**
An accelerated course for selected freshmen and sophomores in fundamentals of communication, concepts and skills in verbal/nonverbal communication and listening. (Substitute for CMM 103) (PR: Admission to Honors College)

201 **Communication Foundations (CT). 3 hrs.**
Develops essential skills in reading and critically analyzing scholarly texts, and in writing academic papers.

205 **The Rhetorical World (CT). 3 hrs.**
An introduction to the study of rhetoric as a cultural force in influencing human behavior and societies and as a critical approach to interpreting cultural artifacts. (PR: CMM 103, 104H, or 207).

207 **Business and Professional Communication. 3 hrs.**
A study of the communication demands and skills relevant to the student's future role as a business or professional person.

213 **Fundamentals of Interpersonal Communication. 3 hrs.**
Introduction to principles and practices related to productive interpersonal communication. Emphasizes competence in using verbal and nonverbal message systems to promote effective communication in social and task relationships.

239 **Development and Appreciation of Film. 3 hrs.**
The historical development of the motion picture as an art form. Analysis of the technical, social, economic and cultural factors that have influenced the medium.

240 **Voice and Diction. 3 hrs.**
Theory and practice of speech production and improvement. (PR: CMM 103)

255 **Introduction to Computer-Mediated Communication. 3 hrs.**
Use and implications of telecomputing for messaging, resource finding, and self-directed discovery learning.

270-271 **Intercollegiate Debate. 1; 1 hr.**
May be repeated 3 times for credit. (PR: Permission of instructor)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of department chair)

285-288 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of chair)

297-298 **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.

302 **Professional Presentations. 3 hrs.**
Designed for present and future demands on skilled presenters of information. Included in the teaching of advanced oral presentation skills, computer assisted/aided presentations, teleconferencing and other presentational skills. (PR: CMM 103, 104H, or 207)

303 **Introduction to Communication Theory. 3 hrs.**
Analysis of the process of communication and its constituent elements, with emphasis upon traditional and contemporary theories, their validation, and their use as a tool in diagnosis and remediation of communication problems. (PR: CMM 103, 104H, 207, 213, or YGS 161).

307 **Political Communication. 3 hrs.**
Investigation of the functions, ethics, responsibilities and social impact of oral communication in periods of social unrest and/or political change. (PR: CMM 103, 104H, 207, or 213)

308 **Persuasive Communication. 3 hrs.**
Introduction to the understanding, practice and analysis of persuasion. Behavioral and rhetorical theories of persuasion will be examined and applied to contemporary persuasive communications. (PR: CMM 103, 104H, or 207)

310 **Argumentation and Debate. 3 hrs.**
Basic principles of argument; practice in discussion and debate. Recommended but not a prerequisite for intercollegiate debating. (PR: CMM 103, 104H, or 207)

311 **Language and Communication. 3 hrs.**
This course explores how language works in human discourse by examining the game of languages: its players, strategies, and hidden rules.

315 **Group Communication. 3 hrs.**
Study of group communication processes, including problem solving, systems of group communication analysis and evaluation, in task oriented groups. (PR: CMM 103, 104H, or 207)

316 **Legal Communication. 3 hrs.**
The theory and practice of legal communication techniques. The course will examine interviewing skills, negotiation skills, argument preparation skills, presentation skills, and cross examination skills, Recommended for pre-law students. (PR: CMM 103, 104H, or 207)

319 **Superior-subordinate Communication. 3 hrs.**
Survey of principles underlying communication between superiors and subordinates in organizations. Emphasis placed upon communication strategies regarding role definition, performance feedback, development and maintenance of relationships, conflict management, leadership, decision making. (PR: CMM 103, 104H, or 207)

320 **Oral Interpretation of Literature. 3 hrs.**
The fundamentals of reading, analyzing, and interpreting literature.

322 **Intercultural Communication. 3 hrs.**
A study of the barriers to communication across cultures and of strategies for addressing these problems. (PR: CMM 103, 104H, or 207)

330 **Performance Theory. 3 hrs.**
This course will focus on the study of performance practices that function as enactments of cultural identity. General topics will include performance as a cultural process, performance in social roles, and performance as power. The subject matter will draw upon historical and contemporary art forms, public rituals and celebrations, ethnographic studies, and film/video documentaries. (PR: CMM 103, 104H or 207)

345 **Listening and Feedback. 3 hrs.**
A study of listening/feedback behavior as an integral part of the communication process, development of listening/feedback skills, and an awareness of barriers to effective listening and feedback. (PR: CMM 103, 104H, or 207)

370-371 **Intercollegiate Forensics 1; 1 hr.**
Continuation of CMM 270-271. May be repeated 3 times for credit. (PR: Permission of instructor)

374 **Introduction to Health Communication. 3 hrs.**
Surveys interpersonal, public, and organizational health communication theories and findings; explores the communication demands of health care and promotion, communication issues in health systems, and strategies to resolve problems.

401 **Organizational Communication. 3 hrs.**
Investigation of information flow in organizations with emphasis on identifying communication problems. (PR: CMM 303)

402 **Rhetorical Theory. 3 hrs.**
An exploration of theories of rhetoric from the Greek philosophers to the present. This course will examine the strategic use of symbols in persuasive discourse.

403 **Nonverbal Communication. 3 hrs.**
This course will explore the areas and significance of nonverbal communication as they relate to the quality and effectivenss of human interaction in personal, social, and professional relationships.

404 **Rhetorical Communication Criticism. 3 hrs.**
An examination of the construction of rhetorical texts and the effects they produce.

406 **Interviewing. 3 hrs.**
Skill development in the question-answer-response process as it applies to a variety of interviewing situations.

408 **Leadership and Group Communication. 3 hrs.**
A study of the variables affecting, and affected by, communication process in small groups, with particular emphasis upon leadership variables. (PR: CMM 315)

409 **Theories of Persuasion and Change. 3 hrs.**
Study of the relationship between persuasion and social change, including theories of attitude and behavioral change and contemporary theories of persuasion.

411 **Communication Study and Research. 3 hrs.**
Introduction to the advanced study of theory and research areas with emphasis on communication research methods and reporting. (PR: Senior majors in Communication Studies; CMM 303)

413 **Theories of Interpersonal Communication. 3 hrs.**
A survey and analysis of theories related to interpersonal communication in relationships. Emphasis is on the communication processes and contingencies underlying relationship development, maintenance, and disengagement in various interpersonal contexts. (PR: CMM 213)

420 **Communication and Conflict. 3 hrs.**
An exploration of the theory, research, and practice of communication in understanding and negotiating interpersonal conflict.

421 **Gender and Communication. 3 hrs.**
An exploration of gender as an organizing principle for communication.

441 **Development and Appreciation of Film Since 1930. 3 hrs.**
Study of important directions in modern film, including style, genre, and the relationship to contemporary society. A variety of films will be viewed for analysis.

450 **Direction of Speech Activities. 3 hrs.**
Direction of extracurricular speech activities: assemblies, forensic events, etc.

456 **Computer-Mediated Communication. 3 hrs.**
This course explores the impact of computer-mediated communication on human organization.

474 **Health Communication in Interpersonal Contexts. 3 hrs.**
Investigates communication in establishing effective interactions between health providers, patients, and families. Explores theories and findings in relationship development, decision making, intercultural communication, social support, advocacy, and family relationships.

476 **Communication for Classroom Teachers. 3 hrs.**
Knowledge and utilization of interpersonal communication skills in all teaching-learning environments.

478 **Senior Seminar. 3 hrs.**
Capstone experience. The development, organization, revision and presentation of major projects that serve to demonstrate the student's competence in the discipline. (PR: CMM 411)

479 **Public Health Communication. 3 hrs.**
Examines communication processes that influence human behavior and public policy through health promotion campaigns, including theories and practices of health behavior change and designing, implementing, and evaluating health communication interventions.

480-483 **Special Topics in Communication Studies. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of department chair)

490 **Internship. 1-4 hrs.**
(PR: Permission of department chair)

495H-496H **Readings for Honors in Communication Studies. 4; 4 hrs.**
Open only to speech majors of outstanding ability. See Honors Courses. (PR: Permission of department chair)

497-498 **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.

COMPUTER AND INFORMATION SECURITY (CYBR)

210 **Computer and Information Security Principles. 3 hrs.**
ntroduction to the various technical and administrative aspects of Computer and Information Security. Understanding key issues associated with protecting information assets, determining the protection needed and response to security incidents. (PR: CS 105 or CS 110)

240 **Information Security Policies. 3 hrs.**
Introduction to information security policies, sociological and psychological issues in policy implementation in general. Discuss the lifecycle of policy creation, enactment in different domains of security and policy structure. (PR: CS 105 or CS 110)

310 **Introduction to Cryptography. 3 hrs.**
This course covers the basic aspects of modern cryptography, including block ciphers, pseudorandom functions, symmetric encryption, Hash functions, message authentication, number-theoretic primitives, public-key encryption, digital signatures and zero knowledge proofs. (PR: CS 210 and (STA 225 or STA 345))

330 **Cyber Security. 3 hrs.**
Concepts and issues in physical and cyber security; technological vulnerabilities found in operating systems, database servers, Web servers, Internet, and local area networks; developing defensive and offensive security measures. (PR: CS 320)

350 **Cyber System Administration. 3 hrs.**
Introduction of System Administration and related topics, including trouble-shooting system and network problems, hardware and software configuration and installation, basic scripting, and security aspects of Internet hosts. (PR: CS 320)

360 **Cyber Infrastructure Security. 3 hrs.**
Comprehensive analysis of the utilization and augmentation of cyber security technologies to harden cyber infrastructure and its interconnected cyber-physical systems against various attacks. (PR: CS 320)

400 **Computer Security Design. 3 hrs.**
Foundation technical and analytical skills to implement comprehensive computer security that encompass designing secure systems, information security, protecting information assets, managing computer security, risk mitigation strategies, and incident response. (PR: CYBR 350)

435 **Cyber Risk. 3 hrs.**
Advanced course on the functions and purposes of the latest development in cyber security techniques and tools used to create, secure, protect and remediate cyber-infrastructures from various cyber threats. (PR: CYBR 330 or CS 320)

442 **Cyber Operations. 3 hrs.**
Study of various concepts and aspects in choosing, deploying, supporting, troubleshooting and securing various local and distributed components of a cyber operation with consideration of the human factor. (PR: CYBR 350 and CYBR 360)

475 **Internship. 3 hrs.**
An in-depth and hands-on involvemnet in a real-world project under direct professional supervision. The project may be on campus or off campus. (PR: Instructor approval)

480-485 **Special Topics. 1-4 hrs.**
Study of an advanced topic not normally covered in other courses.

486-489 **Independent Study. 3 hrs.**

490 **Senior Project. 3 hrs.**
Application of technical and professional skills in solving a real-world problem in a team environment. Discuss professional code of conduct, societal issues, and transition from student to industry professional. PR: CYBR 330 and senior standing in the program)

COMPUTER AND INFORMATION TECHNOLOGY (CIT)

163 **Programming Practicum. 3 hrs.**
Concepts of software development and maintenance using C++, including syntax of the language, loops, functions, pointers, decision structures, and file processing. Proper program design using object-oriented programming techniques are emphasized.

236 **Data Structures. 3 hrs.**
Covers fundamental topics of information technology including the concepts of object orientation, linear data structures, data representation, data manipulation algorithms and their applications, and project participation. (PR: CIT 163)

238 **Algorithms. 3 hrs.**
Covers algorithm-design methods, algorithm performance and analysis, and optimization techniques. Covers algorithm applications used in solving frequently occurring problems, such as pattern matching, data compression, searching, and sorting. (PR: CIT 236)

260 **Instrumentation. 3 hrs.**
The course introduces students to modern data gathering methods, laboratory instrumentation, and programming. Focuses range from transportation development, forensics, to environmental issues.

263 **Web Programming I. 3 hrs.**
This is the first semester of a two course sequence on Web programming. This course focuses on web development standards. Topics covered include current HTML standards, CSS, and JavaScript.

265 **C# Net Programming. 3 hrs.**
Covers the essentials for developing robust and secure applications using C#, Windows forms, and the .NET framework. Also covers ADO.NET, writing secure .NET applications and web services. (PR: CIT 236)

280-283 **Special Topics. 1-4 hrs.**
(PR: Permission)

285 **Independent Study. 1-4 hrs.**
Independent study for selected freshmen and sophomores under supervision of faculty; may be repeated only once. (PR: Permission)

313 **Web Programming II. 3 hrs.**
The second semester of a two-course sequence on Web programming. This course focuses on server-side programming and databases. Topics covered include PHP, mySQL, web services, and security. (PR: CIT 263)

332 **Software Engineering 1. 3 hrs.**
First course in a two course sequence. Introduces students to the processes of software systems development. Course covers project and management, software quality, configuration issues, and development tools.(PR: CIT 236)

333 **Software Engineering II. 3 hrs.**
Second course in a two course sequence. Covers the system development life cycle: requirement analysis and specifications; design methods; system implementation and integration; testing; and reuse issues. Team project participation. (PR: CIT 332)

338 **CAD and Terra Modeling. 3 hrs.**
Introduction to CAD 2D and 3D principles set in a land modeling format. Data sets will be used to model 3D contours of land and river beds. (PR: CIT 423)

340 **Game Development I: 2D. 3 hrs.**
Covers computer software industry, history and the role of a creative game development team. Students will participate in the game development process, including art, animation, programming, music, sound and writing. (PR: CIT 236)

352 **Network Protocols and Administration. 3 hrs.**
This course provides students with knowledge of network terminology, structures, topologies, protocols, and interfaces involving Local Area and Wide Area networks. (PR: CIT 163)

365 **Database Information Management. 3 hrs.**
To understand the logical and physical design of data stored and retrieved from a relational database. Exposure to distributed databases, database administration and structured query language will also be done.

366 **Database Design and Reporting. 3 hrs.**
Technical database design, data modeling techniques, advanced database query functions, and database manipulation concepts. The development of conceptual and organizational skills for planning and creating effective formal written reports. (PR: CIT 365)

410 **Electronic Commerce. 3 hrs.**
This course examines electronic commerce with group decision making and collaborative applications through the Internet. Develop applications that retrieve and store information in distributed databases. (PR: CIT 365)

413 **iOS Development. 3 hrs.**
Students will learn to develop iOS applications using HTML 5/PhoneGap, OBjective-C, and Swift, using Apple and third-party SDKs. Also covers basic concepts for designing intuitive and usable user interfaces. (PR: CIT 265 or permission)

414 **Android Development. 3 hrs.**
Students will learn to develop Android applications using Java and the Android SDK. Course covers user interfaces, audio integration, SQLite databases, location services, sensors, and custom graphics. (PR: CIT 265 or permission)

416 **Advanced Web Programming. 3 hrs.**
Includes topics in XHTML, JavaScript Data Object Model, dynamic application of CSS rules to page elements, browsers' support for XML, object-oriented PHP programming, service side graphics generation, web services. (PR: CIT 263)

440 **Computer Graphics for Gaming. 3 hrs.**
Fundamental concepts dealing with the display of graphic information on semi-interactive storage tube displays. The course includes techniques for hidden line display, hidden line removal, and two- and three-dimensional transformation. (PR: CIT 236)

441 **Game Development II: 3D. 3 hrs.**
Covers state of the art techniques for computer game design and development with an emphasis on the 3D graphics and interaction through practical, example driven approaches of game development. (PR: CIT 340)

443 **Game Development III: AI. 3 hrs.**
Advanced concepts of game development with a focus on artificial intelligence. AI techniques covered include A* path finding algorithm, rule-based reasoning, reinforcement learning, neural networks, genetic algorithm, knowledge representation. (PR: CIT 441)

446 **3D Modeling and Animation. 3 hrs.**
Covers 3D modeling to create environments and character animation. Explores 3D forms within sculpture, architecture, animation and games. Indludes development of simplifications, abstractions and hyper-realiities for gaming. (CIT 340 or permission)

447 **Modeling/Simulation Development. 3 hrs.**
Course applies fundamentals of game development to education games or simulations within a virtual world. Explore virtual worlds, basic scripting/modeling techniquest and role-playing simulations to teach any concept. (PR: CIT 446 or permission)

448 **Mobile Game Development. 3 hrs.**
Students will work inteams to develop games for mobile devices. Emphasis on mobile development tools, techniques, cross-platform development, and standard practices, using open-source software. (PR: CIT 413 or permission)

466 **Database Programming. 3hrs.**
This course teaches students technical database programming with relational database systems. Students will work with fourth generation languages to analyze, design and develop, and execute programs in a database environment. (PR: CIT 365)

480-483 **Special Topics. 1-4 hrs.**
(PR: Permission)

485 **Independent Study. 1-4 hrs.**
Independent study for selected juniors and seniors under supervision of faculty; may be repeated only once. (PR: Permission)

COMPUTER SCIENCE (CS)

101 **Coding. 1 hr.**
This course is designed to expose students to coding, with no previous programming experience. The topic covers basic programming with software development methodologies.

105 **Explore the World with Computing (CT). 3 hrs.**
Central principles and big ideas of computing: problem-solving, computational and critical thinking, abstraction, creativity, reasoning, data, algorithms, recursion, visualization, and limits of computation. Solve real-world problems with computing.

110 **Computer Science I. 3 hrs. I, II.**
Object-oriented and algorithmic problem solving principles and techniques, programming with classes in an integrated programming environment, and program debugging. 2 lec-2 lab. (PR: Computer Science Major, or Pre Computer Science major, or math ACT 23; and concurrent PR: (MTH 127 and MTH 132) or (MTH 130 and MTH 132) or MTH 132 or MTH 229 or MTH 229H)

110H **Computer Science I Honors. 3 hrs.**
Object-oriented and algorithmic problem solving principles and techniques; programming with classes in an integrated programming environment; and program debugging. (PR: admittance to the Honors College AND Math ACT of 23 or higher)

120 **Computer Science II. 3 hrs. I, II.**
Object-oriented analysis and design, advanced programming with classes, arrays, strings, sorting, searching, I/O, GUI development, system life cycle and software development methodologies. 2 lec-2 lab. (PR: Computer Science Major, or Pre- Computer Science major, or math ACT 23; and CS110 and concurrent PR: (MTH 127 and MTH 132) or (MTH 130 and MTH 132) or MTH 132 or MTH 229 or MTH 229H)

205 **Scientific Computing. 3 hrs.**
An introduction to computer programming, software design, and algorithm analysis and implementation. Abstract concepts illustrated with examples and exercises drawn from the mathematical and physical sciences. Primarily for non-CS majors. (CR: MTH 229)

210 **Data Structures and Algorithms. 3 hrs. I, II.**
Design and implementation of data structures including stacks, queue, lists, trees, heaps, balanced trees, and graphs. Other topics include hashing, threading, data parsing, program testing, correctness, efficiency, and exceptions. (PR: CS 120 and MTH 220 or MTH 229 or MTH 230)

215 **Advanced Data Structures and Algorithms. 3 hrs. II.**
Advanced techniques for designing and analyzing algorithms, including asymptotic analysis; data structures; divide-and-conquer algorithms and recurrences; greedy algorithms; dynamic programming; graph algorithms; randomized algorithms; and NO-complete problems. (PR: CS 210 and MTH 220)

280-283 **Special Topics. 1-4 hrs. I, II, S.**

300 **Programming Languages. 3 hrs. II.**
Comparative study of the concepts found in contemporary programming languages. Emphasis is on design and evaluation of a language in terms of its features and their implementation. (PR: CS 210.)

305 **Software Engineering I. 3 hrs. I.**
This course provides a broad introduction to software engineering theories, methods, and tools. Topics include requirements engineering, analysis and design, implementation, versioning, and testing. (PR: MTH 220 and CS 210)

310 **Software Engineering II. 3 hrs.**
Continuation of CS 305. Software construction, versioning and configuration, testing, change control, software reliability and quality assurance. (PR: CS305)

315 **Software Quality Assurance. 3 hrs.**
Testing techniques and validation of system requirements. Design reviews and code inspections; unit, integration, system, regression, load, stress, user acceptance, and regression testing; statistical testing; test strategies and project metrics. (PR: CS 310 and MTH 345)

320 **Internetworking. 3 hrs. I.**
Principles and issues in interconnecting multiple physical networks into a coordinated system, operation of Internet protocols in the interconnected environment, and design of applications to operate in this environment. (Concurrent PR: MTH 229; PR: CS 210)

330 **Operating Systems. 3 hrs. I.**
Modern operating systems design and implementation: multi-tasking and time sharing, concurrency and synchronization, interprocess communication, resource scheduling, memory management, deadlocks, I/O, file systems, and security. (PR: CS 210)

360 **Automata and Formal Languages. 3 hrs.**
Basic theoretical concepts are introduced, including finite state automata, regular expressions, context-free grammars, pushdown automata, Turing machines, recursively enumerable languages, the halting problem, and Church-Turing thesis. (PR: CS 300)

370 **Computer Graphics. 3 hrs. I.**
Mathematical theory and practical tools and techniques for generating realistic pictures using computers. This is a project-centered course and involves extensive programming using the OpenGL standard. (PR: CS 210 and MTH 329)

402 **Computer Architecture. 3 hrs.**
Design and analyze structure of major hardware components of computers including ALU, instructions sets, memory, hierarchy, parallelism through multicore and many core, storage systems and interfaces. (PR: CS 300)

404 **High Performance Computing. 3 hrs.**
Software design and development targeting high performance computing architectures. Multi-core and many-core systems: I/O, file systems, performance metrics. Programming models include MPI, OpenMP, MapReduce, CUDA, and OpenCL. (PR: CS 300 or (C/C++ programming and consent of the instructor))

405 **Computing for Bioinformatics. 3 hrs.**
Study of computational algorithms and programming techniques for various bioinformatics tasks including parsing DNA files, sequence alignments, tree construction, clustering, species identification, principal component analysis, correlations, and gene expression arrays. (PR: CS 215)

410 **Database Engineering. 3 hrs. II.**
Study of data models, data description languages, query languges including relational algebra and AQL, logical and physical databasedesign, transactions, backup and recovery. Design and implementation of a a database application.(PR: CS 305)

412 **Embedded Systems. 3 hrs.**
The design of systems containing embedded computers. Micro-controller technology, assembly language and C programming, input/output interfacing, data acquisition hardware, interrupts, and timing. Real-time operating systems and application programming. Application examples. (PR: CS 402)

415 **Data Mining. 3 hrs.**
Covers (1) the process of knowledge discovery, (2) algorithms (association rules, classification, and clustering), and (3) real-world applications. Focuses on efficient data mining algorithms and scaling up data mining methods. (PR CS 215, CS 410)

420 **Distributed Systems. 3 hrs. II.**
Study of distributed system concepts and issues, architectures and frameworks for developing distributed applications, and future trends. (PR: CS 320 and CS 330; limited enrollment, permission of instructor required)

425 **Computational Intelligence. 3 hrs. II.**
Genetic algorithms, evolutionary strategies, and genetic programming. Methods of knowledge representation using rough sets, type-1 fuzzy sets, and type-2 fuzzy sets. Neural network architectures and their learning algorithms.

430 **Cyber Security. 3 hrs. II.**
Concepts and issues in physical and cyber security; technological vulnerabilities found in operating systems, database servers, Web servers, Internet, and local area networks; developing defensive and offensive security measures. (PR: CS 320)

435 **Cyber Risk. 3 hrs.**
Advanced course on the functions and purposes of the latest development in cyber security techniques and tools used to create, secure, protect and remediate cyber-infrastructures from various cyber threats. (PR: CS 430)

440 **Digital Image Processing. 3 hrs. I.**
Mathematical techniques, algorithms, and software tools for image sampling, quantization, coding and compression, enhancement, reconstruction, and analysis. (PR: CS 210 and MTH 329)

455 **Systems Engineering. 3 hrs.**
Tools and techniques for optimizing the design and construction of software-intensive systems by considering system issues and making engineering tradeoffs in conflicting criteria and interacting decision parameters. (PR: CS 340 and CS 350)

450 **Information Retrieval. 3 hrs.**
Theory, design, and algorithms for modeling and retrieving text. Text representation, IR models, query operations, retrieval evaluation, information extraction, text classification and clustering, enterprise and Web search, recommender systems. (PR: CS 215 or consent of instructor)

452 **Natural Language Processing. 3 hrs.**
Fundamental algorithms and computational models for core tasks in natural language processing: word and sentence tokenization, parsing, information and meaning extraction, spelling correction, text summarization, question answering, and sentiment analysis.

460 **Multimedia Information Retrieval. 3 hrs. I.**
Theoretical and design issues in content-based multimedia information systems and an in-depth exposition of retrieval and presentation issues related to various media—image, audio, and video. (PR: CS 210)

475 **Internship. 3-12 hrs. I, II, S. CR/NC.**
An in-depth and hands-on involvement in a real-world project under direct professional supervision. The project may be on-campus or off-campus. Requires prior approval of the Internship Director, who is a member of the Computer Science faculty. (PR: CS 310 and Computer Science major with Junior/Senior standing.)

480-483 **Special Topics. 1-4 hrs. I, II, S.**

485-488 **Independent Study. 1-4 hrs. I, II, S.**

490 **Senior Project. 3 hrs. I.**
Application of technical and professional skills in solving a real-world problem in a team environment. Discuss professional code of conduct, societal issues, and transition from student to industry professional. (PR: CS 340, CS 350, and standing as a Computer Science senior)

491 **Senior Project II. 3 hrs. II.**
Capstone experience: continuation of CS 490. (PR: CS 490)

COUNSELING (COUN)

260 **Peer Counseling. 3 hrs.**
Theory, practice, and intervention of peer helping relationships. Demonstration and practice of basic helper skills for resident advisors. Does not satisfy requirements for core courses nor restrictive electives.

261 **Introduction to Group Guidance. 3 hrs.**
A Counselor Leadership training course focusing upon a systematic approach to selecting a leadership style. Specific areas include leadership theory, how to conduct groups, delegation, and goal setting. Not for Counseling majors.

262 **Alcohol Counseling by Peers. 1 hr.**
History and practice of alcohol prevention and intervention by peer helpers. Designed to meet the needs of resident advisors. Does not satisfy requirements for core courses nor restricted electives.

263 **AIDS Awareness. 1 hr.**
Course designed to increase awareness of Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome, including: the virus, psychosocial aspects, legal and religious issues, prevention, treatment.

280-281 **Special Topics. 1-4; 1-4 hrs.**
(PR: Permission of department chairman)

306 **Introduction to Counseling. 3 hrs.**
Introduction to the fields of counseling, various mental, physical and social disabilities, careers in counseling, counseling services and orientation processes. (CR: COUN 370)

370 **Clinical Placement. 3 hrs.**
Orientation to helping service agencies and practice in developing interviewing skills under professional supervision. A thirty-hour practical experience involving active contact under supervision enables students to explore their own abilities, to try the helping role, and to get acquainted with clients and helping agencies. (CR: COUN 306)

425 **Counseling Theories and Techniques. 3 hrs.**
Principles and practices of the interviewing relationship in helping service settings. (PR: COUN 306, 370. CR: COUN 470)

430 **Case Development: Process and Management. 3 hrs.** Study of systematic development of casework to include case finding, follow-up provision of services, case recording and time management. (PR: COUN 306, 370 or permission of instructor)

455 **Crisis Intervention. 3 hrs.**
This course is directed to anyone who at some time has felt inadequate in responding effectively to people in crisis. Topics will include situational and developmental crises. Clinical experience required.

456 **Death and Dying. 3 hrs.**
Includes three areas of emphasis: To enable the student to come to grips with personal attitudes toward death and dying; to explore attitudes of society toward death; and to develop skills in managing the crisis of death, terminal illness and bereavement.

470 **Advanced Practicum in Counseling. 3 hrs.**
Practical experiences in counseling interviews under professional supervision. (CR: COUN 425, 448)

471 **Health and Wellness Counseling. 3 hrs.**
Designed to help counselors deal with lifestyle issues related to physical well-being and to demonstrate how health professionals can use counseling interventions in their work (PR: COUN 425 or permission)

474 **Social and Cultural Foundations. 3 hrs.**
Recognize and use appropriate resources for effective counseling of people of different cultural, ethnic, social, class, racial, geographic, or other backgrounds. Learn when counseling is appropriate and in what form.

475 **Prevention and Treatment of Addictions. 3 hrs.**
Course topics will include historical, medical, psychological, family dynamics of the disease process, and treatment modalities which enhance the likelihood of successful counseling with the dependent person and indirect victims. (PR: 306, 370 or permission)

476 **Counseling With Parents. 3 hrs.**
Consideration of effective parent counseling primarily from an Adlerian point of view. Techniques for counselor intervention via lecture, demonstration and laboratory experiences.

477 **Stress Management Counseling. 3 hrs.**
Provides beginning counselors and others with comprehensive information and strategies for successful management of stress and its consequences. Students explore theoretical and practical alternatives in counseling the stressed individual.

478 **Counseling with the Elderly. 3 hrs.**
Counseling techniques and theories applied to problems of the elderly.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of department chairman)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of department chairman)

490 **Counseling Internship. 6 hrs. CR/NC.**
Participation in counseling process with a variety of individuals under supervision of cooperating agencies. Senior standing, majors only, overall 2.0 average, and permission of instructor. (PR: COUN 425, 470 or permission)

491-494 **Counseling Workshop. 1-4; 1-4; 1-4; 1-4 hrs.**
A practical, participatory course designed for advanced students and professionals in the counseling field or related areas.

495H-496H **Readings for Honors in Counseling. 1-3; 1-3 hrs.**
(PR: Permission of department chairman). See Honors Courses.

497 **Family Counseling. 3 hrs.**
Introductory course in current theory and practice in family counseling. Theoretical material on communication and structural approaches to family counseling. Reading, lecture and experiential exercises.

498 **Introduction to Marriage Counseling. 3 hrs.**
Covers the many dimensions marriage counselors deal with, including premarital counseling; the marriage contract (legal and extralegal contracts); marital decision making; divorce counseling; sexual dysfunction; financial counseling; spouse beating; alternatives to marriage; and relationships among the elderly.

CRIMINAL JUSTICE (CJ)

200 **Introduction to Criminal Justice. 3 hrs.**
This survey course examines the various components of the criminal justice system, including law enforcement, courts, and corrections. Students will be introduced to various criminal justice agencies and career possibilities.

211 **Introduction to Law Enforcement. 3 hrs.**
Designed to examine the philosophical and historical background of law enforcement in the United States. Addresses constitutional limitations on law enforcement, objectives of law enforcement, and processes of law enforcement.

221 **Introduction to Criminal Courts. 3 hrs.**
This course addresses the evolution and current functioning of the American criminal court system. Students are exposed to court administration, court procedures, and the state and federal court system.

223 **Introduction to Legal Research. 3 hrs.**
An introduction to the process and strategies involved in legal research. Students will develop an understanding of the sources of legal information and judgment in selecting appropriate sources and formats for specific projects.

231 **Introduction to Corrections. 3 hrs.**
Basic course in the American correctional system; study of the history of corrections, philosophy of punishment and correction, correctional institutions, programs, and services, and contemporary issues and problems.

280-283 **Special Topics. 1-4 hrs.**
Lower-level, specialized courses of contemporary interest.

300 **Administration of Criminal Justice. 3 hrs.**
This course provides an analysis of the theories of organization and the administration of criminal justice agencies, including management styles, techniques of leadership, and decision-making. (PR: CJ 200)

302 **Criminal Justice Research Methods. 3 hrs.**
Logic of social research methods, survey research, methods of evaluation, sampling, and the contrast between qualitative and quantitative Criminal Justice research. (PR: CJ 200)

312 **Criminal Investigation. 3 hrs.**
Investigation methodology, relations of the detective with other police divisions; modus operandi; sources of information; surveillance, interrogation, follow-up procedures. Criminal Justice majors only. (PR: CJ 211)

314 **Crime Scene Investigation. 3 hrs.**
This course exposes students to crime scene evidence, collection techniques, and the various uses of modern technology in preserving and analyzing evidence. Criminal Justice majors only. (PR: CJ 211)

322 **Criminal Law. 3 hrs.**
History and development of criminal law, elements of a crime, parties to a crime, types of offenses. (PR: CJ 200)

323 **Criminal Procedure. 3 hrs.**
Admissibility of evidence and confessions, recent civil rights decisions, reconciling individual rights and community interest in law and order. (PR: CJ 200)

325 **Juvenile Justice. 3 hrs.**
Study of the historical development, legal foundations, and present institutions, programs, and services in the juvenile justice system. (PR: CJ 200)

331 **Probation and Parole. 3 hrs.**
Supervision of offenders in the community, including history, philosophy, legal foundations, strategies, professional roles and contemporary models, programs, and services. (PR: CJ 231)

332 **Correctional Rehabilitation. 3 hrs.**
Examines the theories, treatment strategies, and the role of the correctional counselor. Special emphasis is given to the topics of classification, development of treatment plans, and principles of effective intervention. (PR: CJ 231)

340 **Drugs and Crime. 3 hrs.**
Examines the history and consequences of mind-altering drugs, and criminal behavior as it is affected by drugs, the legal response to substance abuse, treatment and prevention of substance abuse.

341 **Victims of Crime. 3 hrs.**
Examines victims of crime, the process and consequences of victimization. Also covered are victims' rights and services available for victims and victim compensation.

351 **Principles of Crime Prevention. 3 hrs.**
This course examines the theory, operation, and evaluation of crime prevention as a function of the criminal justice system. (PR: CJ 200)

400 **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 public trust in the criminal justice system are examined and applied. (PR: CJ 200)

403 **Understanding Cybercrime. 3 hrs.**
Examination of hacking, piracy, cyber stalking, cyber bullying, identity theft, and other cybercrimes through the lens of various criminological theories with an emphasis on research methodology and criminal justice policy.

404 **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. (PR: CJ 200)

405 **Women and the Criminal Justice System. 3 hrs.**
Examines factors surrounding women and the criminal justice system from a theoretical and practical perspective. Explore feminist ideologies, plus women as victims, offenders, and professionals in the justice system. (PR: CJ 200)

406 **Race, Ethnicity, Class and Crime. 3 hrs.**
Examines the impact of race, ethnicity, and social class within the criminal justice system. (PR: CJ 200)

410 **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. (PR: CJ 211)

416 **Terrorism. 3 hrs.**
Provides students with a working knowledge of the history of terrorism, the current status of terrorist groups, terrorism tactics, and methods to counteract terrorism.

422 **Law of Evidence. 3 hrs.**
Leading rules and principles of exclusion and selection; burden of proof, nature and effect of presumptions; proof of authenticity and contents of writings; examinations, competency and privilege of witnesses. (PR: CJ 200)

423 **Advanced Legal Research and Writing. 3 hrs.**
Gives the student additional experience in legal research and introduces the skills required in drafting legal documents. (PR: CJ 200 and CJ 223, or permission)

424 **Computer Crime. 3 hrs.**
Students will identify and define criminal acts committed with computers or directed toward computer systems, electronic search and seizure and electronic evidence.

426 **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.

433 **Correctional Administration. 3 hrs.**
Objectives of correctional institutions; records; personnel, program development, security; educational programs. (PR: CJ 231)

440 **Criminal Justice Response to Domestic Violence. 3 hrs.**
This course focuses on the legal response to child abuse, domestic violence, and elder abuse. Examines dynamics of abusive relationships, the effects of victimization, and current research on these issues.

450 **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. Criminal Justice majors only. (PR: CJ 211)

453 **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: CJ 200)

460 **Miscarriages of Justice. 3 hrs.**
This course provides a critical examination of the processes and procedures used by police, prosecutors, defense attorneys, judges, and corrections agents that may potentially produce errors or "miscarriages" of justice. (PR: CJ 200)

480-483 **Special Topics. 1-4 hrs.**
Specialized courses of contemporary interest. (PR: Consent of the instructor)

485-488 **Independent Study. 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 the instructor)

490 **Internship. 1-6 hrs.**
The placement of an individual into a criminal justice agency (police, probation, courts, jails) to observe and participate in its operation. Grading is CR/NC only. (PR: Consent of the instructor; GPA of 2.5 or better)

492 **Senior Seminar. 3 hrs.**
Capstone course. Integrates and applies material learned in the program of study. Serves as a culminating experience in which students demonstrate what they have learned in the classroom. (PR: Senior status, CJ 200, CJ 302 CJ 404)

495H-496H Readings for Honors in Criminal Justice. 2-4 hrs.
Open to criminal justice majors of outstanding ability. Study may deal with any aspect of criminal justice. Wide reading and comprehensive understanding of the subject are required. (PR: Consent of department chairman.) See Honors Courses.

CURRICULUM AND INSTRUCTION (CI)

NOTE: The prerequisites ATED 4, ATED 5, and ATED 6 refer to different levels of Admission to Teacher Education. Contact the Associate Dean of Education for additional information.

100 **Critical Thinking in Education (CT). 3 hrs.**
An introduction to the critical thinking skills in education, an orientation of the teaching profession, and an overview of the historical, sociological, multicultural, and philosophical issues affecting schools and teachers.

101 **Mathematics Education: Mathematics for Elementary Teachers, I. 3 hrs. I, II, S.**
Study of sets, logic, numeration systems, number systems, and number theory using an inquiry, laboratory oriented approach. (PR: MTH 121 or MTH 123 or MTH 130A, MTH 130E)

102 **Introduction to Computers in the Classroom. 1 hr. I, II, S.**
The introduction of selection and evaluation techniques of computer courseware and hardware for classrooms K-12 with consideration for CAI, CMI and specific skills for K-12 students.

201 **Mathematics Education: Mathematics for Elementary Teachers, II. 3 hrs. I, II, S.**
Study of elementary mathematics including structure of the real number system,, statistics, probability, informal and transformational geometry, and basic algebraic operations with emphasis on problem solving and teacher strategies. (PR: CI 101 and MTH 121)

203 **Children's Literature. 3 hrs.**
Types of poetry and prose appropriate for elementary school pupils, with emphasis on methods of presentation. May not be used as an elective to meet requirements of the English major in the College of Liberal Arts.

248 **Introduction to Science for Elementary Educators. 3 hrs.**
Introduction to teaching science in elementary schools, emphasizing inquiry-based learning practices and effective research-based teaching strategies. Activities include seminars, discussion and experimentation using learning modules targeting Earth and Space. (PR: MTH 127 or 130)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

297-298 **Instructional Television Course. 1-4 hrs.**
A course ba Study of U.S. and International accounting standards related primarily to assets and financial statement preparation. Accounting standards research and application of Excel are integrated throughout the course. (NEGR)sed upon an 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 division.

301 **Teaching Elementary/Middle School Mathematics. 3 hrs.**
This course is an investigation of techniques and approaches to helping children learn mathematics with special emphasis on the use of manipulative materials in a laboratory setting.

303 **Literature for Adolescents. 3 hrs.**
A study of the various types of literature appropriate to the needs, concerns, and interests of the adolescent. (PR: ENG 201 or 201H; six hours of literature)

321 **Early Childhood Curriculum and Methods. 3 hrs.**
Study of factors shaping curriculum and exploration and assessment of appropriate curriculum for young children in transition from pre-operational to concrete operational stages of development. Field experience included. (PR: Admission to Teacher Education)

342 **Literature and Language Arts. 3 hrs. I, II, S.**
A study of literary genres' characteristics and implementation within the elementary classroom, with emphasis on methods of presentation and a review of English grammar and language.

343 **The Process of Reading Part 1. 3 hrs. I, II.**
Study of modern techniques and practices in the teaching and assessment of reading and language arts:: Part 1.

345 **Critical Reading, Writing, and Thinking. 3 hrs.**
This course examines strategies for learning from text, studying different types of textual materials, monitoring learning, and integrating oral and written discourse. (PR: Admission to Teacher Education)

346 **Reading in the Elementary Grades K-6, Part 2.**
Study of modern techniques and practices in the teaching and assessment of reading and language arts:: Part 2. (PR: CI 343)

350 **Instructional Technology and Computing. 3 hrs.**
Critical examination and skill development using commercial, non-commercial, and computer generated media. Emphasis will be placed on its application to teaching and learning.

360 **Elementary Social Studies Methods. 3 hrs.**
An introduction to materials and methods for teaching Social Studies in the elementary school–including goals, processes, strategies, and evaluation. Discussion, demonstrations, media, and readings explain Social Studies.

401 **Middle Childhood Curriculum. 3 hrs. I, II, S.**
Study of procedures for creating a functional middle childhood curriculum with emphasis upon the needs of middle childhood learners. (PR: ATED 4)

403 **Methods and Materials of Teaching in the Middle Childhood Grades. 3 hrs. I, II, S.**
Study of methods appropriate for teaching in the middle childhood grades, and production and utilization of materials and resources in these grades. Clinical experience included. (PR or CR: ATED 4)

405 **Elementary Education: Supervised Student Teaching. 4-12 hrs. I, II.**
All-day teaching under supervision in cooperating schools; periodic seminars, conducted by University faculty, accompany student teaching. (PR: ATED 6)

406 **Elementary Education: Supervised Student Teaching II. 4-6 hrs.**
All-day teaching under supervision in cooperating schools. Periodic seminars conducted by university faculty accompany student teaching. (PR: Methods and permission)

410 **Early Childhood Education: Supervised Student Teaching. 4-6 hrs. I, II.**
All-day kindergarten teaching under supervision in cooperating schools; periodic seminars, conducted by University faculty, accompany student teaching. (PR: ATED 6)

415 **Integrated Methods and Materials: Secondary Education. 3 hrs.**
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. (PR: ATED 5)

417 **Comprehensive Classroom Discipline Techniques. 3 hrs. I, II, S.**
Identification of common classroom discipline problems and techniques for dealing with behavioral incidents in school settings K-12.

418 **Classroom Motivation. 1-3 hrs. I, II, S.**
Classroom motivation with an emphasis on theoretical constructs and practical applications for teachers of students from early childhood through adolescence.

442 **Instructional and Classroom Management: Elementary Education.**
This course allows elementary education students to critically examine a variety of classroom management strategies and educational issues that impact instruction. (PR: ATED 4)

446 **The Process of Reading Part II. 3 hrs. I. II.**
Study of reading-language difficulties, diagnostic devices and techniques, and preventive and prescriptive methods and materials. (CR: CI 343)

447 **Integrated Reading and Language Arts Methods: Elementary Education. 3 hrs.**
General elementary education course with emphasis on instruction standards and objectives, methods, and materials for Reading and Language Arts. (PR: ATED 5)

448 **Integrated Science Methods: Elementary Education. 3 hrs.**
General elementary education course with emphasis on instructional standards and objectives, methods, and materials for science.

449 **Instructional and Classroom Management: Secondary Education. 3 hrs. I, S.**
Classroom management with emphasis on practical techniques for dealing with management problems in secondary and middle school settings. (PR: ATED 4)

450 **Secondary Education: Supervised Student Teaching. 4-12 hrs. I, II.**
All-day teaching under supervision in cooperating schools; periodic seminars conducted by university faculty accompany student teaching. (PR: ATED 6)

452 **Middle Childhood Education: Supervised Student Teaching. 4-6 hrs. I, II.**
All-day student teaching in cooperating middle schools; periodic seminars conducted by university faculty accompany student teaching. (PR: ATED 6)

455 **Secondary Education: Supervised Student Teaching II. 4-6 hrs.**
All-day teaching under supervision in cooperating schools; periodic seminars conducted by university faculty accompany student teaching. (PR: Methods and permission)

459 **Multicultural Influences in Education: Techniques and Strategies. 3 hrs. I, S.**
Multicultural education with an emphasis on methods and materials for teaching students from diverse cultural backgrounds.

460-464 **Staff Development: 1-3 hrs.**
Courses designed to meet the specific inservice needs of public school personnel. Credit may be used for certificate renewal and salary upgrading but not in degree programs. CR/NC grading.

470 **Level II Clinical Experience. (Corequisite with the courses designated; no credit hours)**
A Level II Clinical Experience teaching in a secondary public school. An opportunity to put theory into classroom practice. (PR: ATED 5; CR: CI 415)

471 **Level II Clinical Experience. (Corequisite for courses listed, no credit)**
A Level II Clinical Experience teaching in an elementary school. An opportunity to pur theory into classroom practice. (PR: ATED 5; CR: CI 447)

472 **Level II Clinical Experience.**
A Level II Clinical Experience teaching in an elementary or secondary public school. An opportunity to put theory into classroom practice. For music majors only. (PR: ATED 5; CR: EDF 319)

480-483 **Special Topics. 1-4; hrs. I, II, S.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
Permission of chairman. Requires 2.5 GPA, limit of 6 hours to be used in professional education as a specialization.

495H-496H **Readings for Honors in Education. 1-3; 1-3 hrs.**

497-498 **Instructional Television Course. 1-4 hrs.**
A course based upon an 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 division.

CURRICULUM AND INSTRUCTION SPECIAL EDUCATION (CISP)

320 **Special Education: Survey of Exceptional Children. 3 hrs. I, II.**
An introduction to the study of children who deviate from the average in mental, physical, and emotional characteristics, including a study of the characteristics of such children and the adaptation of educational procedures to their abilities and disabilities.

420 **Special Education: Survey of Exceptional Children II. 3 hrs. I, II.**
Examination of procedures needed for implementation of the Resource Room model for mildly handicapped children. The course includes a review of the Mainstreaming movement, interpersonal relations, and skills necessary for maintaining the resource room. (PR or CR: CISP 320)

421 **Special Education: Children with Exceptionalities. 3 hrs. I, II, S.**
Behavioral characteristics of children with exceptional development, dynamics of family- community interaction, and attitudes towards exceptional conditions. Implications for amelioration and educational planning. (Not for Special Ed majors) (PR: ATED 4)

422 **Differentiated Instruction. 3 hrs.**
Research-based strategies for providing differentiated instruction to students with diverse learning, social, and behavioral needs who are being educated in inclusive settings. (PR: CISP 421)

427 **Introduction to Autism. 3 hrs.**
This is a lecture-discussion course designed to survey current autism research, definitions, medical issues, differential diagnosis, treatment and educational methods for autistic children, youth, and adults.

428 **Special Needs in Early Childhood Education. 3 hrs.**
Emphasis will be given to enhancing the success of diverse learners through intervention strategies, family involvement, and interdisciplinary service delivery. (PR: CISP 421)

429 **Introduction to Developmental Disabilities. 3 hrs. I, S.**
An introduction to developmental disabilities with an emphasis on issues impacting young children. (PR: CISP 320; CR: Field experience)

433 **Introduction to Intellectual Disabilities. 3 hrs. I, S.**
Characteristics and needs of individuals with intellectual disabilities. Current research, etiologic factors and the impact of intellectual disabilities on education are emphasized. Includes a field experience. (PR: CISP 320)

435 **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.

439 **Assessment in Special Education. 3 hrs.**
Educational assessment and academic diagnostic evaluation for remediation/amelioration. Provides an understanding of teacher assessment and its implication for programming for exceptional children.

440 **Student Teaching: Multi-Categorical. 4-6 hrs. I, II.**
All-day supervised teaching in special classes in cooperating schools; periodic seminars conducted by University faculty accompany student teaching. (PR: ATED 6)

441 **Student Teaching II: Special Education. 4-6 hrs.**
Supervised student teaching. All-day teaching under supervision in cooperating schools. Periodic seminars conducted by university faculty. (PR: Methods courses and permission)

445 **Intervention Strategies for Preschool Special Education. 3 hrs.**
Curriculum development and methodology used to teach young children with special needs. Integration, program development, management, material and equipment adaptation are emphasized.

453 **Curriculum and Methods for Mild/Moderate Disabilities. 3 hrs. I, II.**
Principles and current trends in curriculum development and teaching methodology for individuals with intellectual disabilities are reviewed and evaluated. (PR: CISP 320)

454 **Working with Families of Exceptional Students. 3 hrs.**
Principles and information designed to give the student an understanding of the needs and rights of families of exceptional children and techniques to involve families successfully in their children's education.

455 **Field Experience in Preschool Special Education. 3 hrs.**
Supervised participation and directed teaching activities in a preschool special education program.

CYTOTECHNOLOGY (CYT)

(Prerequisite: Admission is subject to approval by the Admissions Committee of a School of Cytotechnology.)

438 **Cytological Methodology. 3 hrs. S.**
Routine methods in cytology (specimen processing, staining, record keeping). Special methods (filtration, concentrations). Clinical microscopy (routine and special methods: light, phase, dark field).

439 **Elementary Cytology. 3 hrs. S.**
Fundamentals of cell structure, embryology, microbiology, and mycology as related to cytodiagnosis; characteristics of benign and malignant cells.

440 **Genital Cytology. 6 hrs. I.**
Cytology of the female genital tract in health and disease. The study of cells in normal, benign, and malignant stages of development.

441 **Cytology of the Respiratory Tract. 3 hrs. I.**
Cytology of the respiratory epithelium in health and disease. Study of the cell in normal conditions, in benign and malignant pathological conditions.

442 **Cytology of the Body Cavities. 3 hrs. II**.
Cytology of the pericardial, pleural, and abdominal cavities. Study of primary and metastatic tumors.

443 **Cytology of the Urinary Tract. 3 hrs. I.**
Cell changes resulting from benign diseases and malignant tumors of the urinary tract.

444 **Cytology of the Breast. 3 hrs. II.**
Cell changes resulting from benign diseases and malignant tumors of the breast.

445 **Cytology of the Gastro-Intestinal Tract. 3 hrs. II.**
Cytology of the alimentary tract in health and disease..

446 **Research in Cytotechnology. 1 hr. I.**
Directed independent cytodiagnostic research in the hospital setting. Capstone experience.

447 **Advanced Methods in Cytology. 4 hrs. II.**
Methods and procedures of tissue culture, chromosome analysis, and microphotography. Study of chromosome anomalies including Turner's, Down's, and Klinefelter's Syndrome. Study of pure mosiac anomalies.

DANCE (DAN)

101 **Introduction to Dance. 3 hrs.**
Introduction to dance forms, principles of dance techniques, and role of dance in society.

205 **Dance for the Musical Theatre. 3 hrs.**
Introduction to various dance forms and styles necessary for musical theatre. Training in rhythm and coordination with emphasis on elementary techniques and routines.

210 **Tap Dance. 2 hrs.**
Technique, styles, and rhythmic structures of tap dance for the theatre. Emphasis on steps, movement, and routines. Course may be repeated for total of four hours credit. 2 lec.-2 lab.

230 **Ballet Technique. 2 hrs.**
Classical ballet technique, exercise, routine, and drill for the dancer. Course may be repeated for a total of eight hours credit. 2 lec.-2 lab.

270 **Dance Practicum. 1 hr.**
Opportunity to study and perform concert dance. (PR: Permission of instructor; may be repeated for a total of 4 hours credit)

280-283 **Special Topics in Dance. 1-4; 1-4; 1-4; 1-4 hrs.**
Program of study not normally covered in other courses. Topics vary from semester to semester. (PR: Permission of department chairman)

301 **Dance for Athletes. 3 hrs.**
A course in Ballet and Modern Dance designed specifically for the student-athlete involved in intercollegiate competition.

316 **Modern Jazz Dance. 2 hrs.**
Techniques, styles, and rhythmic structures of modern jazz dance. Emphasis on increasing personal expression and dance movement repertoire. Course may be repeated for total of six hours credit. 2 lec.-2 lab.

320 **Modern Dance Technique. 2 hrs.**
Principles, movement, and performance techniques in modern dance. Course may be repeated for total of four hours credit. 2 lec.-2 lab

DIGITAL HUMANITIES (DH)

201 **Introduction to Digital Humanities. 3 hrs.**
Examines the entangled relations between human cultures and digital technologies, and uses those technologies to explore topics in the humanities.

DIETETICS (DTS)

201 **Introductory Nutrition. 4 hrs.**
Provides basic understanding of the science of nutrition and dietetics. The role of food and nutrient intake in health promotion and disease prevention will be explored in hands-on laboratory experiences.

202 **Introductory Foods. 4 hrs.**
Provides basic understanding of the science of food and food substances. Instruction on nutrients will be integrated with preparation of foods to form the laboratory experience. (PR: DTS 201)

210 **Nutrition. 3 hrs. I, II.**
Principles of human nutrition and their application in planning and evaluating dietaries for individuals and families.

215 **Assessment and Education Strategies in DTS. 3 hrs.**
Establish a foundation for effective nutrition assessment and education of individuals and groups. (PR: DTS 201)

301 **Foodservice Safety and Systems Management I. 4 hrs.**
A study of foodservice management principles, with an in-depth investigation of food safety in foodservice establishments. Laboratory/field experiences provide students a better perspective of foodservice management in various institutions. (PR: DTS 202; CR: BSC 250)

302 **Foodservice Safety and Systems Management II. 4 hrs.**
A continued study of foodservice management principles; the course emphasizes quantity production, distribution, and service of foods as well as facility planning and design. (PR: DTS 301)

314 **Nutrition & Diet Therapy. 3 hrs.**
Principles of human nutrition and their application to healthy individuals and to the treatment and prevention of disease. (PR: Nursing major)

310 **Life Span Nutrition. 3 hrs.**
An exploration of the scientific principles of human nutrition and nutrient needs for stages of the life cycle, which include prenatal, gestational, infancy, toddler, child, preadolescent, adolescent, adult, and elderly. (PR: DTS 201)

320 **Intermediate Nutrition. 3 hrs.**
Builds on knowledge acquired in introductory nutrition, and prepares students for advanced nutrition courses. Development of therapeutic diets, analysis of vitamin and mineral needs, and digestive processes discussed in detail. (PR: DTS 201 and BSC 227 or concurrent)

403 **Advanced Nutrition. 3 hrs.**
An in-depth study of digestion, absorption, and metabolism of macronutrients; maintaining homeostasis in the body is also discussed in relationship to fluid, electrolyte, and acid-base balance. (PR: DTS 320, BSC 228, and CLS 200 or concurrent)

409 **Community Nutrition. 3 hrs.**
Nutritional needs of communities and the dietitian's role in addressing them are identified, and community nutrition programs are closely examined. (PR: DTS 320 or concurrent)

410 **Cross-Cultural Foods.**
Explores the relationships among food, nutrition, history, geography, culture, traditions, religion, communication, and acculturation. Studies cultural paramets and current issues that have shaped and continue to influence foodways.

460 **Research in Dietetics. 3 hrs.**
An introduction to quantitative and qualitative research methodologies with application in the field of dietetics. (PR: Senior standing)

468 **Chemistry of Foods. 3 hrs.**
Experimental study of chemical and physical factors affecting food preparation. (PR: DTS 202 and CLS 200 or concurrent)

469 **Medical Nutrition Therapy I. 3 hrs.**
A study of medical diseases and conditions in relation to medical nutrition therapy and the nutrition care process. (PR: DTS 320 and BSC 228)

470 **Medical Nutrition Therapy II. 3 hrs.**
A continued study of medical diseases and conditions in relation to medical nutrition therapy and the nutrition care process. Case study presentations access critical thinking skills. (PR: DTS 469)

476 **Senior Seminar in Dietetics. 3 hrs.**
As a synthesis of dietetics program content, students will use food and nutrition knowledge to plan, implement, and evaluate a nutrition education program and prepare for supervised practice. (PR: Senior standing)

DIGITAL FORENSICS AND INFORMATION ASSURANCE (DFIA)

261 **Introduction to Linux. 3 hrs.**
An introductory course for the Linux operating system, focusing on its application in information assurance and digital forensics.

305 **Open Source Intelligence. 3 hrs.**
This course identifies and demonstrates free online resources that can aid investigators in searching the Internet for resources than can be applied to domestic and international investigations. (PR: DFIA and CJ majors only)

357 **Network Penetration and Attack. 4 hrs.**
Students will explore tools and techniques used to penetrate, exploit and ex filtrate data from computers and networks.

400 **Introduction to Digital Forensics. 3 hrs.**
This course teaches students how information is recovered from electronic devices and the forensic techniques used to perform forensic examinations. In addition, legal issues regarding electronic data will be discussed. (PR: IST 264)

420 **Incident Response. 3 hrs.**
This course examines forensic and investigative aspects of a network intrusion. Topics include pre-incident preparation, developing leads, scoping an incident, forensic data collection, evidence from hosts, networks, and enterprise environments. (PR: DFIA 400)

430 **Exploit Development. 3 hrs.**
Students will learn the skills required to reverse-engineer 32-bit and 64-bit applications, perform remote user application, analyze patches for 1-day exploits, and write complex exploit modern software and operating systems. (PR CIT 352, DFIA 357)

440 **Digital Evidence. 4 hrs.**
Concepts of computer forensics, including handling digital evidence, case preparation, forensic imaging, data recovery, password cracking, e-mail analysis, and report writing. Proper usage of different forensic tools is emphasized. (PR: DFIA 400)

445 **Mobile and Web Pen Testing. 4 hrs.**
This course is designed to teach students the advanced skills and techniques required to test mobile and web applications. (PR: CIT 264, CIT 352)

448 **Forensic Image/Video Analysis. 3 hrs.**
Course will introduce principles of forensic image and video analysis and their application to digital forensics. Practical forensic enhancement and analysis techniques, including how to prepare forensically sound exhibits, are covered.

454 **Network Defense. 4 hrs.**
An in-depth examination of the principles, strategies, and tools used to defend, detect, and respond to a variety of common network attacks.

460 **Applied Digital Evidence and Electronic Discovery. 4 hrs.**
Introduction to the principles, practices and tools of digital forensics and electronic discovery. Hands-on exercises in a simulated real-world environment are a critical component of the course. (PR: IST 449)

461 **Cyber Warfare. 3 hrs.**
Broad examination of this new form of conflict including the role of nation states, the challenge of attribution, potential impact on the physical world, and current government policy and doctrine.

462 **Network Forensics. 4 hrs.**
Examination of techniques and tools used to investigate, search, collect, analyze, and report on network based breaches and events. (PR: IST 264, IST 363, IST 449)

464 **Network Security and Cyber Crime. 3 hrs.**
Addresses security issues for TCP/IP-based networks. Access Control and Communications issues are covered as well as Internet security in the areas of cryptography, protocols, applications, encryption, hash functions, digital signatures, etc. (PR: IST 362)

467 **Mobile Device Forensics. 4 hrs.**
Identification, preservation, collection, analysis, and reporting techniques and tools used in the forensic examination of mobile devices such as cell phones and GPS units. (PR: IST 264, IST 449)

490 **Capstone. 3 hrs.**
This course reinforces and assesses the student's ability to apply core digital forensic and information assurance knowledge and skills In a series of realistic practical exercises. (PR: DFIA 357, 400, 454, 462, 467)

491 **Research. 3 hrs.**
Sludenls will explore and apply common research methods used in digital forensics and information assurance. Students will complete a research project including a paper or poster during the semester. (PR: DFIA 460, 467)

EARLY CHILDHOOD EDUCATION (ECE)

101 **Early Childhood Wellbeing. 3 hrs.**
An introduction to the basic requirements and regulations for health and safety in early childhood programs serving children from birth to age eight.

102 **Early Childhood Programs (CT). 3 hrs.**
A critical analysis of the historical, philosophical, political, social, and theoretical foundations of early childhood programs, with specific attention to current programs serving children prior to school entry.

201 **Technology Skills for Early Childhood. 3 hrs.**
Application of technology in the teaching and administration of early childhood education programs.

204 **Parenting. 3 hrs.**
This course examines parenting from a socio-cultural and developmental perspective using a systems model.

215 **Family Relationships. 3 hrs.**
Relationships in the family during its life cycle, with some consideration of family life in other cultures.

303 **Child Development. 3 hrs.**
Care and guidance of young children two through five years in relation to their physical, emotional, mental and social development. Observation and participation in nursery school required.

322 **Language and Literacy. 3 hrs.**
Provide pre-service teachers with an overview of the emergent nature of the development of language and literacy in the young child in a context that is developmentally and culturally appropriate.

323 **Assessment in Early Childhood. 3 hrs.**
Realistic and practical guidance in providing learning experiences for children from diverse cultural backgrounds based upon authentic assessment practices.

324 **Early Childhood Science and Math Methods. 3 hrs.**
Strategies for integrating math, science and technology in early childhood curriculum with focus on inquiry approaches. (CR/PR: EDF 218 and ECE 303)

325 **Play and Creativity. 3 hrs.**
Exploration of the multiple ways children and adults express their thoughts and represent their environment and experiences. (PR: ECE 303)

420 **Infant/Toddler Environments and Relationships. 3 hrs.**
Creation of developmentally supportive environments for infants and toddlers in group settings with emphasis on establishing nurturing relationships. (CR: ECE 421)

421 **Infant/Toddler Education: Practicum. 3 hrs.**
Practice in planning and leading an infant/toddler group with emphasis on environments and relationships that provide supportive nurturance and education for the babies and their parents. (PR: ECE 303)

430 **Preschool Curriculum and Methods. 3 hrs.**
Historical and contemporary curriculum and methods for preschool children with emphasis on current best practices.

431 **Guidance of the Young Child: Practicum. 3 hrs.**
Techniques of guidance of young children with emphasis on adult-child interaction. Laboratory observation required. (PR: COUN 435, ATED4)

435 **Administration of Early Childhood Programs. 3 hrs.**
Administration of early childhood programs serving infants, toddlers and preschool children.

472 **Early Childhood Capstone. 3 hrs.**
Application of ECE content knowledge in the management of early childhood programs: senior level capstone. Permission required. (PR: Permission)

485-488 **Independent Study in Early Childhood Education. 1-4 hrs.**
Permission of the coordinator. Requires 2.5 GPA, limit of 6 hours to be used in professional education as a specialization.

ECONOMICS (ECN)

200 **Survey of Economics. 3 hrs.**
Major emphasis given to microeconomic topics such as supply and demand, market structure, and international trade. Macroeconomic concepts and aggregate supply-aggregate demand model are examined. (Not open to students in the College of Business or to students who have completed ECN 250)

250 **Principles of Microeconomics. 3 hrs. I, II.**
Principles of scarcity, opportunity cost, and supply and demand are developed along with price and wage determination in the marketplace. International trade and policy problems are also examined. (Not open to students who have completed ECN 200)

253 **Principles of Macroeconomics. 3 hrs. I, II.**
Introduction to the workings of the national economy. Focus on the forces driving economic growth, inflation, unemployment, and the country's international economic relations. (PR: ECN 200 or 250).

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

310 **Money and Banking. 3 hrs.**
Money, credit and credit institutions in the United States; monetary, fiscal, and banking functions of the Federal Reserve System. (PR: ECN 250, ECN 253)

326 **Intermediate Macroeconomic Analysis. 3 hrs. II.**
Advanced study of the national economy as a whole. The main topics focused on are: Economic growth, unemployment, inflation, international monetary & financial relations, and macroeconomic policy activity. (PR: ECN 250, ECN 253)

328 **Intermediate Microeconomic Analysis. 3 hrs. I.**
Microeconomic theories of the production and pricing of goods and services, payments to the factors of production. (PR: ECN 250, ECN 253)

405 **Environmental Economics. 3 hrs.**
An application of basic economic theory to a consideration of a wide range of environmental problems including pollution, natural resource exhaustion, population and economic growth. (PR: ECN 250)

408 **Comparative Economic Systems. 3 hrs. I, II.**
Marxism, capitalism, communism, fascism and socialism considered as theories, movements and actual political economies. (PR: ECN 250, ECN 253)

420 **International Trade. 3 hrs. I.**
An introduction to the basic microeconomic models explaining the reasons for and the effects of trade among nations, trade restrictions, and regional trading arrangements. (PR: ECN 250, ECN 253)

421 **Global Macroeconomic Analysis. 3 hrs. II.**
Current topics in international monetary relations, and how countries use macroeconomic policy to influence their performance in the global economy, and how global events influence country performance. Emphasis upon applications. (PR: ECN 250, ECN 253)

423 **Introduction to Econometrics. 3 hrs. I.**
Combines economic theory with real data to obtain quantitative results for purposes of explanation and prediction. The development of useful economic models applicable to present day world problems. (PR: ECN 250, ECN 253, MGT 218)

460 **Economics of Developing Countries. 3 hrs. I, II.**
Introduction to developing nations in the world economy. Focus on their economic characteristics, current economic problems, and policy issues. Interactions between the world economy and country performance. (PR: ECN 250, ECN 253)

466 **Economics Workshop. 3 hrs. II.**
Capstone Course. Emphasis on learning economics through applied research, writing, and oral presentations of student work. (PR: ECN 326, 328, and 423)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs**.
Members of the department may teach, when necessary, any economics subject not listed among the current course offerings.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
A research project conducted by a qualified student under guidance of a member of the department; involves gathering of data, interpretation, and presentation of findings in a written report.

490 **Internship. 3-12 hrs. (CR/NC)**
A supervised internship in which the student works for a business firm/agency to gain practical experience in the student's major. The program of work and study will be defined in advance and the students performance will be evaluated. (PR: Permission of Dean)

EDUCATIONAL FOUNDATIONS (EDF)

201 **Educational Psychology and the Developing Learner. 3 hrs.**
A study of the psychological principles for learning and teaching based on children's emotional, social, cognitive, and physical development. (CR: EDF 270)

218 **Child and Adolescent Development in Schools. 3 hrs.**
A basic course in the study of children's emotional, social, mental, and physical development. Field experience required. (PR: Sophomore standing. CR: 270)

270-272 **Level I Clinical Experience. (Corequisite with Educational Foundations 218; no credit hours)**
A public school Clinical Experience in elementary, secondary and middle schools. An opportunity to work with faculty, staff and students in a teaching/learning environment. (CR: EDF 218)

280-283 **Special Topics. 1-4 hrs.**

319 **Applications of Learning Theory. 3 hrs.**
A study of the psychological principles which are the foundation for learning and teaching. (PR: ATED 4)

402 **Psychology of the Middle Childhood Student. 3 hrs.**
Study of developmental principles relating to the physical, cognitive, social and moral development of the middle childhood student (10-14 years old).

406 **Foundations of Education. 3 hrs. I, II, S.**
A survey of the historical, philosophical and sociological foundations of American education with emphasis upon current educational problems and issues. (PR: Junior standing)

415 **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. (PR: Junior standing)

417 **Statistical Methods. 3 hrs.**
A foundation course in descriptive and inferential statistics as applied in education and the social sciences. (PR: Junior standing)

435 **Classroom Assessment. 3 hrs.**
History, philosophy and elementary statistical methods for testing, measuring and evaluating pupil behavior are studied. (PR: Junior standing)

475 **Schools in a Diverse Society. 3 hrs.**
Study of social, historical and philosophical foundations of U.S. schooling. Provides a basis for examining and critiquing student teaching experiences. Contributes to capstone experience. (PR: ATED 4)

480-483 **Special Topics. 1-4 hrs.**

485-488 **Independent Study. 1-4 hrs.**

495H-496H **Readings for Honors in Foundations of Education. 1-3; 1-3 hrs.**

ELECTRICAL AND COMPUTER ENGINEERING (EE)

210 **Programming Lab. 3 hrs.**
This course introduces students to the fundamental principles of programming for solving engineering programs. It familiarizes students with the process of translating real-life engineering problems to computation problems. (PR: CS 110)

211 **Introduction to Computer Engineering. 3 hrs.**
Provide a study of stat structure, operating systems concepts, hardware design methods and relationship between hardware and software. (PR: EE 210, MTH 220)

310 **Electromagnetic Fields. 3 hrs.**
This course provides inllepth coverage of all aspects electromagnetics, with a focus on field and wave generation and propagation. The course will focus on11Te more practical aspects of E-M theory. (PR: MTH 335)

320 **Analysis of Signals and Systems. 3 hrs.**
This class introduces students to concepts of probability and random variables necessary for study of signals and systems involving uncertainty; applications to elementary problems in detection, signal processing and communication. (PR: MTH 335)

330 **Random Signals and Systems. 3 hrs.**
This course will introduce the students to the fundamental concepts of probability theory applied to engineering problems, including elementary set operations, sample spaces and probability laws, conditional probability and independence. (PR: EE 320)

340 **Computer Architecture and Design. 4 hrs.**
This course is a study of the factors influencing the design of hardware and software elements of computer systems. Topics include: instruction set design; cache and virtual memory organizations. (PR: EE 211)

350 **Electric Properties of Materials. 3 hrs.**
Introduction to basic physical properties of solid materials; some solid state physics employed, but major emphasis is on engineering applications based on semiconducting, magnetic, dielectric and superconducting phenomena. (PR: EE 202)

360 **Control Systems. 3 hrs.**
Application of state variable and frequency domain techniques to modeling, analysis and synthesis of single input, single output linear control systems. (PR: EE 202)

370 **Electrical Machinery and Power Systems. 3 hrs.**
Fundamentals of energy-handling electric circuits, power electronic circuits, analysis of power electric circuits, elements of linear and rotating electric machinery, induction, and DC machinery. (PR: EE 310)

375 **Communication Systems I. 3 hrs.**
Introduction to the fundamental concepts of computer communication networks. Topics include the OSI reference model, the physical, data link, network, and transport layers, TCP/JP, LANs, DCC, JC. ALOHA, routing and flow control. (PR: EE 320)

380 **Microprocessor Design. 3 hrs.**
Hardware and software for real-time microprocessor-based digital systems. Basic concepts of on-chip components related to digital system functionality. Introduction to 32-bit machines with treatment of 16- and 8- bit machines. (PR: ENR 204)

401 **Communication Systems II. 3 hrs.**
This course will cover topics in the field of RF/microwave engineering, such as transmission lines, waveguides, impedance matching, microwave resonators, RF filters, RF amplifiers and an introduction to antenna design. (PR: EE 375)

410 **Electrical Engineering Design. 3 hrs.**
Application of design process and project engineering as practiced in industry; team approach to the design process; development of a project proposal; proposed project, implemented in EE 420. (PR: Permission)

411 **Introduction to Digital IC Design. 3 hrs.**
This course covers the anlysis and design of digital integrated circuits using CMOS technology. The course emphasizes design of circuit layout, and HSPICE and IRSIM for simulations. Lab is included. (PR: Permission)

415 **Introduction to VHDL Design and Hardware Systems. 3 hrs.**
This course provides fundamentals of hardware design methodologies and meling. It covers the essentials of HDL, embedded C and hardware-embedded systems using VHDL language. Lab is included. (PR: EE 380)

419 **Introduction to Digital Signal Processing. 3 hrs.**
This course covers the transformation, manipulation of signals. It introduces the concepts of discrete-time, discrete-frequency domains, representations and analyses of systems, and filter designs; lab is included. (PR: EE 350)

420 **Capstone Design. 3 hrs.**
Application of the design process and project engineering as practiced in industry; team approach to the design process; completion of project based on proposal from EE 410 or EE 412. (EE 410 or EE 412)

425 **Electric Power Systems. 3 hrs.**
The course emphasizes power engineering areas that include power generation, transmission, and distribution. (PR: EE 370)

440 **Digital Control Systems. 3 hrs.**
Feedback systems in which a digital computer is used to implement the control law; Z-transform and time domain methods serve as a basis for control systems design. (PR: EE 360)

445 **Radio Frequency and Microwave Engineering. 3 hrs.**
Fundamental Radio Frequency (RF) and microwave circuit analysis: return Joss, insertion Joss; transmission lines, lumped elements, impedance matching; theory, analysis and design of basic RF and microwave passive circuits. (PR: EE 320)

447 **Real-Time Digital Processing. 3 hrs.**
This course provides an introduction to the principles of real-time digital signal processing and hands-on development of real-time signal processing algorithms. (PR: EE 320)

448 **Power Electronics. 3 hrs.**
Principles of power electronics. Including understanding of power semiconductor devices, passive components, basic switching circuits, AC/DC, DC/DC, DC/AC converters and their applications. (PR: ENGR 202, EE 310)

ENGINEERING (ENGR)
See also CIVIL ENGINEERING (CE) AREA OF EMPHASIS

102 **Introduction to CAD. 2 hrs. I, II.**
An introduction to scales, plan reading, engineering graphics and computer aided design. Introduction to the operation of modern 2D and 3D CAD software. 2 lec. **(**CR: MTH 127, 130, 132, 229 or 229H)

103 **Freshman Engineering Seminar. 1 hr. I.**
Weekly seminars presented by practicing engineers to help students gain a better understanding of various engineering fields and the attributes required to be a successful engineer. (PR: Engineering major)

104 **The Engineering Profession. 1 hr. I.**
Introduction to the engineering profession and engineering disciplines; introductino to the engineering design process and team projects. (PR: ACT 24 or SAT 560; concurrent PR: MTH 132 or CR: MTH 229 or MTH 229H; engineering major)

111 **Engineering Computations. 3 hrs. II.**
Introduction to effective problem-solving techniques used in various engineering applications with an emphasis on accuracy. Computational tools including calculators, spreadsheets, and a computational environment such as MATLAB will be covered. (PR: Math ACT 24 or SAT Math 560; or concurrent PR: MTH 132; or CR: MTH 229 or 229H; engineering major)

201 **Circuits I. 4 hrs. I.**
Definition of fundamental concepts and components, including operational amplifiers. Steady-state ac and dc analysis using the basic laws of circuits. Principles of electrical measurements. Single-phase ac power. Computer applications. 3 lec–3 lab. (PR: MTH 229)

202 **Circuits II. 4 hrs. II.**
Transient response of first- and second-order systems. Balanced three-phase systems. Mutual inductance, transformers, resonance, and two-port networks. Computer Applications. 3 lec-3 lab. (PR ENGR 201 and MTH 230)

204 **Introduction to Digital Systems. 4 hrs. II.**
Number systems, digital components and systems; Boolean switching algebra; the analysis and design of combinational and sequential circuits; introduction to computer architecture. Laboratory exercises to reinforce lecture topics. 3 lec. – 2 lab. (PR: ENGR 201; CS 120, or consent)

213 **Statics. 3 hrs. I, II.**
Particle and rigid body mechanics for static force systems. 3 lec. (PR: MTH 229; CR: MTH 230)

214 **Dynamics. 3 hrs. I, II.**
Laws of motion, work and energy, impulse and momentum, relative motion. 3 lec. (PR: ENGR 213 and MTH 230)

215 **Engineering Materials. 3 hrs. I.**
Material types and the relationships between material structure and material properties. Material defects, failure, corrosion, and degradation; strengthening mechanisms, test, and joining operations. (PR: CHM 211)

216 **Mechanics of Deformable Bodies. 3 hrs. I, II.**
Strength of materials, shear and moment diagrams, stresses in shafts, beams and columns; combined stresses, deflections; computer applications. (PR: ENGR 213 and MTH 230)

217 **Engineering Co-Op Preparation. 1 hr. I, II.**
To prepare students for both the job search and employment in the field of engineering. Students will learn strategies for conducting a successful Co-Op. (PR: ENGR 102, CE 102, or CS 110)

219 **Engineering Thermodynamics. 3 hrs. II.**
Fundamental concepts of energy analysis; thermodynamic models; First Law and introduction Second Law of thermodynamics; pressure, temperature, volume relationships; enthalpy and entropy. 3 lec-3 lab. (PR: MTH 230)

221 **Engineering Economy. 3 hrs. I, II.**
Economic selection of machines, structures, and processes. Computer applications. (PR: MTH 127, or MTH 130, or MTH 132 or MTH 229; CITE majors only)

222 **Engineering Cost Analysis and Economy. 3 hrs. I, II.**
Economic analysis of engineering proposals; time value of money; evaluation and selection of projects; replacement and retention decisions; uncertainty and risk; inflaction; cost estimation; depreciation; and benefit cost analysis. (PR: MTH 229)

240 **Manufacturing Processes. 3 hrs. II.**
An introduction to manufacturing systems and strategy. A study of manufacturing processess. Measurement and quality assurance machining, welding, and casting processess. Hot and cold forming and joining processes. 1 lec.-6 lab. (PR: ENGR 102 and ENGR 215)

245 **Introduction to Circuits and Controls. 3 hrs. I, II.**
Basic DC and AC electric circuit analysis including: variables, measurement, laws, methods, three-phase circuits, and basic control theory. Includes the use of computer applications and PLC-based controls. (Concurrent PR: MTH 230)

265 **Engineering Analysis. 4 hrs.**
Mathematical and analytical solutions of linear and power systems that involve linear algebra, Fourier analysis, and complex variables. (PR MTH 231)

290 **Internship in Engineering. 1-4 hrs. CR/NC.**
Supervised off-campus activities which provide professional experience in different fields of engineering. (PR: Permission)

318 **Fluid Mechanics. 3 hrs. I.**
Fluid properties, hydrostatic forces, stability of floating bodies, equations of fluid acceleration and motion (continuity, momentum, energy, Euler's Bernoulli's), dynamic similitude, internal flow, and computer solutions in ideal fluids. 3 lec. (PR: ENGR 214; CR: ENGR 319 or CE 319)

319 **Fluid Mechanics Laboratory. 1 hr. I.**
Laboratory experiments to support study of fluid mechanics, including fluid properties, static forces, flow visualization, jet impact, and pipe flow. 3 lab. (PR: ENGR 214; CR: ENGR 318 and MTH 231)

335 **Advanced Engineering Analysis. 3 hrs.**
Mathematical methods for analyzing and solving a range engineering problems, including linear algebra, vector and multivariate calculus, complex variables calculus, and Fourier analysis. (CR: MTH 335)

451 **Introduction to Project Management. 3 hrs. I, II.**
This course covers project management fundamentals including project definition, project selection, project planning, estimating, scheduling, resource allocation and project control. An emphasis will be placed on building effective project teams. (CR: ENGR 452, PR: ENGR 222)

452 **Senior Capstone Design I. 2 hrs. I, II.**
Prepares students for engineering practice by focusing on licensure, ethics, and professional responsibility via presentations by practicing engineers. Students begin work on senior capstone design projects that are finished the following semester in ENGR 453. (PR: Senior Standing in Engineering; Permission)

453 **Senior Capstone Design II. 3 hrs. I, II.**
Students utilize the engineering design process to complete a comprehensive project that addresses a real-world problem with realistic constraints in a collaborative environment. (PR: ENGR 451, ENGR 452)

480-483 **Special Topics. 1-4 hrs.**

485-488 **Independent Study. 1-4 hrs.**

ENGLISH (ENG)

Advanced placement in English is granted on the basis of the Educational Testing Service (ETS) Advanced Placement Test scores. See section entitled "Advanced Placement" of this catalog for details. Students with ACT verbal scores of 34 or better (770 SAT ERW) should notify the Coordinator of Composition (*kelli.prejean@marshall.edu*), who will then arrange for credit in ENG 101-201 to be assigned to the students' records. Students with ACT verbal scores of 28-33 (640 SAT ERW) should enroll in ENG 201H. Students with ACT verbal scores of 18-27 (480 SAT ERW) should enroll in ENG 101. Students who score 17 or below on the ACT verbal (or below 470 SAT ERW), must take ENG 101P. Honors College students should enroll in ENG 200H.

101 **Beginning Composition. 3 hrs.**
Introduction to academic writing with emphasis on writing as a multi-stage process, critical thinking, and fundamental research strategies and skills. (PR: ACT English 18-27 [480 on the SAT ERW])

101P **Beginning Composition Plus. 4 hrs.**
Introduction to academic writing with emphasis on writing as a multi-stage process, critical thinking and fundamental research strategies and skills. Additional attention on reading, paragraph development and sentence-level writing skills. (PR: ACT Verbal below 18 or SAT ERW below 480)

150 **Academic Listening and Speaking. 3 hrs.**
This course promotes the development of English language fluency by nonnative speakers of English. It specifically targets the language skills necessary for successful oral communication within an academic context. (PR: Acceptance to INTO-Marshall Pathways program)

151 **Academic Reading. 3 hrs.**
This course prepares nonnative speakers of English to meet the challenges of reading for academic purposes at the college level by improving their reading skills and English language proficiency. (PR: Acceptance to INTO-Marshall Pathways program)

160 **Academic English and Composition. 6 hrs.**
This course for nonnative speakers of English focuses on written academic English, including grammar, mechanics, research, American English rhetorical conventions, and process writing. It further provides practice in oral communication.

200 **Texting the World (CT). 3 hrs.**
This class brings together literary and non-literary texts and considers how the same theme plays through them via analysis, evaluation, and creation of said texts.

200H **Texting the World - Honors (CT). 3 hrs.**
This class brings together literary and non-literary texts and considers how the same theme plays through them via analysis, evaluation, and creation of said texts. (PR: Honors College status)

201 **Advanced Composition. 3 hrs.**
An advanced composition course centered on critical reading, writing, and research skills for the disciplines. (PR: ENG 101 with a grade of *C* or better OR ENG 101P with a grade of C or better)

201H **English Composition Honors. 3 hrs.**
An accelerated course in English composition. Completion of 201H with a grade of C or better satisfies the University requirement in composition. Students completing the course with a grade of C or better are awarded three additional hours of credit toward graduation. (PR: ACT Verbal 28-33 [SAT ERW 640])

203 **Appalachian Literature. 3 hrs.**
The study of Appalachian literature and texts that reflect cultural, political, and aesthetic experiences in the region as well as the intellectual, emotional, and spiritual experience of its inhabitants. (PR: Completion of Core II composition requirement)

204 **Writing for the Workplace. 3 hrs.**
A writing course focused on the styles and forms used in the workplace. (PR: Completion of Core II composition requirement; restricted to College of Business students, English majors, and English minors)

205 **Popular Literature (CT). 3 hrs.**
The study of popular literature in its cultural contexts.

206 **Good Plays. 3 hrs.**
Study of plays from a variety of traditions and/or historical eras that have had a powerful impact on culture and the tradition of drama. (PR: Completion of Core II composition requirement)

207 **Good Essays. 3 hrs.**
Criticism and analysis of representative selections of short nonfiction (PR: Completion of Core II composition requirement)

209 **Literature of Fantasy. 3 hrs.**
Study of different forms, conventions, and styles in fantastic literature, such as legend, fairy tale, horror story, heroic fantasy, nonsense, and romance. (PR: Completion of Core II composition requirement)

210 **Autobiography. 3 hrs.**
Study of select autobiographies and memoirs from a variety of literary traditions. (PR: Completion of Core II composition requirement))

211 **Science Fiction. 3 hrs.**
Study of science fiction, including its background, themes, types, analyses, and appreciation. (PR: Completion of Core II composition requirement)

212 **Sports Literature. 3 hrs.**
Study of sports literature of different genres, including fiction, poetry, drama, and biography. (PR: Completion of Core II composition requirement)

213 **Good Poems. 3 hrs.**
Selected examples of poems from a variety of cultures and/or historical eras studied through close reading and analysis. (PR: Completion of Core II composition requirement)

214 **Introduction to Comics. 3 hrs.**
Introduction of the literary art form of comics through a study of its history, genres, conventions, and complexities. (PR: Completion of Core II composition requirement)

215 **Good Novels. 3 hrs.**
An introduction to the basic elements of the novel, such as forms and techniques, through careful reading of selected novels and criticism concerning them. (PR: Completion of Core II composition requirement)

220 **The Political Novel. 3 hrs.**
Studies in English and American novels relating significantly to political themes. (PR: Completion of Core II composition requirement)

221 **Postcolonial Literature. 3 hrs.**
Study of postcolonial literature and theory. Focuses on questions of class, gender, sexuality and human rights in the literature of current and former colonies in Asia, Africa, and the Americas. (PR: Completion of Core II composition requirement)

225 **Southern Literature. 3 hrs.**
The study of selected writers of the American South from its beginnings to the present with special attention on writers after 1920. (PR: Completion of Core II composition requirement)

231 **Good Stories. 3 hrs.**
Criticism and analysis of representative short stories, primarily British and American. (PR: Completion of Core II composition requirement)

232 **Good Films. 3 hrs.**
Study of films as narratives, as cultural representations, and as aesthetic expressions. (PR: Completion of Core II composition requirement)

235 **Crime and Sensation Literature. 3 hrs.**
Examines the literary responses to crime and sensational literature and discusses the artistic, cultural, and historical contexts of those responses. (PR: Completion of Core II composition requirement)

236 **Forbidden Literature. 3 hrs.**
Examines the literary responses to "banned literature" and discusses the artistic, cultural and historical contexts of those responses. (PR: Completion of Core II composition requirement)

240 **African American Literatures. 3 hrs.**
Examination of the tradition in African American literatures through close reading. (PR: Completion of Core II composition requirement)

241 **Multicultural Literatures. 3 hrs.**
Study of texts from diverse ethnic and cultural groups in social and historical context. (PR: Completion of Core II composition requirement)

242 **Women Writers. 3 hrs.**
A study of women writers in cultural contexts. Surveys attitudes toward women, women writers, and their work. (PR: Completion of Core II composition requirement)

263 **Introduction to Digital Literary Studies. 3 hrs.**
An introduction to digital literary studies, including the use of digital tools for textual analysis, the study of electronic literature, and the creation of digital texts. (PR: Completion of Core II composition requirement)

280-283 **Special Topics. 1-4 hrs.**

344 **Introduction to Film Studies. 3 hrs.**
An intensive study of film form (mise-en-scène, cinematography, editing, and sound) and international film history. (PR: Completion of Core II composition requirement)

350 **Introduction to Textual Analysis. 3 hrs.**
An introduction to critical reading of texts from a range of genres and media. Develops explication, critical reading, and research skills. Taken within first 9 hours of coursework in major. (PR: Completion of Core II composition requirement and declaration of English major , English 5-Adult major, or English or Creative Writing minor; or permission of chair)

354 **Scientific and Technical Writing. 3 hrs.**
Types and styles of written reports required in science, government, industry, and medicine. Practical applications adapted to the needs of the individual student. (PR: Completion of Core II composition requirement)

355 **Introduction to Critical Theory. 3 hrs.**
An examination of the principles and methods of a range of major critical theories, emphasizing how their application affects textual interpretation. (PR: ENG 350)

360 **Introduction to Creative Writing. 3 hrs.**
An introduction to writing of fiction, poetry, and creative nonfiction. (PR: Completion of Core II composition requirement)

377 **Creative Writing: Poetry. 3 hrs.**
Practice in writing poetry. (PR: ENG 360 or permission of instructor)

378 **Creative Writing: Fiction. 3 hrs.**
Practice in writing fiction. (PR: ENG 360 or permission of instructor)

379 **Creative Writing: Nonfiction. 3 hrs.**
Practice in writing creative nonfiction. (PR: ENG 360 or permission of instructor)

402 **Pre-Professional Composition and Rhetoric. 3 hrs.**
Study of rhetorical invention and models of the composing process, with intensive practice in writing. (PR: ENG 350 and ADMI 4 status)

405 **History of the English Language. 3 hrs.**
The phonology, spelling, grammar, syntax, and vocabulary of previous language periods as background to Modern English. (PR: ENG 350 or permission of chair)

407 **Writing, Editing, and Document Design. 3 hrs.**
Study of the principles and practices of professional writing, editing, and document design. (PR ENG 204 or ENG 350 or ENG 354)

408 **Writing in the Digital World. 3 hrs.**
Development of writing skills and strategies with an emphasis on digital texts and genres. (PR: Completion of Core II composition requirement)

409 **Milton. 3 hrs.**
Biographical and critical study, including Milton's English poetry and prose, and his literary and intellectual milieu. (PR: ENG 350 or permission of chair)

410 **Shakespeare's Comedies, Tragicomedies, and Romances. 3 hrs.**
Intensive study of Shakespeare's comedies, tragicomedies, and late romances. Also includes the Sonnets and *Venus and Adonis*. (PR: ENG 350 or permission of chair)

411 **Chaucer. 3 hrs.**
The poetry of Chaucer, chiefly the *Canterbury Tales*, in the light of medieval tradition and critical analysis. (PR: ENG 350 or permission of chair)

412 **Shakespeare's Histories and Tragedies. 3 hrs.**
Intensive study of Shakespeare's histories and tragedies. (PR: ENG 350 or permission of chair)

414 **Nineteenth-Century British Novel. 3 hrs.**
Austen, Scott, the Brontes, Gaskell, Dickens, Hardy, Schreiner, and others. (PR: ENG 350 or permission of chair)

415 **Victorian Poetry. 3 hrs.**
Tennyson, Browning, Arnold and others. (PR: ENG 350 or permission of chair)

416 **Victorian Nonfiction. 3 hrs.**
Essays, speeches, treatises, and other works from Britain's Victorian age. Includes such authors as Arnold, Carlyle, Darwin, Huxley, Eliot, Matineau, Mill, Newman, and others. (PR: ENG 350 or permission of chair)

419 **Approaches to Teaching Literature. 3 hrs.**
The intensive study of the pedagogy of literature and literary critical theory and its classroom applications. (PR: ENG 350, ADMI 4 status, and ENG 410 or 412)

421 **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, Benjamin Franklin, Phillis Wheatley, Anne Bradstreet, Washington Irving, and James Fenimore Cooper. (PR: ENG 350 or permission of chair)

422 **American Literature, 1830-1865. 3 hrs.**
American literature of the Romantic period, including such authors as Emerson, Douglass, Poe, Melville, Hawthorne, Whitman, Dickinson, and lesser figures of the period. (PR: ENG 350 or permission of chair)

423 **American Literature, 1865-1914. 3 hrs.**
American literature of the Realistic and Naturalistic periods, including such authors as Howells, Crane, Twain, James, Chopin, Dreiser, Chesnutt, and Wharton. (PR: ENG 350 or permission of chair)

424 **American Literature after 1914. 3 hrs.**
American literature after 1914, including such authors as Faulkner, Hemingway, Cather, Carver, Vonnegut, Morrison, and others. (PR: ENG 350 or permission of chair)

427 **Studies in Authors or Genre. 3 hrs.**
Intensive study focused on author(s) or genre. Topics will vary. May be repeated up to 6 hours with permission of chair. (PR: Completion of Core II composition requirement and any 200- or 300-level literature class, or permission of chair)

428 **International Literature. 3 hrs.**
Readings in contemporary literature from the non-Anglo-European world. Texts will be taken from Asian, African, South American, Australian, and other authors. (PR: ENG 350 or permission of chair)

430 **Young Adult Literature. 3 hrs.**
Examines literature written for adolescents and young adults, with a focus on coming of age and the formation of identity. (PR: ENG 350 or permission of chair)

432 **Contemporary Literature. 3 hrs.**
Examines literature of the present, its influences, and the increasing diversification of cultural/textual production, including cinema, video, comix/manga, videogames, and blogs. (PR: ENG 350 or permission of chair)

433 **Twentieth Century British and Irish Poetry. 3 hrs.**
Principal poetry since the Victorian period. (PR: ENG 350 or permission of chair)

434 **Twentieth Century American Poetry. 3 hrs.**
Principal poetry since 1900. (PR: ENG 350 or permission of chair)

435 **Modernism. 3 hrs.**
Examines literary modernism and the artistic, cultural, and historical contexts of that movement. (PR: ENG 350 or permission of chair)

436 **Medieval British Literature. 3 hrs.**
Old English elegiac and heroic poetry; Middle English lyrics and romances; the Ricardian and Malory. (PR: ENG 350 or permission of chair)

437 **Tudor Literature: Poetry and Prose of the 16th Century. 3 hrs.**
Survey includes works by Wyatt, Philip and Mary Sidney, Spenser, Elizabeth I, Nashe, Marlowe, Raleigh, Anne Cecil, Lyly, Isabella Whitney, and Shakespeare, excluding drama. (PR: ENG 350 or permission of chair)

438 **17th Century Literature: Poetry and Prose. 3 hrs.**
Survey includes Donne and the Metaphysical poets, the Cavalier lyricists, Bacon, Browne, Lady Mary Wroth, Herbert, Jonson, Amelia Lanyer, Burton, Walton, Hobbes, and Bunyan. (PR: ENG 350 or permission of chair)

440 **Selected Topics in Film. 3 hrs.**
Intensive study of a specific theme or genre. Topics will vary. May be repeated up to 6 hrs. with permission of chair. (PR: ENG 344 or ENG 350 or permission of chair)

442 **Gender and Sexuality in Film. 3 hrs.**
Exploration of evolving portrayals of gender roles and sexualities throughout film history and across film genres. (PR: ENG 344 or ENG 350 or WS 101 or permission of chair)

445 **Screenwriting. 3 hrs.**
Practice in writing screenplays. (PR: Core II Composition, plus one of the following: ENG 344 or ENG 360 or ART 219 or THE 201)

447 **British Romantic Poets. 3 hrs.**
Emphasis on Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. (PR: ENG 350 or permission of chair)

450 **Western World Literature to the Renaissance. 3 hrs.**
Major works (excluding English), with emphasis on Homer, the Greek Drama, Virgil, Dante, and Cervantes. (PR: ENG 350 or permission of chair)

451 **Western World Literature since the Renaissance. 3 hrs.**
Major works (excluding English and American), with emphasis on Racine, Moliere, Goethe and principal continental fiction. (PR: ENG 350 or permission of chair)

455 **Advanced Critical Theory. 3 hrs.**
Intensive study of specific theorists, theoretical schools, or history of literary theory, including application to texts. Topics will vary. May be repeated up to 6 hours with permission of chair. (PR: ENG 355)

460 **Composition and Writing Center Theory. 3 hrs.**
Introduces students to the study of teaching writing in a classroom setting and in one-to-one tutoring. (PR: ENG 350 or permission of chair)

466 **Literacy Studies. 3 hrs.**
Theories of writing and reading development with a focus on cultural, linguistic, and rhetorical influences on literacy acquisition. (PR: Completion of Core II composition requirement)

467 **Visual Rhetoric. 3 hrs.**
Study of the production, strategies, reception, and persuasive effects of visual texts. (PR: Completion of Core II composition requirement)

469 **Teaching Creative Writing. 3 hrs.**
Pedagogy and practice for students who plan to teach Creative Writing at the primary, secondary, or college level. (PR: ENG 350 and ENG 360)

470 **Form and Theory of Creative Writing. 3 hrs.**
Readings in creative writing illustrating formal and theoretical concerns. Readings will also be applied to student writing. (PR: ENG 350 and ENG 360, or permission of instructor)

475 **Introduction to Linguistics. 3 hrs.**
The structural and descriptive approach to study of the English language. (PR: Completion of Core II composition requirement)

476 **Structures of the English Language. 3 hrs.**
Study of the structures of English grammar, including how these structures relate to punctuation, language acquisition, dialect variation, and the history of English. (PR: Completion of Core II composition requirement)

478 **Language, Society, and Self: An 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. (PR: Completion of Core II composition requirement)

480-483 **Special Topics. 1-3 hrs. each.**
(PR: ENG 350 or permission of chair)

485-488 **Independent Study. 1-4 hrs. each.**
(PR: ENG 350 or permission of chair)

490 **Internship in English. 3 hrs.**
A supervised internship. The student works for a local firm/agency to gain practical experience in the major. Arranged by student and department. Supervised by firm. (PR: Any 200-level literature course or ENG 350)

491 **Creative Writing: Poetry Workshop. 3 hrs.**
A practical and intensive class in exploring the varieties of creative expression; exercises on the creating of verse in different forms and styles. (PR: ENG 377 or permission of the instructor)

492 **Creative Writing: Fiction Workshop. 3 hrs.**
Offers students a forum for presentation, discussion, and refinement of their work, either short stories or novels. (PR: ENG 378 or permission of the instructor)

493 **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.), employing techniques typically reserved for fiction (dialogue, narrative, poetic language, etc.). (PR: ENG 379 or permission of the instructor)

499 **Senior Capstone. 3 hrs.**
An intensive examination of topics relevant to advanced English studies. Provides capstone experience through substantial scholarly, creative, and/or pedagogical composition and presentation. (PR: ENG 350, ENG 355, and 12 hours of 400-level English coursework at C or better; or permission of chair)

ENTREPRENEURSHIP (ENT)

220 **Creativity and Innovation. 3 hrs. II.**
Introduction to creativity theory, including exposure to basic frameworks, concepts and obstacles to creativity. Through practical application, the relationships between creativity, innovation and entrepreneurship are explored.

280-284 **Special Topics. 1-4 hrs.**
Special topics in entrepreneurship.

350 **The Startup Experience. 3 hrs**. I.
An experiential learning course, student will complete a portion of this course as an apprentice at a new or small business, followed by experience starting an online business. (PR: MGT 360)

370 **Dilemmas and Debates in Entrepreneurship. 3 hrs.**
Refereed by a faculty member, students will engage with entrepreneurs to discuss issues relevant to new ventures, including partnerships, working with family, debt, ethical dilemmas and customer issues. (PR: MGT 360)

380 **Social Entrepreneurship. 3 hrs**.
Introduces students to social entrepreneurship, social venture models and funding options including philanthropy, government funding, and income-generating, self-sustaining business models. (PR: MGT 360)

467 **Strategic Entrepreneurship. 3 hrs. II.**
Lean startup and strategic thinking from both causation and effectuation viewpoints, utilizing interdisciplinary skills to develop an original business concept, model, and plan. Capstone course. (PR: ENT 350, MKT 442)

469 **New Venture Launch. 3 hrs.**
Working with advisor and mentors, students start their own ventures, develop prototypes (or service simulations), conduct a market test, pivot on their original plans, and pitch ideas to the local entrepreneur community. (PR ENT 467 and instructor approval)

471 **Social Enterprise Practicum. 3 hrs.**
Supervised field experience in a social enterprise for a minimum of 200 clock hours. Regular conferences with instructor and weekly progress reports. (PR: ENT 467 and instructor approval)

472 **New Venture Practicum. 3 hrs.**
Supervised field experience in a new or existing venture for a minimum of 200 clock hours. Regular conferences with instructor and weekly progress reports. (PR: ENT 467 and instructor approval)

480-484 **Special Topics. 1-4 hrs.**
Study of an advanced topic not normally covered in other courses. (PR: Permission of instructor)

EXERCISE SCIENCE AND SPORT (ESS)

118 **Development of Physical Education and Sport in the United States. 3 hrs. I, II**.
A survey of the development of sport forms and physical education curricula from colonial America through the present day.

210 **Practicum in Exercise Science. 4-5 hours.**
The purpose is to provide a practical introduction to various emphases in exercise science. (PR: Permission Only)

211 **Physiology of Fitness. 3 hrs. I, II.**
The student will gain knowledge of behavior change, components of exercise sessions, cardinal principles of conditioning, basics of fitness programming, and instructing individual and group exercise sessions. (PR: HS 201)

215 **Introduction to Exercise Science. 3 hrs.**
Introductory overview of the current trends and theories in exercise science. Preview the subspecialties of exercise science, body systems, exercise training and assessment, and course preparation for professional certification and careers in various aspects of exercise science. In addition, the student will be exposed to the global and regional health issues regarding physical inactivity and how public health and clinical policies aim to combat the growing pandemic.

218 **Sports in Society (CT). 3 hrs. I, II.**
A study of the possible interrelationship between physical activity and various sociocultural factors.

220 **Fitness and Wellness. 3 hrs.**
Addresses fitness and weight control and modes of change. Primary focus is on goals in nutrition label identification, nutrient assessment, weight control, and fitness and how to reach them safely.

250 **Introduction to Sport Management. 3 hrs.**
The student will gain knowledge in sport management with multiple emphases including professional, collegiate, and recreational sports.

270 **Sport Tourism. 3 hrs.**
This course introduces students to the nature, structure, and complexity of the sport tourism industry. Topics covered include economic, sociocultural and environmental impacts; motivations; marketing; and development principles.

290 **Sport Management Practicum. 1-3 hrs. II.**
Supervised experience with classroom setting that emphasizes a variety of skills and exploration of career opportunities in. Sport Management (PR: ESS 250; CR: Admission to Sport Management program).

295 **Adult Fitness Programs in Business and Industry. 2 hrs. I.**
Basic course dealing with adult fitness programs in business and industry. Consideration will be given to types of programs and professional opportunities.

301 **Philosophy of Sport and Physical Activity. 3 hrs.**
Development of philosophic reasoning skills to better understand the role that philosophy plays in our understanding and conception of physical activity.

305 **Health and Physical Education in Early Childhood Programs. 3 hrs.**
Provides students with a wide array of knowledge and skills so they can effectively assume teacher responsibilities in early childhood health and physical education programs.

310 **Teaching Individual Sports. 2 hrs. I.**
Study and application of the principles and techniques of teaching individual sports skills in grade 5-12. (PR: Completion of Physical Education Activity Competencies)

311 **Teaching Team Sports. 2 hrs. II.**
Study and application of the principles and techniques of teaching team sports skills in grades 5-12. (PR: Completion of Physical Education Activity Competencies)

314 **Physical Education in Elementary Schools. 3 hrs. I, II, S.**
A practical approach designed to aid the elementary teacher in teaching methods and techniques needed for the teaching of elementary physical education. (PR: Majors, ESS 350)

345 **Exercise Physiology. 3 hrs. I, II.**
Focuses on physiological and functional alterations in response to acute and chronic exercise with emphasis on metabolic, neuroendocrine, neuromuscular, cardiopulmonary, and environmental adaptations. (PR: BSC 228 with a grade of *C* or better)

350 **Rhythms and Movement for Children. 3 hrs. II.**
Provides elementary physical education specialist with an overview of rhythms and movement activities for elementary school children.

365 **Tests and Measurements. 3 hrs. II.**
A study of the nature and purpose of measurements and evaluation in the field of physical education. Evaluation of available tests and practice in administration of tests.

375 **Fitness Assessment and Exercise Prescription. 3 hrs. II.**
Focuses on the processes and procedures of physical fitness evaluation and prescription. Emphasis is placed on the design of individual and group exercise programs. (PR: ESS 345 with a grade of *C* or better)

380 **Sport Marketing. 3 hrs.**
A study of the application of marketing concepts to the sport industry. (PR: MKT 340)

381 **Sport Finance/Economics. 3 hrs.**
In this course, students will be introduced to current economic and financial issues confronting managers in the sport industry.

385 **Development and Management of Adult Fitness Programs. 3 hrs. I.**
Considers organizational structures, record keeping, budgeting, and liability factors. (PR: ESS 345, 375)

386 **Adult Fitness. 3 hrs.**
Discuss health risk appraisal and exercise benefits of commonly seen pathophysiology among U.S. adults. (PR: ESS 345 with a grade of *C* or better)

390 **Sport Management Pre-Internship Experience. 3 hrs.**
A minimum of 90 hours in the sport and leisure industry setting emphasizing a variety of work experiences and internship application skills in Sport Management. (PR: ESS 290)

401 **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.

410 **Principles, Organization and Administration of Physical Education and Athletics. 3 hrs. I**.
Principles of health and physical education, procedures in the organization and administration of the physical education program, including purchase, care and use of equipment.

416 **Planning and Developing HPERD and Athletics 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. 2 lec-2 lab.

418 **Ancient and Medieval Sport History. 3 hrs.**
An in depth investigation of the role of sport in ancient & medieval societies. Course focuses on ancient Greece, Rome, and medieval Europe, but will also briefly cover non-Western cultures.

425 **Sport in Film. 3 hrs.**
The relationship between sport and feature motion pictures are analyzed in the historical, social and cultural contexts. (PR: Junior or senior standing)

430 **Sport Law. 3 hrs.**
Study of the basic principles of the legal system as they operate in the environment of American sport. (PR: Junior or Senior standing)

435 **Adapted Physical Education and Mainstreaming. 3 hrs.**
Theory of remedial exercise and individualizing of physical activities to meet the needs of the physically handicapped. (PR: HS 201)

440 **Women in Sport. 3 hrs.**
The history of women in sport, gender equity, the opportunities for women and intercollegiate and professional sports (such as participant, coach, trainer, journalist, agent, and promoter), and physiological perspectives.

442 **Principles of Strength and Conditioning. 3 hrs.**
Application of strength and conditioning principles in the development and administration of sport-based exercise programs. Emphasis on the teaching of flexibility, powerlifting, Olympic weightlifting, and speed and agility programs. (PR: HS 365)

443 **Principles of Strength and Conditioning Laboratory. 1 hr.**
Laboratory course that demonstrates strength and conditioning skills. Practical application of strength and conditioning principles with emphasis on the teaching of flexibility, powerlifting, Olympic weightlifting, and speed and agility programs. (CR: ESS 442)

444 **Cardiovascular Exercise Physiology. 3 hrs.**
Detailed study of the anatomy and physiology of the cardiovascular systems and its response to acute and chronic exercise. (PR: ESS 345, 346 and HS 200)

445 **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 444)

446 **Neuromuscular Exercise Physiology/Plasticity. 3 hrs.**
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 345, 346 and HS 200)

447 **Advanced Exercise Physiology. 3 hrs.**
The course in Advanced Exercise Physiology will focus on the detailed study of the cardiovascular, endocrine, immune, neuromuscular, and respiratory systems in response to acute and chronic exercise. (PR: ESS 345 AND ESS 346)

450 **Sport Agent. 3 hrs.**
This course focuses on the understanding of the sports agent industry and structure.

452 **Sport Performance Analysis. 3 hrs.**
This course will provide students with an understanding of basic and advanced principles of sport performance analysis, and specific methods to adapt and utilize in the practical sports fields.

458 **Sales and Promotion Management in Sport and Leisure Industry. 3 hrs.**
A study of sales and promotion management in the sport and leisure industry.

469 **Curriculum Development in Physical Education. 3 hrs.**
A study of principles, objectives and procedures in curriculum construction in the elementary and secondary school programs. Typical programs studied and evaluated. (PR: Completion of Physical Education activity competencies)

475 **Seminar in Sport Management and Marketing. 3 hrs. II.**
Course is designed to provide students with an overview to all aspects involved in the Sport Management and Marketing field through classroom lectures, guest speakers, and field trips. (PR: Junior standing in School of Kinesiology)

476 **Theoretical and Practical Aspects of Coaching. 3 hrs.**
An indepth study of the principles and problems of coaching.

478 **Energy Sources, Body Composition and Performance. 3 hrs.**
Consideration of metabolic requirements for various types of physical activity as well as the impact that physical activity and training can have on body composition and performance. (PR: PE 345 with a grade of *C* or better)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: HPER majors only, with permission of Division chairperson)

485-488 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.

490 Internship in Sport Management. 3-8 hrs.
(PR: Senior standing and ESS 290)

491 Internship in Exercise Science. 1-12 hrs.
Field internship experience. (PR: ESS 375 with a grade of *C* or better)

495H-496H Readings for Honors in Physical Education and Sport. 1-3; 1-3 hrs.

FINANCE (FIN)

175 Personal Finance (CT). 3 hrs.
To assist the consumer in management of personal financial affairs. Topics are consumerism, insurance, savings instruments, banking, personal expenditures and budgeting, personal taxes, house buying, introduction to investments, and estate planning.

280 Special Topics. 1-4 hrs.

321 Principles of Risk Management and Insurance. 3 hrs.
Fundamental concepts and principles of risk; techniques used to manage pure risks, and the role of insurance and the insurance mechanism in handling the exposure of individuals and businesses.

323 Principles of Finance. 3 hrs. I, II.
Business finance from viewpoints of business manager; use of financial statements, tools, and concepts for measuring and planning for profitability and liquidity. (PR: MGT 218, ACC 215)

327 Life and Health Insurance. 3 hrs.
Legal facets of life, health, and annuity contracts; risk selection; programming, mathematics of life and health insurance; individual and business uses of life insurance; taxation; regulation of companies. (PR: FIN 321)

329 Property and Liability Insurance. 3 hrs.
Risk Management and Insurance tools applied to the needs of the corporate enterprise; direct/indirect property exposures; third-party claims; workers compensation; fidelity; crime; boiler/machinery, valuation and insurance surveys. (PR: FIN 321)

343 Intermediate Financial Management. 3 hrs. I, II.
Application of financial principles to corporate business problems. Computer analysis will be utilized where appropriate. (PR: FIN 323)

356 Financial Management of Health Care Organizations. 3 hrs..
Management of working capital, evaluation of financial data, capital budgeting, the capitalism process, and the study of third party reimbursement systems. (PR: FIN 323)

360 Commercial Banking. 3 hrs.
Bank structure; asset and liability management; management of reserves; liquidity management; credit analysis and loan administration; costs and pricing of bank services; analysis of bank performance and capital adequacy; evolution of the ''financial supermarket.'' (PR: FIN 323)

370 Principles of Investment. 3 hrs. I, II.
A study of financial market operations, security analysis and portfolio selection. Models of capital market equilibrium, trade-off between risk and return, and how to evaluate portfolio performance are also discussed. (PR: FIN 323)

380 Entrepreneurial Finance. 3 hrs.
Entrepreneurial Finance examines the principles of small business finance which include projecting financial needs and surveying potential sources of financing. Other areas covered include financial forecasting and sources of capital.

405 Social Insurance and Employee Benefits. 3 hrs.
Coverages and limitations of social insurance; social security; workers compensation; unemployment insurance; Medicare; Medicaid; integration with private insurance and employee benefits; theory of group programs; pension plans. (PR: FIN 321)

410 Corporate Risk Management. 3 hrs.
Identification, analysis, and handling of the risk exposures faced by businesses and risk managers; loss preventation and control; risk retention; self-insurance and corporate insurance programs. Case Study. (PR: FIN 321)

425 Portfolio Analysis and Management. 3 hrs.
Analytical procedures for valuing various financial securities and techniques for the creation and maintenance of portfolios. (PR: FIN 370)

431 Futures and Options. 3 hrs.
To introduce options and futures, their market microstructure, their theoretical foundation pertaining to pricing and hedging with such contracts, and their uses. (PR: FIN 370)

432 Financial Advising: FINRA S-7. 3 hrs.
This course prepares students for the Series 7 exam that entitles the holder to sell all types of securities products with the exception of commodities and futures.

440 International Financial Management. 3 hrs. I, II.
International financing techniques and the role of finance in multinational organizations. (PR: FIN 323)

470 Financial Policies and Strategies. 3 hrs. I, II.
Financial planning, working capital management, capital budgeting, divided policy and comprehensive problems. Capstone Course. (PR: FIN 343, FIN 440)

475 International Business Strategies. 3 hrs. II.
Strategies for gaining competitive advantage in the global business environment. Topics include international trade and investment, economic growth, and operations of multinational corporations. Capstone Course for the International Business major. (PR: FIN 343 and ECN 421)

480 Special Topics. 1-4 hrs.
Study of an advanced topic not normally covered in other courses. Finance majors only, with permission of department chairman.

485-488 Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.

490 Internship. 3-12 hrs. (CR/NC)
A supervised internship in which the student works for a business firm/agency to gain practical experience in the student's major. The program of work and study will be defined in advance and the student's performance will be evaluated. (PR: Permission of Division Head)

FIRST YEAR STUDIES (FYS)

100 First Year Seminar in Critical Thinking. 3 hrs.
Students will develop intentional critical thinking skills integral to lifelong learning through inquiry, discussion, interaction, discovery, problem-solving, writing, research, reflection and examination of complex multicultural/global ideas and themes.

100H First Year Seminar - Honors. 3 hrs.
Students will develop intentional critical thinking skills integral to lifelong learning through inquiry, discussion, interaction, discovery, problem-solving, writing, research, reflection and examination of complex multicultural/global ideas and themes.

FRENCH (FRN)

101-102 **Elementary French. 3; 3 hrs. I, II.**
Pronunciation, conversation, reading, and composition with emphasis on aural/oral development. (PR for 102: French 101 or equivalent with a *C* or better or permission)

112 **Basic French. 3 hrs. I.**
Emphasis on oral/written communication and on listening/reading comprehension. Students completing 112 with a *C* or higher receive 3 hours of credit (CR) for FRN 101 and 3 hours of graded credit for 112. For students who previously passed FRN 101, the 3 hours of credit for 101 WILL NOT COUNT toward graduation. (PR: two years or more of high school French or permission)

203 **Intermediate French. 3 hrs. I, II.**
Intermediate level of the basic language skills: pronunciation, conversation, reading, and composition with emphasis on aural/oral development. (PR: FRN 102 or equivalent with a *C* or better or permission)

204 **Intermediate French. 3 hrs. I, II.**
Development of practical conversational skills, reading for comprehension, and directed composition. (PR: FRN 203 or equivalent with a *C* or better or permission)

240 **French Society and Life. 3 hrs. I or II.**
Selected topics relating to culture and life in the French-speaking countries. Lectures, readings, and discussions in English.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: FRN 204 or permission)

304 **French Literary Masterpieces in Translation. 3 hrs.**
This course deals with major works of French literature and requires no background in French literary history. Course taught in English.

305-306 **Introduction to French Composition and Conversation. 3 hrs.**
Writing/speaking intensive course designed to develop communicative skills and review language fundamentals acquired in FRN 101-204 course sequence. Course taught in French. (PR: FRN 204 or permission)

315-316 **Advanced Grammar and Composition. 3; 3 hrs.**
Study of idioms, grammatical structure, and syntax with emphasis on free composition, use of language laboratory, and formal study of the art of translation from English to French. (PR: FRN 204 or permission)

317-318 **Survey of French Literature. 3; 3 hrs.**
A study of important literary movements, representative authors and their works from the Middle Ages to present. (PR: FRN 305/306 or permission)

323-324 **Advanced French Grammar and Oral Communication. 3 hrs.**
Analysis of grammatical structures and introduction to phonetics. Oral and written exercises, presentations, and discussion. Course taught in French. (PR: FRN 204 or permission)

335-336 **French Civilization and Culture. 3; 3 hrs.**
French culture from prehistoric to modern times with emphasis on contemporary life and French institutions. Course taught in French. (PR: FRN 204 or permission)

401 **Seventeenth Century French Theater. 3 hrs**.
Study of representative plays by the classical dramatists Corneille, Moliere, and Racine. Course taught in French. (PR: FRN 305/306 or permission)

402 **Eighteenth Century French Literature. 3 hrs.**
Study of representative works by the philosophers, Montesquieu, Rousseau, Voltaire, and Diderot. Course taught in French. (PR: FRN 305/306 or permission)

403 **Nineteenth Century French Novel. 3 hrs.**
A study of major novels chosen to illustrate the romantic, realistic, and naturalistic literary movements. Course taught in French. (PR: FRN 305/306 or permission)

404 **Twentieth Century French Novel. 3 hrs.**
A study of representative 20th century French novels. Course taught in French. (PR: FRN 305/306 or permission)

407 **Foreign Language Teaching Methodology. 3 hrs.**
Analysis and practical application of methods of teaching foreign language, including professional development, language pedagogy, and language standards. To be taken concurrently with CI 470. For French education majors only. (CR/PR: Permission of instructor; must be taken with appropriate College of Education clinical experience)

417-418 **Contemporary French Film. 3 hrs.**
Course on selected films by French directors of the New Wave and the Post New Wave period. Course taught in English.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II.**
A course for advanced students sufficiently prepared to do work on aspects of the language, literature, or culture not covered in regularly offered courses. (PR: FRN 305/306 or permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: FRN 305/306 or permission)

495H-496H **Readings for Honors in French. 2-4; 2-4 hrs. I, II.**
Open only to French majors of outstanding ability. See Honors Courses.

GEOGRAPHY (GEO)

100 **Introduction to Human Geography (CT). 3 hrs. I, II.**
This critical thinking course provides a systematic examination of contemporary concepts and processes of human geography in global perspective, including economics, geopolitics, culture, nationalism, urbanization, governance, agriculture, population, and migration.

101 **Physical Geography (CT). 4 hrs. I, II.**
Systematic survey of earth-sun relationships, land-surface form, climate, soils, water, natural vegetation, and other natural content as a background for human geography.

110 **Basic GIS. 1 hr.**
Introduction to GIS concepts including GIS components, spatial and tabular data, database elements, data formats, and map design; hands-on experience with a GIS.

111 **Air Photos and Satellite Imagery. 1 hr.**
Introduction to photogrammetry and remote sensing through the hands-on investigation of aerial photographs and satellite imagery using the latest technology.

112 **Smartphpone GPS. 1 hr.**
Principles of Global Navigation Satellite Systems (GNSS); using your smartphone for Global Positioning Systems (GPS)/GNSS orientation, navigation, and data collection.

113 **Web GIS. 1 hr.**
Students learn to build web maps, share GIS data on the Internet, and create web GIS applications.

203 **Economic Geography (CT). 3 hrs. I, II, S.**
A systematic examination of world economic geography with a focus on population, agriculture, transportation, land use, urbanization, industry, energy, and the environment.

206 **Geography of West Virginia. 3 hrs.**
A survey of the geography of West Virginia including landforms, climate, settlement patterns, population, economics, resources, politics, and environmental changes.

222 **Global Environment Issues (CT). 3 hrs.**
Environmental issues have great emotional, political, and economic significance. The dynamics of global environmental problems, their complex interactions, and effects on potential stakeholders will be examined at teh international scale.

230 **Introduction to Meteorology (CT). 4 hrs.**
Introduction to the composition of the atmosphere and weather phenomena, including thunderstorms, tornadoes, and hurricanes.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

300 **Methods in Geography. 3 hrs.**
Provides and introduction to research methods in geography. Topics addressed include: data sources; sampling; data collection, storage and management; descriptive measures and data visualization techniques; qualitative and quantitative analysis. (PR: STA 224)

305 **Geography of the United States and Canada (MC). 3 hrs.**
Survey of physical, historical, population, economic, political, cultural, and regional geographies of Canada and the United States, including an analysis of the multicultural nature of the societies.

317 **World Regional Geography. 3 hrs. I, II, S.**
World regions examined using a synthesis of physical and human geographical themes including environment, culture, landscape, climate, landforms, globalization, population patterns, urbanization, economies, and political geography.

350 **Severe Local Weather and Natural Hazards. 4 hrs.**
Basics of earth and atmospheric hazards including flooding, hurricanes, droughts, blizzards, tornadoes, and volcanic eruptions, and how to mitigate the impacts.

360 **Weather Analysis. 4 hrs.**
Introduction to reading weather maps and meteorological analysis techniques including satellite and radar image interpretation and numerical weather prediction. (PR: GEO 230)

401 **Historical Geography. 3 hrs.**
An examination of the spatial aspects of prominent historical patterns and processes, including demographic patterns, economic development, cultural diffusion, state formation, and urbanization.

402 **Geography of Appalachia. 3 hrs.**
A study of the geography of Appalachia, including landforms, climate, settlement patterns, population, economics, resources, politics, and environmental changes.

404 **Geography of Europe. 3 hrs.**
An examination of the geography of Europe focusing on contemporary issues, including climate, culture, economics, environmental change, everyday life, international relations, landforms, language, politics, population, religion, and urbanization.

406 **Population Geography. 3 hrs.**
An examination of contemporary patterns, processes, and problems of population geography in global perspective, including fertility, mortality, demographic change, migration, malnutrition, urbanization, natural resource sustainability, and future projections.

408 **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.

410 **Urban Geography. 3 hrs.**
Study of the morphology, function, and development of cities and the urban fringe. An emphasis is place on social and environmental costs of urbanization, as well as urban and rural linkages.

422 **Environmental Geography. 3 hrs. I, II.**
A geographical survey of environmental changes caused by human activities. Focus is on resource availability and use; pollution of air, water, and biosphere; energy problems, and interaction of humans with plant and animal communities.

423 **Cartography and GIS. 3 hrs.**
An introduction to cartography through geographic information systems. Topics include spheroids and datums; geographic and grid coordinate systems; scale and projections; Relief portrayal; thematic maps; map design.

425 **Climatology. 4 hrs.**
A study of elements of weather and climate, methods of climatic classification, and distribution and characteristics of world climate regions. (PR: GEO 101 or GEO 230 or permission)

426 **Principles of GIS. 4 hrs.**
Introduction to Geographic Information Systems (GIS) principles, techniques, and applications for the social and natural sciences with emphasis on foundational geographic principles in a lecture/lab format.

429 **Principles of GIS 2-Vector Analysis. 4 hrs.**
Continuation of GE0426 Principles of GIS, including additional principles like data management, cartographic design, and geocoding; and vector analyses like spatial patterns analysis, spatial autocorrelation, and network analysis. (PR: GEO 426 or GEO 430 or GEO 431 or IST 423 or permission)

430 **Intermediate GIS - Raster Analysis. 4 hrs.**
GIS raster analysis, including local, neighborhood, and zonal operations, terrain analysis, building raster databases, distance modeling, and surface interpolation. (PR: GEO 426 or GEO429 or GEO431 or IST 423 or permission)

431 **Principles of Remote Sensing and Photogrammetry. 3 hrs.**
Scientific study of the earth using images and data captured using satellite- or aircraft-borne sensors, with emphasis on issues of acquisition, photogrammetric interpretation, spatial analysis, and application. (PR: GEO 426 or GEO 429 or GEO 430 or IST 423 or permission)

432 **Enterprise GIS. 3 hrs.**
Principles and techniques for planning, implementing, and managing Geographic Information Systems technologies in a firm or agency. (PR: GEO 426 or GEO 429 or GEO 430 or GEO 431 or IST 423)

433 **GPS and Mobile Geospatial Technologies. 3 hrs.**
An analysis of the design and deployment of Global Navigation Satellite Systems such as GPS (Global Positioning System) and their application to mobile map services. (PR: GEO 426 or GEO 429 or GEO 430 or GEO 431 or IST 423)

440 **Spatial Statistics and GIS. 4 hrs.**
Statistical methods applied to problem solving in geography and using GIS for display and analysis. Primary focus on descriptive and inferential spatial statistics, mapping, and spatial analysis of data.

454 **Drones: Remote Sensing and GIS. 3 hrs.**
Learn FAA rules and safety procedures; prepare for Remote Pilot licensing exam; operate drones to collect remote sensing data; i process imagery for analysis; integrate sUAS imagery with existing GIS data.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490 **Internship. 1-6 hrs.**
Cooperative learning experience with regional employer/government agency.

498 **Senior Capstone I.**
This senior capstone course combines research methods, data collection, and analysis to produce original research on questions and problems in geography. Part I: Pilot Project. **(P**R: GEO 426 and one of GEO 440, STA 225, MGT 218, PSY 223, SOC 345, ANT 301, or EDF 417)

499 **Senior Capstone II. 1-3 hrs.**
This senior capstone course combines research methods, data collection, and analysis to produce original research on questions and problems in geography. Part II. (PR: GEO 498)

GEOLOGY (GLY)

100 **Geologic Hazards and Resources. 3 hrs. I, II.**
Introductory course for non-science majors focusing on (i) Earth Hazards: causes and mitigation; (ii) Climate change and its impacts; and (iii) Earth and energy resources; their origin, development, and environmental impacts. Geology majors must earn at least a *B* to use GLY 100 in place of GLY 200 as a prerequisite for other Geology courses.

150 **Introductory Oceanography. 3 hrs. I.**
Origin of the seas and ocean basins. Processes of marine sedimentation and seawater chemistry. Dynamics of air/sea interaction, circulation, waves and tides. Description of coastal and other marine environments. 3 lec. (CR: GLY 150L)

150L **Introductory Oceanography Laboratory. 1 hr. I.**
A complementary laboratory to Introductory Oceanography, GLY 150. A series of exercises relating to bathymetry, acoustic profiling, marine charts, properties of seawater, sea floor sediments, currents, waves and tides. (PR or CR: GLY 150)

200 **Physical Geology. 3 hrs. I, II.**
An elementary but comprehensive course that deals with the earth's origin, composition, structures, tectonics and processes. Intended primarily for, but not limited to, the science major. 3 lec.

201 **Historical Geology. 3 hrs. II.**
Chronological history and development of the earth, sequence of the geologic ages and rock formations, development and evolution of life as revealed by fossils.

210L **Earth Materials Laboratory. 1 hr. I, II, S.**
An introduction to laboratory and materials as applied to the identification, classification, recovery and uses of earth resources. 2 lab. (CR: GLY 100 or 200)

211L **Historical Geology Laboratory. 1 hr. II.**
Reconstruction of events in earth history based on physical characteristics and arrangement of rock layers and their fossil content. 2 hr. lab. (CR: GLY 201)

212 **Introduction to Field Methods. 3 hrs. I, Alternate years (even numbers).**
An introduction to geologic map interpretation, qualitative and quantitative methods of geologic map and cross-section preparation, and basic ArcGIS mapping methods. 2 lec-1 lab. (Field work). (PR: GLY 200 or 201; and GLY 210L or 211L).

280-283 **Special Topics. 1-4 hrs.**

313 **Structural Geology. 4 hrs. II, Alternate years (odd numbers).**
Analysis, classification and origin of depositional and deformational structures common to all classes of rocks, their structural history, relationships, and stresses which caused them. 3 lec.-2 lab. (PR: GLY 200; GLY 212, or consent).

314 **Mineralogy. 4 hrs. I, Alternate years (odd numbers).**
Identification, classification, origin, occurrences, and economic uses of minerals and their crystallographic forms. 3 lec-2 lab. (PR: GLY 200, CHM 211)

320L **Geology Lab Techniques. I, alternate years (even numbers). 2 hrs.**
Techniques of collection, preparation, and analysis of mineral, rock, and water samples and the use of different instruments for obtaining quality data. Will also cover tools used for data interpretation. (CR/PR: GLY 200; GLY 210L)

325 **Stratigraphy and Sedimentation. 4 hrs. I, Alternate years (even numbers).**
Formation, organization, sequence, and correlation of sedimentary rocks; study of the origin, transportation and deposition of rock-forming sediments. 3 lec-2 lab. (PR: GLY 201, 211L)

330 **Tectonics. 3 hrs. II, Alternate years (even numbers).**
Overview of tectonic processes at plate boundaries, orogenic systems, formation of continents and ocean basins, and tectonic analytical methods. (PR: GLY 200, GLY 201, GLY 210L, and GLY 211L)

418 **Invertebrate Paleontology. 4 hrs. II, Alternate years (even numbers).**
Taxonomy, morphology, and paleoecology of body and trace fossils representing the major invertebrate phyla; analysis and interpretation of faunal assemblages; evolution and extinction of species. (PR: GLY 201, 211L,, or consent)

420 **Geochemistry. 3 hrs. II, Alternate years (odd numbers).**
Application of chemical principles to geology. Topics include cosmochemistry; distribution of elements in minerals and rocks; aqueous solutions and water-rock interaction; radiometric age dating; and stable isotope geology. (PR: CHM 211, GLY 200 REC: GLY 314)

421 **Petrology. 4 hrs. II, Alternate years (even numbers).**
Identification and classification of igneous, and metamorphic rocks, their origin and occurrence; their geologic and economic importance. 3 lec-2 lab. (PR: GLY 200, GLY 314 or consent)

423 **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)

426 **Geophysics. 3 hrs. II, Alternate years (even numbers).**
Development of seismic, gravity, magnetism, electrical and thermal methods of studying the structure and dynamics of the earth. 3 lec.-2 lab. (PR: GLY 200, GLY 210L; PHY 201 or 211, MTH 229)

427 **Fossil Fuels. 4 hrs. II, Alternate years (odd numbers).**
Origin and distribution of coal, oil and gas, and methods of exploration and reserve evaluation. 3 lec.-2 lab. (PR: GLY 201, 325, or consent)

451 **Geomorphology. 4 hrs. I, Alternate years (odd numbers).**
Principles of identification and analysis of the world's surficial features in terms of stratigraphy, structure, processes, tectonics and time. 3 lec.-2 lab. (PR: GLY 200, 210L, or consent)

455 **Hydrogeology. 3 hrs. II, Alternate years (odd numbers).**
The properties of water, the hydrologic cycle with emphasis on surface and groundwater processes, the uses, needs and problems associated with water resources. 3 lec. (PR: GLY 200; MTH 132 or MTH 229; CR: GLY 455L for majors, elective for non-majors)

455L **Hydrogeology Laboratory. 1 hr. II, Alternate years (odd numbers).**
A two-hour laboratory of practical hydrogeologic problem solving. For non-majors, elective. (CR: Geology 455 for majors)

456 **Environmental Geology. 4 hrs. II, Alternate years (even numbers).**
Consideration of risks posed by natural geo-hazards and from physical / chemical contamination of geologic media. (PR: GLY 200, GLY 210L or equivalent; REC: GLY 451)

457 **Engineering Geology. 4 hrs. I., Alternate years (even numbers).**
Consideration of geotechnical problems faced by geologists and engineers. Major topics include mechanics and classification of soil and rock, and geotechnical aspects of groundwater. (PR: GLY 200, GLY 210L; MTH 132 or MTH 229)

480-483 **Special Topics. 1-4 hrs.**

485-488 **Independent Study. 1-4 hrs.**
(PR: permission)

491-492 **Capstone Experience. 2-4 hrs.** (PR: permission)
An independent study involving a research project or internship; must be approved by geology faculty. (PR: permission)

GERMAN (GER)

101 **Elementary German I. 3 hrs.**
Pronunciation, conversation, reading, and composition with an emphasis on aural/oral development.

102 **Elementary German II. 3 hrs.**
Pronunciation, conversation, reading, and composition with an emphasis on aural/oral development. (PR: GER 101 with a *C* or better or permission)

203 **Intermediate German. II. 3 hrs. I, II, S.**
Intermediate level of the basic language skills; pronunciation, conversation, reading, and composition with emphasis on aural/oral development. (PR: GER 102 with a *C* or better or permission)

204 **Intermediate German. 3 hrs. I, II.**
Intermediate level of the basic language skills; pronunciation, conversation, reading, and composition with emphasis on aural/oral development. (PR: GER 203 with a *C* or better)

240 **German Society and Life. 3 hrs. I or II.**
Study of selected topics relating to culture and life in the German speaking countries. Lectures, readings, and discussions in English. No prerequisite.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

301 **Drama of the 19th and 20th Centuries. 3 hrs.**
A survey of literary trends and main authors. Reading and comprehension of selected dramas of the period. (PR: GER 204)

302 **Prose of the 19th and 20th Centuries. 3 hrs.**
A survey of literary trends and main authors. Reading and comprehension of selected stories and discussion of novels. (PR: GER 204)

315-316 **Advanced Grammar, Conversation and Composition.**
The study of idioms, grammatical structure, and syntax through conversation and composition. (PR for 315: GER 204. PR for 316: GER 315 or permission)

405-406 **German Civilization and Culture. 3; 3 hrs. I, II.**
German culture from prehistoric times to present-day divided Germany. Lectures, reports, discussions, representative readings in English and German. Capstone course. (PR: GER 204).

417-418 **Survey of German Literature. 3; 3 hrs.**
A study of important literary movements, representative authors and their works from the Middle Ages to the present. Capstone course. (PR; GER 204)

419-420 **German Literature of the Classical Age. 3; 3 hrs.**
German literature of the classical age, stressing Goethe, Schiller, and romanticism. (PR: for 419: GER 204)

425 **Grimm's Fairy Tales. 3 hrs.**
Taught in English, this course will focus on many of the Brothers Grimms' collection of 279 fairy tales, augmented by additional readings and film showings.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II.**
(PR: GER 204 and permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: GER 204)

495H-496H **Readings for Honors in German. 2-4; 2-4 hrs. I, II.**
Open only to German majors with outstanding ability. See Honors Courses.

GREEK (GRK)

201-202 **Ancient Greek First Year. 3; 3 hrs. I, II.**
(PR for GRK 202: GRK 201)

301-302 **Ancient Intermediate Greek. 3; 3 hrs. I, II.**
Varied readings including selections from Homer's Iliad, Dialogues of Plato and the New Testament. (PR: GRK 202 for 301; GRK 301 for 302).

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: GRK 302)

HEALTH PROFESSIONS (HP)

110 **Introduction to the Health Professions. 3 hrs.**
This course is designed to provide an overview of the health care system and health professions taught on the MU campus and throughout the state.

210 **Health Sciences Seminar. 3 hrs.**
This course is designed to bring outside, non-clinical speakers to discuss professionalism in health care. Students analyze career opportunities and establish non-clinical career expectations.

240 **Introduction to Human Diseases in Health Sciences. 3 hrs.**
A clinical overview of common human diseases at a patient and scientist level, with emphasis on bridging the communication gap among health professionals, patients, and the general public.

320 **Introduction to Research in Health Professions. 3 hrs.**
This course covers the basic quantitative and qualitative research techniques used in the health professions. (PR: HP 110, HP210 and Statistics)

420 **Allied Health Sciences Administration.**
In this course students will explore and apply allied health sciences principles as they relate to the student's focus in the Health Sciences major.

450 **BHS Senior Seminar. 1 hr.**
Opportunity for students to explore current topics related to areas of interest.

490 **BHS Capstone. 3-6 hrs.**
This course offers an opportunity for students to demonstrate that they have achieved the goals for learning established by the Bachelor of Health Sciences program.

HEALTH SCIENCE (HS)

122 **First Aid for Children and Infants. 1 hr. I, II.**
First aid and CPR for children and infants related to the home, school, and playground.

200 **Comprehensive Medical Terminology. 3 hrs. II.**
This course is designed to introduce students to basic medical terminology and basic pharmacology.

201 **Introduction to Applied Anatomy and Physiology. 3 hrs. I, II.**
Focuses on basic anatomy and physiology as applied to physical activity.

212 **Practical and Emerging Techniques in Athletic Training. 3 hrs.** I,
This course introduces students to taping, wrapping and advanced emergency care techniques used in athletic training. (CR: Admission to the Athletic Training program)

215 **Introduction to Athletic Training. 3 hrs. I, II.**
Survey and study of the basic techniques and practices of athletic training. (PR: HS 201 or BSC 227)

220 **Personal Health I. 3 hrs. I.**
A survey course that focuses upon wellness promotion and prevention of various health problems.

221 **Personal Health II. 3 hrs. I, II.**
An examination of the health content areas of mental/emotional health, substance use/abuse, and human sexuality/family life education. (PR: HS 220)

222 **Health Providers' First Aid. 3 hrs. I, II, S.**
First aid, CPR, and AED skills for health care providers. Additional topics include musculoskeletal injuries, environmental conditions, and sudden illness.

230 **Orthopedic Skills and Procedures. 3 hrs.**
An intensive hands-on course for allied health majors that introduces the orthopedic assessment and testing skills needed to perform effective evaluations on the field and in the clinical setting. (PR: HS201 or BSC227 or equivalent)

235 **Introduction to Work Site Wellness. 3 hrs.**
An introduction to worksite wellness programming including the basic components of an effective wellness program and how to integrate wellness into corporate culture.

255 **Athletic Training Clinical Experience: Level I. 3 hrs. II.**
To begin developing athletic training evaluation and treatment skills under the direction of a BOC-certified Athletic Trainer. Requires 150 clinical hours. (CR: Admission to Athletic Training Program)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

321 **The School Health Program. 3 hrs. I, II, S.**
A consideration of the comprehensive school health program, including a special focus upon health services and health instruction. (PR: EDF 218)

325 **School and Community Health. 3 hrs. II.**
An examination of some of the specific relationships between school and community health programs, including the roles and interaction of public, professional, private and voluntary health agencies with the school. (PR: HS 220, 221, 321)

335 **Worksite Health Assessment. 3 hrs.**
An investigation into worksite health assessment models and modes. (PR: *C* or better in HS 235)

336 **Organization and Administration of Worksite Wellness Programs. 3 hrs.**
This is a course that investigates current trends in worksite wellness organization and administration and provides instruction on integration of wellness and prevention interventions into corporate culture and business plans. (PR: *C* or better in HS 235)

345 **Worksite Wellness Prescription. 3 hrs.**
This is a course that investigates prescription of worksite wellness programming based on data collection methods and current industry Best Practices for wellness interventions.

346 **Evaluation of Worksite Wellness Programs. 3 hrs.**
This course investigates the effectiveness of worksite wellness programming. Students will understand what components of a program should be evaluated and how to calculate return on investment for interventions.

360 **Athletic Training Clinical Experience: Level II. 2 hrs. I.**
To continue developing athletic training evaluation and treatment skills under the direction of a BOC-certified Athletic Trainer. Requires 150 clinical hours. (PR: HS 255)

361 **Athletic Training Clinical Experience: Level III. 2 hrs. II.**
To continue developing athletic training evaluation and treatment skills under the direction of a BOC-certified Athletic Trainer and/or other qqualified allied health professionals. Requires 150 clinical hours. (PR: HS 360)

365 **Functional Kinesiology. 3 hrs. I, II.**
Applied anatomy of the human musculature and biomechanics in relation to physical activity. (PR: BSC 227 or HS 201)

369 **Motor Learning. 3 hrs.**
A study of the factors contributing to the acquisition, improvement and retention of gross motor skills. Stages of motor development and learning will be examined from a behavioral approach.

405 **Sport Psychology. 3 hrs.**
An examination of theory, research and application of psychological principles related to sport and exercise. (PR: PSY 201)

410 **Organization and Administration in Athletic Training. 3 hrs.**
This is a course that investigates current trends in administration and organization in the field of athletic training. (PR: HS 215)

422 **Orthopedic Evaluation for the Athletic Trainer. 3 hrs. I.**
Evaluation of musculoskeletal orthopedic injuries of the upper and lower extremities. (PR: HS 215)

423 **Orthopedic Evaluation of the Upper Extremity for Athletic Trainers. 4 hrs.**
Orthopedic evaluation techniques of the thoracic and cervical spines and the upper extremities. Anatomy, injury recognition, stress and special testing, treatment protocols, and preventative measures will be examined. (PR: HS 215)

424 **Orthopedic Evaluation of the Lower Extremity for Athletic Trainers. 4 hrs.**
Orthopedic evaluation techniques of the lumbar spine and the lower extremities. Anatomy, injury recognition, stress and special testing, treatment protocols, and preventative measures will be examined. (PR: HS 423)

426 **Curriculum in Health Education. 3 hrs. I.**
A study of principles, objectives, and procedures in curriculum development for middle and secondary school programs including historical and philosophical perspectives, and comparing current curricula. (PR: HS 220, 221, 321, 325)

430 **Health Issues in Physical Education and Athletics. 3 hrs.**
Survey of current health issues such as sanitation, contagious diseases, substance abuse, ergogenic aids, and diet/nutrition in PE and athletics. (PR: HS 221, HS 201 or BSC 227, HS 215, ESS 435)

435 **Biomechanical Instrumentation with Data Processing in MatLab. 3 hrs.**
This course teaches students the skills to use biomechanical sensors as instruments for research, and the use of MatLab prgramming language to process the data they collect from their instruments. (PR: HS 365, PHY 203/204)

440 **Health Evaluation for the Athletic Trainer I. 3 hrs. I.**
A study of common problems and illnesses of athletes and other physically active individuals and the proper methods of evaluating these complaints. Includes a lab. (PR: HS 422)

448 **Therapeutic Interventions in Athletic Training I. 4 hrs. II.**
Therapeutic modality application in the initial stages of injury, and modality and therapeutic exercise selection and prescription based upon patient responses for injuries to the lower extremity and lumbar spine.(PR: HS 215)

449 **Therapeutic Interventions in Athletic Training II. 4 hrs.**
Instruction of electrical stimulation modalities and therapeutic exercise rehabilitation of the upper extremity and cervical spine, including post-surgical rehabilitation. Strategies for psychosocial intervention will also be addressed. (PR: HS 448)

460 **Athletic Training Clinical Experience: Level IV. 2 hrs. S.**
To continue developing athletic training evaluation and treatment skills under the direction of BOC-certified Athletic Trainier abd.or other qualified allied health professionals. Requires 150 clinical hours. (PR: HS 361)

464 **Pathomechanics. 3 hrs.**
An investigation into normal and abnormal human movement patterns in sport, the workplace, and in activities of daily living. (PR: HS 365 or ESS 321)

465 **Biomechanical Analysis of Movement. 3 hrs.**
An investigation into normal and abnormal human movement patterns in sport, the workplace, and in activities of daily living. (PR: ESS 321 or HS 365, and PHY 202)

475 **Trends in Biomechanics. 3 hrs.**
To provide an in-depth analysis of current trends in the field of biomechanics.

478 **Research Practicum in Biomechanics. 3-6 hrs.**
This course offers "hands-on" work withing the biomechanics lab. The student will assist with current researc. THis experience allows student to gain practical experience within a lab setting. (PR: BSC 227 or equivalent)

479 **Trends in Athletic Training. 3 hrs. II.**
To provide an in-depth analysis of current trends with regard to administration, liability, sport pharmacology and insurance. Cover current standards in surgery, rehabilitation, and evaluation of sport-related injuries.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Health education majors only, with permission of department chairman.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs**.

490 **Internship: Paraprofessional Student Experience. 3-8 hrs.**
Supervised clinical experience in an approved setting. Can be repeated for a total of 8 hours. Capstone experience requires 3 hours minimum in one term. Capstone experience. (PR: HS 460 and/or program permission)

495 **Trends in Biomechanics II. 3 hrs.**
A final investigation into normal and abnormal human movement patterns in sport, the workplace, and in activities of daily living. (PR: HS 475)

HISTORY (HST)

101 **The Great Civilizations to 1300 (CT). 3 hrs. I, II.**
Comparative study of the origin and course of major civilizations focusing on the Middle East, India, China, and the West. This class emphasizes critical thinking skills.

101H **The Great Civilizations to 1300 - Honors (CT). 3 hrs.**
Comparative study of the origin and course of major civilizations focusing on the Middle East, India, China, and the West. This class emphasizes critical thinking skills. (PR: Admission to Honors College)

102 **The World and the Rise of the West, 1300 to the Mid-19th Century (CT). 3 hrs. I, II.**
An interdisciplinary analysis of the foundations of Western development. This class emphasizes critical thinking skills.

103 **The World Since 1850 (CT). 3 hrs. I, II.**
Major world developments and trends from the middle of the 19th century to the present and their implications for the future. This class emphasizes critical thinking skills.

103H **The World Since 1850 - Honors (CT). 3 hrs.**
Survey for superior students of world developments and trends from the 19th century to the present and their implications for the future. (PR: Admission to Honors College)

200 **Sophomore History Methods Workshop. 3 hrs.**
An introduction to the most fundamental methods of the discipline. Students will learn to use library resources, practice document interpretation skills, and identify and evaluate historical arguments.

205 **English History to 1642. 3 hrs. I.**
A political and social survey of England. Emphasis is placed on the development of the English Parliament.

206 **English History Since 1642. 3 hrs. II.**
A continuation of English History 205. Special attention is given to the development of ministerial government and to the growth and decline of the British Empire.

208 **The Developing World (CT). 3 hrs.**
A comparative survey of selected Third World countries focusing on imperialism, colonialism and present developmental efforts. This class emphasizes critical thinking skills.

218 **Ancient Egypt. 3 hrs.**
A survey of the history of Egypt from the pre-dynastic kings through the reign of Cleopatra with emphasis on religious, cultural, social, political and economic developments.

219 **Ancient History. 3 hrs.**
A survey of the ancient Near East, Greece, and Rome with emphasis on Greek and Roman civilization from Mycenaean times through the Roman Empire of the 5th Century.

220 **European History - Medieval. 3 hrs.**
A survey of the history of Europe from the later Roman Empire to the end of the Middle Ages, with emphasis on religious, cultural, social, political, and economic developments. Open to all undergraduates.

223 **The Rise and Fall of Nazi Germany. 3 hrs.**
A study of the origins, course, and collapse of the Third Reich. Some attention will be given to pre-Nazi period.

230 **American History to 1877 (CT). 3 hrs. I, II, S.**
A general survey from the discovery in 1492 through the period of Reconstruction. This class emphasizes critical thinking skills.

231 **American History From 1877 (CT). 3 hrs. I, II, S.**
A general survey since Reconstruction. This class emphasizes critical thinking skills.

231H **American History Since 1877 - Honors. 3 hrs.**
A general survey since Reconstruction for the superior student. (PR: Admission to Honors College)

250 **Women in United States History. 3 hrs.**
A study of the public and private contributions of women in the shaping of the United States from the Colonial period to the present.

260 **Rise of Islam, 570-1750. 3 hrs.**
A study of the Middle Eastern region from pre-Islamic Arabia to the pinnacle of Ottoman imperial control. Emphasis is placed on cultural, social, and political developments.

265 **Modern East Asia. 3 hrs.**
A survey of the history of East Asia from 17th century to present with a focus on China and Japan.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Selected topics not covered in regular course offerings.

301 **Latin America: Discovery to Independence. 3 hrs.** Emphasis is on conditions which influenced the development of Latin America and eventually led to the independence movement.

302 **Latin America: Independence to the Present. 3 hrs.**
Emphasis is on the political, economic and social institutions of Argentina, Brazil, Chile and Mexico.

303 **The American Military Experience. 3 hrs.**

304 **Spanish History Since 1475. 3 hrs.**
A survey of Spain's historical development emphasizing her rise and decline as a world power, the impact of persistent internal conflict, the Franco dictatorship and the transition to democracy.

305 **Drug Wars in the U.S. and Latin America. 3 hrs.**
This course examines the history of the war on drugs throughout U.S. and Latin American history with an emphasis on the past century.

306 **The Holocaust. 3 hrs.**
An exploration of the why and how of the Holocaust with an emphasis on Nazi Jewish policy from 1933 to 1942.

307 **The Global Cold War. 3 hrs.**
An international survey of World War II and the Cold War. Topics include military, political, diplomatic, social, and cultural history from a global perspective.

311 **World War I. 3 hrs.**
This course explores the First World War. It examines the roots of the conflict, the course of the war, and its chaotic aftermath.

312 **African-American History, 1619 to Present. 3 hrs.**
A survey of African-American History from African and West Indian origins to the present.

313 **Intro to Modern Africa. 3 hrs.**
This course chronicles the "modern" history of sub-Sahara Africa from late 19th century to today.

323 **Religion in America. 3 hrs.**
The rise and development of religion and of religious thinking in America. (Same as Religious Studies 323)

330 **Football and American Culture. 3 hrs.**
This class examines the role of football in American culture, politics, the economy and particularly its role in the elevation of college sports.

333 **American Colonial History. 3 hrs.**
A study of the historical development of the English colonies in America.

342 **American Legal History. 3 hrs.**
Historical development of American law in areas ranging from slavery and racial discrimination to civil liberties and crime and punishment.

343 **History of the United States in the 1970s. 3 hrs.**
The economic, political, social and cultural history of the United States as it shifted from the modern 1960s to the post-modern world of the late 20th century.

344 **The United States in the 1980s.**
Focusing on the United States in the 1980s in global context, this course examines the social, cultural, political, and economic history of the late 20th century.

347 **Southern Women's History. 3 hrs.**
This course explores the lives and experiences of Southern women in the U.S. from the colonial era to the present.

350 **History of the U.S. Working Class. 3 hrs.**
The history of the American working class.

360 **Sports and Civil Rights. 3 hrs.**
An examination of the way that sports history reflects important themes in U.S. history, such as as equality, race, ethnicity, and gender.

361 **The Modern Middle East. 3 hrs.**
A survey of the modern Middle East with emphasis on the historical background of current controversial issues confronting the region.

362 **The Crusades. 3 hrs.**
An examination of the origins, historical progression, and impact of the Crusades from both Christian and Islamic perspectives.

365 **History of the Civil Rights Movement. 3 hrs.**
An exploration of 20th Century movements for civil rights in American history examining race, ethnicity, social class, and gender.

366 **Consipiracies in U.S. History. 3 hrs.**
This course focuses on the ways people have constructed and used conspiracy theories to explain events in U.S. political, cultural, social, and scientific arenas.

378 **The Emergence of Modern Asia. 3 hrs.**
A selective look at Modern Asia, focusing on Japan, China, Korea, Taiwan, Vietnam and Indonesia and American interaction with the Asian nations.

380 **Civilizations of Asia to 1600. 3 hrs**.
This course will introduce students to the political, cultural, social, and intellectual environment of pre-modern Asia. Students will also learn to think critically about their own and other societies.

390 **Food in World History. 3 hrs.**
This course examines the key changes and continuities in human food consumption patterns and practices since the Neolithic period, while comparing and contrasting the food-ways of major civilizations and cultures.

392 **Food Markets and Modernity. 3 hrs.**
This course examines the social and cultural history of various types of urban food markets in Western Europe and the United States from the late eighteenth century to the present.

400 **Senior Seminar. 3 hrs. II.**
A capstone course for History majors. Survey of literature and practical experience in methods and sources of history through bibliographical study and research papers. Capstone experience. (PR: HST 200, Senior standing or by permission.)

401 **History of Appalachia. 3 hrs.**
This course will explore the historical and historiographical development of Appalachia and the economic, political, and cultural forces that have shaped the lives and communities of mountaineers.

404 **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.

405 **American Diplomacy, 1900 To Present. 3 hrs.**
American foreign relations in the 20th century. The gradual retreat from isolation in the period between World War I and World War II and modern American involvement in international commitments are stressed.

406 **Tudor and Stuart England, 1450-1688. 3 hrs.**
A history of England under the Tudors and Stuarts, focusing primarily on demographic, social, cultural, and political developments.

407 **The History of Sexuality. 3 hrs.**
Examines the history of sexuality in North America in the context of cultural, legal, economic, political and social history from the 16th century to the present.

408 **History of LGBT Peoples. 3 hrs.**
A survey of gay, lesbian, bisexual and transgender history in the United States from the colonial period to the present.

409 **American Revolution. 3 hrs.**
A varied view of the American Revolution and its impact on the American people.

411 **U.S. Social and Cultural History. 3 hrs.**
A study of the changes and continuities in American social cultural history.

414 **Civil War and Reconstruction. 3 hrs.**
A discussion of the economic, political, social, and cultural differences leading to the Civil War, the war itself, and an analysis of the political and economic importance of Reconstruction.

417 **U.S. West to 1900. 3 hrs.**
A study of the social, cultural, political , and economic history of the U.S. West to 1900, along with the West's place in our public memory.

421 **The Era of the Renaissance and Reformation. 3 hrs.**
The impact of the Renaissance upon esthetic, economic and political developments especially in the 15th and 16th centuries. The decline of Catholicism and the growth of the Protestant movement, and the influence of the two movements upon each other are stressed.

423 **US Latin-American Relations. 3 hrs.**
An appraisal of political, economic, and cultural relations of the U.S. and Latin America in a historical context with emphasis on the period since 1945.

424 **U.S. Science and Technology. 3 hrs.**
A study of the development and impact of science and technology in the U.S.

425 **European History, 1814-1914. 3 hrs.**
A century of European political, economic, and social history and its relationship to and influence upon the history of other world areas is noted. The impact of imperialistic rivalry is emphasized.

426 **European History, 1914 to Present. 3 hrs.**
The impact of World War I upon Europe, the era between two world wars, the search for world peace, and World War II and its aftermath are major topics of consideration.

428 **Intellectual and Cultural History of Modern Europe. 3 hrs.**
A survey of the main events in European thought and culture in the 19th and 20th centuries.

430 **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, including an examination of the aftermath of the Soviet Union's collapse.

433 **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.

434 **The Vietnam War. 3 hrs.**
A study of the origin and escalation of American involvement in Vietnam, the domestic impact of the war within the United States and the collapse of the South Vietnamese government.

435 **Modern Japan. 3 hrs.**
Begins with an overview of nineteenth century Japan and stresses the twentieth century rise of Japan to the position of world power.

436 **Modern China. 3 hrs.**
This course will provide an overview of Chinese history in the modern era (1600 to present), including the major political, cultural, social, and intellectual events and trends of this period.

437 **Seminar in 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 publics; local and economic development applications and projects emphasized.

438 **Material Culture and History. 3 hrs.**
This 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.

439 **Modern China Through Film. 3 hrs.**
Through a combination of films, lectures, readings, discussions, and writings, the course will show how China took its unique path to modernization.

440 **West Virginia History. 3 hrs.**
An interdisciplinary study of the state, its people and its institutions within the national context. (PR: HST 230 and 231)

441 **Women in Social Movements. 3 hrs.**
This course explores factors affecting the emergence, growth, structure, impact of social movement as they attempt to transform social relationships and reshape social values.

442 **Latin America Firsthand. 3 hrs.**
Students learn Latin American history through a 15-day mobile classroom experience in one of a number of countries. Texts, presentation, journals, and papers are also required.

443 **Twentieth Century U.S. Women's History. 3 hrs.**
This course explores the diverse lives and experiences of 20th century U.S. women, always with an emphasis on power.

444 **The History of Popular Culture in the United States. 3 hrs.**
Explores the roles of popular media, art, consumer culture, and public entertainments in the development of popular culture in the United States from the 18th Century to the present.

445 **Arab-Israeli Conflict. 3 hrs.**
This course will examine the historical developments of the modern Arab-Israeli conflict, with emphasis placed on political, socioeconomic, and cultural change and the prospects for peace.

446 **The Rise of the Atlantic World, 1400 – 1800. 3 hrs.**
This course considers the expansion of western Europe, beginning in the early 1400s to Africa, Latin America, and other parts of the Atlantic world.

447 **Film and Empire. 3 hrs.**
This course explores the nature and importance of empires through the reading of key texts and the study of selected films.

449 **World War I in Film. 3 hrs.**
This course explores the origins, course, and meaning of World War I (1914-1918) through the use of selected films and readings.

450 **Baseball in the Americas. 3 hrs.**
It seeks to understand the importance of baseball from a social, cultural and political standpoint. It also explores the use of baseball as a diplomatic tool.

451 **History of Women in Sports. 3 hrs.**
Examines the importance of sport to the lives of girls and women and vice versa. The course encourages critical analysis of the place and value of sport in women's lives.

452 **History of Sports in America. 3 hrs.**
Examines the effects of sports on American society and culture. It explores the historical development of American sports and examine relationships between sports, nationalism, politics, economics, gender and American expansion.

453 **The Kennedy Assassination. 3 hrs.**
This course explores the events surrounding the assassination of President John F. Kennedy.

454 **History of Ireland. 3 hrs.**
This course explores the history of Ireland from the Middle Ages to the present.

458 **Spies in History. 3 hrs**.
The course explores the role played by spies and espionage in modern history.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Consent of department chair).

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Consent of department chair).

495H-496H **Readings for Honors in History. 4; 4 hrs. I, II**.
Open to history majors of outstanding ability. Study may deal with any field of history. Wide reading and comprehensive understanding of the era are required. (PR: Consent of department chair) See Honors Courses.

HONORS (HON)

See UNIVERSITY HONORS.

INTERNATIONAL AFFAIRS (INT)

100 **Introduction to International Affairs. 3 hrs.**
A survey of the processes and issues surrounding globalization. This course is the introductory course for International Affairs majors.

499 **Senior Seminar. 3 hrs.**
A capstone experience for International Affairs majors, intended to provide an integrated perspecitve on the field through the application of interdisciplinary theories, methods, and practices to global issues.

INTEGRATED SCIENCE AND TECHNOLOGY (IST)

150 **Spreadsheet and Database Principles. 3 hrs.**
Comprehensive coverage of spreadsheets and databases. Includes techniques to collect, manage, and analyze data; solve problems; and effectively communicate results for scientific research. Includes macro development and introduction to scripting.

224 **Introduction to Forensic Science. 4 hrs.**
The relationship between scientific process and crime solutions is explored. DNA technology, probability theory, fingerprints, blood spatter, questioned documents, crime scene investigation will be examined using laboratories and case studies.

225 **Drugs and Disease: A Molecular Approach. 4 hrs.**
Introduction to the human effort to understand, control and eradicate disease via the use of natural and synthetic drugs. (PR: MTH 121 or higher)

240 **Biotechnology. 4 hrs.**
Biotechnology explores scientific, political, economic, and ethical aspects of recombinant DNA technology and genetically altered organisms. Class projects include DNA manipulation and analysis, forensic studies, and Internet exploration. (PR: MTH 121 or higher, except MTH 400 and MTH 401)

241 **Introduction to DNA Cloning. 4 hrs.**
Basic Molecular Genetics. Topics include DNA, RNA and Protein Structure and Function, Microbiology, Genetics, Cell Biology, Gene Regulation, Molecular Biology Applications in agriculture, medicine and industry. Hands-on DNA cloning lab. (PR: IST 111, or BSC 120 and CHM 211)

243 **Biotechnology Regulation. 2 hrs.**
Course provides an overview of cGMP and FDA regulations for pharmaceutical, biotechnology and medical device industry including Quality Control and Quality Assurance, upstream and downstream processing.

264 **Technology Foundations. 3 hrs.**
This course introduces the student to the common hardware and technology that pervades business and society as a whole. Topics include pc's, networks, software, the internet, cellular phones, etc.

280-283 **Special Topics. 1-4 hrs.**
A course on some topic not treated in the regular course offerings.

285-286 **Independent Study. 1-4 hrs.**
Independent Study for selected sophomores or advanced freshmen under supervision of faculty; may be repeated only once.

301 **Public Service Experience. 1 hr.**
At least 30 contact hours in a public service/volunteer experience with a group, organization, or agency that offers a service to the general public. (Advisor permission required)

340 **DNA Technology. 4 hrs.**
Hands-on course using genes to manufacture proteins. DNA manipulation, sequencing, cloning, library construction, screening, PCR and techniques used in biotechnology and pharmaceutical industries. (PR: IST 241 or CHM 212 or BSC120 or equivalent)

341 **Human Genetics. 4 hrs.**
Principles, problems, and methods in human genetics. Mendelian, biochemical, medical, quantitative, and molecular genetics, cytogenetics, bioethics applied to humans. Lab includes DNA sequencing SNP genotyping (PR: IST 241 or equivalent)

342 **Bioscience Research Methods. 2 hrs.**
Students will develop proficiency in the laboratory methods used in Biosciences. These skills prepare students for successful internships and advanced courses in biotechnology and environmental sciences. Hands-on and WebCT instruction. (PR: IST 241 or CHM 212 or BSC 120)

343 **Genomic Cloning and Cytogenetics. 4 hrs.**
Advanced Molecular Genetics class emphasizing lab techniques. DNA cloning and plasmid purification, Genomic DNA purification. Southern and Northern hybridization, DNA sequencing, Animal Cell Culture and Human Cytogenetics. (PR: IST 241 or BSC 120 or CHM 212)

350 **Manufacturing Systems. 3 hrs.**
Various manufacturing systems used within organizations are introduced. Methods of manufacturing are presented along with various technologies employed. Design for manufacturing, material management, quality considerations, etc. are treated.

420 **Remote Sensing with GIS Applications. 4 hrs.**
A study of the physical systems for collecting remotely sensed data. Statistical/spatial analysis and modeling using large processing/geographic information/spatial computer software systems with earth resources applications. (PR: MTH 127)

421 **Digital Image Processing/GIS Modeling. 4 hrs.**
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: MTH 127)

434 **Molecular Diagnostics. 3 hrs.**
This course is designed to provide an overview of the general principles and methods used to diagnose bacterial, viral and human diseases by molecular techniques. (PR: BSC 121 or 250 or CHM 212 or IST 340)

440 **Genetic Systems. 4 hrs.**
Discusses basic structures and mechanisms of genetic information storage and transmission in all existing systems from viruses to humans. Provides necessary theoretical background for the understanding of DNA technology. (PR: IST 241 or CHM 212 or BSC 120)

441 **Metabolic Systems. 4 hrs.**
Discusses basic molecules, processes, and mechanisms responsible for the activity of all living systems, and the methods of their analysis. Provides necessary theoretical background for the understanding of industrial biotechnology. (PR: BSC120)

442 **Bioethics. 3 hrs.**
Discuss ethical issues in scientific research: fraud, informed consent, genetic testing, gene therapy, cloning, new drugs, vaccines and foods produced via engineered organisms. Includes real case studies and media analysis.

443 **Protein Biotechnology. 3 hrs.**
Discussion covers basics of protein structure and function, post-translational modification and transport, simple immunology. Laboratories include protein quantification, enzyme kinetics, protein purification and dialysis, protein gel electrophoresis and staining.

444 **Bioinformatics. 3 hrs.**
Bioinformatics computer software is used to draw inferences from DNA and protein databases. Students will find patterns and meaning in genomic data through computer-aided analysis of DNA, RNA, and protein. (PR: IST 241 or CHM 212 or BSC 120)

445 **DNA Forensics. 3 hrs.**
Hands-on DNA typing of simulated crime scene evidence. Process biological samples, purify DNA, perform presumptive and confirmatory tests for blood and semen, learn microscopy, PCR genetic analysis, and practice testimony. (PR: IST 340 or IST 341 or equivalent)

455 **Commercialization of Drugs, Biologics and Medical Devices. 3 hrs.**
Students will learn key components of the drug discovery process and the steps leading to full regulatory approval and commercialization of drugs, biologics and medical devices. Case studies will be discussed. (PR: IST 340 or BSC 322)

456 **Technology and Innovation. 3 hrs.**
This class introduces technology venture formation and intellectual property. Course covers employment, confidentiality and consulting agreements. Development of Green Businesses is emphasized through business case studies and writing grant proposals.

470 **Internship in IST. 1-4 hrs.**
A supervised internship in an area of Integrated Science and Technology. (PR: Permission)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: permission)

490 **Senior Project 1. 3 hrs.**
Senior Capstone Experience. (PR: permission)

491 **Senior Project II. 3 hrs.**
Senior Capstone Experience. (PR: IST 490)

495H-496H **Honors in Integrated Science and Technology. 3-4; 3-4 hrs.**

INSTRUCTIONAL TECHNOLOGY AND LIBRARY SCIENCE (ITL)

115 **Introduction to Library Skills. 3 hrs.**
Introduces students to basic research (including the use of the library and other resources), information literacy and information management skills needed to succeed in college, the online environment, and beyond.

301 **RBA Career Preparation. 1 hr.**
Preparation for career after completing a college degree, including self-assessment; career exploration in conjunction with Marshall's Career Services; development of a resume, cover letter and completion of a mock interview.

350 **Advanced Digital Literacy Skills. 3 hrs.**
Examination of online search/retrieval skills used to define, access, evaluate, manage, integrate, create, and use digital information ethically; emphasis on critical thinking and practical use of Web 2.0 tools.

365 **Orientation to Technology Applications. 3 hrs.**
Utilization of various computer software applications with emphasis on practical usage to produce graphic aids such as charts, brochures, spreadsheets, drawings and audio or video clips.

400 **Introduction to New Literacies. 3 hrs.**
Introduction to New Literacies aims to discuss new information, meta, digital and visual literacy trends in librarianship. The class will engage with current issues and trends affecting these different literacies.

403 **RBA Advanced Portfolio Development. 3 hrs.**
Students are coached through the RBA portfolio development process. This includes: What a portfolio is; inventorying their work and life experience and creating and submitting the portfolio. (PR: Restricted to RBA majors, by permission of instructor only)

406 **Digital Citizenship. 3 hrs.**
Introduction to skills that build digital citizenship literacy and that will help students learn the cognitive, social and technical skills for navigating and evaluating the digital information ecosystem.

455 **Pedagogy of New Literacies. 3 hrs.**
An introduction to information and new literacies instruction in libraries and information-related organizations for a variety of patrons. Topics include history and theory of literacy instruction, pedagogy and evaluation techniques.

460 **Emerging Technologies and Libraries. 3 hrs.**
Using new and emerging technologies to facilititate and foster online information literacy instruction, support digital resource management, perform digital reference and public services, and assess services and return on investment (ROI).

466 **Production of Instructional Technology Materials. 3 hrs.**
This course will assist students in designing multimedia instructional materials. Focus will be on the development of web-based instructional materials.

JAPANESE (JPN)

101 **Elementary Japanese I. 3 hrs.**
Pronunciation, conversation, reading and composition with emphasis on aural/oral development. This includes katakana, hiragana, and Chinese characters, used in context.

102 **Elementary Japanese II. 3 hrs.**
Pronunciation, conversation, reading and composition with emphasis on aural/oral development. This includes katakana, hiragana and Chinese characters, used in context. (PR: JPN 101 with a *C* or better)

203 **Intermediate Japanese III. 3 hrs.**
Continuation on the intermediate level of the basic skills: pronunciation, conversation, reading, and composition with emphasis on aural/oral development. More work on katakana, hiragana and Chinese characters, used in context. (PR: JPN 102 with a *C* or better)

204 **Intermediate Japanese IV. 3 hrs.**
Development of practical conversational skills, reading for comprehension, and directed compositions. (PR: JPN 203)

240 **Japanese Society and Culture in Translation. 3 hrs.**
An introduction course of Japanese society and culture through Japanese films, readings, and lectures. This course examines social, political and cultural themes in contemporary Japanese society. Course taught in English.

245 **Modern Japanese Literature (CT). 3 hrs.**
Taught in English, course examines Japanese literature from the mid-nineteenth century to the present day.

250 **Japanese Anime and Manga. 3 hrs.**
Taught in English, this course examines the history and nature of Japanese animation (anime) and comics (manga).

280-283 **Japanese Special Topics. 1-4 hrs.**
Study of a topic not normally covered in courses. (CR/PR: JPN 204 and permission of instructor)

304 **Japanese Literature In Translation. 3 hrs.**
This course introduces a comprehensive overview of the history of Japanese literature from the earliest times to the mid-nineteenth century. Course taught in English.

305 **Advanced Japanese I. 3 hrs.**
Equal emphasis on listening, speaking, reading and writing. Students learn advanced new Kanji characters. The course includes preparation for the Japanese Proficiency Exam. Course taught in Japanese. (PR: JPN 204)

307 **Japanese Conversation. 3 hrs.**
Speaking-intensive course designed to develop communicative skills and review language fundamentals acquired in JPN 101-204 course sequence. Course taught in Japanese. (PR: JPN 204 or permission)

315 **Advanced Japanese II. 3 hrs.**
Equal emphasis on listening, speaking, reading, and writing skills. Students learn advanced grammar and 100 Kanji characters. The course includes preparation for the Japanese Proficiency Exam. Course taught in Japanese. (CR/PR: JPN 305)

325 **Business Japanese. 3 hrs.**
Students learn conversational expressions and Japanese manners that can be used in actual business situations in Japanese companies. (PR: JPN 305 or permission)

330 **Japanese Grammar. 3 hrs.**
A review of the intermediate level of Japanese grammar equivalent to N3 and N4 JLPT (Japanese Language Proficiency Test). It familiarizes students with test components including vocabulary, reading, grammar, and listening. (PR: JPN 204 or permission)

335 **Japanese Society and Culture. 3 hrs.**
An introduction course of Japanese society and culture through Japanese films, readings, and lectures. This course examines social, political and cultural themes in contemporary Japanese society. Course taught in Japanese. (PR: JPN 204)

401 **Readings in Advanced Japanese I. 3 hrs.**
Students learn comprehensive skills in contemporary Japanese at an advanced level and 250 new kanji. (CR/PR: JPN 315 or permission)

402 **Readings in Advanced Japanese II. 3 hrs.**
Students continue to learn comprehensive skills in contemporary Japanese at an advanced level and 250 new kanji. Students conduct survey research in Japanese. Course taught in Japanese. (CR/PR: JPN 401 or permission)

403 **Japanese Film in English. 3 hrs.**
A survey of Japanese cinema from literary, historical, cultural, and interdisciplinary perspectives. Readings and lectures introduce the director's work and the backgrounds of individual films. Course taught in English.

407 **Japanese Teaching Methodology. 3 hrs.**
Analysis and practical application of teaching Japanese, including professional development, language pedagogy, and language standards. For Japanese education majors only. (PR: JPN 315 or permission)

408 **Literature of Asians in the Americas. 3 hrs.**
Taught in English, this course explores Asian American literature in the U.S., Canada, Latin America, and the Caribbean, focusing on race, class, and gender**.** (PR: ENG 101)

480-483 **Japanese Special Topics. 1-4 hrs.**
Study of a topic not normally covered in courses. (CR/PR: JPN 204 and permission of instructor)

490 **Japanese Capstone Experience. 3 hrs.**
Designed for Japanese majors as a senior capstone seminar. Students develop specific skills to conduct research on chosen topics and to present a research project in Japanese. (PR: JPN 401 or permission)

JOURNALISM AND MASS COMMUNICATIONS (JMC)

101 **Media Literacy. 3 hrs. I, II.**
Examines structures and functions of mass media and provides a critical look at their effects on social concepts such as democracy and diversity. Includes print, electronic journalism, advertising, public relations.

102 **Media Toolbox. 3 hrs. I, II, S.**
Introduction to media writing, creative and critical thinking, information literacy, data management, computer search tools, social media and interviewing for mass communications professionals.

103 **Language Use for Media. 1 hr. C/NC.**
Review of the English grammar and usage; preparation for taking SOJMC standard language exam.

222 **Introduction to Media Studies. 3 hrs.**
This course provides students with an overview of fundamental approaches, theories, and perspectives essential to successfully complete a minor in media studies.

230 **General Photography. 3 hrs.**
An introduction to still digital photography and image processing.

231 **Introduction to Audio Production. 3 hrs. II.**
Fundamentals of audio production, including operation of audio equipment, microphone techniques, tape editing and audio production. Laboratory work at WMUL-FM is required. (PR: JMC 101)

241 **Media Design. 3 hrs. I, II. S.**
Design principles; conceive, create and evaluate executions for print, websites, mobile applications, information-based and ad-based graphics. (PR: Keyboarding proficiency)

245 **Introduction to Strategic Communications. 3 hrs. II.**
An examination of theories, practices and techniques of strategic communications used by agencies and organizations.

260 **Digital Imaging for JMC. 3 hrs. I, II.**
Methods of taking and editing still and video digital images for print, broadcast, and digital publication.

272-273 **Practice in Radio. 1 hr. I, II, S.**
Staff responsibility on campus broadcast facilities, WMUL-FM. (PR: Written permission before registration and the satisfactory completion of one year of service on WMUL)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.**

300 **Reporting and News Writing. 3 hrs. I, II, S.**
Techniques of cross-media news writing designed to develop basic skills necessary for beginning reporters and public relations professionals through in-class laboratory experience. (PR: Keyboarding proficiency, JMC 101, and JMC 102)

301 **Beat Reporting. 3 hrs. I, II.**
Practice in gathering and writing news. Emphasis is placed on beat assignment reporting, interviewing techniques, and specialized reporting. A laboratory class in which students write for student media. (PR: JMC 102, 300)

302 **Advanced Editing and Design. 3 hrs. I, II.**
Advanced course in copy editing, headline writing, and design for daily, community, and public relations newspapers. Laboratory instruction and experience on the printed and online issues of the university newspaper, The Parthenon. (PR: JMC 241 and 301)

303 **Sports News Reporting. 3 hrs.**
In-depth news reporting on the sports beat, breaking news and analysis. (PR: JMC 201)

304 **Computer-Assisted Reporting. 3 hrs. I.**
Study and practice of research methods and writing techniques for in-depth and computer-assisted cross-media reporting on topical issues. (PR: JMC 301)

305 **Copy Editing. 3 hrs.**
Copy editing for newspapers, magazines and online, with emphasis on finding and correcting errors of fact, grammar, spelling. AP style; writing headlines; selecting and placing stories in publications. (PR/CR: JMC 201)

321 **Sportscasting. 3 hrs.**
A "hands-on" course designed to develop announcing, interviewing and writing skills specifically as such skills relate to play-by-play techniques and practices.

330 **AD-PR Principles and Ethics. 3 hrs. I, II.**
An examination of advertising and public relations theories and practices used by organizations across all sectors of society. Special emphasis on the role of ethics in advertising and public relations.

331 **Radio-Television Announcing and Newscasting. 3 hrs. I, II.**
Specialized training in the interpretive skills of announcing and newscasting. (PR: JMC 101)

332 **Introduction to Video Production. 3 hrs. I, II.**
Introduction to the fundamentals of video production, dealing with cameras, microphones, lighting, staging, field production, editing, post production. (PR: JMC 101)

340 **Basic Broadcast News. 3 hrs. I, II.**
Introduction and overview of electronic journalism. Emphasis on broadcast writing. Students will report for Newscenter 88 WMUL-FM. (PR: Keyboarding proficiency, JMC 101, and JMC 102)

345 **Mass Communication Law and Ethics. 3 hrs.**
A cross-media overview combining study of legal concepts important to the media practitioner, ethical conflicts encountered, and application of legal precedents and ethical principles. (PR: JMC 103; and JMC 201 or JMC 221)

361 **Digital Presence. 3 hrs. I.**
Digital strategies in news and strategic communication contexts including digital presence and content development, ethical issues and best practices. (PR: Junior standing)

372-373 **Practice in Radio or Television. 1 or 2 hrs. I, II, S.**
Staff responsibility on campus broadcast facilities. Capstone experience. (PR: Written permission before registration)

380 **AD-PR and Continuity Writing. 3 hrs.**
Crafting of multimedia content for advertising-public relations and broadcast continuity with attention to communications strategy development, script formats and writing styles for traditional, digital and social media. (PR: JMC

383 **Content Creation. 3 hrs. II.**
Concept-driven media design with an emphasis on digital media. (PR: JMC 241)

390 **Media Sales and Underwriting. 3 hrs.**
Introduction of business side of mass media with emphasis on sales in television and radio; consideration of competing media; differences between commercial and public broadcasting and the elements of underwriting.

400 **Photojournalism II. 3 hrs.**
A course in advanced techniques for newspaper and magazine photography, concentrating on creation, design and use of photo essays and picture stories. (PR: JMC 360 or ART 315)

402 **Law of Mass Communications. 3 hrs. I, II, S.**
A cross-media overview of the legal concepts important to the media professional with special focus on the roles, rights, and responsibilities of those individuals. (PR: Junior standing)

404 **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 relation of communications developments to political, economic and social trends in America.

408 **Research and Analytics. 3 hrs. I.**
Introduction to methods and tools used to monitor, inform and evaluate advertising-public relations decisions including applications of research methods and digital analytics.

410 **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. (PR: JMC 241)

414 **Reporting Public Affairs. 3 hrs. II.**
Advanced instruction in cross-media reporting in local, state, and federal government; politics, finance, labor, and social and environmental issues, with emphasis on background and interpretation. Course includes field trips and guest speakers. (PR: JMC 301)

415 **Content Strategy. 3 hrs. I.**
Students will analyze advertising-public relations content problems, propose strategic solutions, create content and present strategies. Students will write, design and produce content for a variety of media. (PR: JMC 380 and JMC 383)

417 **Advanced Digital Filmmaking. 3 hrs.**
Students will learn advanced concepts, theories and skills in digital narrative film production. Working through all phases of production, students will create an original short film from script to screening. (PR: JMC 332)

420 **Electronic Media Management. 3 hrs.**
Covers special circumstances faced by electronic media managers including programming, legal constraints, employment practices, technological developments, social pressures, impact of the Internet, and other concerns.

424 **Media Strategy. 3 hrs.**
Focuses on the delivery of advertising-public relations messages with attention to the development of au dience personas, content management and analytics for traditional, digital and social media. (PR: JMC 330 or MKT 340)

430 **Magazine Article Writing. 3 hrs. I.**
Fundamentals of researching and writing the popular, factual magazine article; techniques of selling articles to magazines (PR: Junior standing)

432 **AD-PR Video Production. 3 hrs. S.**
Students will create and produce various informational, promotional, and training video for companies and organizations. Students will learn to make and critique AD-PR videos that inform, persuade, and entertain. (PR: JMC 260)

433 **Radio-Television Programming. 3 hrs. II.**
Principles of programming, including audience analysis, production, purchase, and scheduling of various formats. (PR: JMC 101)

434 **Advanced Video. 3 hrs. II.**
Development of the elements necessary for the production of detailed video projects. Students study the creation and production of public affairs, educational and creative video programming. (PR: JMC 332)

436 **International Mass Communications. 3 hrs. II.**
Development of various systems of mass communications and comparison with the United States.

437 **Public Relations Planning. 3 hrs. I.**
Public relations planning, writing, and pitching of strategies and tactics to clients. (PR: JMC 241, 300, 330, 380, 408)

438 **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)

439 **AD-PR Campaign Management. 3 hrs. II.**
Students function as an AD-PR firm that researches, plans, implements, and evaluates advertising and public relations campaigns for clients. Capstone experience. [PR: JMC 330, 380, 383, 408, and either 406, 424, 415 (AD) or 301, 437, 438 (PR)]

440 **Mass Communication 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. Capstone experience (PR: senior standing)

445 **Advertising in Modern Society. 3 hrs.**
An examination of current issues and problems affecting the advertising industry and a study of advertising's impact on and responsibility to society. (PR: Junior standing)

450 **Contemporary Issues in Radio and Television. 3 hrs. II.**
An examination of the current political, social, economic and legal issues affecting the decision-making process in the newsrooms and programming centers of the electronic media. (PR: Junior standing)

451 **Television Reporting. 3 hrs. I.**
Students report, shoot, edit, write, produce, and anchor "MU Report," a student-produced newscast. The class makes use of university broadcast facilities and West Virginia Public Television as available. (PR or CR: JMC 301)

452 **Advanced TV Reporting. 3 hrs. II.**
Students report, shoot, edit, write, produce, and anchor "MU Report," a student-produced newscast, on an advanced level. The class makes use of university broadcast facilities and West Virginia Public Television, as available. Capstone experience. (PR: JMC 451)

455 **Race, Gender, and the Mass Media. 3 hrs. I.**
A seminar that explores the participation of women and people of color in mass media; representations of gender and race are examined.

458 **Emerging Media for Journalists. 3 hrs.**
Students will demonstrate uses of emerging medfa for journalistic purposes, focusing on social networks and conversational media with associated digital media tools and platforms. (PR: JMC 301)

462 **Web Design for Mass Media. 3 hrs. I, II.**
Creative and practical aspects of typography, design and interactivity of online communications for the mass media. (PR: JMC 241)

465 **Multimedia Reporting. 3 hrs.**
An advanced laboratory reporting class in which students, in teams and individually, produce multimedia stories including audio, video, still photos, text and graphics for publication. (Capstone) (PR: JMC 260 and JMC 301)

468 **Environmental Mass Communications. 3 hrs.**
Identifying, analyzing and discussing issues that challenge environmental communications, strategizing the creation of comprehensible environmental messages, and examining philosophies that underpin environmental communications.

470 **Professional Practicum. 1-4 hrs. I, II, S.**
Instruction to assist students in meeting career expectations. Short-term courses designed to bridge instructional programs and practices of professional journalism. Students may participate in supervised publications work in reporting, editing and advertising. (PR: JMC 301, 302, or permission of instructor)

475 **Documentary Journalism. 3 hrs.**
Students will view, critique and evaluate the genres of nonfiction storytelling. Students will produce an original 15-minute film to be screened to the public. (PR: JMC 201 or 221, and JMC 360 or 332 or 432)

490 **Journalism and Mass Communications Internship I. 1-3 hrs. I, II, S.**
Supervised journalistic or mass communications work with professional media including newspapers, magazines, radio, television, advertising, and public relations departments and agencies. Conferences with instructor for guidance and evaluation. Advance arrangements must be made through the JMC internship director. Capstone experience.

491 **Journalism and Mass Communications Internship II. 1-3 hrs. I, II, S.**
Supervised journalistic or mass communications work with professional media including newspapers, magazines, radio, television, advertising and public relations departments or agencies. Advance arrangements must be made through the JMC internship director. Student must have completed a previous internship. Can't be used in hours required for graduation.

LATIN (LAT)

101-102 **First Year Latin. 3; 3 hrs. I, II.**
(PR for Latin 102: LAT 101)

203-204 **Intermediate Latin. 3; 3 hrs. I, II.**
Varied readings including selections from Cicero's Orations and Vergil's Aeneid I-VI. (PR for Latin 203: LAT 102 or equivalent; PR for Latin 204: LAT 203 or equivalent)

250 **Conversational Latin. 1 hr.**
Introduction to basic skills of oral comprehension, composition, and pronunciation of Latin.

251 **Conversational Latin II. 1 hr.**
Introduction to basic skills of oral comprehension, composition and pronunciation of Latin. (PR: LAT 101)

252 **Conversational Latin III. 1 hr.**
Introduction to basic skills of oral comprehension, composition and pronunciation of Latin. (PR: LAT 101)

280-283 **Special Topics. 1-4; 1-4; 1-4 hrs.**

303 **Caesar's Commentaries. 3 hrs.**
A close reading in Latin of the commentaries of Julius Caesar. (PR: LAT 204 or permission; CR: LAT 320)

308 **Catullus. 3 hrs.**
A close reading in Latin of the poetry of Catullus with consideration of its literary antecedents and its importance to Roman Literature. (PR: Latin 204 or permission)

311 **Readings in Ovid. 3 hrs.**
Close reading in Latin of selections from Ovid's erotic and epic poetry. (PR: LAT 204 or permission)

315 **Sallust and Nepos. 3 hrs.**
A close reading in Latin of selected works from Sallust and Nepos. (PR: LAT 204 or permission)

320 **Latin Prose Composition: Caesar. 1 hr.**
Study of Latin Prose Composition, the translation of English to Latin, with special reference to the style, syntax and vocabulary of Caesar. (CR: LAT 303)

321 **Latin Prose Composition: Cicero. 1 hr.**
Study of Latin Prose Composition, the translation of English to Latin, with special reference to the style, syntax and vocabulary of Cicero. (CR: LAT 305)

322 **Latin Prose Composition: Livy. 1 hr.**
Study of Latin Prose Composition, the translation of English to Latin, with special reference to the style, syntax and vocabulary of Livy. (CR: LAT 407)

323 **Latin Prose Composition: Tacitus. 1 hr.**
Study of Latin Prose Composition, the translation of English to Latin, with special reference to the style, syntax and vocabulary of Tacitus. (CR: LAT 410).

401 **Cicero: Speeches. 3 hrs.**
A close reading in Latin of one of the political or court speeches of Cicero. (PR: LAT 204 or permission; CR: LAT 321)

403 **Roman Comedy. 3 hrs.**
(PR: LAT 204 or permission)

404 **Roman Elegy: Propertius and Tibullus. 3 hrs.**
Close readings in Latin of selections from the elegies of Propertius and Tibullus. (PR: Latin 204 or permission)

405 **Readings in Vergil. 3 hrs.**
Introduction to the poetry of Vergil, especially Vergil's Aeneid, and to the culture and the ideology of the Augustan principate. (PR: Latin 204 or equivalent).

406 **Horace: Odes, Epodes, Epistles. 3 hrs.**
(PR: LAT 204 or permission)

407 **Livy's History of Rome. 3 hrs.**
A close reading in Latin of selections from Livy's History of Rome. (PR: LAT 204 or permission; CR: LAT 322)

408 **Roman Epistolary Literature: Cicero and Pliny. 3 hrs.**
A unique look at Roman life, public and private, though a close reading in Latin of the correspondence of Cicero, Seneca the Elder, and Pliny the Younger. (PR: Latin 204 or permission)

409 **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: Latin 204 or permission)

410 **Tacitus (selections from): Annals, Agricola. 3 hrs.**
A close reading in Latin of selections from the works of Tacitus. (PR: LAT 204 or permission; CR: LAT 323)

411 **Latin Prose Composition: Survey.**
Study of Latin Prose Composition, the translation of English into Latin, with special reference to the style, syntax and vocabulary of the 1st century B.C.E. (PR: LAT 205)

480-483 **Special Topics in Latin. 1-4; 1-4; 1-4; 1-4 hrs. I, II.**
(PR: LAT 204 or permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
Non-Latin majors may enroll in Latin Independent Study courses for one hour credit to meet general requirements in literature. For such students instruction and readings will be entirely in English. Consult chairman for current offerings. (PR: LAT 204 or permission)

495H-496H **Honors in Latin. 4; 4 hrs. I, II.**
Open only to Latin majors of outstanding ability. See Honors Courses.

499 **Latin Capstone Experience. I, II. 3 hrs.**
Senior project. Working with a project director, students will develop a paper written in an advanced Latin course into an expanded version that incorporates primary and secondary sources. (PR: 15 hours LAT above LAT 204)

COLLEGE OF BUSINESS (LCOB)

200 **Career Exploration Skills for Business. 1 hr.**
Students will develop skills to prepare themselves for internships and careers in business through resume writing, interviewing, and job search strategies.

300 **Business Professionalism and Self Development 1 hr.**
Students will enhance their knowledge of leadership skills and better understand professionalism in the business world through this course.

LEGAL ENVIRONMENT (LE)

207 **Legal Environment of Business. 3 hrs. I, II.**
Law and the judicial system. The relationship of law, government, ethics and the consumer of business enterprise. The study of contracts, torts, government regulation of business, environmental and consumer protection.

308 **Commercial Law. 3 hrs. I, II.**
A continuation of Legal Environment 207. Emphasizes in-depth case study of the law of commercial paper, business organizations, security, and real and personal property. (PR: LE 207)

351 **Legal Aspects of Health Care Organizations. 3 hrs. II.**
A survey of basic legal problems facing a hospital administrator. The study also includes constitutional and administrative law issues dealing with medicaid and medicare and regional planning. (PR: LE 207, MGT 350)

366 **Entrepreneurial Law & Ethics. 3 hrs. II.**
Students will examine the basic legal and ethical issues involving the creation, maintenance, and expansion of small businesses.

MANAGEMENT (MGT)

100 **Introduction to Business. 3 hrs.**
Career exploration and preparation. Emphasis on modern supervisory management techniques in various business fields.

150 **Diversity Issues in Business. 3 hrs.**
A study of risks, challenges, and opportunities of attracting and developing a diverse workforce and consumer base.

218 **Business Statistics. 3 hrs. I, II.**
Application of statistical techniques in business and economics. Topics include measures of central tendency and dispersion, theory of distributions, sampling distributions, estimation, hypotheses testing, correlation and regression analysis. (PR: MTH 127 or 130)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

320 **Principles of Management. 3 hrs. I, II.**
A comprehensive survey of the fundamental principles of management applicable to all forms of organizations. The course provides the student with a basis for thinking about complex business situations in the framework of analysis of the management process. Some case analysis of management problems used.

350 **Health Care Organizations Management. 3 hrs. I.**
An introduction to the management of health care organizations. (PR: MGT 320)

354 **Health Care Delivery Systems. 3 hrs. II.**
An examination of the various private and public sector helath care delivery systems currently operating within the United States. (PR: MGT 350)

355 **Health Care Products and Services. 3 hrs. II.**
Application of business principles as they apply to the management of health care products and services in today's health care environment. (PR: MGT 350, MKT 340)

360 **Introduction to 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: MGT 320 or MKT 340)

370 **Energy Management Principles. 3 hrs.**
A managerial perspective of regional national, and international energy issues. Course provdes an objective assessment into the projections, limitations, costs, and tradeoffs associated with conventional and alternative sources of energy. (PR: MGT 320)

380 **Principles of Renewable Energy. 3 hrs.**
An introduction to renewable energy management, markets, and sustainable nosiness solutions. Nuclear, hydro, solar, wind, geothermal, biomass and biofuel sectors will be evaluated for their economic viability and business profitability. (PR: MGT 320)

419 **Business and Society. 3 hrs. I, II.**
An examination of the manager's social 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: MGT 320)

420 **Operations Management. 3 hrs. I, II.**
Management of operation systems including system design, implementation and control. Analysis of the system in the areas of product, process, material quality, and facilities management. Topics include breakeven analysis, inventory models, transportation models, network analysis. (PR: MGT 218)

422 **Organizational Behavior. 3 hrs. I, II.**
Problems, methods, and analysis of various theories of behavior within organizations for purposes of integration and generalization. Emphasis will be upon the identification and investigation of the schools of thought concerning the behavioral sciences. (PR: MGT 320)

423 **Organizational Development. 3 hrs. I, II.**
An examination of the dynamics of change within organizations. The course will examine the cause of resistance to change and purposeful methodologies for implementing change including behavioral, technological, and structural in an attempt to describe a holistic approach. Capstone Course. (PR: MGT 320)

424 **Human Resource Management. 3 hrs. I. II.**
Analyze the role of human resource managers within strategic decision making. Topics include selection, training, assessment, compensation, and employee relations. Current topics also covered. (PR: MGT 320)

425 **Industrial Relations. 3 hrs.**
A study of labor-management relations in union and non-union settings. Topics include: conflict resolution techniques, negotiation strategy, participative management, and labor theory. Labor laws and history are reviewed. (PR: MGT 320)

428 **Negotiations. 3 hrs. I,II.**
The theory and practice of negotiation in organizational settings including negotiation strategies and their impact on the outcomes achieved. Students will build negotiation skills through experiential exercises and cases. (PR: MGT 320)

429 **Leadership. 3 hrs.**
Leadership styles, principles, models, and practical applications including: motivation and communication, teamwork, use of power, development of trust, effective group facilitation, negotiation and persuasion, effective change, and ethics. (PR: MGT 320)

445 **International Management. 3 hrs.**
Focuses on the economic, political, legal, technological, and cultural issues faced by international managers. Topics include developing cultural awareness, implementing global strategy, and competing with ethical integrity. (PR: MGT 320)

446 **Green Management. 3 hrs.**
Focuses on environmental sustainability and the practices involved in managing a green business, including: eco-advantage strategies, supply chains, preventing the failure of eco-initiatives and sustained competitive advantage. (PR: MGT 320)

454 **Trends in Health Care Delivery. 3 hrs.**
Discussion of trends in Health Care Delivery in the United States and related public policies and their implications to society. (PR: MGT 350 and MGT 354)

455 **Health Care Policy Seminar. 3 hrs. I.**
An integrative discussion course on current problems and future policies and strategies as they are related to facilities planning and utilization, staffing and organization and providing quality health care to community. (PR: MGT 350 and MGT 354))

456 **Planning of Health Care Delivery Systems. 3 hrs.**
Application of systems approach to evaluation of current health care services and for future planning decisions. (PR: MGT 350 and MGT 354)

458 **Energy Management Strategy. 3 hrs.**
Comprehensive coverage of all facets of the management of energy sources, production, risks, and markets. Provides managerial tools necessary to increase production capabilities and maneuver with the transforming energy sectors. (PR: FIN 370, LE 308, MGT 370)

460 **Strategic Management. 3 hrs. I, II.**
The integrative capstone course concerning theory and practice of top managements' plan to attain outcomes consistent with the organization's mission and goals including strategy formulation, implementation and control. Capstone course. (PR: ENG 204, MGT 320, MKT 340, FIN 323, LE 207, MGT 218, Senior Standing)

461 **New Venture Dynamics. 3 hrs.**
Managing small enterprises, as opposed to large corporations. In cooperation with the Small Business Administration, students work as trainee management consultants with small businesses in the area. (PR: MGT 320)

471 **Health Care Practicum I. 4 hrs. CR/NC. S.**
Field experience in management of Health Care Operations. (PR: Permission of Division Head)

472 **Health Care Practicum II. 4 hrs. CR/NC.**
Field experience in management of Health Care Organizations. (CR: MGT 471)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Study of an advanced topic not normally covered in other courses. Management majors only, with permission of Division Head.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490 **Internship. 3-12 hrs. C/NC**
A supervised internship in which the student works for a business firm/agency to gain practical experience in the student's major. The program of work and study will be defined in advance and the student's performance will be evaluated. (PR: Permission of Division Head)

MANAGEMENT INFORMATION SYSTEMS (MIS)

200 **Computer Applications in Business.3 hrs.**
An introduction to computer applications in business, including spreadsheets, databases, presentation and word processing. Students also learn to integrate spreadsheet and database outputs into presentations and reports.

290 **Principles of Management Information Systems. 3 hrs. I, II.**
Introcution to the development, selection, use, and impact of information and communication technologies and systems in modern organizations and enterprises.

300 **Introduction to Business Programming. 3 hrs. I.**
Introduction to programming in a business context, emphasizing problem solving using basic programming logic and data structures, interface concepts, file and database access, and selection and use of development tools. (PR: MIS 290)

307 **Advanced Business Programming. 3 hrs.**
Builds upon the business programming introduction with an emphasis on distributed, data-driven applications and higher order data structures. (PR: MIS 300)

310 **Business System Analysis and Design. 3 hrs. II.**
The course covers business application systems development, behavioral considerations in the development process, feasibility assessment, requirement analysis, and communication skills. Emphasis on prototyping and fourth generation languages.

333 **Business Telecommunication Systems. 3 hrs. I, II.**
To understand the applications, concepts and management of telecommunications. Students will be exposed to network components and network operations. Emphasis will be on strategic business applications of telecommunication systems.

340 **Introduction to Database Management Systems. 3 hrs. I.**
Introduction to enterprise data administration emphasizing database environment and architecture, relational model and languages, database requirements, and modeling. Introduction to the use of a database management system.

350 **E-Commerce Systems. 3 hrs.**
E-commerce from a management and socio-technical perspective emphasizing current technologies and issues, including Internet-enabled business models, legal and social issues. (PR: MIS 290 or permission of COB division head)

360 **Introduction to Business Intelligence and Analytics. 3 hrs.**
Introduction to the field of business intelligence and analytics, introducting the use of big data, statistical, quantitative analysis, expeloratory and predictive models, and fact-based management to drive decisions and actions. (PR: MGT 218, MIS 290; CR: MIS 340)

411 **Applied Business System Analysis and Design. 3 hrs.**
This course extends the concepts and techniques in MIS 310 to enable students to design and implement systems in a business environment. The implementation of a computer application will be required.

412 **Enterprise Systems. 3 hrs.**
A study of cross-functional and process-oriented information systems. Topics to include business process management, supply-chain, and relationship management systesm. (PR: MIS 290 or permission of division head)

415 **Emerging Information and Communication Technologies. 3 hrs.**
A study of emergin informationo and communication technologies in a business and organizational context. (PR: MIS 290 or permission of COB advising office)

420 **Information Security Management. 3 hrs.**
A study of information security risk analysis and assessment; threats to information security; defense measures; and legal, privacy, and ethical issues in information security.

433 **Advanced Telecommunications and Networks. 3 hrs.**
An advanced study of the design, implementation and operation of voice, data, video networks using digital and analog technologies. (PR: MIS 333)

444 **Advanced Database Management Systems. 3 hrs.**
Enterprise database administration; issues surrounding database implementation, security, ethics, distributed databases, and advanced language features using a database management system. (PR: MIS 340)

450 **E-Commerce Systems Management. 3 hrs.**
Modeling electronic business systems. Identifying requirements, conceptual and logical design, user interface and data management. Integration with internal and external systems.

465 **Business Decision Support Systems. 3 hrs.**
A study of decision support systems (DSS) in terms of building and providing end-user support for managerial decision making. Advanced topics will include computer interface design and artificial intelligence.

460 **Advanced Business Intelligence and Analytics. 3 hrs.**
An advanced study of business intelligence and alytics, the use of big data, statistical, quantitative analysis, exploratory and predictive models, and fact-based management to drive decisions and actions. (PR: MIS 360; CR: MIS 444 and MGT 420)

470 **Business Systems Project Management. 3 hrs. I.**
Project management for information and process-oriented organizational systems. Tools, techniques, feasibility, post-project evaluation, information and knowledge exchange, change and vendor management. (PR: MIS 290 or permission of COB division head)

475 **Strategic Management Information Systems. 3 hrs. II.**
A capstone course for management majors. Emphasis will be on creating and using information systems to give businesses a competitive advantage and provide strategic support for all levels of management. Capstone course (CR: MIS 470)

476 **Business Intelligence and Analytics Project. 3 hrs.**
A capstone project in business intelligence and analytics. Principles of business intelligence and analytics as applied to the development of a comprehensive, multi-disiplinary, business intelligence and analytics project. (PR: MIS 460)

480-483 **Special Topics. 1-4; 1-4; 1-4. 1-4 hrs.**
Study of an advanced topic not normally covered in other courses. Management Information Systems majors only, with permission of division head.

485-488 **Independent Study. 1-4; 1-4; 1-4. 1-4 hrs.**

490 **Internship. 3-12 hrs. CR/NC.**
A supervised internship in which the student works for a business firm/agency to gain practical experience in the student's major. The program of work and study will be defined in advance and the student's performance will be evaluated. (PR: permission of division head)

MARKETING (MKT)

231 **Principles of Selling. 3 hrs. I, II.**
Elements of professional personal selling from prospecting through follow-up designed for individuals preparing for a career in sales/marketing and those desiring skills to influence, persuade, or lead others.

340 **Principles of Marketing. 3 hrs. I, II.**
Introduction to marketing as the central activity of organizations in creating exchanges with customers. Focuses on strategies related to environmental opportunities and threats using product, price, promotion and distribution tools.

341 **Integrated Marketing Communications. 3 hrs. I, II.**
A managerial analysis of the principles and practices of the promotion mix from the viewpoints of the consumer, the firm, the industry, and the macroenvironment. (PR: MKT 340)

344 **Retail Management. 3 hrs.**
Overview of retailing (store and non-store sales to consumers) to familiarize students with such topics as buying, selling, location, store design, display, promotion, pricing, inventory control, staffing and retailing strategy. (PR: MKT 340, ACC 215)

349 **Principles of Domestic Transportation. 3 hrs.**
Introduction to the history, economics, and regulation of U.S. domestic motor, rail, water, air and pipeline transportation. Particular emphasis is placed upon the significance of transportation to the development of the United States and today's economy.

350 **Supply Chain Logistics. 3 hrs.**
A supply chain approach is used to explain activities that create an efficient flow of products from point of origin to point of consumption in order to satisfy customer requirements.

371 **International Marketing. 3 hrs. I, II.**
A study of marketing across national borders. Emphasis is placed on foreign environments, methods of entry, and marketing mix development, including the conflict between standardization and adaptation. (PR: MKT 340)

375 **Business to Business Marketing. 3 hrs.**
Study of marketing products and services to business, institutions, and government. Forcus on organizational buying, market planning, and development of marketing mix.

400 **Social Media Marketing. 3 hrs.**
Social media as a marketing function: Students will gain the knowledge and skills necessary to engage and serve the customer and expore the strategic use of current social media platforms.

414 **Purchasing and Inventory Control. 3 hrs.**
In-depth analysis of procurement function, problems and techniques. Maintenance of proper inventory level, ordering methods, and product management at both the retail and industrial levels.

425 **Marketing Analytics. 3 hrs.**
Students analyze data to make marketing decision regarding segmentation and target market selection, product positionig, brand choice, customer relationship management, pricing, customer lifetime value, and other areas. (PR: MGT 218, MKT 340, LCOB major)

435 **Internet Marketing. 3 hrs.**
Introduction to Internet as a sales and marketing tool, web page development, strategic planning for e-commerce, non-Internet functions which support e-commerce, and integration of e-commerce into conventional marketing mix. (PR: MKT 340)

437 **Consumer Behavior. 3 hrs. I, II.**
Acquaints the student with individual and group behavior as it pertains to consumer activity. Theories and findings in the behavioral sciences, as well as those set forth by marketing scholars, are examined so as to understand the behavioral patterns of consumers. Cultural, social, and psychological influences are considered, in addition to the traditional economic interpretations. The stress of the course is on incorporating these data into the managing of the marketing effort.

440 **Sales Management. 3 hrs.**
An exploration of the duties and activities of sales managers. Topics typically include planning and forecasting as well as organizing, staffing, training, compensating, motivating, and evaluating the sales force. (PR: MKT 340)

442 **Market Research. 3 hrs. I, II.**
Scope and importance of market and distribution research; product, package, brand analysis and social impact; consumer, industrial and institutional survey, quantitative and qualitative analysis of market data; situation analysis, sampling, tabulation and presentation methods. (PR: MKT 340, MGT 218)

445 **Services Marketing. 3 hrs.**
Examination of the marketing of services offered by business and non-business organizations with particular emphasis on the unique aspect of the services marketing mix and the implementation of service strategy.

449 **Transportation Law and Public Policy. 3 hrs.**
Comprehensive review of the regulation of carriers and transportation in general. Comparison of the principal transportation regulatory acts, functions of the procedure before the several regulatory commissions. (PR: ACC 216, MGT 218)

465 **Marketing Management. 3 hrs. I, II.**
Capstone integrated study of marketing for decision making. Emphasis on the application of marketing principles and concepts for the purpose of developing, analyzing and modifying marketing plans and strategy. Capstone course. (PR: MKT 231, MKT 437, MKT 442, and senior standing))

480-482 Special Topics. 1-4; 1-4; 1-4 hrs.
Study of an advanced topic not normally covered in other courses. Marketing majors only, with permission of division head.

485-486 Independent Study. 1-4; 1-4; 1-4 hrs.

490 Internship. 3-12 hrs. CR/NC.
A supervised experience in which the student works for a business firm/agency to gain practical experience by completing a defined work program. Student performance is evaluated. (PR: Permission of Division Head)

MATHEMATICS (MTH)

102 Preparation for College Mathematics B. 4 hrs.
A mastery-based course that will prepare students for College Algebra. (PR: Math ACT of 18 or below)

102B Abridged Preparation for College Mathematics B. 1 hr.
An abridged mastery-based course that will prepare students for College Algebra. (PR: *C* or better in MTH 100 or MTH 121 or MTH 121B; and permission of the Math Department)

121 Concepts and Applications of Mathematics (CT). 3 hrs.
Critical thinking course for non-science majors that develops quantitative reasoning skills. Topics include logical thinking, problem solving, linear modeling, statistics and probability, exponential and logarithmic modeling, and financial concepts. (PR: Math ACT 19 or MTH 100)

121B Concepts and Applications of Mathematics - Expanded Version (CT). 4 hrs.
Critical thinking course for non-science majors that develops quantitative reasoning skills. Topics include logical thinking, linear modeling, beginning statistics and probability, exponential and logarithms modeling, and financial concepts, with arithmetic review. (PR: Math ACT 18 or below)

122 Plane Trigonometry. 3 hrs.
A study of the trigonometric functions, graphs of the trigonometric functions, identities, equations, inverse trigonometric functions, vectors, complex numbers, and applications. (PR: Math ACT 22 or *C* or better in MTH 127 or MTH 130 concurrent)

125 Mathematicical Thinking (CT). 3 hrs.
A critical thnking course for non-science majors. Topics include number systems, sequences, modular arithmetic, deductive arguments, linear programming, techniques of problem-solving, and history of mathematics. (PR: Math ACT 19)

127 College Algebra - Expanded Version. 5 hrs.
A brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. (PR: Math ACT 17 or *C* or better in MTH 102 or MTH 102B)

130 College Algebra. 3 hrs.
Polynomials, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. (PR: Math ACT 21 or above)

132 Precalculus with Science Applications. 5 hrs.
Functions used in calculus including polynomial, rational, exponential, logarithmic, and trigonometric. Systems of equations and inequalities, conic sections, polar parametric equations, sequences and series. Binomial Theorem. (PR: Math ACT 24 or above, or *C* or better in MTH 127or *C* or better in MTH 130)

140 Applied Calculus. 3 hrs.
A brief survey of calculus including both differentiation and integration with applications. Not to be substituted for MTH 229 or MTH 203. (PR: *C* or better in MTH 127 or *C* or better in MTH 130 or Math ACT 24 or above)

140H Applied Calculus Honors. 3 hrs.
A brief survey of calculus including both differentiation and integration with applications. This honors course will also introduce topics from differential equations with applications. (PR: Math ACT 25 or *C* or better in MTH 127 or higher)

160 Applied Mathematics Reasoning (CT). 5 hrs.
A critical thinking course in applied mathematical reasoning. Topics include logic, problem solving, linear modeling, beginning statistics and probability, exponential and logarithmic modeling, formula use. (PR: Math ACT of 17 or *C* or better in MTH 102 or MTH 102B)

220 Discrete Structures. 3 hrs.
Sets, relations, directed and undirected graphs, monoids, groups, lattices, Boolean algebra, and propositional logic. (PR: Math ACT 27 or *C* or better in MTH 132 or *C* or better in IST 131 or *C* or better in MTH 229)

229 Calculus with Analytic Geometry I (CT). 5 hrs.
An introduction to calculus and analytic geometry, emphasizing critical thinking. Limits, derivatives, and integrals of the elementary functions of one variable, including the transcendental functions. (PR: MTH ACT of 27 or above, or *C* or better in MTH 132)

229H Calculus with Analytic Geometry I (Honors) (CT). 5 hrs.
An introduction to calculus and analytic geometry for honors students, emphasizing critical thinking. Limits, derivatives, and integrals of the elementary functions of one variable, including transcental functions. (PR: Math ACT 27 or permission of the chair of the mathematics department))

230 Calculus with Analytic Geometry II. 4 hrs.
Applications of the integral, techniques of integration, and infinite series. A study of conic sections, polar coordinates, and parametric equations. (PR: *C* or better in MTH 229 or *C* or better in IST 230)

231 Calculus with Analytic Geometry III. 4 hrs.
Vectors, curves, and surfaces in space. Derivatives and integrals of functions of more than one variable. A study of the calculus of vector valued functions. (PR: *C* or better in MTH 230)

280-283 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.
(PR: Permission of the chair of the Department of Mathematics)

300 Introduction to Higher Mathematics. 4 hrs.
A transition between elementary calculus and higher mathematics with emphasis on techniques of proof. (PR: *C* or better in MTH 230)

329 Elementary Linear Algebra. 3 hrs.
Systems of linear equations, matrices and determinants, vector spaces, linear transformations, eigenvalues, eigenvectors, and applications. (PR: Math ACT of 27 or *C* or better in MTH 132 or MTH 229)

331 Linear Algebra. 4 hrs.
Vector spaces, matrices and determinants, systems of linear equations, linear transformations, eigenvalues, eigenvectors, and applications. (PR or CR: *C* or better in MTH 300)

335 Ordinary Differential Equations. 3 hrs.
First and second-order ordinary differential equations. Applications include vibrations and electrical circuits. Laplace transform, approximate solutions, orthogonal functions, Fourier series; partial differential equations including heat, wave, and Laplace equations. (PR: *C* or better in MTH 231 and REC: MTH 331 or MTH 329)

360 Introduction to Complex Variables. 3 hrs.
An introductory survey of complex numbers, analytic functions, properties of elementary functions, integrals, series, residues and poles, with a focus on practical applications. (PR: *C* or better in MTH 231)

361 Vector Calculus. 3 hrs.
A course in n-dimensional calculus: the derivative, the integral, and applications. Coordinate-free methods are emphasized. (PR: *C* or better in MTH 231)

400 **Structure of Algebra. 3 hrs.**
Informal development of modern elementary algebra. Recommended for pre-service middle school teachers and for elementary and secondary in-service teachers. May not be used for either a 5-12 mathematics specialization or for any degree offered by the Mathematics Department. (PR: *C* or better in MTH 130 or equivalent)

401 **Structure of Modern Geometry. 3 hrs.**
Informal development of geometry with an exploration of probability and statistics. Recommended for pre-service middle school teachers and for elementary and secondary in-service teachers. May not be used for either a 5-12 mathematics specialization or for a degree offered by the Mathematics Department. (PR: *C* or better in MTH 130 or equivalent)

404 **Mathematics Methods and Materials. 3 hrs.**
Content and content-specific pedagogy for secondary mathematics education majors. (CR/PR: CI 470 / Admin. 5)

405 **History of Mathematics. 3 hrs.**
A study of the history of mathematics from the time of the ancient Greeks to the end of the nineteenth century. (PR: *C* or better in MTH 300)

411 **Mathematical Modeling. 3 hrs.**
Students work in teams to construct mathematical models of various real-world situations. Problems to be modeled are drawn from diverse areas of application and use a wide range of undergraduate mathematics. (PR: *C* or better in MTH 231)

415 **Partial Differential Equations. 3 hrs.**
Elementary partial differential equations. Heat equation, Laplace equation, separation of variables, Fourier series, vibrating strings, eigenvalue problems, finite differences, Bessel functions, Legendre polynomials. (PR: *C* or better in MTH 331 and *C* or better in MTH 335)

416 **Advanced Differential Equations. 3 hrs.**
Differential equations are studied qualitatively. Topics include the existence and uniqueness of solutions and the behavior of solutions including stability of nonlinear systems, periodic solutions, and approximation using perturbation methods. (PR: *C* or better in MTH 300 and *C* or better in MTH 335)

427 **Advanced Calculus I. 3 hrs.**
A rigorous study of the real number system, continuity and differentiability of functions of a single variable, integration of functions of a single variable, infinite series. (PR: *C* or better in MTH 231 and *C* or better in MTH 300 and CR/PR: MTH 331)

428 **Advanced Calculus II. 3 hrs.**
A rigorous development of algebra and topology of Euclidean spaces, differentiability and integrability of functions of several variables. (PR: *C* or better in MTH 427)

430 **Topology I. 3 hrs.**
First course in topology. Basics of point-set topology: metric and topological spaces, continuity, connectedness, compactness, products, quotients. Surfaces and simplicial complexes, Euler characteristics. (PR: *C* or better in MTH 300)

431 **Topology II. 3 hrs.**
First course in algebraic topology. Homotopy, fundamental group, simplicial homology. (PR: *C* or better in MTH 430 and MTH 450)

440 **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 combinatorics. (PR/CR: *C* or better in MTH 300)

442 **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 and applications. (PR: *C* or better in MTH 331 and a programming language. REC: MTH 443)

443 **Numerical Analysis. 3 hrs.**
Computer arithmetic, roots of equations, interpolation, linear systems, and numerical differentiation and integration. Analysis of errors in and convergence properties of algorithms. Computer implementation of methods. (PR: *C* or better in MTH 331 and a programming language)

448 **Modern Geometries. 3 hrs.**
Finite geometries, basic background material for the modern development of Euclidean Geometry, other geometries. (PR: *C* or better in MTH 300)

449 **Projective Geometry. 3 hrs.**
Projective geometry using both synthetic and algebraic methods. (PR: *C* or better in MTH 300)

450 **Modern Algebra I. 3 hrs.**
Structure of the abstract mathematical systems: fields, rings, groups, with illustrations and applications from number theory. (PR: *C* or better in MTH 300 and PR/CR: *C* or better in MTH 331)

452 **Modern Algebra II. 3 hrs.**
Continuation of MTH 450. (PR: *C* or better in MTH 450)

455 **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 Diopohantine equations. (PR: *C* or better in MTH 300)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Courses on special topics not listed among the current offerings. (PR: Permission of the chair of the Department of Mathematcis)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490 **Internship in Mathematics. 2-12 hrs.**
A supervised internship in an area of mathematics, applied mathematics, or statistics. By permission only. (PR: MTH 300 and permission)

491 **Senior Seminar. 2 hrs.**
Capstone experience in reading, doing, writing and speaking mathematics. Students will explore topics related to a theme chosen by the instructor. (PR: MTH 300 and Permission)

MECHANICAL ENGINEERING (ME)

310 **Thermodynamics II. 3 hrs.**
Gas, vapor, combined power cycles, co-generation, entropy, combustion, fuel cells, and equations of state. (PR: ENGR 219)

320 **Fluid Power. 3 hrs.**
This course covers physical principles of fluid power, fluid power cylinders, control valves, fluid power components: compressors, pumps, valves, cylinders, and motors, fluid power circuits, troubleshooting: hydraulic, symptoms, procedures, pneumatics. (PR: ENGR 214 and ENGR 216)

325 **Mechanical Engineering Lab I. 1 hr.**
Experimental laboratory mainly from within the thermo-fluids area, concerned with fluid statics, flow, heat transfer, internal combustion engines, data acquisition, analysis, including use of computers. Principles of good experimental design. (PR: ENGR 318; Concurrent PR: ME 350)

330 **Manufacturing Methods and Design. 3 hrs.**
This course covers economical production by understanding the capabilities of different manufacturing processes, candidate manufacturing processes for a given part, performing manufacturability evaluation at the design stage, automation, IMS. (PR: ENGR 102 and ENGR 215)

335 **Mechanical Engineering Analysis. 3 hrs.**
Covers the mathematical methods available for analysis of engineering problems, and how to apply them effectively for analytically mechanical and thermal systems. (PR: MTH 335)

340 **Machine Element Design. 3 hrs.**
Mechanical design of machine elements, static and fatigue failures, shaft systems, bearings, gears, springs, screws and fasteners. (PR ENGR 214, 216; Concurrent PR: MTH 231)

350 **Heat Transfer. 3 hrs.**
Analysis and solutions of conduction, free and forced convection, radiation heat transfer, and design of heat exchangers. (PR: ENGR 219 and ENGR 318)

410 **Kinematics and Design of Machine. 3 hrs.**
The determination of the motion and forces of machines and mechanisms including rotating machinery, cams and gears. Analyze position, velocity, accelerations, static loads, and dynamic loads. (PR: ME 340)

420 **Instrumentation and Control. 3 hrs**.
This course provides an overview of the instrument characteristics and measurement principles. Concept of control, open and closed-loop control systems. (PR: ENGR 214, ENGR 245)

425 **Mechanical Engineering Lab II. 1 hr.**
Engineering measurements and experimentations. Hands-on labs and data analyses in several major topics of the Mechanics of Materials theory and Theory of Machines. (ME 340)

430 **Design of Thermal Systems. 3 hrs**.
Design and analysis of thermal systems including components selection and integrations. (PR ME 350)

435 **Design of Mechanical System. 3 hrs.**
Problem solving methodology in the design, analysis, and synthesis of mechanical systems. Engineering design process involving modeling, computer simulation, concepts of optimization, robustness, reliability, sustainability. (PR: ME 410)

440 **Design and Analysis of Energy Systems. 3 hrs**.
Design characteristics and operational performance of energy systems. (PR: ME 350).

445 **Hydraulic and Pneumatic Control. 3 hrs.**
This course covers standard symbols, pumps, control valves, assemblies, actuators, filter regulator lubricator (FRL), maintenance procedures, switching, control devices, fluid power system, fluid power circuits including design, application, and troubleshooting. (PR: ENGR 240, ME 320)

447 **Engineering Analysis. 4 hrs.**
Experimental laboratory mainly from within the thermo-fluids area, concerned with fluid statics, flow, heat transfer, internal combustion engines, data acquisition, analysis, including use of computers. Principles of good experimental design. (PR: MTH 335)

450 **CNC and Rapid Prototyping. 3 hrs.**
This course covers CNC CAD/CAM, CNC tools, coordinate systems, CNC programming Language, CNC operation, CNC tool paths, CNC turning, G/M code reference, CNC milling work-holding, rapid prototyping, 3D printing. (PR: ENGR 240)

455 **Metallurgy. 3 hrs.**
Covers material properties and behavior of pure metals and common metal alloys. Discuss various aspects of extractive, mechanical, physical metallurgy, theory and practice of identification, selection, processing, conditioning, and testing. (PR: ENGR 215)

460 **Vibrations. 3 hrs.**
Modeling of vibratory motion of single and multiple degree of freedom systems; free and forced response; modal summation method for response predictions; simulation of the vibration by using Matlab. (PR: ENGR 214, MTH 335)

465 **Mechatronics. 3 hrs.**
Dynamic analysis of mechatronic systems, sensors, transducers, and electric circuits and control. (PR: ENGR 245, MTH 345)

480-483 **Special Topics. 1-4 hrs.**
Subject matter to be selected from topics of current interest. (PR: Permission)

485-488 **Independent Study. 1-4 hrs.**
Individual study of advanced mechanical engineering areas. (PR: Permission)

MEDICAL IMAGING (MI)

201 **Introduction to Radiography. 3 hrs.**
Provides an overview of the foundations in radiography and the practitioner's role in the health care delivery system and professional responsibilities of the radiographer. (PR: BSC 228, CHM 203, MTH 121 or higher, PHY 101, admission to the MI program)

202 **Patient Care in Imaging Science. 3 hrs.**
Content is designed to identify the role of the radiographer in patient care, including consideration of the physical and psychological needs of the patient and family. (CR: MI 203, 204, 205, 206; PR: BSC 228, MI 201, admission to the MI program)

203 **Ethical & Legal Principles in Imaging Science. 2 hrs.**
Content is designed to provide a fundamental background in legal issues and ethical practice including the ARRT Code of Ethics and Practice Standards. (CR: MI 202, 204, 205, 206; PR: Admission to the MI program)

204 **Radiographic Anatomy. 3 hrs.**
Content is designed to introduce the student to radiographic anatomy. Emphasis is placed on identifying structures visible on correctly performed radiographic procedures. (CR: MI 202, 203, 205, 206; PR: BSC 228, admission to the MI program)

205 **Imaging Procedures I. 4 hrs.**
Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Students will practice imaging procedures in lab prior to performing them on patients. (CR: MI 202, 203, 204, 206; PR: BSC 228, admission to the MI program)

206 **Clinical Practice I. 4 hrs.**
Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize and evaluate concepts and theories in the performance of Radiologic procedures. (CR: MI 202, 203, 204, 205; PR: Admission to the MI program)

207 **Imaging Procedures II. 4 hrs.**
Content is designed to provide the knowledge base necessary to perform special imaging procedures and basic computed tomography. (CR: MI 208, 209, 210, 211; PR: MSC 228, MI 206, admission to the MI program)

208 **Pharmacology & Drug Administration for Imaging Science. 2 hrs.**
Content is designed to provide basic concepts of pharmacology including delivery of and pharmacodynamics associated with imaging contrast media. (CR: MI 207, 209, 210, 211; PR: BSC 227, MI 206, BCLS, admission to the MI program)

209 **Introduction to Imaging Equipment. 3 hrs.**
Content is designed to provide in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. (CR: MI 207, 208, 210, 211; PR: MTH 121 or higher, PHY 101, PHY 101L, admission to the MI program)

210 **Clinical Practice II. 4 hrs.**
Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Students will begin clinical rotations in computed tomography. (CR: MI 207, 208, 209, 211; PR: MI 206, admission to the MI program)

211 **Seminar in Imaging Science. 1 hr.**
Introduces student to current research in imaging science. Emphasis will be on oral communication via power point presentations. (CR: MI 207, 208, 209, 210; PR: Admission to the MI program)

212 **Seminar in Imaging Sciences II. 1 hr.**
Seminar on new and emerging technologies in imaging sciences.

213 **Elective Clinical Practicum I. 4 hrs.**
Elective clinical practicum in radiography or sonography.

301 **Clinical Practice III. 10 hrs.**
Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Clinical practice is sequential. Students will be introduced to special imaging modalities. (CR: MI 210, admission to MI program)

302 **Principles of Radiation Physics. 3 hrs.**
Introduces student to the nature and characteristic of radiation production and the fundamentals of photon interactions with matter. Course covers principles associated with radiography, nuclear medicine and radiation oncology. (CR: MI 303, 304, 305, 306. PR: CHM 203, PHY 101, PHY 101L, MTH 121 or higher, MI 209, admission to MI program)

303 **Image Acquisition & Processing. 3 hrs.**
Introduces student to the factors that govern the image production process. (CR: MI 302, 304, 305, 306; PR: MTH 121 or higher, MI 209, admission to MI program)

304 **Radiographic Pathology. 3 hrs.**
Introduces student to concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection. (CR: MI 302, 303, 305, 306; PR: BSC 228, MI 204, admission to MI program)

305 **Clinical Practice IV. 4 hrs.**
Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Clinical practice is sequential. Students will be introduced to special imaging modalities. (CR: MI 302, 303, 304, 306; PR: MI 301, admission to MI program)

306 **Seminar in Imaging Science. 1 hrs.**
Introduces student to current research in imaging science. (CR: MI 302, 303, 304, 305; PR: Admission to MI program)

307 **Radiation Protection & Radiobiology. 3 hrs.**
Introduces student to principles of radiation protection and radiobiology including the responsibilities of the radiographer for patients, personnel and the public. (CR: MI 308, 309, 310; PR: BSC 228, CHM 203, MI 302, admission to MI program)

308 **Radiographic Image Analysis. 2 hrs.**
Content is designed to provide a basis for analyzing and critiquing radiographic images. (CR: MI 307, 309, 310; PR: MI 208, 303, 304; admission to MI program)

309 **Digital Image Acquisition & Display. 2 hrs.**
Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiography. (CR: MI 307, 308, 310; PR: MI 303, admission to the MI program)

310 **Clinical Practice V. 4 hrs.**
Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Clinical practice is sequential. Students will be introduced to special imaging modalities. (CR: MI 307, 308, 309; PR: MI 210, 301, 305; admission to MI program)

311 **Seminar in Imaging Sciences III. 1 hr.**
Seminar on new and emerging technologies in imaging sciences.

312 **Abdominal Sonography I. 3 hrs.**
This course covers basic abdominal sonographic positioning and scanning protocols, as they relate to normal anatomy of the abdomen. Laboratory included.

313 **Ultrasound Physics I. 3 hrs.**
The focus of this course is to educate students about the physics of sound waves and their interaction with tissue enabling the display of diagnostic imaging.

314 **Clinical Practice I Sonography. 4 hrs.**
Clinical practice experiences are design for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the peformance of sonographic procedures.

315 **Small Parts Sonography. 3 hrs.**
This course covers anatomy, positioning and scanning protocol of the superficial structures.

316 **Abdominal Sonography II. 3 hrs.**
This course covers basic abdominal sonographic positioning and scanning protocols, as it relates to normal anatomy, anatomical variants, physiology to include the retroperitoneum, associated abdominal vasculature identified. (PR: MI 312)

317 **Ultrasound Physics II. 3 hrs.**
The focus of this course is to educate students about the physics of sound waves and their interaction with tissue enabling the display of diagnostic imaging.

318 **Vascular Sonography I. 4 hrs.**
Discussion of vascular disease, duplex animations with comparison to arteriography, as it pertains to venous and visceral vascular examinations. Laboratory included.

319 **Clinical Practice II Sonograph. 4 hrs.**
Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaulation of concepts and theories in the performance of sonographic procedures.

320 **Elective Clinical Practicum II. 4 hrs.**
Elective clinical practicum in radiography or sonography.

321 **Imaging Procedures III. 4 hrs.**
Content is designed to provide the knowledge necessary for advanced diagnostic radiographic imaging procedures. (PR: MI 205, MI 207)

401 **Seminar in Imaging Science. 1 hr.**
Review seminar for the primary ARRT certification examination. (PCR: Admission to MI program)

402 **Quality Management. 3 hrs.**
Advanced practice course in the quality assurance (QA) and quality management (QM) process for imaging sciences. (PR: Senior status or ARRT certification)

403 **Advanced Practice in Medical Imaging. 3 hrs.**
Core theory requirement for all advanced practice students focused on discussion of communication, human diversity, health care policy, legal issues and patient information management. (PR: Senior status or ARRT certification)

404 **Advanced Sectional Anatomy. 3 hrs.**
Provides students enrolled in CT/MRI advanced practice track advanced knowledge of sectional anatomy. (CR: MI 405, 407; PR: Senior status or ARRT certification)

405 **CT Procedures & Equipment. 3 hrs.**
Focus on advanced patient care skills including ACLS, imaging procedures and equipment in Computed tomography. (CR: MI 404, 408; PR: Senior status or ARRT certification)

406 **MRI Procedures & Equipment. 3 hrs.**
Focus on advanced patient care skills including ACLS, imaging procedures and equipment in Computed tomography. (CR: MI 404, 408; PR: Senior status or ARRT certification)

407 **Cardiovascular Anatomy & Physiology. 3 hrs.**
Focus on advanced cardiovascular anatomy, physiology and pathophysiology including heart anatomy, coronary, systemic, pulmonary, peripheral and cerebral circulation. (CR: MI 408; PR: Senior status or ARRT certification)

408 **Vascular Interventional Imaging Procedures & Equipment. 3 hrs.**
Focus is on advanced patient care skills including ACLS, procedures and equipment utilized in cardiovascular and vascular/interventional imaging. (CR: MI 407; PR: Senior status or ARRT certification)

409 **Advanced Clinical Practice. 4 hrs.**
Students will arrange clinical experience in selected imaging modality to gain competency in clinical procedures required to sit for post-primary ARRT certification exams. (CR: Variable; PR: Senior status or ARRT certification)

410 **Research in Medical Imaging. 3 hrs.**
Capstone Course. Research methods and information literacy. (CR: Variable; PR: Statistics, senior status or ARRT certification)

411 **Transcultural Healthcare. 3 hrs.**
Multidisciplinary approach to transcultural heathcare. Course will utilize comparative ethnography and provide a theoretical framework for organizing and interpreting information about health. (CR: Variable; PR: Permission of instructor)

412 **Radiography Management I. 3 hrs.**
Provides instruction in management principles for radiography departmental managers, including JACHO and Nuclear Regulatory Commission parameters. Students will be prepared to sit for the certification exam offereed by the AHRA.

413 **Radiography Management II. 3 hrs.**
Continuation of MI 412 to provide radiographer with management principles and preparation for the AHRA certification exam in radiography management.

414 **Mammography. 3 hrs.**
Introduction to medical imaging of the breast. Focus is to prepare student for advanced certification exam in mammography.

415 **RIS and PACS Principles. 3 hrs.**
Course content provides basic knowledge of digital storage systems, computer networking, radiology information systems (RIS), and picture archiving and communication systems (PACS).

416 **Obstetrical Sonography I. 3 hrs.**
This course covers basic obstetrical sonographic positioning and scanning protocols, as they relate to normal anatomy of the fetus.

417 **Gynecological Sonography I. 3 hrs.**
This course presents a study of anatomy and physiology of the nongravid and first trimester pelvis.

418 **Sonography Registry Review I. 1 hrs.**
This course is designed to prepare sonography students for their first specialty exam through the ARDMS. (PR: Senior status)

419 **Clinical Practice III Sonography. 4 hrs.**
Clinical practice experiences are designed for sequential development, application, critial analysis, integration, synthesis and evaluation of concepts and theories in the performance of sonographic procedures.

416 **Obstetrical Sonography II. 2 hrs.**
This course focuses on sonographic techniques in high-risk pregnancies and fetal abnormailities.

421 **Gynecological Sonography II. 3 hrs.**
This course presents a study of pathology of the nongravid and first trimester pelvis.

422 **Clinical Practice IV Sonography. 4 hrs.**
Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance sonographic procedures.

424 **Vascular Sonography II. 3 hrs.**
Discussion of vascular pathology and the use of plethsymography techniques in sonography.

427 **Adv Trauma/Surgical Radiography. 3 hrs**
Advanced practice course in trauma and surgical radiography for imaging sciences. (PR: senior status)

428 **Forensic Radiology. 3 hrs.**
This course will focus on introducing forensic radiography techniques and theoretical models. (PR: senior status)

429 **Geriatric & Pediatric Radiography. 3 hrs.**
This course will focus on advanced diagnostic medical imaging in the geriatric and pediatric population including mobile radiography. (PR: senior status)

430 **Mammography II. 3 hrs.**
Advanced medical imaging of the breast. (PR: senior status)

431 **Advanced Clinical Practice III. 4 hrs.**
Elective advanced clinical practicum in radiography or sonography (PR: Senior status or ARRT certification, ACLS certification)

432 **Advanced MRI Theory. 3 hrs.**
Advanced magnetic resonce imaging equipment and procedures. (PR: Senior status or MI 406)

433 **Point of Care Ultrasound. 3 hrs.**
This course will introduce basic principles of point of care ultrasound for vascular and cardiac interventional radiography, and mammography. (PR: Senior status or ARRT certification)

434 **Cardiovascular Imaging. 3 hrs.**
This course will focus on diagnostic and interventional procedures of the cardiovascular system. (PR Senior status or ARRT certification)

435 **Seminar: ARRT Exam Review II. 1 hr.**
This is a review course for the ARRT primary certification examination. (PR: Senior status)

436 **Sonography Registry Review II. 1 hr.**
This course is designed to prepare sonogrphy students for their second specialty exam through the ARDMS. (PR: Senior status)

437 **Breast Sonography. 3 hrs.**
This course covers anatomy, positioning and scanning rotocol for the breast as well as an introduction to ultrasound physics. (PR: Enrollment in the School of Medical Imaging)

485-488 **Independent Study. 1-4 hrs.**
Course designed to allow student to pursue individual research in medical imaging. (PR: senior status or permission)

MEDICAL LABORATORY TECHNICIAN
(See Clinical Laboratory Sciences)

MEDICAL TECHNOLOGY
(See Clinical Laboratory Sciences)

MILITARY SCIENCE (MS)

101 **Foundations of Officership. 1 hr. I.**
Increase self-confidence through team study and activities in physical fitness, land navigation, first aid, and basic drill. Learn fundamental concepts of leadership in both classroom and outdoor laboratory environments. (CR: MS 101L)

101L-102L **Military Science Basic Course Leadership Laboratory I. 1 hr. I, II.**
Learn and practice basic soldier skills and field craft. Build self-confidence and team-building leadership skills through activities in drill, repelling and basic marksmanship that can be applied throughout life. (CR: MS 101 and 102)

102 **Basic Leadership. 2 hrs. II.**
Learn/apply principles of effective leading. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to effectiveness of a leader. (CR: MS 102L, PR: MS 101 or departmental permission)

201 **Individual Leadership Studies. 2 hrs. I.**
Learn ethics-based leadership skills that develop individual abilities and contribute to team building. Develop skills in communications, event planning, group coordination, advanced first aid, land navigation and basic tactics. (CR: 201L; PR: MS 102 or departmental permission)

202 **Leadership and Teamwork. 2 hrs. II.**
Introduction to individual and team military tactics in squad operations. Includes: communications, safety assessments, movement techniques, planning for safety/security, training management, and methods of preoperational checks. (CR: MS 202L, PR: MS 201 or departmental permission)

201L-202L **Military Science Basic Leadership Lab II. 1 hr. I, II.**
Practice and refine the basic soldier skills and field craft learned in MS 101L/102L. Build self-confidence and team-building skills through leadership opportunities supervising MS101L/MS102L cadets. (CR: MS 201 and 202)

211 **Ranger Operations and Techniques. 2 hrs. I.**
Provides an overview of U.S. Army Ranger history, organization, and mission. Small unit tactics, leadership, patrolling techniques, marksmanship, repelling, and land navigation.

216 **Application of Marksmanship Fundamentals. 2 hrs. I, II.**
Teaches the fundamentals of rifle marksmanship in a competitive environment through the use of competition grade air rifles. Students learn shooting techniques, safety, range operations and competitive shooting skills.

251 **Camp Challenge. 6 hrs. S.**
This course is a five-week camp consisting primarily of applicatory training conducted during the summer at Fort Knox, Kentucky. It is designed to replace the first two years of on-campus ROTC training. Students who successfully complete the course are eligible to enter advanced military science training with departmental permission.

284 **Military History. 3 hrs.**
Review the evolution of warfare, military theory and the military profession, with particular emphasis on the place of military institutions in society, so as to develop a sense of historical awareness.

301 **Leadership and Problem Solving. 3 hrs. I.**
Uses small unit defensive tactics and opportunities to plan and conduct training. Practical opportunities to lead small groups, receive personal assessments/encouragement, and lead in situations of increasing complexity. (CR: MS 301L, PR: MS 101, 102, 201 and 202 or MS 251 or department permission)

301L-302L **Advanced Course Leadership Lab III. 1; 1 hr. I, II.**
Students develop, practice and refine leadership skills by serving and being evaluated in a variety of leadership positions. Students are responsible for the planning, coordination, execution and evaluation of training. (PR: MS 301/302)

302 **Leadership and Ethics. 3 hrs. II.**
Analyze tasks; prepare written/oral guidance; delegate, and supervise. Plan for and adapt to the unexpected under stress. Examine and apply lessons from leadership cases studies, study ethical decision making. (PR: MS 301/ 301L; CR: MS 301L)

351 **Summer Training Camp. 6 hrs. (non-resident) S.**
A five-week camp at Fort Lewis, Washington; it is highly structured and demanding, stressing leadership at small unit levels under varying, challenging conditions. Individuals are evaluated throughout camp. (PR: MS 302)

401 **Leadership and Management. 3 hrs. I.**
Articulate goals, plan, conduct, and evaluate activities of the ROTC cadet organization. Assess organizational cohesion and develop improvement strategies. Develop confidence in leadership skills and manage resources. (PR: MS 302; CR: MS 401L)

401L-402L **Advanced Course Leadership Lab IV. 1 hr. I, II.**
Students develop, practice and refine leadership skills by serving a variety of leadership positions. Students are responsible for the planning, coordination, execution and evaluation of training for students enrolled in MS 101L-MS 302L. (CR: MS 401, 402)

402 **Officership. 3 hrs. II.**
Identify/resolve ethical dilemmas. Refine counseling/motivating techniques. Examine aspects of tradition and law as relating to an Army officer. Prepare for a future as a successful Army lieutenant. (PR: MS 401/401L; CR: MS 402L)

MINE SAFETY (MSF)

397 **Mining and Industrial Hygiene Sciences. 3 hrs. I or II.**
Algebra, chemistry, human anatomy and physiology as applicable to Industrial Hygiene calculations; hazards encountered and physiological systems affected. (PR: CHM 212 or equivalent)

410 **Survey of Mining. 3 hrs.**
An overview of mining to provide the participant with a general understanding of mining history, development systems terminology, procedures, methods, and safety and health activities.

411 **Mine Safety Program Analysis. 3 hrs.**
This course prepares the participant for the effective analysis of safety programs and provides some specific applications in the mining environment.

412 **Mine Safety and Health Legislation. 3 hrs.**
A survey of the legislation that has affected safety and health in mining with special emphasis of the Federal Mine Safety and Health Act of 1977.

413 **Mine Safety and Health Management. 3 hrs.**
This course covers the principles, functions and philosophies of mine management.

414 **Hazards Control in Mining. 3 hrs.**
A study of how to recognize accident potential throughout the mining industry.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
A study of special topics not offered in regularly scheduled courses.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

491-494 **Workshop (Selected Topics). 1-4; 1-4; 1-4; 1-4 hrs.**

MODERN LANGUAGES (MDL)

100 **Culture and Language (CT). 3 hrs.**
In this course students will study the interaction between culture and language from an international/multiculutral perspective and will work to achieve reflective judgment about cultures/beliefs.

280-283 **Special Topics.**
Beginning and intermediate study of a language not regularly taught in the Department of Modern Languages.

480-483 **Special Topics.**
Advanced study of a language not regularly taught in the Department of Modern Languages.

MUSIC (MUS)

100 **Applied Music Laboratory. 0 hrs.**
A forum devoted to the development of applied music area, supplying the opportunity for music majors both to demonstrate performance skills and to observe the skills of colleagues.

101 **Basic Musicianship. 3 hrs.**
Study of music fundamentals and aural skills including: notation, key signatures, scales, intervals, and triads and aural recognition of meter, scales, intervals, and triads. Online section open to non-music majors.

102 **Developmental Class Piano.**
Class instruction for students with little or no prior background in piano. Preparation for entry into the MUS 179 sequence. (PR: permission)

105 **Critical Thinking in Music (CT). 3 hrs.**
Includes the study of critical thinking in music with specific focus on music education and performance. Students will examine aspects of specific knowledge and develop an understanding of synthesis of these components as required for careers.

110 **The Professional Musician. 1 hr.**
Investigation of traditional and non-traditional music career options and the role of the musician in arts advocacy, community engagement, and arts education.

111 **Elementary Music Theory I. 2 hrs.**
Study of the diatonic harmony of the Common Practice Period through development of compositional and analytical skills. Emphasis on cadences, melodic form, non-harmonic tones, and diatonic triads. (PR: MUS 101 or permission; CR: MUS 113)

112 **Elementary Music Theory II. 2 hrs.**
Continued study of diatonic harmony of the Common Practice Period through development of compositional and analytical skills. Introduction to elementary forms, elementary modulations, and secondary dominants. (PR: Grade of *C* or better in MUS 111 and MUS 113; CR: MUS 114)

113 **Elementary Aural Skills I. 2 hrs.**
Sight-singing of melodies, and dictation of harmony, rhythm, and melody using elementary rhythms and diatonic pitch materials. (PR: MUS 101 with grade of *C* or better, or permission, CR: MUS 111)

114 **Elementary Aural Skills II. 2 hrs.**
Sight-singing of melodies, and dictation of harmony, rhythm, and melody using diatonic pitch materials in major and minor modes. Introduction to syncopation, secondary dominants, and elementary forms. (PR: MUS 113 with grade of *C* or better, CR: MUS 112)

142 **Music in Society. 3 hrs.**
Exploration of the roles and value of music in culture and society. Development of musical awareness through mastery of basic terminology, stylistic concepts, and critical listening skills. For non-music majors.

171-371 **African Drum and Dance Ensemble.**

172-372 **John Marshall Fife and Drum Corps. 1 hr.**
Performing/marching/uniformed ensemble devoted to the music of the American Revolution and Chief Justice John Marshall. Instruments featured include fifes and drums. (PR: Permission or Audition Required)

174-374 **Irish Ceili Band.**

178 a,b **Class Voice. 1 hr.**
Classes for voice minors and electives designed for beginners.

179 a,b,c,d **Class Piano. 1 hr.**
Classes for piano minors and electives progressing from beginner to proficiency level. (PR: Permission)

180-380 **Applied Music. Composition. 1-2 hrs.**

181-381 **Applied Music. Saxophone.1-2 hrs.**

182-382 **Applied Music. Flute. 1-2 hrs**

183-383 **Applied Music. Oboe. 1-2 hrs.**

184-384 **Applied Music. Clarinet. 1-2 hrs.**

185-385 **Applied Music. Bassoon. 1-2 hrs.**

186-386 **Applied Music. French Horn. 1-2 hrs.**

187-387 **Applied Music. Trumpet. 1-2 hrs.**

188-388 **Applied Music. Trombone. 1-2 hrs.**

189-389 **Applied Music. Euphonium. 1-2 hrs.**

190-390 **Applied Music. Tuba. 1-2 hrs.**

191-391 **Applied Music. Violin. 1-2 hrs.**

192-392 **Applied Music. Viola. 1-2 hrs.**

193-393 **Applied Music. Cello. 1-2 hrs.**

194-394 **Applied Music. String Bass. 1-2 hrs.**

195-395 **Applied Music. Piano. 1-2 hrs.**

196-396 **Applied Music. Voice. 1-2 hrs.**

197-397 **Applied Music. Organ. 1-2 hrs.**

198-398 **Applied Music. Percussion. 1-2 hrs.**

199-399 **Applied Music. Guitar. 1-2 hrs.**

200 **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.

203-403 **Choral Union. 1; 1 hr.**
Large choral ensemble available to university and regional singers without audition. Gives public performances of oratorios and works for chorus and orchestra twice a year. One rehearsal per week.

204-404 **Marshall University Chorus. 1 hr.**
A mixed chorus of 60-90 singers open to all university students without audition. Public performances of a variety of music are given each semester. Three rehearsals per week.

205-405 A Capella Ensemble. 1 hr.
A mixed a capella ensemble dedicated to the performance of a variety of popular, jazz, and contemporary styles. Open to all students regardless of major. (PR: Permission)

206-406 Opera Workshop. 1 hr.
Preparation and performance of opera scenes and full operas. Membership open to students as singers, pianists, and technical personnel. Roles assigned by audition. Two rehearsals per week plus private coaching. (PR: Audition with Director)

207-407 Marshall University Chamber Choir. 1 hr.
Advanced, auditioned choral ensemble open to all university students. Repertoire performed locally and on tour includes great chamber literature of the past five centuries. Three rehearsals per week. (PR: Audition with Director)

208-408 Orchestra. 1 hr.
The Marshall Orchestra is open to all university students, faculty, and interested musicians in the community with permission of the instructor. Concerts are presented each semester. (PR: Audition with Director)

210 Introduction to Electronic Music (CT). 3 hrs.
A non-technical introduction to the theory, practice, and literature of electronic music. This course fulfills a Core I/CT course requirement. Open to all majors.

211 Advanced Music Theory I. 2 hrs.
Study of advanced harmonic concepts in tonal music including modulation, altered pre-dominants, and chromatic mediant relationships. (PR: Grade of *C* or better in MUS 112 and MUS 114; CR: MUS 213)

212 Advanced Music Theory II. 2 hrs.
The study of musical forms and formal processes found in music of the late 18th through the 19th centuries. (PR: Grade of C or better in MUS 211 and MUS 213, CR: MUS 214)

213 Advanced Aural Skills 1. 2 hrs.
Sight-singing and aural analysis of melodies, harmonies, and rhythms found in 18th and 19th century music, including modulating melodies, secondary dominants, multi-part harmonic dictation, and characteristic rhythms. (PR: MUS 112 and MUS 114; MUS 211 must be taken concurrently or prior to enrollment in MUS 213)

214 Advanced Aural Skills I1. 2 hrs. II.
Sight-singing and aural analysis of 19th and 20th century music, including chromatic harmony, modulating melodies, multi-part harmonic dictation, scale/chord identification, characteristic 20th century sonorities, and advanced rhythmic materials. (PR: MUS 211 and MUS 213; MUS 212 must be taken concurrently or prior to enrollment in MUS 214)

217 Jazz Theory. 4 hrs.
Fundamental jazz theory and ear training. Chords, scales, nomenclature. Harmonic progressions and substitutions. Aural recognition of melodic and chord structures and fuctions. Composition and transcription. (PR: MUS 211 and 213)

218 Introduction to Music Technology. 3 hrs.
Introduction to music technology for sound reinforcement, music notation, MIDI, recording, technology aided instruction, and emerging issues concerning use and production of media in Western society. (PR: MUS 112 and 114 or permission)

219 Digital Recording Techniques. 2 hrs.
Concepts, implementation, and utilization of digital audio workstation software and hardware: MIDI, digital audio, recording techniques, production, and using the Internet to empower music creators (open to non-music majors).

222 Italian and English Diction for Singers. 2 hrs.
A systematic study of the pronunciation and problems encountered by singers when performing repertoire with English and Italian texts.

224 French and German Diction for Singers. 2 hrs.
A systematic study of the pronunciation and problems encountered by singers when performing repertoire with French and German texts. (PR: MUS 222)

227 History of Popular Music. 3 hrs.
A chronological listening survey course of popular music with an emphasis on examining the intersection of musical, historical, sociological, and cultural factors.

231 Jazz Improvisation I. 2 hrs.
Introduction to improvisation. Diatonic chord/scale relationships. Basic forms. Melodic construction and elaboration. Rhythmic improvisation. Keys and modes. (PR: MUS 112 and MUS 114)

232 Jazz Improvisation II. 2 hrs.
Continued development of skills and techniques. Idiomatic jazz patterns. Survey of standard literature. Turnarounds, blues proressions. Transciption of solos. Performance and elaboration of representative literature. (PR: MUS 231)

233 Percussion Class. 3 hrs.
A class for non-music majors who will learn to play percussion instruments from various cultures.

235-435 Concert Band. 1 hr.
A concert band for any undergraduate student who has had experience playing a band instrument in high school or middle school. (PR: High school or middle school band experience)

240 Seminar in Music Composition and Theory. 2 hrs.
Introduction to advanced theoretical and compositional methods employed by artist/researchers in analyzing music from the 19th and and 20th centuries. (PR: MUS 112 and 114)

245 Piano Ensemble. 1 hr.
An ensemble elective for piano majors and qualified piano secondary/elective students. Perform a wide variety of musical styles for multiple pianists on 1-5 pianos. May be repeated for credit. (PR: Instructor audition)

250 Survey of Jazz. 3 hrs.
A survey of the development of jazz and related forms from the 19th century antecedents to recent experimental trends.

252-452 Cello Ensemble. 1 hr.
Cello students will rehearse and perform works from the major literature for cello ensemble.

253-453 Guitar Ensemble. 1 hr.
An ensemble elective for guitar majors and qualified guitar elective students that focuses on sight reading skills, ensemble accuracy and position playing.

254-454 Flute Ensemble. 1 hr.
Performs a wide variety of musical styles from full flute choir to quartets, trios, etc. Membership required of all flute majors; others by audition. One rehearsal per week.

255-455 String Ensemble. 1 hr.
(PR: Audition with Director)

256-456 Woodwind Ensemble. 1 hr.
(PR: Audition with Director)

257-457 Percussion Ensemble. 1 hr.
(PR: Audition with Director)

258-458 Brass Ensemble. 1 hr.
(PR: Audition with Director)

259-459 Jazz Ensemble. 1 hr.
(PR: Audition with Director)

260-460 Jazz Improvisation Ensemble. 1 hr.
Ensemble improvisation from duet to tentet. Emphasis on music sightreading, recognition and application of chord/scale relationships in a performance setting. Ensemble playing skills. May be repeated for credit.

261 String Techniques. 1 hr.

262 Woodwind Techniques. 1 hr.

263 Brass Techniques. I hr.

264 Percussion Techniques. 1 hr.

265-465 Symphonic Band. 1 hr.

266-466 Marching Thunder. 1 hr.

267-467 Wind Symphony. 1 hr.
(PR: Audition with Director)

268-468 Sixth Man Band. 1 hr.

269-469 Contemporary Music Ensemble. 1 hr.
Performance of contemporary music in various media. May be repeated for credit. Counts towards improvisation requirement.

270-470 Music Production Practicum. 1 hr.
Specialized practical training in aspects of performance production, preparation, and execution. May be repeated once.

271 Guitar Techniques. 1 hrs.
The study of guitar techniques that will allow students to play and teach guitar at a basic level in a public school music program.

279a,b,c,d Jazz Piano Class. 1 hr.
Class instruction progressing from beginner to advanced. Development of literature and skills needed to pass the jazz piano proficiency exam. (PR: Permission)

280-283 Special Topics. 1-4 hrs.

290 Music History to 1750. 3 hrs.
A study of the history and development of music through 1750, including the interaction of music with historical events, world cultures, other arts and philosophy. (PR: MUS 211 and 213 with a grade of *C* or better)

301 Analysis. 3 hrs.
Analysis of music from the 18th through 20th centuries using general analytical methodology, set and serial theory. (PR: MUS 212 and 214 with a grade of *C* or better)

302 Advanced Analysis. 2 hrs.
Analysis of musical works from the late 19th century through the present era using sight and sound. (PR: Grade of *C* or better in MUS 301)

304 Styles. 2 hrs.
An investigation of the distinguishing characteristics of the music of major composers by the study, dissection and comparison of major works. (PR: MUS 302)

308 Music and Sound in Film. 3 hrs.
A study of the role of music and sound in film. Development of terminology and skills for analyzing and interpreting sound tracks of films throughout the history of film.

310 Music Entrepreneurship. 1 hrs.
Introduction to basic skills required to create careers as entrepreneurial musicians or to supplement a musical career in entrepreneurial pursuits, including planning, self-promotion, networking, audience building, and marketing. (PR: MUS 110)

312 Vocal Techniques. 1 hr.
Foundation principles of voice usage, interpretation, and problems of vocal pedagogy. For instrumental music education majors. Courses must be taken in sequence. (PR: MUS 312 for 313)

315 Basic Conducting. 2 hrs.
Fundamental conducting skills: baton use, beat patterns of simple/compound meters, fermata holds/releases, cues to discrete parts using hand/visual gestures, leadership, conducting terminology, transposition and score reading. (PR: MUS 212 and 214)

317 Counterpoint. 2 hrs.
Eighteenth Century counterpoint includes creative writing in this style and analysis of contrapuntal composition of this period based upon principles learned in introductory theory courses. (PR: MUS 214)

320 Instrumental Arranging. 2 hrs.
The study of the instruments of the modern orchestra, their history, technical possibilities and limitations, and practical application of technique in public school work. (PR: MUS 212 and 214)

321 Choral Arranging. 2 hrs.
Score writing and arranging for vocal ensembles of two to eight parts. (PR: MUS 212 and 214)

322 Orchestration. 2 hrs.
A detailed study of band and orchestral instrument capabilities and their use in various large and small ensembles. (PR: MUS 212 and 214)

323 Jazz Arranging and Composing. 3 hrs.
Fundamental techniques and analysis of jazz masterworks applied to composing and arranging in various instrumental and vocal jazz styles. Orchestration for large and small ensembles. (PR: MUS 217)

327 Introduction to Music Business. 2 hrs.
A study of the intersection of music and business aimed at developing foundational skills and an understanding of the structure of the music business.

331 Jazz Improvisation III. 2 hrs.
Advanced skills and techniques. Extended forms, substitute harmonic progressions. Survey of standard bebop literature. Transcription of solos. Performance and elaboration of representative literature. (PR: MUS 232)

332 Jazz Improvisation IV. 2 hrs.
Advanced skills, techniques, and performance practices. Compound and extended forms. Survey of post-bebop, free jazz, fusion, and Afro-Caribbean literature. Transcription of solos. Performance of representative literature. (PR: MUS 331)

338 Music Education: Materials and Methods in School Music (PreK-4). 3 hrs.
Elementary music education techniques, including movement, song, dance, rhythm, and musicianship. Study of Orff, Kodaly, Dalcroze techniques. Curriculum design and incorporation of music curriculum into elementary curriculum. Field experience required. (PR: EDF 218)

339 Music Education: Materials and Methods in Instrumental Music (Grades 5-12). 3 hrs.
Intensive study of materials and methods of instrumental music in middle and secondary grades. Curriculum design and incorporation of music curriculum into general curriculum. Field experience required. (PR: EDF 218)

340 **Music Education: Materials and Methods in Choral and General Music (Grades 5-12). 3 hrs.**
Intensive study of vocal/choral materials. Methods of presentation of music in middle and secondary grades. Curriculum design and incorporation of music curriculum into general curriculum. Field experience required. (PR: EDF 218)

342 **Music Materials and Procedures. 3 hrs.**
Materials and procedures for teaching music in nursery school, kindergarten and grades K-6. (PR: MUS 142 and permission of College of Education)

350 **Guitar Literature I. 2 hrs.**
A survey of the literature for the guitar from c. 1400 to the end of the 19th century. (PR: Permission)

351 **Guitar Pedagogy I. 2 hrs.**
A survey of guitar pedagogy literature, and a practicum in teaching classical guitar. (PR: Permission)

360 **Music History 1730-1900. 3 hrs.**
A study of the history and development of music c. 1730 to c. 1900, including the interaction of music with historical events, world culture, other arts and philosophy. (PR: MUS 290 or MUS 250 [Jazz Studies majors only] with a grade of *C* or better)

361 **Music History Since 1900. 3 hrs.**
A study of the history and development of music since c. 1900, including the interaction of music with historical events, world cultures, other arts and philosophy (PR: MUS 360 with a grade of *C* or better)

376 **Recital. 0 hrs.**
Serves as the summative recital for B.A. Music Education and Bachelor of Arts, and as the junior-level recital for the B.F.A. (PR: Sophomore hearing and permission)

379 **Advanced Class Piano. 1 hr.**
Class instruction for experienced students. Development of repertoire, ensemble skills, and sight reading. (PR: MUS 179D or permission)

401 **Research in Music. 3 hrs.**
Basic research procedures and bibliography study culminating in a project in the student's area of specialization. (PR: MUS 361 and 376)

402 **Chamber Music Pedagogy. 2 hrs.**
A survey of chamber music pedagogy literature, and a practicum in teaching chamber music. (PR: Permission)

412 **Jazz Pedagogy and Conducting. 3 hrs.**
Methods and materials for jazz curriculum. Ensemble organization, rehearsal and conducting techniques. Selection of literature and equipment. Organization and presentation of public performances.

413 **Jazz Styles. 2 hrs.**
Structural forms used in jazz, analysis of extended forms. Techniques for solo transcriptions. Harmonic practices in specific styles. Survey of significant jazz composers, performers, genres. (PR: MUS 217)

415 **Advanced Conducting. 2 hrs.**
Advanced study of choral and instrumental conducting techniques emphasizing rehearsal and performance strategies, score study, ensemble warm-ups, asymmetric and changing meters. Lab ensemble experience provided. (PR: MUS 315 or permission)

426 **American Music and Its Influences. 3 hrs.**
Musical and cultural influences of European, West African, Caribbean, and Native American societies on United States music from 1650 to 1920. Specific application to concert music. (PR: MUS 290 and 360 or permission of instructor)

427 **Commercial Music Business. 2 hrs.**
An in-depth examination of the commercial music industry designed at developing business-related competencies including entrepreneurship, IP management, legal issues, and contract law; skills essential for maintaining a professional music career.

428 **Song Literature. 2 hrs.**
A discussion of the development of the art song in western civilization. Study of song literature including texts, accompaniments, interpretation, and program building. For singers and accompanists. (PR: Sophomore hearing or permission of instructor)

429 **Vocal Pedagogy. 2 hrs.**
Review of materials, concepts, and methodology used in teaching singing; overview of anatomy and function of the voice. Emphasis on beginning and intermediate levels.

432 **Electronic Music Composition. 2 hrs.**
The theory and practice of the use of electronic media of composition. Synthesizer and tape recording techniques will be emphasized. Primarily for music majors. (PR: MUS 212 and 214)

433 **Advanced Composition II. 3 hrs.**
Experience in writing musical compositions in larger forms using twentieth-century compositional techniques. (PR: MUS 431)

439 **Teaching Advanced Piano. 2 hrs.**
Materials and techniques of presentation; appropriate selection of repertoire; teaching strategies for late intermediate and advanced levels; exploration of pedagogical, business, and wellness resources for the independent piano teacher.

440 **Teaching Beginning to Intermediate Piano. 2 hrs.**
Materials and techniques of presentation; development of reading skills; basic fundamentals of technique; cultivation of musicianship. Emphasis is on elementary and intermediate levels.

441 **Piano Literature I. 2 hrs.**
Investigation of the historical significance, stylistic and technical aspects, and performance problems in solo keyboard repertoire from J.S. Bach to Schubert. (PR: MUS 212 and 214 and 4 semesters advanced applied piano or equivalent)

442 **Piano Literature II. 2 hrs.**
Investigation of the historical significance, stylistic and technical aspects, and performance problems in solo keyboard repertoire from Chopin to the present. (PR: MUS 212 amd 214 and 4 semesters advanced applied piano)

445 **Piano Ensemble. 1 hr.**
An ensemble elective for piano majors and qualified piano secondary/elective students. Perform a wide variety of musical styles for multiple pianists on 1-5 pianos. May be repeated for credit. (PR: Instructor audition)

450 **Guitar Literature II. 2 hrs.**
A survey of the literature for guitar from during the twentieth and twenty-first centuries. (PR: Permission)

451 **Guitar Pedagogy II. 2 hrs.**
A survey of guitar pedagogy literature, and a practicum in teaching classical guitar. (PR: Permission)

476 **Senior Recital. 0 hrs.**
The culminating recital for applied music study in the principal applied area. (PR: MUS 376; successful completion of piano profiency)

480-483 **Special Topics. 1-4 hrs.**

485-488 **Independent Study. 1-4 hrs.**

491-494 **Workshops. 1-4 hrs.**

495 **Music Internship. 1-4 hrs.**
Practical synthesis and application of knowledge and skills gained during the student's course of study. (PR: MUS 376)

497 **Capstone Project in Music. 1-2 hrs.**
A discipline-based experience designed to combine the student's musical knowledge and range of knowledge outside the field of music in a summarizing project. (PR: MUS 361, MUS 376, and completion of piano proficiency requirements)

498 **BFA Composition Capstone. 2 hrs.**
A discipline-based experience designed to combine classroom and studio education in a summarizing project. (PR: MUS 304, 401, 8 credits of MUS 380, and successful completion of piano proficiency requirements)

499 **BFA Performance Capstone. 2 hrs.**
A discipline-based experience designed to combine classroom and studio education in a summarizing project. (PR: MUS 304, 401, and successful completion of piano profiency requirements)

NATURAL RESOURCES AND RECREATION MANAGEMENT (NRRM)

101 **Introduction to Natural Resources and Recreation Management. 3 hrs.**
An orientation to the profession and its settings–emphasizing history, trends, concepts, and relationship to other fields. This course is prerequisite to all other PLS courses.

110 **Outdoor Leadership: Canoeing. 1 hr.**
This course is designed to give students the skills essential for the pursuit of employment in guiding participants on flat-water canoe courses in back-country settings.

111 **Outdoor Leadership: Fly Fishing. 1 hr.**
An activity course designed to teach the basic skills associated with fly fishing including equipment, flies, and techniques.

112 **Outdoor Leadership: Bass Fishing. 1 hr.**
This course is designed to give students the skills essential to pursue employment as a guide on bass fish excursions in the backcountry.

113 **Outdoor Leadership: Backpacking. 1 hr.**
This course is designed to give students the foundational skills essential in the pursuit of being leading participants on backcountry backpacking experiences. Leave No Trace ethics will be taught.

156 **Bicycling. 1 hr.**
This course is designed to give the student basic knowledge and skills essential to safe and enjoyable bicycling.

158 **Downhill Skiing. 1 hr.**
An activity course designed to teach the basic skills of snow skiing using the proper ski equipment and ski techniques.

200 **Analytical Methods: Statistics. 4 hrs.**
Students develop an understanding of statistical reasoning through the use of software to generate, summarize, and draw conclusions from data. Course enhances statistical technique dexterity through analysis of applied problems.

201 **Recreational Activities. 3 hrs.**
Introduces the student to a variety of recreational activities typically utilized in recreation settings.

231 **Nature Study. 3 hrs.**
Designed to provide students with the fundamental understanding of and for the delivery of nature-based educational programs offered through an experiential framework.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

301 **Introduction to Outdoor Recreation. 3 hrs.**
Organization, administration and delivery of outdoor recreation activities and resources. Emphasis upon federal, state, and local government programs and areas.

310 **Environmental Interpretation. 3 hrs.**
Principles and techniques of environmental interpretation as practiced in federal, state and private agencies.

311 **Introduction to Environmental Education. 3 hrs.**
This course is the study of environmental education, its foundations, emergence in the 1960's, its evolution, the systems approach to it, and the application of it in the field.

320 **Recreational Sports and Campus Recreation Management. 3 hrs.**
This course will deal with the fields of recreational sports and campus recreation management. It will present the foundations of both fields, the development, implementation and trends in today's programs.

330 **Concepts and Philosophies in NRRM. 3 hrs.**
A systematic approach to the concepts and philosophies for managing wildland, wilderness, and protected areas.

340 **Special Event Management. 3 hrs.**
This course will study the processes for event facilitation. Special attention will be given to the roles and skills utilized by a variety of recreation managers.

350 **Adventure Education Leadership. 3 hrs.**
This course focuses on preparing students to be outdoor adventure education leaders, facilitating programs in both the front and back country and utilizing adventure education techniques in an outdoor setting.

360 **Sustainable Tourism. 3 hrs.**
This course will examine the critical issues addressed by sustainable tourism, which are the positive and negative influences of tourism on the destination's economy, society, culture, and environment.

361 **Visitor and Participant Behavior in Natural Resources and Recreation Management. 3 hrs.**
This course provides an overview and analyses of individual and group behavior as it pertains to consumer activity in the context of recreation and tourism resource environments.

362 **Ecotourism: Administration and Management. 3 hrs.**
This course will examine the theoretical foundations, application and best management practices in ecotourism. Other minor topics include sustainability, nature-based and adventure tourism; sociocultural, environment, and economic impacts of ecotourism.

380 **Park Resource Operation and Administration. 3 hrs.**
Focused on the management, operation, and administration practices of recreation resource areas. Includes supervision of personnel, budgeting, and public relations for a variety of park and public land organizational structures.

402 **Research, Evaluation and Assessment in Natural Resources and Recreation Management. 3 hrs.**
Theoretical and practical approach to research, evaluation, and assessment of the social sciences of natural resources and recreation management.

405 **Park and Recreation Ecology. 3 hrs.**
The course is designed to help students identify and evaluate the level of resource impact, understand factors that cause impacts, and suggest management actions to minimize impacts under given conditions.

410 **Maintenance of Natural Resources and Recreation Areas. 3 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.

411 **Recreation Resource Planning and Design. 3 hrs.**
Basic considerations in the planning and design of natural areas, parks, forests, recreation and sport area infrastructure, facilities, and structures, and associated amenities.

432 **Wilderness and Protected Area Management. 3 hrs.**
This course will examine the historic and current philosophies of wilderness and protected area management as applicable to NGOs, local, state and federal land management programs.

433 **GIS/RS in Natural Resources. 3 hrs.**
Focusing on natural resource management, the course will explore techniques and procedures required for spatially explicit data analysis in park and protected area applications. (PR: IST 423 or equivalent)

450 **Introduction to Off-highway Vehicle Recreation. 3 hrs.**
A course designed to introduce the student to the subject of off-highway vehicle recreation in terms of areas, facilities, vehicle types, use, demand, professional organizations, legislation, and legal issues.

451 **Planning and Design, and Construction of OHV Trail Systems. 3 hrs.**
A course designed to guide students through the process of planning and designing off-highway vehicle trails utilizing state-of-the art procedures and technology.

452 **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.

453 **Operation & Management of OHV Trail Systems. 3 hrs.**
A course designed to provide students with background, guidance, and recommended procedures for operating and managing OHV trail systems and facilities.

480-483 **Special Topics in Recreation. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: By permission of the division head)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490 **Natural Resources and Recreation Management Internship. 6 hrs.**
A supervised, 40-hour per week, 6-week internship in which the student works with park and recreation agencies. (PR: NRRM major; advisor approval required)

NATURAL RESOURCES AND THE ENVIRONMENT (NRE)

111 **Living Systems. 4 hrs.**
This course is designed to equip students to observe and create their own questions, test them, and continue the process of scientific inquiry related to living systems.

120 **Discussions in Environmental Science (CT). 3 hrs.**
Critical thinking course designed to examine and explore issues in environmental science including protection of terrestrial and aquatic resources and production of energy and food for a growing population.

210 **Living on Earth. 4 hrs.**
A course introducing the basic concepts of environmental science and using the scientific method to study current environmental issues. (PR: MTH 121 or higher)

212 **Energy. 3 hrs.**
The course introduces the student to the properties and the interfaces of biological and physical systems with emphasis upon energy concepts, production, and distribution in both systems.

220 **Human Dimensions of Natural Resources. 3 hrs.**
This course provides an overview of human-nature relationships from the perspective of conservation and natural resource management.

280-283 **Special Topics. 1-4 hrs.**
A course covering topics not treated in regular course offerings.

285-288 **Independent Study. 1-4 hrs.**
Independent study for selected sophomores or advanced freshmen under supervision of faculty; may be repeated only once.

320 **Nature of Environmental Problems. 3 hrs.**
The effects of human activity on ecological, political, and cultural systems are examined. Particular attention is given to present human population growth, industrial activities, and energy availability.

321 **Resolution of Environmental Problems. 3 hrs.**
Students examine case studies of current environmental problems and propose methods of remediation. Cultural, political, economic, as well as ecological and physiographic factors are considered.

322 **Assessment 1: Terrestrial Systems. 4 hrs.**
Use of scientific procedure and current technology to characterize and quantify sensitive elements of terrestrial ecosystems and to assess human impact on those systems. (PR: IST 111 or BSC 104 or BSC 120)

323 **Assessment ll: Aquatic Ecology. 4 hrs.**
Use of scientific procedures and current technology to characterize and quantify sensitive elements of aquatic ecosystems and to assess human impact on those systems. (PR: IST 111 or BSC 104 or BSC 120)

423 **GIS and Data Systems. 3 hrs.**
Course focuses on the relationships among the scientific method, data structures, and geographic images. Students relate hypothesis formation and databases through the development of ARCMap documents.

425 **Water Policy and Regulation. 3 hrs.**
Examination of how aquatic resources are protected for humans and species of concern by current regulatory framework.

431 **Aquatic Toxicology. 4 hrs.**
This course will introduce students to the principles of aquatic toxicology including regulations driving biological criteria, development of laboratory toxicity testing and test methodology. (PR: BSC 105 or 121 or IST 323)

435 **Biomonitoring. 4 hrs.**
Biomonitoring is the use of organisms to assess habitat and water quality of a stream. Current aquatic biomonitoring focuses on the utilization of benthic invertebrates and fishes communities. (CR/PR: BSC 120 or equivalent)

480-483 **Special Topics. 1-4 hrs.**
A course covering topics not treated in regular course offerings.

485-488 **Independent Study. 1-4 hrs.**
Independent study for selected juniors and seniors under supervisionof faculty' may be repeated only once.

470 **Environmental Science Internship. 3 hrs.**
A supervised internship in an area of natural resources and the environment. (PR: Permission)

490 **Environmental Science/Natural Resourse and Recreation Management Capstone Preparation. 3 hrs.**
Prepares students for the senior project, internship experience, and for careers beyond graduation. Life skills are introduced by building on communication, organizationo and project management skills (capstone). (PR: Permission)

491 **Environmental Science Senior Capstone. 3 hrs.**
Students develop and complete a research project under the directio of a faculty member in the NR department (Capstone). (PR: NRE 490 or permission)

NURSING (NUR)

120 **Introduction to Nursing. 8 hrs. 6 theory-2 clinical. (ASN only)**
Introduce the nursing role and use of the nursing process in assisting adult patients to meet basic needs. Clinical included.(PR: BSC 227, CHM 203, ENG 101, PSY 201; CR: BSC 228, DTS 314, PSY 311)

200 **Introduction to Professional Nursing. 2 hrs.**
Introduction to the concepts and processes basic to the nursing profession, including historical and legal aspects, career roles, medical terminology, and practical techniques to prepare for the baccalaureate nursing program.

219 **Health Promotion through the Lifespan (formerly Nursing Assessment of Individuals I). 3 hrs.**
Study of nursing assessment of the individual through the life span in relation to wellness promotion and the impact of illness. Pre-licensure students: Completion of freshman level classes. (PR: MTH 121 or higher, excluding statistics; ENG 101, BSC 227, BSC 228, CHM 203, PSY 201, admission to nursing program; PR/CR: NUR 221)

220 **Health Alterations I. 8 hrs. 6 theory-2 clinical. (ASN only)**
Focus is on nursing care of adult patients responding to potential and actual health alterations. Clinical included.(PR: NUR 120; CR: BSC 250)

221 **Foundations of Professional Nursing I. 5 hrs.**
Introduction to philosophical and theoretical foundations of nursing, exploration and integration of concepts and processes basic to professional nursing practice. Practicum included. (PR: MTH 121 or higher, excluding statistics; ENG 101, BSC 227, BSC 228, CHM 203, PSY 201, admission to nursing program; PR/CR: NUR 219)

222 **Foundations of Professional Nursing II. 6 hrs.**
Introduction to professional nursing practice in relation to potential and simple alterations in health. Practicum included. (PR: NUR 219, NUR 221; SOC 200; PR/CR: NUR 319, BSC 250, DTS 314)

225 **Psychiatric Nursing. 4 hrs. 3 theory-1 clinical. (ASN only)**
Focus is on the nursing role in caring for patients with alterations of psychosocial functioning. Clinical included. (PR: NUR 120)

230 **Health Alterations II. 7 cr. 5 theory-2 clinical.**
Focus is on nursing care of adult patients with health alterations of specific physiological systems. Role requirements and process utilized in managing groups of patients is introduced. Clinical included (PR: NUR 220)

235 **Maternal-Child Nursing. 6 hrs. 4 theory-2 clinical. (ASN only)**
Focus is on the nursing role utilized in promoting health and caring for the childbearing family and pediatric patients. Clinical included. (PR: NUR 220)

241 **Health Alterations III. 9 hrs. 4 theory-5 clinical. (ASN only)**
Focus is on nursing care of adult patients with health alterations of specific physiological systems. Clinical included. (PR: NUR 230)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. (ASN only)**

305 **Concepts of Professional Nursing. 4 hrs.**
Emphasizes concepts and processes essential to professional nursing practice. Philosophical and theoretical foundations of nursing are examined. Focus is on professional role and role transition. (PR: Admission to RN to B.S.N. nursing program)

318 **Family and Chronic Illness. 2 hrs.**
Focus is on family nursing theory as it related to human responses. Emphasis is on factors influencing family health promotion and health protection. Included is the impact of chronic illness on families. (PR: NUR 219, NUR 221, ENG 201; or PR/CR: NUR 305)

319 **Physical Assessment Across the Lifespan (formerly Nursing Assessment of Individuals II). 4 hrs.**
Development of skills in taking health history and performing physical examination of clients throughout the life span. Practicum included. (PR: NUR 219, NUR 221; PR/CR: NUR 222)

321 **Care of Childbearing Families (formerly Nursing and Human Responses I). 5 hrs.**
Focus of nursing is on the diagnosis and treatment of human responses to changes that occur in the expanding family. Practicum included. (PR: NUR 222, NUR 319, ENG 201, BSC 250, DTS 314; PR/CR NUR 318)

322 **Psychiatric/Mental Health Nursing (formerly Nursing and Human Responses II). 5 hrs.**
Focus is upon nursing care of clients of all ages in relation to human responses to psychosocial and chronic illness. Practicum included. (PR: NUR 222, NUR 319, ENG 201, BSC 250, DTS 314)

323 **Nursing and Human Responses III. 5 hrs.**
Focus is on nursing care of adult clients responding to common heath problems. Practicum included. (PR: NUR 222, NUR 319, ENG 201, BSC 250, DTS 314)

324 **Nursing and Human Responses IV. 5 hrs.**
Focus is on nursing care of adult clients responding to potential and complex alterations in health in relation to specific body systems. Practicum included. (PR: NUR 318, NUR 323, NUR 350)

325 **Nursing and Human Responses V. 5 hrs.**
Focus is on nursing care of adult clients responding to potential and complex alterations in health in relation to specific body systems. Practicum included. (PR: NUR 324, NUR 326)

326 **Nursing and Human Responses VII. 3 hrs.**
Focus is on nursing care of pediatric clients of all ages and their family's response to common and complex health problems. (PR: NUR 318, NUR 323, NUR 350)

327 **Adult Nursing I. 5 hrs.**
Focus is on nursing care of clients from young to geriatric adults and responding to health problems. Practicum included. (PR: NUR 222, NUR 319, ENG 201, BSC 250, DTS 314)

328 **Adult Nursing II. 5 hrs.**
Focus is on nursing care of clients from young to geriatric adults and responding to increasing complex health problems. Practicum included. (PR: NUR 318, NUR 327, NUR 350)

333 **Health and Physical Assessment for the RN. 3 hrs.**
Focus on providing nurses with the knowledge base and clinical skills necessary to obtain in-depth health histories and complete physical assessments of clients of various ages and cultural backgrounds. (PR/CR: NUR 305 or permission)

350 **Pharmacology for Nurses. 3 hrs.**
Focus is on the role of the nurse in drug therapy. Specific drug classifications and prototypical drugs, their actions, effects, and nursing implications are described in-depth. (PR: NUR 222)

400 **Transcultural Nursing (formerly transcultural Health Care). 3 hrs.**
Focus is on health care practices and beliefs in a variety of cultures. Political, economic, and geographic factors affecting global health care are addressed. Open to non-majors. (PR: NUR 219, NUR 221; or PR/CR: NUR 305; or permission)

408 **Pediatric Nursing. 4 hrs.**
Focus is on nursing care of pediatric clients of all ages and their families' responses to common and complex health problems. Practicum included.

410 **Community Nursing for the RN. 5 hrs.**
Focus is on the foundations of community-oriented nursing practice for the Registered Nurse with an emphasis on health promotion and disease prevention. (PR: NUR 305 and NUR 318)

414 **Adult Nursing III. 5 hrs.**
Focus is on nursing care of young to geriatric adults and responding to health problems requiring critical care intervention. Practicum included. (PR: NUR 328)

416 **Introduction to Research for Evidence-Based Practice. 3 hrs.**
Focus is on research as it relates to evidence-based practice. This course addresses the steps of research and evidence based practice to provide a basis for nursing practice (PR: Statistics, NUR 305 or NUR 323)

418 **Contemporary Nursing. 3 hrs.**
This course focuses on nursing leadership, cost-based care, and the professional role of the nurse within a complex health care system. (PR: NUR 305)

419 **Professional Nursing. 3 hrs.**
Focus on nursing leadership, the management of patient care, and issues inherent to professional nursing practice. (PR/CR: NUR 422)

421 **Community and Public Health Nursing (formerly Nursing and Human Responses VI). 5 hrs.**
Focus is upon the public health principles and nursing practice with opportunity to provide health promotion for clients at risk and long term care for individuals and families in the home. (PR: NUR 321, NUR 322, NUR 324, NUR 326, NUR 350)

422 **Capstone Practicum (formerly Role Synthesis Practicum). 5 hrs.**
Focus is on leadership activities related to the roles of the professional nurse: provider of care, coordinator of care, and member of the profession through supervised clinical practice. (PR: NUR 321, NUR 322, NUR 325, NUR 350; PR/CR: NUR 416, NUR 419, NUR 421; CR NUR 425)

425 **NCLEX Success (formerly Capstone Seminar). 3 hrs.**
The purpose of this course is to assist the student to synthesize the content of the baccalaureate nursing educational program. (CR: NUR 422)

427 **Professional Engagement in Nursing RN-BSN. 5 hrs.**
Focus is on evidence-based practice and application of theoretical and empirical knowledge to address issues in management, health care policy, ethics, leadership, and health promotion of clients. (PR: NUR 305 and RN Licensure; PR/CR: NUR 416, NUR 418, NUR 410)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Study of topics not available in other courses.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

PHILOSOPHY (PHL)

200 **Introduction to Philosophy: Ancient Period. 3 hrs. I, II, S.**
The origins of philosophical activity among the Greeks by means of a selective sounding of several major thinkers.

200H **Introduction to Philosophy: Ancient Period. 3 hrs. Honors**
A detailed consideration of selected texts from Ancient philosophy, such as the pre-Socratics, Plato, Aristotle, the Stoics, the Epicureans, the Academic Skeptics, and the neo-Platonists. (PR: Admission to Honors College)

201 **Introduction to Philosophy: Modern Period. 3 hrs. I, II, S.**
Questions and answers concerning the nature of existence and human values and how we come to know them.

202 **The Ethics of Contemporary Health Care. 3 hrs.**
A basic introduction to ethical theory, followed by an application of this theory to problems in health care. For students in health care professions and those interested in applied ethics.

203 **Philosophy and Human Existence. 3 hrs.**
An introduction to philosophy drawing from both ancient and modern thinkers and texts.

215 **Managing Life. 3 hrs.**
Philosophical approaches to dealing with life's deep challenges and difficult moments, with the help of some of the great classics of world thought.

250 **Studies in Humanities. 3 hrs. I, II.**
An interdisciplinary course to introduce students to the elements of a humanistic education. (Same as Classics 250 and Religious Studies 250; PR or CR: English 101)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Group or individual study of areas demanding further study of a more specialized depth.

301 **Plato's Republic. 3 hrs.**
A deconstruction of the major time-worn prejudices and presuppositions of Platonism by way of a radical reading of Plato's great dialogue the REPUBLIC.

302 **Applied Ethics. 3 hrs.**
The application of basic ethical theories to contemporary moral issues drawn from such fields as medicine, business and the environment.

303 **Ethics. 3 hrs.**
A critical study of diverse moral norms, ideals and systems in theory and practice.

304 **Logic and Interpretation. 3 hrs. I, II.**
Theory and practice of valid principles of thinking, including developing the skills of justifying diverse types of belief and evaluating reasons for conflicting standpoints (for example, racial, gender, and ethnic differences).

306 **Philosophy of Art. 3 hrs.**
Examination of the qualities involved in the appreciation of beauty which serve as standards of taste.

315 **American Philosophy. 3 hrs.**
Great American thinkers, including thinkers such as Emerson (transcendentalism), Peirce, James, Dewey, and Rorty (pragmatism), Royce (idealism), Quine (analytic philosophy), and de Man (post-structuralism).

320 **Comparative Philosophy. 3 hrs.**
The relations of the world's philosophies to the basic cultural and religious traditions of the world and to the development of the world community.

321 **Current Philosophical Trends. 3 hrs.**
Selected reading in contemporary thought embracing such movements as realism, Marxism, post-structuralism, deconstruction, postmodernism.

330 **Philosophy of Sex. 3 hrs.**
Introduction to some of the basic authors, texts, and themes in this branch of philosophy beginning with Plato's *Symposium*.

340 **Philosophy of Sexual Orientation and Gender. 3 hrs.**
An introduction to the philosophy of sexual orientation and its relation to gender, with a special focus on issues of knowledge and politics.

353 **Philosophy of Science. 3 hrs.**
Reflections on crucial concepts of modern science relevant to philosophical issues in interpreting human beings and the universe; special attention given to epistemological and other problems of mathematics and physical and social sciences. (PR: Three hours of philosophy)

363 **Philosophy of Feminism. 3 hrs.**
An introduction to contemporary feminist theory including discussion of current gender-related issues.

390-394 **Junior Seminar in Humanities. 3 hrs.**
A structured interdisciplinary study offered by the departments of Philosophy, Classics, and Religious Studies in the foundations of human thought, myth, literature, religion, philosophy, and art. Same as CL 390-394 and RST 390-394. (CR/PR: ENG 201, 201H,YGS 152, IST 201, or one course from CL 231, 232, 233, 319, PHL 200, 201, 303, 321, 340, 353, RST 205, 206, 300, 304, 320, 325)

400 **Ancient Philosophy. 3 hrs.**
Advanced study of major philosophers drawn from the ancient Greek and Roman period. (PR: PHL 200)

401 **Modern Philosophy. 3 hrs.**
Advanced study of major movements in philosophy from the 17th century on, movements such as rationalism, empiricism, idealism, and existentialism. (PR: PHL 201, or any 300 level PHL course)

420 **Metaphysics. 3 hrs.**
Advanced study of the most basic nature of reality. (PR: 3 hrs. of philosophy)

421 **Philosophy of Knowledge. 3 hrs.**
Advanced study of the nature and possibility of knowledge. (PR: 3 hrs. of philosophy)

451 **Philosophy of History and Culture. 3 hrs.**
Ancient and modern theories of the meaning and consequence of history and culture. (PR: 3 hrs of philosophy)

455 **Philosophy of Religion. 3 hrs.**
Theories of the nature and functions of religion, including the meaning of religious language and the problems of belief. (PR: Six hours between philosophy and religious studies)

460 **Philosophy of Politics and Power. 3 hrs.**
Advanced study of the significance or the place in human reality of political organization, negotiation, strategy and power.

465 **Existential Philosophy. 3 hrs.**
A study of existential philosophers from Kierkegaard to Heidegger, Sartre and beyond.

470 **Philosophy of Logic. 3 hrs.**
Advanced study of the nature of logic: Whether logic is possible at all, how far it applies, and whether and how there can be conflicting logics.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Shared study and research on a special topic as announced. (PR: Permission of the chairman)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490-494 **Senior Seminar in Humanities. 1-4 hrs.**
Designed for majors as a senior humanities seminar, the the culminating interdisciplinary study in the Humanities program. (Sames as CL 490-494 and RST 490-494).

495H-496H **Readings for Honors in Philosophy. 4; 4 hrs.**
Open only to philosophy majors of outstanding ability. See Honors Courses.

498 **Directed Readings in Philosophy. 3 hrs. I or II.**
Advanced research adaptable to the needs of the individual student. (PR: Permission of department chairman)

PHYSICAL EDUCATION AND LIFETIME ACTIVITIES (PEL)

100 **Beginning Swimming. 1 hr. I, II.**
PR: Non-swimming classification or instructor's permission)

113 **Basketball. 1 hr. I, II.**
Theory, rules and techniques of basketball.

115 **Body Conditioning with Weights. 1 hr. I, II, S.**
An introduction to weight training principles and techniques which can be utilized by both men and women to devise their own individual body conditioning programs.

118 **Indoor Cycling. 1 hr.**
Designed to promote fitness through spinning. (PR: ESS 250)

119 **Total Body Conditioning. 1 hr.**
Designed to help instruct both men and women with a variety of lifetime fitness activities.

120 **Self Defense. 1 hr.**

121 **Taekwondo. 2 hrs.**
Techniques and skills are taught with emphasis on participation.

125 **Beginning Gymnastics 1 hr.**

127 **Aerobics - Personal Fitness. 1 hr. I, II, S.**
A course designed to provide the information necessary for the development of an individualized aerobic fitness program.

132 **Beginning Volleyball. 1 hr. I, II, S.**

133 **Beginning Softball. 1 hr. I, II, S.**
Techniques and skills of softball taught with emphasis on participation in the activity.

140 **Beginning Tennis. 1 hr. I, II, S.**

141 **Beginning Golf. 1 hr. I, II, S.**

142 **Beginning Badminton. 1 hr. I, II.**

145 **Beginning Bowling. 1 hr. I, II.**

147 **Beginning Soccer. 1 hr. I.**
Instruction in techniques and skills of beginning soccer with strategy provided through class participation.

150 **Beginning Ice Skating. 1 hr.**
To provide the student with sufficient skills to properly utilize ice skating as a lifelong recreational activity.

155 **Beginning Folk Dance. 1 hr. I, II.**

156 **Beginning Square Dance. 1 hr. I, II.**

159 **Beginning Social Dance. 1 hr.**
The analytical and practical study of the skills necessary to perform contemporary and traditional ballroom dance.

160 **Beginning Modern Dance. 1 hr.**
Analytic and practical study of beginning modern dance technique with some experiences in the basic elements of composition.

170 **Beginning Racquetball. 1 hr. I, II.**

175 **Core Conditioning. 1 hr.**
Designed to help instruct both men and women on numerous activities to help strengthen the abdominal region of the body, which can then be incorporated into their workout routine.

179 **Rock Climbing. 1 hr.**
Through activity, the students learn the fundamentals and techniques of rock climbing.

180 **Yoga. 1 hr.**
Techniques are taught with emphasis on participation.

205 **Intermediate Swimming. 1 hr. I, II.**
Theory and practice of fundamental strokes.

220 **Advanced Self Defense.**
Builds on techniques and strategies from PEL 120, adds defenses against the edged weapon and firearm. Course covers more prone defense strategies, multiple subject encounters and low & diffused light simulation.

232 **Intermediate Volleyball. 1 hr. I, II.**
Practice of intermediate volleyball techniques with additional insight into offensive and defensive techniques used in competitive volleyball.

235 **Intermediate Softball. 1 hr. I, II.**
Practice of intermediate softball skills with emphasis on offensive and defensive techniques and strategies.

240 **Intermediate Tennis. 1 hr. I, II.**

241 **Intermediate Golf. 1 hr. I, II.**

242 **Intermediate Badminton. 1 hr. I, II.**

243 **Intermediate Basketball. 1 hr. I, II.**
Practice of intermediate basketball skills with emphasis on offensive and defensive techniques and strategies.

245 **Intermediate Bowling. 1 hr. II.**

251 **Intermediate Soccer. 1 hr. II.**
Instruction in advanced techniques, skills and strategies in soccer.

257 **Intermediate Folk Dance. 1 hr.**
Continuation of skills in Folk Dance with emphasis on intermediate dances and techniques.

258 **Intermediate Square Dance. 1 hr.**
Continuation of skills in Square Dance with emphasis on intermediate dances and techniques.

259 **Intermediate Social Dance. 1 hr.**
Emphasis on stylization and more advanced skills involved in the performance of ballroom dance.

261 **Intermediate Modern Dance. 1 hr.**
A continuation of Beginning Modern Dance, with an emphasis on analysis, discipline, and performance.

270 **Intermediate Racquetball. 1 hr.**

275 **Scuba Diving. 2 hrs.**
Instruction in the theory and practice of basic scuba diving.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: Permission of Division Person)

290 **Intermediate Yoga. 1 hr.**
This course is an intermediate yoga class, building from beginning yoga. It will focus on poses, breathing, relaxation, and meditation. (PR: PEL 180 or permission)

403 **Advanced Swimming and Life Saving. 1 hr. I, II.**
Instruction in several swimming strokes and techniques to develop advanced levels of ability. Instruction and tests for American Red Cross Senior Life Saving Certification.

404 **Water Safety Instruction. 1 hr. I, II.**
Materials and methods of teaching American Red Cross Safety Course. Upon satisfactory completion, Water Safety Instructor's Certificate issued. (PR: PE 403 and Senior Life Saving Certificate)

PHYSICAL SCIENCE (PS)

101 **Introductory Astronomy (CT). 4 hrs.**
A survey of the past, present, and future of the universe, from our solar system, to the nearby stars, our Milky Way Galaxy and far beyond.

109 **General Physical Science. 3 hrs. I, S.**
The course covers the basic principles and concepts of the universe including energy, and its various forms. Force, motion, electricity, magnetism, the wave theory of light and sound and astronomy are also studied. (PR: MTH 121, or MTH 123, or MTH 127, or MTH 130, or MTH 130E, or MTH 229, or MTH 203, or MTH 121B, or MTH 130H; CR: PS 109L lab) 3 lec.

109L **General Physical Science Laboratory. 1 hr. I, S.**
A laboratory course with experiments related to PS 109. (CR: PS 109)

110 **General Physical Science. 3 hrs. I, S.**
Course covers the basic principles of chemistry, applications of chemistry, and an introduction to earth science. Atomic theory, chemical reactions and structure, everyday chemicals, and basic concepts of geology are studied. (PR: MTH 121, or MTH 121H, or MTH 123, or MTH 127, or MTH 130, or MTH 130H, or MTH 130E, or MTH 140, or MTH 203, or MTH 220, or STA 225, or MTH 229, or MTH 229H; CR: PS 110L)

110L **General Physical Science Laboratory. 1 hr. II, S.**
A lab course with experiments related to PS 110. (CR: PS 110)

111 **Life in the Universe. 4 hrs.**
An investigation of the prospects for the existence of life elsewhere in our solar system, galaxy, and the wider universe. Includes an integrated 2-hour lab.

220 **Ethics for Science. 1 hr.**
Classical virtue theory with applications to situations encountered by scientists as students, faculty, or researchers. Includes ethical guidelines from the American Physical Society, the American Chemical Society, and the IEEE.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

325 **Development of Scientific Thought. 4 hrs.**
An introduction to the history and nature of science, emphasizing the logic of scientific reasoning and progress with social and historical influences. Includes lab. (PR: 12 hrs of science)

400 **Astronomy. 3 hrs. I, II., S.**
A study of the stars, planets and galaxies, planetary motion, cosmology, cosmography. Designed to assist teachers and others to develop an interest in astronomy. (PR: PHY 201 or PHY 211 or PS 109; and CR: PS 400L)

400L **Astronomy Laboratory. 1 hr. I, II, S.**
A computational and observational laboratory. Fundamental observations in astronomy and their interpretation through physical laws. Quantitative discussion of orbital motion, time, telescopes, solar system, stars, and galaxies. (CR: PS 400)

410 **Physical Principles of Remote Sensing with Applications. 4 hrs.**
A study of the physical systems for collecting remotely sensed data. Statistical/spatial analysis and modeling using image processing/geographic information/spatial analysis computer software systems with earth resource applications. (PR: PHY 203 and 204; STA 225 or permission)

411 **Digital Image Processing and Computer Simulation Modeling. 4 hrs.**
A study of image processing/geographic information and spatial analysis hardware/software systems, concurrent and parallel image processing modeling scenarios utilizing geobiophysical data for computer simulation modeling and practicum. (PR: PS 410 or permission)

470 **Practicum. 4 hrs.**
Problem solving, geobiophysical modeling, and proposal development techniques in the physical sciences. (PR: PS 411, BSC 411, IS 421, or permission)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4; 1-4 hrs.**

PHYSICS (PHY)

101 **Conceptual Physics. 3 hrs. I, S.**
Introduces nonscience majors to applications of physics in life. Emphasizes conceptual understanding of basic principles in classical and modern physics. Recommended for science students with no high school physics. 3 lec. (PR: MTH 121, or MTH 127, or MTH 130, or MTH 130E, or MTH 229, or MTH 203, or MTH 121B, or MTH 130H; CR: PHY 101L)

101L **Conceptual Physics Lab. 1 hr. I, II, S.**
A laboratory course designed to include the principles and applications of physics that are introduced in Physics 101. (CR: PHY 101) 2 lab.

120 **Introduction to LabView. 3 hrs.**
An introduction to the LabView programming environment for instrumentation control, data acquisition and analysis.

190 **Overview of Physics (CT). 3 hrs.**
An overview of well-established topics characteristic of an undergraduate physics major, including classical physics, special relativity, quantum mechanics, particle physics, and cosmology. Also covered are the factors leading to new scientific discoveries and distinctively scientific ways of thinking and the interplay between science and culture.

201 **College Physics 1. 3 hrs. I, II, S.**
First half of an introduction to physics for life-science students, using algebra and vectors by triangles: force, energy, particle dynamics, rotation, fluids, waves, thermal phenomena. 3 hrs. lec. (PR: (MTH 127 and MTH 122), or (MTH 130 & MTH 122), or MTH 132, or (MTH 140 and MTH 122), or MTH 229 or (ACT 27 or higher and an additional math course either taken before or concurrently, such as MTH 127, MTH 130, MTh 140, MTH 229, or MTh 132); CR: PHY 202)

202 **General Physics 1 Laboratory. 1 hr. I, II, S.**
Laboratory to accompany PHY 201 or PHY 211, focusing on mechanics, concepts and applications.. 2 hrs. lab (CR: PHY 201 or PHY 211).

203 **College Physics 2. 3 hrs. I, II, S.**
Second half of an introduction to physics for students natural (life) sciences, using algebra and vectors by triangles; E&M fields, circuits; ray optics; interference; atoms; nuclei. 3 hrs. lec. (PR: a "C" or better is required in both PHY 201 and PHY 202 to proceed into PHY 203; CR: PHY 204).

204 **General Physics 2 Laboratory. 1 hr. I, II, S.**
Laboratory to accompany PHY 203 or PHY 213, focusing on classical E&M, circuits, and optics. 2 hrs. lab (CR: PHY 203 or PHY 213).

211 **University Physics 1. 4 hrs. I, II.**
First half of an introduction to physics for students of physical science or engineering, using calculus and vectors by components: foce, energy, particle dynamics, rotation, fluids, waves, thermodynamics. 4 hrs. lec. (CR: MTH 229 and PHY 202)

213 **University Physics 2. 4 hrs. I, II.**
Second half of an introduction to physics for students of phycial science or engineering, using calculus and vectors by components: E&M fields, circuits, ray optics, interference, atoms, nuclei. 4 hrs. lec. (PR: PR: MTH 229 and PHY 211 and a *C* or better is required in both PHY 211 and PHY 202 to proceed into PHY 213; CR: MTH 230 and PHY 204).

222 **Investigating the Universe. 2 hrs.**
A creative laboratory course designed to give students an opportunity to work with modern research equipment, with ample time to conduct experiments and/or investigate phenomenae of their choosing. (PR: MTH 122, and MTH 127 or MTH 130; or MTH 132)

280-283 Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.

300 **Electricity and Magnetism I. 3 hrs. I. (Alternate years)**
A course including the study of electrostatics, magnetostatics, electromagnetic induction, introduction to Maxwell's equations and electromagnetic waves. 3 lec. (PR: PHY 203 or 213 and MTH 231)

302 **Electricity and Magnetism II. 3 hrs. II. (Alternate years)**
A study of Maxwell's equations and electromagnetic waves, radiation theory, optical phenomena, and electrodynamics. 3 lec. (PR: PHY 300)

304 **Optics. 3 hrs. II. (Alternate years)**
An intermediate course in geometrical and physical optics. 3 lec. (PR: PHY 203 or 213; CR: pHY 405 or 505) See 405.

308 **Thermal Physics. 3 hrs. I. (Alternate years)**
A study of thermodynamics, kinetic theory of gases, and an introduction to statistical mechanics 3 lec. (PR: PHY 203 or 213 and MTH 231)

314 **Electronic Physics. 3 hrs. II. (Alternate years)**
A study of transistors, integrated circuits and their associated circuits. 3 lec. (PR: PHY 203 or 213 and 204) See PHY 415.

320 **Introductory Modern Physics. 3 hrs. I.**
An introductory study of atomic and molecular theories, relativity, quantum theory, and nuclear physics. 3 lec. (PR: PHY 203 or 213 and MTH 140 or MTH 230) See 421

330 **Mechanics. 3 hrs. I. (Alternate years)**
An intermediate study of the fundamental principles of statics of particles and rigid bodies, momentum and energy, dynamics of particles, harmonic oscillations, and wave motion. 3 lec. (PR: PHY 203 or 213 and MTH 231)

340 **Computational Physics. 3hrs.**
Presents basic numerical methods used for solving complex physics problems and for the simulation of physical processes, with C++. 2 lec-2 lab. (PR: PHY 211 and PHY 213 or equivalent)

350 **Biological Physics. 3hrs.**
Physical principles underlying the mechanisms by which living organisms survive, adapt, and grow. Will enhance writing skills and strategies. 2 lec - 2 lab. (PR: PHY 203 or 213, and PHY 204)

360 **Medical Physics. 3hrs.**
Physics principles applied to devise methods for diagnostic and treatment of the human body. Will enhance writing skills and strategies. 2lec-2lab. (PR: PHY 203 or 213, and PHY 204)

405 **Optics Laboratory. 2 hrs.**
A course in optical experiments encompassing geometrical and physical optics. This course is to be taken with Physics 304.

412 **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. (PR: Permission of instructor)

415 **Electronics Laboratory. 2 hrs**.
A course in laboratory measurements encompassing transistors, integrated circuits, and their associated circuits. This course is to be taken with Physics 314.

420 **Astrophysics. 3 hrs.**
A detailed study of core problems in astrophysics, such as orbital dynamics, radiation processes, stellar structure and evolution, galactic dynamics, and cosmology. (PR: PHY 213, MTH 231)

421 **Modern Physics Laboratory. 2 hrs.**
Laboratory exercises on modern physics topics encompassing both experiments of historic significance and current applications. To be taken with Physics 320, or equivalent.

425 **Solid State Physics. 3 hrs.**
The course provides a broad introduction to the structure and physical properties of solids. It also serves as a basis for advanced courses in solid state and condensed matter physics. (CR/PR: PHY 320 or 442 or CHM 442)

435 **Scientific Computing. 3 hrs.**
Introduction to some of the most important tools and techniques in scientific computing, including object-oriented design, version control, and MPI for high-performance computing. (PR: IST 163 or MTH 229)

442 **Quantum Mechanics I. 3 hrs. II. (Alternate years).**
A study of waves and particles, the Schroedinger and Heisenberg formulations, particles in potential fields, scattering and perturbation theories, and applications to atomic and nuclear structure. 3 lec. (PR: MTH 231 and PHY 330)

443 **Quantum Mechanics II. 3 hrs.**
This is a second part of a two-semester introduction to quantum mechanics. Emphasis is on applications of quantum theory, including approximatino techniques and the study of more realistic quantum systems. (CR/PR: PHY 442 or CHM 442)

444 **Advanced Laboratory. 2 hrs.**
Developments in producing and detecting correlated photon pairs has enabled emplementation of undergraduate laboratories demonstrating fundamental quantum mechanical principles. This laboratory also incorporates fundamental solid state and materials science experiments. (PR: PHY 425 and PHY 442; CR: PHY 442 and PHY 425)

445 **Mathematical Methods of Physics. 3 hrs. II. (Alternate years).**
An introduction to 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 or 213 and MTH 231 or permission)

446 **Mathematical Methods of Physics II. 3 hrs.**
A second semester of a full-year course on methods of solving problems in physics: calculus of variations, ordinary and partial differential equations, and special functions with real physics problems. (PR: PHY 445)

447 **Mechanics for Teachers. 4 hrs.**
An in-depth study of mechanics for education majors specializing in Physics with emphasis on problem-solving techniques, demonstrations, experiments and computer applications. The course also examines recent advances in physics education. (PR: PHY 203 or 213, MTH 122, MTH 140)

450 **Radiation Physics in 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. (PR: PHY 203 or PHY 213 and 204, or consent of instructor)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II, S.**
By permission of department chairman.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
By permission of department chairman.

491 **Capstone. 1-2 hrs.**
To give a capstone experience to physics majors in their junior and senior years by applying the principles of physics to the solution of real life problems.

492 **Capstone. 1-2 hrs.**
To give a capstone experience to physics majors in their junior or senior years by applying the principles of physics to the solution of real life problems. (PR: PHY 491)

POLITICAL SCIENCE (PSC)

104 **American National Government and Politics (CT). 3 hrs.**
This course will engage students in critical thinking as they explore the American federal government system, with emphasis on constitutionalism, governmental structure, and the political process. (Some sections are Writing Intensive.)

105 **Fundamentals of Politics (CT). 3 hrs.**
Critical thinking approach introducing the study of politics, its major concepts, processes, institutions, and fields of concern, with attention to political science in the larger context of social science inquiry.

200 **Models of Politics. 1-3 hrs.**
Introduction to the use of theory in political science. Offered in one-credit (5-week) modules. Module I is prerequisite to all others. Designed to assist in the development of analytic and synthetic skills.

202 **American State Government and Politics. 3 hrs.**
Study of the institutions, processes, and significance of this level of political life in America.

207 **Comparative Politics (CT). 3 hrs.**
Introduction to the field of comparative politics, stressing comparative concepts and approaches to the cross-national study of politics and government, with examination of political systems, ranging from democratic to non-democratic types.

209 **Fundamentals of International Relations (CT). 3 hrs.**
Survey of major concepts and approaches in the study of international relations and analysis of processes, institutions, strategies, and trends in world politics.

211 **Scope and Method in Political Science. 3 hrs.**
Study of the development of political science as a distinct science and discipline, and of the fundamentals of research in political science, such as bibliographic techniques, use of scientific method, textual and case-study approaches and data analysis. Offered only in Spring semester.

233 **Introduction to Public Policy. 3 hrs.**
Basic concepts and skills in the analysis of public policy problems. Use of policy as an instrument for solving problems. Application to selected fields, for example, environmental policy and urban policy.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
To offer a course on some special topic not adequately treated in the regular course offerings

301 **Urban Government and Politics. 3 hrs.**
Political systems in American cities and metropolitan areas.

303 **American Political Parties. 3 hrs.**
Examination of the American party system, its origins, development and characteristics. Emphasis also on party organization, political ambition and recruitment, party impact on public policy, campaigns, elections, and voting behavior.

307 **Public Opinion and Propaganda. 3 hrs.**
Study of the processes by which individuals acquire politically relevant information, attitudes, values, and opinions; the consequences of these processes for political stability and conflict; and the linkage of mass opinions to elite behavior.

311 **Issues in Public Policy. 3 hrs.**
A course devoted to a special topic of interest in the policy field, such as energy, health care, transportation, environmental concerns, etc.

333 **Introduction to Public Administration. 3 hrs.**
Introduction to modern theories of administration; the relation of administration to the political system and process; and analysis of administrative organizations and functions, including planning, personnel, and finance.

376 **Black Politics. 3 hrs.**
Study emphasizing power structures in black communities, dissent and protest, problems and trends, and the uniqueness of black politics as compared with the politics of other ethnic groups.

381 **The American Legislative Process. 3 hrs.**
Structure and behavior of American national and state legislative systems; the impact of constituencies, parties, interest groups, interpersonal relations, and other factors on the legislative policy- making process; the role of the legislature as a subsystem in the larger political system; and problems and trends.

382 **Student Legislative Program. 1 hr. II.**
One week of intensive legislative observation designed to provide selected students an understanding of the organization and processes of the West Virginia legislature and its role in the making of public policy. (PR: Junior or senior standing, a Political Science course in American Government and permission)

383 **The American Executive Process. 3 hrs.**
Study of governmental executives in the American political system, with emphasis on the president, including analysis of constitutional status and powers, recruitment, administrative responsibilities, political and legislative leadership, accountability, and problems and trends.

402 **Politics of the Undead. 3 hrs.**
An exploration of political thought, international relations theory, and political economy through the pop cultural lens of vampires, zombies, and other undead creatures.

403 **War and Popular Culture. 3 hrs.**
An exploration of evolving depictions of political violence in film, television, graphic novels, video games, and popular music.

405 **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.

406 **International Politics. 3 hrs.**
Study of major issues in world politics, with emphasis on theoretical approaches, problems of war and peace, and contemporary trends.

407 **Asian Politics. 3 hrs.**
Study of such nations as India, China, Japan, and Korea in the contemporary setting.

408 **Middle Eastern Politics. 3 hrs.**
Study of the Arab States and such nations as Israel, Iran, and Turkey in the contemporary setting.

409 **Western Democratic Politics. 3 hrs.**
Study of such nations as Canada and those of Western Europe, particularly Great Britain and France.

410 **Post-Soviet Politics. 3 hrs.**
Study of the politics of Russia and the former Soviet Union.

411 **Latin American Politics. 3 hrs.**
Study of 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.

412 **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 Economic Order.

415 **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.

416 **Politics of Development. 3 hrs.**
A survey of major theories development and modernization and issues confronting developing nations around the world.

417 **Homeland Security and Civil Liberties. 3 hrs.**
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.

418 **American Political Thought II (Reconstruction to Present). 3 hrs.**
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.

419 **Women and Political Thought. 3 hrs.**
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.

420 **Current World and Regional Issues. 3 hrs.**
An intensive study of specific world or regional problems, such as the politics of world hunger, the role of multinational corporations, imperialism, Third World Communist movements, etc.

421 **American Political Thought I (Founding to Civil War). 3 hrs.**
This course is a detailed examination of the philosophical and historical roots of American politics from the Colonial era through the Civil War, with emphasis on original texts.

422 **African Political Systems. 3 hrs.**
The study of political systems of selected countries, blocs, or regions.

423 **American Foreign Policy. 3 hrs.**
The study of descriptive, analytical, and normative aspects of United States foreign policy with emphasis on contemporary problems and issues.

424 **Comparative Foreign Policy. 3 hrs**.
Application of the comparative method to foreign policy decision-making and outputs. Comparisons within or between geographic regions.

425 **Ancient and 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, Augustine, and Aquinas.

426 **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, Hobbes, Locke, Rousseau, Hume, Burke, Mill, and Marx.

427 **Shapers and Definers. 3 hrs.**
A study of political leaders who have shaped and defined the American constitutional tradition.

428 **Islamic Political Ideas and Institutions. 3 hrs.**
Study of Islamic political ideas, practices, and institutions and their impact on the rise and development of contemporary Islamic movements, organizations, and states.

429 **The Politics of Conflict and Revolution. 3 hrs.**
Study of major theories of conflict and revolution with emphasis on cross-national explanations and outcomes.

430 **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.

431 **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.

432 **Nonprofit Management. 3 hrs.**
This course examines the principles and applied practices of nonprofit administration including theories of nonprofit formation, fundraising appeals, executive leadership, marketing, budgeting, and strategic management.

433 **Public Administration and Policy Development, 3 hrs.**
Examination of alternative theoretical approaches to the study of policy and administration and their implications for the use of policy to shape administrative practice.

435 **Harry Potter and Political Theory. 3 hrs.**
Detailed examination of the Harry Potter book series through the lens of various theories and theorists of power, with emphasis on scholarly argumentation and writing.

436 **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.

440 **Power in American Society. 3 hrs.**
Examination of some of the major theoretical approaches – pluralistic, elitist, etc. – to the study of power. A major concern is 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.

442 **Politics and Welfare. 3 hrs.**
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.

444 **Dictatorship and Democracy. 3 hrs.**
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.

445 **Environmental Politics. 3 hrs.**
This course examines multiple perspectives on the relationship between humans and nature, focusing on how particular interpretations of this relationship determine how we translate environmental concerns into political problems.

446 **Politics In History. 3 hrs.**
A study of politics as an order-shattering, order-restructuring force during some of America's most transformative moments.

450 **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.

452 **Public Personnel Administration. 3 hrs.**
Survey of public personnel administration with particular attention to various facets of the merit system concept. Psychological and human relations aspects of the work situation and supervisor-subordinate interaction emphasized.

453 **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.

454 **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.

460 **Civil Rights and Liberties. 3 hrs.**
The basic substantive and procedural elements of American constitutional liberties and civil rights with emphasis on historical development as influenced by social and political forces.

461 **Urban Problems and Public Policy. 3 hrs.**
Study of policy problems of metropolitan areas in terms of structures, alternatives, and outcomes.

466 **Appalachian Politics. 3 hrs.**
Explores Appalachia as both a geographical region and a political construct, focusing on how politics shapes regional identity and the region's relationship to the United States.

480-483 **Selected Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
To offer a course on some special topic which is not adequately treated in the regular course offerings.

484 **Constitutional Law. 3 hrs.**
Introduction to the principles of American constitutional law and analysis of constitutional issues, emphasizing leading Supreme Court cases.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
These numbers are reserved for tutorials, directed and independent readings, directed and independent research, problem reports, etc.

489 **Seminar in Public Service. 3 hrs.**

490 **Public Service Internship. 6 hrs.**

495H-496H **Readings for Honors in Political Science. 2-4; 2-4; hrs. I, II.**
Open only to political science majors of outstanding ability. Both courses must be taken to receive credit. See Honors Courses.

499 **Capstone Experience. 3 hrs.**
This course is designed to integrate political theory with politics by considering the relevance of political philosophy to contemporary political questions. Capstone Experience must be completed in the senior year. Offered only in Fall Semester.

PSYCHOLOGY (PSY)

100 **Careers in Psychology. 1 hr.**
Prepares students to be successful undergraduate Psychology majors and introduces possible careers and educational requirements. Does not count toward hours in major required for graduation. (Graded CR/NC only)

201 **Introductory Psychology (CT). 3 hrs.**
Critical thinking approach to the principles and methods in the scientific study of behavior.

201H **General Psychology–Honors (CT). 3 hrs.**
For the superior student. (PR: Admission to Honors College)

204 **Psychology of Adjustment. 3 hrs.**
Modes of personal and social adjustment; assessment and treatment techniques.

205 **Introduction to Paraprofessional Mental Health. 3 hrs.**
Course covers paraprofessional mental health career options; community resource utilization, deinstitutionalization, crisis/interpersonal intervention and special populations. On-site observation experience required. (PR PSY 201 or permission)

210 **Ethics for Paraprofessional Mental Health. 3 hrs.**
Course covers common ethical principles in mental health disciplines; HIPAA guidelines; laws, regulations and policy; supervision requirements, managing boundaries, cultural competence. (PR: PSY 204 or permission)

223 **Elementary Behavioral Statistics. 3 hrs.**
Orientation to the philosophy of science; survey of methods in behavior study; elementary statistics. (PR: MTH 121 or higher)

250 **Psychology of Popular Culture. 3 hrs.**
This course surveys how psychology and psychological issues are presented, researched, and applied in multiple modalities of popular culture. (PR: PSY 201)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

300 **Paranormal Phenomena. 3 hrs.**
Investigation of such putative paranormal events as ESP, clairvoyance, UFO's, ghosts, astral projection, astrology, and related topics. Emphasis on evaluation of evidence using the scientific method and scientific criteria.

302 **Social Psychology. 3 hrs.**
Social determinants of individual behavior. (PR: PSY 201; 12 college credits at 100 level or higher)

310 **Behavioral Interventions for Paraprofessional Mental Health. 3 hrs.**
Course covers behavioral theory, antecedent motivators, functional analysis, reinforcement regimes; preparing and following treatment plans, defining measurable goals/objectives, monitoring progress. (PR: PSY 205 or permission)

311 **Child Development. 3 hrs.**
Psychological characteristics and personal and social problems of developmental periods. (PR: PSY 201; 12 college credits at 100 level or higher)

312 **Adult Development. 3 hrs.**
Study of the physiological, psychological, and social processes that occur with aging. (PR: PSY 201 or 311; 12 college credits at 100 level or higher)

323 **Experimental Psychology. 3 hrs.**
Methodology and research in psychology. (PR: PSY 223)

324 **Sensation and Perception. 3 hrs.**
Methodology and research in sensory and perceptual processes. (PR: PSY 223)

330 **Human Sexual Behavior. 3 hrs.**
A psychological approach to the functioning, attitudes, varieties and development of human sexual behavior. (PR: PSY 201; 12 college credits at 100 level or higher)

350 **Animal Behavior. 3 hrs.**
A comprehensive study of the behavior of non-human animals. (PR: Nine hours of Psychology)

360 **Personality. 3 hrs.**
Personality structure, dynamics and development. (PR: PSY 201; 12 college credits at 100 level or higher)

380 **Introduction to Professional Psychology. 3 hrs.**
This course surveys the application of psychology to human problems in clinics, schools, consumer patterns, environmental matters, the legal system, health psychology, clinical neuropsychology and others. (PR: PSY 201; 12 college credits at 100 level or higher)

391 **Psychology of Aggression. 3 hrs.**
A multifaceted study of aggressive behavior in humans and other animals. (PR: PSY 201, 302)

402 **Advanced Social Psychology. 3 hrs**
Advanced study of selected topics in social psychology. (PR: PSY 223, PSY 302 or consent of instructor)

403 **Applied Social Psychology. 3 hrs.**
Examination of the applications of social psychological methods, theories, principles and research findings to the understanding or solution of social problems. (PR: PSY 302)

406 **Psychometrics. 3 hrs.**
Mental test theory and applications. (PR: PSY 223)

408 **Abnormal Psychology. 3 hrs.**
An overview of the theories, assessment techniques, and treatment of maladaptive behavior. (PR: PSY 201; 12 college credits at 100 level or higher)

411 **Advanced Topics in Developmental Psychology. 3 hrs.**
This course will provide an advanced study of topics regarding change throughout the lifespan. Emphasis will be on understanding the interactions of biological, psychological, and social factors. (PR: PSY 311)

416 **Psychology of Learning. 3 hrs.**
Critical study of the major theories of learning and the related research. (PR: PSY 201, PSY 223)

417 **Intermediate Behavioral Statistics. 3 hrs.**
An intermediate level presentation of descriptive and inferential statistics as applied in behavioral research. (PR: PSY 201 and 223)

418 **Psychology of Personnel. 3 hrs.**
Psychological principles and methods applied to functions in personnel administration. (PR: PSY 201; 12 college credits at 100 level or higher)

420 **Introduction to Industrial - Organizational Psychology. 3 hrs.**
A systematic study of the application of psychological methods and principles in business and industry. Emphasis is on research methods, motivation, training, leadership, personnel selection, employee safety, and job satisfaction. (PR: PSY 201; 12 college credits at 100 level or higher)

422 **Psychology of Machines. 3 hrs.**
Human factors are integral in the design of today's products. This class focuses on the psychologyical principles involved in current technologies and psychology's use to create better products.

424 **Environmental Psychology. 3 hrs.**
This course will focus on human interactions with the natural and built environment. We will examine human behavior and experiences. Topics will range from natural phenomena to human-constructed environments.

425 **Psychology of Cinema Symbolism. 3 hrs.**
Analysis of how signs, symbols, and archetypes influence the individual and collective psyche via film.

426 **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. (PR: PSY 201; 12 college credits at 100 level or higher)

427 **Computer Applications in Psychology. 3 hrs.**
An introduction to computer applications in psychology, emphasizing data collection, management, organization, analysis and reporting. (PR: PSY 201, 223; IT 101 or CT 101)

430 **Psychology of Women. 3 hrs.**
This course explores theories, findings, and social issues regarding the psychology of women and gender, with emphasis on gender role socialization on people's beliefs and behaviors across the lifespan. (PR: PSY 201)

431 **Health Psychology. 3 hrs.**
Introduction to the contribution of psychology to the promotion and maintainance of health and the prevention and treatment of illness (PR: PSY 201, 323)

433 **Current Models of Psychotherapy. 3 hrs.**
Introduction of theoretical models and related therapeutic strategies which influence the practice of modern psychotherapy. (PR: PSY 201)

435 **Psychology of Conspiracy Theory. 3 hrs.**
Understand, identify, and give critical analysis to the psychological and social factors that promote the support and belief of conspiracy theory.

440 **Physiological Psychology. 3 hrs.**
The relationships between physiological functions and biochemical processes and behavior. (PR: PSY 201; 12 college credits at 100 level or higher)

456-457 **Research in Psychology. 3; 3 hrs.**
Laboratory courses to give advanced students experience in conducting psychological research. Capstone experience. (PR: Permission of instructor)

460 **History and Systems of Psychology. 3 hrs.**
An examination of the historical and philosophical antecedents of contemporary psychology. Capstone experience (PR: Twelve hours of Psychology)

465 **Love, Intimacy, and Attachment. 3 hrs.**
Examination of how childhood attachments, bonds, and relationships affect and influence adult perspectives on love, expectations, intimacy, fidelity, and commitment. (PR: PSY 311)

470 **Practicum in Industrial-Organizational Psychology. 3 hrs.**
The 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. Capstone experience. (PR: Either PSY 418 or 420; Major in Psychology; permission of instructor; complete application form).

471 **Practicum in Clinical Psychology. 3 hrs.**
Students work 6 hours per week in a local clinical setting where they have the opportunity to observe individual and group therapy, psychological testing, staff meetings, etc. Capstone experience. (PR: 12 hours of PSY including 408 and permission of instructor; complete application form)

475 **Race, Culture and Development. 3 hrs.**
Examine the roles that race, ethnicity, and culture play in the physical, cognitive, intellectual, and social developmental processes of people of color.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
A course or seminar on some aspect of Psychology not otherwise treated in regular course offerings (PR: Permission of instructor and department chairperson)

495H-496H **Readings for Honors. 2-4 hrs. each.**
Open only to students of outstanding ability. See Honors Courses.

499 **Psychology Capstone Seminar. 3 hrs.**
A capstone course which integrates research methods, critical analysis, and problem solving applied to psychological questions and issues. (PR: PSY 223 and 323; 2.0 GPA in PSY and overall)

PUBLIC HEALTH (PH)

101 **Introduction to Public Health. 3 hrs.**
Course introduces students to the concepts and models of public health.

105 **Introduction to Epidemiology. 3 hrs.**
This course provides an introduction to epidemiology for undergraduate students.

220 **Social and Behavioral Health. 3 hrs.**
Develop basic literacy regarding social concepts and processes that influence health status and public health interventions. Understand interaction of biologic, behavioral, social and environmental factors influencing health status of population.

240 **Control of Infectious Diseases. 3 hrs.**
Examination of infectious diseases from a public health perspective, including strategies for prevention, treatment, control and eradication. (PR: PH 105)

260 **Community Health and Development. 3 hrs.**
This course will provide the foundations for a study into the new relevant community health issues facing area residents and also worth an International Perspective.

270 **Global Health. 3 hrs.**
This course provides students the opportunity to study health care systems in developed and developing countries and compare these systems to the U.S. health care system.

280-283 **Public Health Special Topics. 1-4 hrs.**
With permission of program director.

304 **Environmental Health. 3 hrs.**
Major environmental health problems, including water quality, wastewater, occupational health, trace elements in the environment, municipal and hazardous waste, food protection, vector control, and air quality are discussed.

305 **Foundation and Formulation of Public Health Policy. 3 hrs.**
Introduction to policy development, establishment and implementation wtih a focus on critical health issues. Students will develop skills in addressing current problems in health policy.

350 **Qualitative Research Methods Applications. 3 hrs.**
The course focuses on theories and applications of qualitative research methods.

380 **Maternal and Child Health. 3 hrs.**
This course takes a life-cycle approach to understand the health issues, needs, policies and program implications for women and children with a global perspective. (PR: PH 270)

420 **Topics in Health Policy. 3 hrs.**
This course provide in-depth study of timely topics in health policy. High-impact health reform issues will be examined, culminating in student formulation of a policy perspective.

430 **Monitoring and Evaluation in Public Health. 3 hrs.**
Introduces students to the language and theory of program monitoring and evaluation. Facilitate understanding of managing and tracking results in health programs. (PR: PH 101 and PH 105)

455 **Ethical and Legal Issues in Public Health. 3 hrs.**
Introduction to principles in health care; sources and types of law; the U.S. government and development of law; organizational ethics; legal ethical issues for health care, and patient rights and responsibilities. (PR: PH 101 and PH 270)

470 **Quantitative Research Methods. 2 hrs.**
The course focuses on theoretical aspects of quantitative research methods in public health and health care.

471 **Quantitative Research Methods Applications. 3 hrs.**
This course focuses on applications and techniques of quantitative research methods.

480-483 **Public Health Special Topics. 1-4 hrs.**
With permission of program director.

490 **Public Health Internship. 6 hrs.**
This is 320 hours total on-the-job experiences. The duration of the internship is planned to allow the variety of experiences that will provide the most benefits to the students.

496 **Advanced Epidemiological Methods. 3 hrs.**
Examine important epidemiologic concepts; compare and contrast various epidemiologic study designs; compute, analyze, and interpet measures of occurrence and association; determine causal association, and evaluate the accuracy of epidemiologic studies.

RELIGIOUS STUDIES (RST)

205 **Introduction to Religious Traditions of the West. 3 hrs. I or II.**
A comparative study of major religious traditions of the Western world: Judaism, Christianity, Islam, Zoroastrianism, and religions of the Americas.

206 **Introduction to the Religious Traditions of Asia. 3 hrs. I or II.**
A comparative study of the major traditions of Asia: Hinduism, Buddhism, Confucianism, Taoism, and Shinto.

220 **Literature of the Old Testament. 3 hrs. I or II.**
Traces the origins, growth, and development of the literature of the Hebrew people to the Greek period. Includes an introduction to and application of modern tools of biblical study.

225 **Literature of the New Testament. 3 hrs. I or II.**
Traces the origins, growth, and development of the literature of the early Christian church. Includes an introduction to and application of modern tools of biblical study.

250 **Studies in Humanities. 3 hrs. I.**
An interdisciplinary course to introduce students to the elements of a humanistic education. (Same as Classics 250 and Philosophy 250; PR or CR: ENG 101)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Research adaptable to the needs of the individual student.

300 **The Nature of Religion. 3 hrs.**
An analysis of the nature of religious personalities, institutions, literature, philosophies, experiences, and education.

303 **World of Islam. 3 hrs.**
An examination of the global cultures of Islam with particular focus upon the origin and development of the religion which binds them together.

304 **The Teachings of Jesus. 3 hrs. I, II.**
An analysis of early Christian writing and a systematic study of the message of the historical Jesus that stands behind it.

305 **Early Christianity. 3 hrs.**
Traces the background, birth, and development of Christian thought from Paul through Augustine.

310 **The Hebrew Prophets. 3 hrs. I or II.**
The rise of the office of prophet and the contributions of prophecy to religion.

311 **Jewish Holocaust. 3 hrs.**
An examination of the religious/philosophical questions raised by the Holocaust of European Jews: Why and how did it occur? What does it tell us about religion and humanity?

319 **ABC's of Orthodoxy. 3 hrs.**
An examination of Easter Orthodox Christianity from the culture in which it was birthed to its place in today's society.

321 **The Protestant Faith. 3 hrs.**
An examination of the distinctive historical and theological features of the Protestant movement in Western Christendom, with special attention to the distinctive beliefs and practices of contemporary American denominations.

322 **The Catholic World. 3 hrs.**
An exploration of the origin and development of the Catholic World in all of its multiple expressions: theology, politics, liturgy, and the arts.

323 **Religion in America. 3 hrs. I, II.**
The rise and development of religious thinking in America. (Same as History 323)

324 **The Jewish Way of Life. 3 hrs.**
An exploration of the distinctive features of the heritage of modern Judaism. An integrated approach to the study of Jewish religious practices, teachings, literature, and contributions to contemporary life.

351 **Classics of Religious Literature. 3 hrs.**
A contextual analysis of selected popular religious classics, e.g., Foxe's Book of Martyrs, Bunyan's Pilgrim's Progress, St. Augustine's Confessions, Bhagavad-Gita, and the like.

360 **Hindu Mysticism. 3 hrs.**
A general survey of religious life and mysticism throughout South Asian history.

361 **Buddhism. 3 hrs.**
General survey of Buddhist life throughout history and around the world.

390-394 **Junior Seminar in Humanities. 3 hrs.**
A structured interdisciplinary study offered by the departments of Classics, Philosophy, and Religious Studies in the foundations of human thought, myth, literature, religion, philosophy, and art (Same as PHL 390-394 and RST 390-394). (CR/PR: ENG 102, 302, 201H,YGS 152, IST 201, or one course from CL 231, 232, 233, 319, PHL 200, 201, 303, 321, 340, 353, RST 205, 206, 300, 304, 320, 325)

419 **Religious Thought in the Western World. 3 hrs.**
An analysis of the major schools of religious thought as they have developed in the West.

450 **Sociology of Religion. 3 hrs.**
An investigation into religion as a social phenomenon. (Same as Sociology 450)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

490-494 **Senior Seminar in Humanities. 1-4 hrs.**
Designed for majors as a senior humanities seminar and the culminating interdisciplinary study in the Humanities program. (Same as CL 490-494 and PHL 490-494.)

495H-496H **Readings for Honors in Religious Studies. 4; 4 hrs.**
Open to students with permission of the department chairman. See Honors Courses.

RESPIRATORY CARE (RSP)

100 **Respiratory Pharmacology. 3 hrs.**
Introduces the student to basic pharmacology of medicines used in respiratory care and physiological implications on the human body. (CR: BSC 228)

101 **Introduction to Respiratory Care. 2 hrs.**
Introduces the student to the history of respiratory care and professional organizations. Emphasis is on the role of the respiratory therapist as a member of the health care team. (PR: RSP 100)

102 **Introduction to Respiratory Care Procedures. 3 hrs.**

Administration of medical gases, humidity and aerosol therapy with emphasis on the handling of medical gases and safety in administration. Techniques of therapeutic procedures used in respiratory care are included. (CR: RSP 102L, 101; PR: RSP 100)

102L **Respiratory Care Procedures Lab. 1 hr.**
Administration of medical gases, humidity and aerosol therapy with emphasis on the handling of medical gases and safety in administration. Techniques of therapeutic procedures used in respiratory care are included. (CR: RSP 102, 101; PR: RSP 100)

200B **Concepts of Professional Respiratory Care. 5 hrs.**
Designed for the board certified and state licensed CRT to enter into advanced respiratory practice. Emphasis is on concepts and principles for professional practice as an RRT. (PR: CRT and admission to program)

201 **Pulmonary Pathophysiology. 3 hrs.**
Emphasis is placed on the etiology, signs and symptoms, pathology, clinical manifestations, sequellae, and treatment. The respiratory therapist's role in the recognition and treatment of pulmonary diseases is highlighted. (PR: RSP 102; CR: BSC 250)

202 **Mechanical Ventilation Technology and Management. 3 hrs.**
An introduction to the fundamentals of mechanical ventilation techniques and terminology. Monitoring and the ability to solve clinical problems relating to mechanical ventilation are emphasized. Lab included. (PR: RSP 102; CR: BSC 250, RSP 201 and 203)

203 **Respiratory Internship. I 4 hrs.**
Emphasis is on information gathering from the patient record, physical evaluation of the patient and basic respiratory interventions. Co-requisite: RSP 202; (PR: Sophomore Level; CR: RSP 201)

204 **Pulmonary Rehabilitation/Home Care. 1 hr.**
Emphasis on the care of the patient with long term pulmonary disability requiring home care. Psychosocial and physical needs are addressed with emphasis of quality of life and cardiopulmonary reserve. (PR: RSP 203)

205 **Cardiopulmonary Diagnostics. 3 hrs.**
Emphasis on advanced techniques of pulmonary function testing. Topics include lung volume determination, diffusion/distribution of ventilation, invasive and non-invasive methods of arterial blood gas sampling, analysis, and interpretation. (PR: RSP 203; CR: RSP 206 and 207)

206 **Neonatal/Pediatric Respiratory Care. 3 hrs.**
Provide knowledge of neonatal/pediatric patients; fetal cardiopulmonary development and changes at birth, care methods used and evaluation of neonatal and pediatric patients are covered. (CR: RSP 205)

207 **Introduction to Critical Care Management. 3 hrs.**
Designed to provide the student with knowledge of airway management, transtrachael oxygen therapy and aspiration, bronchoscopy, thoracentisis, pleural chest tubes, arterial lines, ABG interpretation and analysis, transports, and electrocardiogram interpretation. (CR: RSP 205)

208 **Seminar in Respiratory Care. 1 hr.**
Introduces the student to NBRC exam taking skills, mock examinations of the NBRC matrix, realistic clinical problems and situations with emphasis on critical thinking and problem solving. (PR: sophomore level)

209 **Respiratory Internship II. 3 hrs.**
Emphasis is on supervised practice of humidity and aerosol therapy, aerosol drug therapy, lung inflation therapy and techniques used in electrocardiography. (PR: sophomore level; CR: RSP 204, 205, 206, 207)

210 **Respiratory Internship III. 3 hrs.**
Emphasis in on supervised practice of arterial blood gas sampling and analysis, arterial line management, chest tube management, ECGs observation of hemodynamic measurement and monitoring, IABP management. (PR: RSP 209)

211 **Dynamics of Pulmonary and Renal Interaction. 2 hrs.**
Emphasis is placed on the interaction of systems in gas exchange and renal involvement in acid base balance. (CR: RSP 210; PR: sophomore level)

212 **Acute/Chronic Pulmonary Management. 3 hrs.**
Emphasis place on pulmonary function testing/interpretion and care of a patient with long-term pulmonary disability requiring home care and rehabilitation. (PR/CR: Junior Status)

301 **Introduction to Respiratory Care Management. 3 hrs.**
Introduces the student to the basic principles of management in the respiratory care department. Includes theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concept. (CR/PR: junior level)

302 **Respiratory Internship IV. 2 hrs.**
Emphasis is on cardiopulmonary assessment and treatment of trauma, post-surgical, cardiac, renal, neonatal and pediatric patients with refinement of monitoring procedures and interpretation of data. (PR: junior level)

303 **Clinical Respiratory Education. 3 hrs.**
Designed as an introduction to clinical teaching in a respiratory care program. Emphasis is on instructional and evaluation strategies and development of performance objectives. (PR/CR: junior level)

304 **Advanced Neonatal and Pediatrics. 3 hrs.**
Advanced study of neonatal/pediatric pathophysiology including parenchymal disease, obstructive airway disease, lesions of the lungs and airways, congenital abnormalities, respiratory distress syndrome, apnea disorders, neurological disorders and trauma. (PR: RSP 206, junior level or RRT)

305 **Respiratory Cost Management and Solutions. 3 hrs.**
Introduces the student to cost solutions for respiratory departments. Topics include annual budgets, purchasing decisions, effective staffing, inventory and supply controls and cost-containment methods. (Pr: lunior level; CR: RSP 306)

306 **Respiratory Care Performance Improvement. 3 hrs.**
Provides basic principles associated with Total Quality Management (TQM) and Continuous Quality Improvement (CQI) to aid in problem identification and quality problem-solving for respiratory care departments. (PR: junior level; CR: RSP 305)

307 **Advanced Techniques in Adult Critical Care. 4 hrs.**
Emphasis is on current respiratory care procedures for the critically ill adult patient with exploration into newer techniques. (PR: RSP 207 or RRT; CR: junior level)

308 **Respiratory Management and Quality Improvement. 3 hrs.**
This course introduces the student to basic management principles of a respiratory department. Discussion includes scope of management, quality issues, budgeting isssues, and evaluation and application of management concepts. (PR/CR: Junior status)

401 **Introduction to Sleep Disorders. 4 hrs.**
Designed to teach how a polysomnogram is performed, the major categories of sleep disorders, the presenting symptoms of sleep apnea, narcolepsy, psychophysiological insomnia and sleep disturbance due to depression. (CR: RSP 307)

402 **Issues in Respiratory Management. 3 hrs.**
Designed to examine respiratory care in rural America. This course will address the key issues confronting rural respiratory healthcare today, examine the causes and develop solutions to the issues. (PR: RSP 304)

403 **Respiratory Care Research. 3 hrs.**
Designed to provide the student knowledge about survey of research problems, methods, and designs utilized in respiratory care, with emphasis on data presentation and analysis. (PR: Statistics)

404 **Advanced Respiratory Care Practicum. 3 hrs.**
Advanced respiratory techniques and management for clients across the life-span. (PR: senior level)

405 **Flight/Hyperbaric Care. 3 hrs.**
Advanced respiratory techniques related to physiologic stressors impacting patient care due to atmospheric impact and pressure gradients and unique hazards in these environments to patients and staff. (PR: senior level)

406 **Community Respiratory Care. 3 hrs.**
Designed for the student to provide care in a variety of settings including clinics, schools and other settings utilizing principles of public health and client and family teaching. (PR: senior level)

420 **Capstone in Respiratory Care. 5 hrs.**
Role synthesis practicum incorporating provider of care, coordinator of care, member of profession and leadership roles. (CR: RSP 405)

480-483 **Special Topics (1-4; 1-4; 1-4) 4 hrs.**
Study of topics not available in other courses.

485-488 **Independent Study. 1-4 hrs**.
Course will consist of directed and independent reading, directed and independent research, problem reports, or tutorials. Will allow student to complete individualized learning in respiratory care. (PR: Permission)

SAFETY TECHNOLOGY (SFT)

101 **Learning to Drive. CR/NC. 1 hr.**
An introduction to traffic safety: emphasis is placed on the fundamentals of driving, pedestrian and cycle safety. 2 lab. per week. (Lab fee non-drivers only)

235 **Introduction to Occupational Safety (CT). 3 hrs. I, II, S.**
Introduction to occupational safety and health on an international level. Comparisons of various accidents by type and country will be explored along with prevention techniques.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**

340 **Industrial Fire Prevention. 3 hrs. I.**
An introductory course that explores the relationship between engineering and fire prevention. Topics include: sprinkler systems, water supplies, behavior of fire and materials, fire protection, extinguishers and other systems. (PR: SFT 235 minimum grade of *C*; CR: PHY 201 or PHY 211, and PHY 202)

372 **Safety and Industrial Technology II. 3 hrs.**
Industrial processes, graphics, materials, and dynamics, instrumentation, and design factors involving safety. (PR:SFT 235 minimum grade of *C*; CR: MTH 121 or MTH 123 or MTH 127 or MTH 130 or MTH 122 or MTH 140 or MTH 229 or MTH 229H)

373 **Principles in Ergonomics and Human Factors. 3 hrs.**
Introductory principles within human-machine relationships; examining the biological, physiological, and psychological factors which contribute to accident causation. (CR: SFT 373L; PHY 203 or PHY 212, and PHY 204)

373L **Principles of Ergonomics Lab. 1 hr. II.**
A laboratory course designed to include the principles and applications of human factors/ergonomics that were introduced in SFT 373. (CR: SFT 373;PHY 203 or PHY 212, and PHY 204)

375 **Construction Safety I. 3 hrs.**
Basic construction site safety focus on site preparation, planning, and inspection for safe operations. (PR: SFT 235 with a minimum grade of *C*)

378 **Safety Evaluation and Measurement. 3 hrs.**
Methodologies of safety performance and evaluation for accident prediction and control. (PR: SFT 235 and sophomore standing or higher)

385 **Traffic Safety and Driver Education. 3 hrs.**
An introductory course in the teaching of safety and driver education, including techniques of classroom and behind-the-wheel instruction. 2 lec-2 lab.

400 **Traffic Law and Enforcement. 3 hrs. S.**
A course designed to study and evaluate the varied and complex system of laws governing the control of all forms of traffic and the influences and responsibilities of traffic law enforcement in present-day society.

410 **Problems and Practices in Traffic Safety and Driver Education. 3 hrs.**
A survey course designed for supervisors of traffic accident prevention programs. Examines and evaluates problems, attitudes, philosophies, activities and administrative practices in school, city and state traffic safety programs. Supplements basic teacher training courses in traffic safety.

450 **Traffic Engineering. 3 hrs.**
Concerned with traffic and pedestrian flow, channelization, light coordination, intersection control, and devices related to safe, convenient and economical transportation of persons and goods.

453 **International Safety and Health. 3 hrs. I.**
The effects of globalization on a variety of different countries' health and safety programs.

454 **Industrial Hygiene. 3 hrs. I.**
Environmental protection as related to industrial settings. Air/water quality, noise and chemical pollution and hazardous material control. (CR: SFT 454L and SFT 489: PR: CHM 212, CHM 218, PHY 203 or PHY 212, PHY 204 with a minimum grade of *C*)

454L **Industrial Hygiene Lab. 2 hrs. I.**
Quantitative monitoring techniques for measuring air and water quality, the measurement of noise and chemical pollutions, and the evaluation of physical hazards. (CR: SFT 454L and SFT 489: PR: CHM 212, CHM 218, PHY 203 or PHY 212, PHY 204 with a minimum grade of *C*)

458 **Hospital Safety. 3 hrs.**
The role of safety and its effect on health professionals in hospitals, nursing homes and various health care facilities.

460 **Safety Training Methods. 3 hrs. I.**
A course designed to help students develop, present, and evaluate training materials as mandated by OSHA or other governmental agencies. Hands on practice & live training will be required. (PR: SFT 372 or 375)

465 **Incident Investigation Techniques. 3 hrs. II.**
Introductory course in incident investigation giving insight into the recognition and collection of information, recording data and using various techniques including system safety analysis into the reconstruction of the event. (CR: 372, PHY 203 and PHY 204)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Students with specialization in safety education only, with permission of department chairman.

485-487 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**

489 **Process Safety Management. 3 hrs. I.**
A study of the latest industrial safety information which will assist the student in designing a program to reduce or eliminate all incidents which downgrade the system. (PR: SFT 372, PHY 203, PHY 204, all with a minimum grade of *C*; concurrent PR: CHM 211 and CHM 217)

490 **Safety Internship. 3 hrs.**
Supervised experience on the job site. (PR: PR: SFT 465, CHM 212, CHM 218, all with a minimum grade of *C*)

491-494 **Workshop. 1-4; 1-4; 1-4; 1-4 hrs.**
Workshop in selected areas of occupational safety and health.

497 **Occupational Safety and Health Programs. 3 hrs.**
Safety functions in industry. Principles of organization and application of safety programs. Prevention, correction and control methods are outlined and evaluated. (PR: SFT 235)

498 **Environmental Safety and Health Legislation. 3 hrs. II.**
A survey of the legislation that has affected the safety movement with special emphasis on the 1970 Occupational Safety and Health Act. (CR: SFT 372, CHM 212 and CHM 218.)

499 **Development and Management of Occupational Safety Program. 3 hrs. II.**
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. (PR: SFT 372, CHM 212, CHM 218, PHY 203 or PHY 212, PHY 204, all with a minimum grade of *C*)

SCIENCE EDUCATION
(Listed under Curriculum and Instruction)

SOCIAL STUDIES (SOS)

207 **Problems of a Multicultural Society. 3 hrs. I, II, S.**
An interdisciplinary analysis of the multicultural nature of American society and its problems, with emphasis on the problems of minority groups.

404 **Senior Seminar. 3 hrs. I or II.**
A capstone course designed for those preparing to teach social studies in the middle school and the high school. (PR: Admission to teacher education; CR: An educational methods course)

STATISTICS (STA)

225 **Introductory Statistics (CT). 3 hrs.**
A critical thinking course in applied statistical reasoning covering basic porbability, descriptive statistics and fundamental statistical inference porcedures. Parameter estimation and hypothesis testing for variety of situations with wide applications. (PR: ACT Math of 21 or *C* or better in MTH 121 or higher)

326 **Applied Statistical Methods. 3 hrs.**
Use of statistical packages; introduction to descriptive, probability and sampling distributions; forecasting, inferences concerning one and two samples; simple and multiple regression, analysis of variance and covariance. (PR: *C* or better in MTH 229)

345 **Applied Probability and Statistics. 3 hrs.**
Statistical methods in scientific/engineering research, with emphasis on applications. Probability modeling, experimental design/survey sampling, estimation/hypothesis testing procedures, regression, ANOVA/factor analysis. Implementation using statistical software such as Excel, SAS. (CR/PR: MTH 229)

412 **Regression Analysis. 3 hrs.**
Topics in determining regression models; deriving parameter estimates using calculus; detailed coverage of tests of assumptions and remedial procedures (transformations and weighted least- squares); multiple and polynomial regression; tests and corrections for autocorrelation. (PR: C or better in STA 445))

413 **Experimental Designs. 3 hrs.**
Principles of experimentation; analysis of variance and covariance; latin square and related designs; factorial designs, response surface; robustness; nested and split-plot designs. (PR: *C* or better in STA 445))

420 **Nonparametric Methods. 3 hrs.**
Coverage of a variety of nonparametric or distribution-free methods for practical statistical inference problems in hypothesis testing and estimation, including rank procedures and randomization procedures.(PR: *C* or better in STA 445))

422 **Time Series Forecasting. 3 hrs.**
Finding statistical models to represent various time-dependent phenomena and processes; coverage of a variety of forecasting techniques, with emphasis on adaptive, regression, and Box-Jenkins procedures. (PR: *C* or better in STA 445)

425 **Sampling Design and Estimation. 3 hrs.**
Coverage of the theory and applications of a variety of sampling designs, sample size determination; ration and regression estimated comparisons among the designs. (PR: *C* or better in STA 445))

445 **Probability and Statistics I. 3 hrs.**
Probability spaces, conditional probability, and applications. Random variables, distributions, expectation, and moments. (PR: *C* or better in MTH 231)

446 **Probability and Statistics II. 3 hrs.**
Statistical inference: estimation of parameters, tests of hypotheses. Regression, analysis of variance. (PR: *C* or better in STA 445)

464 **Statistical Computing. 3 hrs.**
Introduction to the commonly used statistical computing techniques, procedure and methods, with extensive use of R language and environment, and SAS for statistical computing and graphics. (PR: *C* or better in STA 445)

466 **Stochastic Processes. 3 hrs.**
Review of probability theory. Topics include stationary processes, discrete and continuous time Markov chains, Markovian queueing systems, random walks, renewal processes, Brownian motion and Markov Chain Monte Carlo. (PR: *C* or better in STA 445)

470 **Applied Survival Analysis. 3 hrs.**
Survival and hazard functions, parametric and non-parametric methods, models and inferences for survival data, and regression diagnosis. (PR: *C* or better in STA 445)

480-483 **Special Topics. 1-4 hrs.**
Courses on special topics in statistics not listed among the current offerings. (PR: Permission of the chair of the Department of Mathematics)

485-488 **Independent Study. 1-4 hrs.**
A faculty supervised, individualized course of study of a topic in statistics.

SOCIAL WORK (SWK)

203 **Introduction to Social Work. 3 hrs.**
Introduction to the field of social work.

210 **Social Justice and Human Behavior (CT). 3 hrs.**
This course will focus on critical thinking about controversial issues related to social justice and social change and development of multicultural/global awareness and personal position related to social justice.

250 **Volunteerism and Social Work. 1 hr.**
Examination of social issues, social activism, civic responsibility, values, historical perspectives, and strategies for social change with 40 hour community service component.

260 **Substance Use and Social Work. 3 hrs.**
This course provides information on substance abuse and addiction from a social work ecosystems perspective, emphasizing understanding of addiction and recovery, family dynamics, assessment, and intervention.

261-263 **Staff Development. 1-4 hrs. CR/NC.**
Courses designed for staff development and training needs of social work or para social work professionals or trainins; not degree applicable. Topics will vary. CR/NC grading.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Selected topics not covered in regular course offerings. (PR: Majors only)

307 **Child Welfare. 3 hrs.**
Examination of child welfare issues, services, and interventions. (PR: SWK 203)

310 **Human Behavior and Social Environment I. 3 hrs.**
Integration of biological, psychological, social and cultural aspects of the individual's growth and development from prenatal period through adolescence including the impact the social environment has on the individual. (PR: BSC 105, SOC 200, PSY 201, SWK 203, ENG 101, ENG 201 or permission of instructor. CR: SWK 320, 330, 340, or permission of instructor)

312 **Human Behavior and the Social Environment II. 3 hrs.**
Integration of biological, psychological, social and cultural aspects of the individual's growth and development from early through later adulthood including impact of social environment on the individual. Organizational theory included. (PR: BSC 105, SOC 200, PSY 201, SWK 203, 310, 320, 330, 340, or permission from instructor; CR: SWK 322, 332, 370, or permission from instructor)

320 **Social Work Practice I. 4 hrs.**
Generalist Social Work Practice with populations and institutions of Appalachia. Professional development, information gathering, and assessment across various size systems (PR: SWK 203 or permission of instructor. CR: SWK 310, 330, 340 or permission of instructor) For Social Work majors only.

322 **Social Work Practice II. 4 hrs.**
Generalist Social Work Practice with populations and institutions of Appalachia. Planning, intervention evaluation and termination across various size systems. (PR: SWK 203, 310, 320, 330, 340 or permission of instructor. CR: SWK 312, 332, 370 or permission of instructor) For Social Work majors only.

330 **Social Welfare Issues in Appalachia. 3 hrs.**
The development of Social Welfare as a continuing institution. Rural poverty and other critical social issues in Appalachia. (PR: ECN 250, PSC 202, SWK 203, or permission of instructor. CR: SWK 310, 320, 340, or permission of instructor)

332 **Social Welfare Policy and Legislation. 3 hrs.**
Policy formulation, implementation and analysis. Examination and critical analysis of social welfare policies, legislation, and administration. (PR: ECN 250, PSC 202, SWK 203, SWK 330, SWK 340 or permission of instructor. CR: SWK 312, 322, 370 or permission of instructor)

340 **Social Work Research. 3 hrs.**
Introduction to Social Work Research with preparation for evaluation of generalist practice. (PR: SWK 203 MTH 121 or above excluding 400 and 401 or permission of instructor. CR: SWK 310, 320, 330)

370 **Practicum I. 3 hrs. CR/NC**
Supervised field experience in a social agency or organization for minimum of 100 clock hours. Regular conferences with instructor and weekly seminars. (PR: SWK 203, 310, 320, 340. CR: SWK 312, 322, 332)

473 **Practicum II. 12 hrs. CR/NC**
Supervised field experience in a social agency or organization for minimum of 400 clock hours. Regular conferences with instructor and weekly seminars. (PR: SWK 203, 310, 312, 320, 322, 330, 332, 340, 370)

475 **Social Work Capstone Seminar. 6 hrs.**
A capstone course integrating coursework and field work as preparation for beginning level of generalist Social Work practice. (PR: SWK 203, 310, 312, 320, 322, 330, 332, 340, 370, 473, writing requirements). This course is taken the last regular semester before graduation.

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Study of topics of interest not covered in regularly scheduled classes.

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
Individual study of topics not offered in regularly scheduled courses. Advance permission required.

495H-496H **Readings for Honors in Social Work. 2-4; 2-4 hrs.**
Open only to social work majors of outstanding ability. See Honors Courses.

SOCIOLOGY (SOC)

200 **Introductory Sociology (CT). 3 hrs.**
Introduction to the study of human society. This class emphasizes critical thinking skills.

200H **Introductory Sociology, Honors (CT). 3 hrs.**
Introduction to the study of human society for the honors student. This course emphasizes critical thinking skills. (PR: Admission to the Honors College)

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Selected topics not covered in regular course offerings.

300 **Social Organization. 3 hrs.**
Analysis of sociological conceptual systems and theories.

310 **Individual and Society. 3 hrs.**
Study of sociological perspectives on social interaction and the relationship between the individual and society.

311 **Deviance and Social Control. 3 hrs.**
Study of the basic concepts and theories regarding deviant behavior and the mechanisms of social control.

313 **Contemporary Social Issues and Problems. 3 hrs.**
Analysis of current social issues and problems from a variety of sociological perspectives. Issues and problems will vary from semester to semester. (PR: SOC 200 or SOC 200H)

330 **Sociology of Community Health. 3 hrs.**
An investigation of those social institutions and environmental, social, and personal factors in the community to maintain health and provide support in illness as related to social theory.

342 **American Society. 3 hrs.**
Sociological analysis of the basic social and cultural features of contemporary American society.

344 **Social Research I. 3 hrs.**
Introduction to systematic social research methodology. (PR: SOC 200 or SOC 200H)

345 **Social Statistics I. 3 hrs.**
Introduction to statistical analysis of social data. (PR: SOC 200 or SOC 200H)

360 **Sociological Theory. 3 hrs.**
Introduction to the dominant theoretical perspectives in sociology examining the assumptions about human nature, society and sociology that constitute each theoretical tradition.

362 **Health, Culture and Society. 3 hrs.**
A cross-cultural, historical, and bio-cultural examination through case study of social and environmental factors that affect human health and disease

375 **Social Stratification. 3 hrs.**
Introduction to the analysis of structured social inequality with emphasis on the dimensions of social class, race and gender.

401 **Population and Human Ecology. 3 hrs.**
The course focuses on population and its relation to characteristics of environment. Specifically, it is designed to discuss the interaction of population processes and resources.

403 **Social Research II. 3 hrs.**
Intermediate social research methodology with emphasis on research design. (PR: SOC 344 three more hours of Sociology or departmental permission)

408 **The Family. 3 hrs.**
Theoretical analysis of the family as a primary social institution. (PR: SOC 200 or SOC 200H)

413 **Social Movements and Social Change. 3 hrs.**
Analysis of large-scale social change, including intentional social movements and revolutions.

420 **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.

421 **Sociological Theory II. 3 hrs.**
Examination of the emergence and development of theoretical orientations in Sociology.)

423 **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.

425 **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.

432 **Sociology of Appalachia. 3 hrs.**
Study of the economics, politics, and social relations of Appalachia, including contemporary debates over development in the region.

433 **Sociology of Work. 3 hrs.**
Study of the organization and structure of the work place as a social system; the meaning and organization of work; managerial functions; management-labor relations; and human relations in industry.

435 **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.

440 **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.

442 **Urban Sociology. 3 hrs.**
The sociology of urban and metropolitan communities.

443 **Evaluation and Survey Research. 3 hrs.**
Analysis and application of the principles/methods of survey design and the theories/methods for assessing the outcomes of applied organizational programs to affect change in people and/or social conditions.

445 **Social Statistics II. 3 hrs.**
Intermediate level statistical analysis, including analysis of variance and covariance. 2 lec-2 lab. (PR: SOC 345)

450 **Sociology of Religion. 3 hrs.**
Sociological analysis of religion as a social institution. Same as Religious Studies 450. (PR: Six hours of Sociology or departmental permission)

451 **Science, Knowledge, and Technology. 3 hrs.**
Exploration of the effects of social factors on the development and authorization of knowledge claims, especially science and technology.

452 **Sociology of Death and Dying. 3 hrs.**
Study of death and dying as a societal and cultural phenomenon. Explores how institutions within our society deal with death. (PR: SOC 200 or SOC 200H)

455 **Sociology of Sex and Gender. 3 hrs.**
Analysis of social differentiation and inequality by gender, with a focus on the contemporary U.S.

460 **Holocaust and Genocide. 3 hrs.**
An examination of the Holocaust and other genocides from an interdisciplinary social science perspective.

464 **Complex Organizations. 3 hrs.**
Analysis of complex organizations with special attention given to bureaucratic organization.

466 **Culture and Environment. 3 hrs.**
This course will examine the symbbolic and structural dimensions of struggles over defining, organizing, and controlling the natural environment from a biocultural perspective.

468 **National Identity. 3 hrs.**
Exploration of the cultural, political and economic processes that contribute to the creation and maintenance of the modern nation state as an imagined community.

470-471 **Field Experience in Applied Sociology. 3-6 hrs.**
Supervised field work in public or private agencies affording students an opportunity to apply sociological knowledge and skills in addressing practical problems. (PR: Six hours of Sociology or departmental permission)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
Study of topics of interest not covered in regularly scheduled courses. (PR: Permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
Individual study of topics not offered in regularly scheduled courses. Advance permission required. (PR: Permission)

489 **Internship. 1-4 hrs.**
Supervised practicum founded on sociological knowledge in a host institution. 40-45 hours of internship work correspond with 1 credit hour.

492 **Senior Seminar II. 3 hrs.**
Application of sociological theory and practice to individually designed projects. Fulfills the capstone requirement for undergraduate majors. (PR: Sociology major in senior standing or departmental permission)

SPANISH (SPN)

101-102 **Introductory Spanish. 3; 3 hrs. I, II, S.**
Pronunciation, vocabulary and basic language structures. For students with no foreign language experience. (PR for SPN 102: SPN 101 with a *C* or better or permission)

112 **Elementary Spanish. 3 hrs. I, II.**
Emphasis on oral/written communication and on listening/reading comprehension. Students completing 112 with a *C* or higher receive 3 hours of credit (CR) for 101 content and 3 hours of graded credit for 112. For students who previously passed SPN 101, the 3 hours of credit for 101 WILL NOT COUNT toward graduation. (PR: two years or more of high school Spanish or permission)

140 **Spanish for Health Care Providers. 4 hrs.**
Designed for majors in the health p http://www.marshall.edu/ucomm/messages-to-the-university-community/ rofessions, this course will teach conversational Spanish and cultural information to facilitate successful relations with the Spanish-speaking patient in a clinical situation.

203 **Intermediate Spanish III. 3 hrs. I, II, S.**
Emphasis on oral and written communication. Conversation and composition. Intermediate language structures. (PR: SPN 102 or SPN 112 with a *C* or better or permission)

204 **Intermediate Spanish IV. 3 hrs. I, II, S.**
Development of practical conversational skills, reading for comprehension, and directed compositions. (PR: SPN 203 with a *C* or better)

240 **Hispanic Culture (CT). 3 hrs.**
Taught in English, this course examines Hispanic cultures through literature and cinema.

245 **Chicano/a Identities. 3 hrs.**
Taught in English, this course examines the Chicano Movement as a civil rights movement, as well as cultural and artisitic movement.

280-283 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: SPN 204)

305-306 **Introduction to Spanish Conversation. 3 hrs.**
Speaking intensive course designed to develop conversational skills and to review language fundamentals acquired in SPN 101-204 sequence. Course taught in Spanish. (PR: SPN 204)

307 **Spanish for Law Enforcement. 3 hrs.**
Course designed to help law enforcement students develop language skills and acquire a specialized vocabulary that will enable them to interact professionally with the Hispanic community. Course taught in Spanish. (PR: SPN 204)

315-316 **Advanced Grammar and Composition. 3; 3 hrs. I, II.**
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. Courses taught in Spanish. (PR: SPN 305/306 or permission)

323-324 **Advanced Grammar and Oral Communication.**
Analysis of grammatical structures. Introduction to phonetics and applied linguistics, and oral practice in various discourse types such as conversation, narration, discussion/debate, presentation. Courses taught in Spanish. (PR: SPN 305/306 or permission)

325 **Commercial Spanish. 3 hrs.**
A study of Spanish used in international business and commerce, emphasizing specialized vocabulary, forms and procedures in commercial communication, and of the Hispanic business world through its language and culture.

335 **Latin America: Culture and Civilization. 3 hrs. I.**
A study of the civilization of the Latin-American countries and their contributions to world culture. Lectures, discussions, and reports. Course taught in Spanish. (PR: SPN 305/306 or permission)

336 **Spain: Culture and Civilization. 3 hrs. II.**
A study of the civilization of Spain and its contributions to world culture. Lectures, discussions, and reports. Course taught in Spanish. (PR: SPN 305/306 or permission)

345 **Ecocriticism in Latin America. 3 hrs.**
Taught in English, this course explore approaches to the ecological crisis in Latin America through a variety texts including poetry, journalistic non0-fiction, historical interpretation, and film.

407 **Foreign Language Teaching Methodology. 3 hrs. II.**
Analysis and practical application of methods of teaching foreign language, including professional development, language pedagogy, and language standards. To be taken concurrently with CI 470. For Spanish education majors only. (CR/PR: Permission of instructor; must be taken with appropriate College of Education clinical experience)

408 **Latin American Women. 3 hrs.**
Taught in English, this course examines the interplay of cultural, ideological, and structural factors affecting women's lives in Latin America. (PR: ENG 201 or equivalent)

411 **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. (PR: SPN 315/316 or SPN 323/324 or permission)

412 **Contemporary Latin American Literatures.**
A study of a selection of Latin American authors and works representative of the major literary movements in Latin America, from Modernism to present. Course taught in Spanish. (PR: SPN 315/316 or SPN 323/324 or permission)

413 **Literary Genres and Non-Canonical Issues in Latin America.**
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. (PR: SPN 315/316 or SPN 323/324 or permission)

414 **Medieval, Renaissance and Golden Century Spanish Literature.**
Study of the representative Spanish authors and literary works and the major intellectual movements in peninsular literature from Medieval times to Spain's Golden Century. Course taught in Spanish. (PR: SPN 315/316 or SPN 323/324 or permission)

415 **Spanish Literature: 18th and 19th Centuries.**
Study of the representative Spanish authors and literary works and the major intellectual movements in peninsular literature during the 18th and 19th centuries. Course taught in Spanish. (PR: SPN 315/316 or SPN 323/324 or permission)

416 **Contemporary Spanish Literature.**
Study of the representative Spanish authors and literary works and the major intellectual movements in peninsular literature from the Generation of 1898 to the present. Course taught in Spanish. (PR: SPN 315/316 or SPN 323/324 or permission)

417 **Spanish Film. 3 hrs.**
Course on selected films by Spanish and Spanish-American directors and on films based on literature, with an emphasis on Spain. Reviews by contemporary film critics. Film and literary theory. (PR: SPN 204)

418 **Latin American Film. 3 hrs.**
Course on selected films by Spanish and Spanish-American directors and on films based on literature, with an emphasis on Latin and South America. Reviews by contemporary film critics. (PR: SPN 204)

419 **Against Oppression: Spanish and Latin American Film Study. 3 hrs.**
Thematic study of films from Spain and Latin America that concern religious, sexual and sociopolitical oppression, violence and transgression. Taught in English. (PR: ENG 101)

420 **Afro-Latin America. 3 hrs.**
Study of various modes of Afro-Latin cultural production, including literature, film, music and other Fine Arts with emphasis on the 20th and 21st centuries. Taught in English.

433 **Intensive Grammar Review. 3 hrs.**
This course will review and expand specific, advanced Spanish language structural points. It will include daily intensive practice in the four linguistic skills. Course taught in Spanish. (PR: SPN 315/316 and SPN 323/324)

435 **Culture and Civilization: Contemporary Latin America. 3 hrs.**
An overview of Contemporary Latin American cultures. Course deals with political changes, artistic movements, and issues of public interest during the 20th Century. Course taught in Spanish. (PR: SPN 315/316 and SPN 323/324)

436 **Culture and Civilization: Contemporary Spain. 3 hrs.**
Course is based on the origins of issues confronting contemporary Spain: the war and its aftermath, the transition to democracy and modernization, the European Union, terrorism, regional autonomy, feminism, and sexual identity. Course taught in Spanish. (PR: SPN 315/316 and SPN 323/324)

440 **Advanced Commercial Spanish. 3 hrs.**
A study of forms and procedures in commercial relationships, business etiquette, and specialized business vocabulary that enables students to succeed in the Spanish-speaking business world. (PR: SPN 325)

444 **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, differences, and intertwining relationship between them. (PR: SPN 315/316 and SPN 323/324)

480-483 **Special Topics. 1-4; 1-4; 1-4; 1-4 hrs. I, II.**
Independent research for qualified students. (PR: SPN 315/316 or SPN 323/324 and permission)

485-488 **Independent Study. 1-4; 1-4; 1-4; 1-4 hrs.**
(PR: SPN 315/316 or SPN 324/325 and permission of instructor)

490 **Spanish Capstone Experience.**
Students develop skills to conduct research on a topic from their area of concentration and to present a research project in Spanish. (PR: Two 400-level SPN courses or permission)

495H-496H Readings for Honors in Spanish. 4; 4 hrs. I, II.
Open only to outstanding majors. See Honors Courses.

THEATRE (THE)

101 **Introduction to Theatre. 3 hrs.**
Fundamentals of theatre arts. (PR: majors only)

111 **Introduction to Acting 3 hrs.**
Explore acting technique through theatre games, exercises, and improvisation. Good vocal skills and effective movement are emphasized. For non-majors with little or no training in the acting discipline.

112 **Theatre Appreciation. 3 hrs.**
Development of an appreciation and an understanding of theatre as a fine art. For non-theatre majors.

201 **Critical Analysis of Theatre Literature. 3 hrs.**
Critical analyses of theatre texts with emphasis on the successful translation of theatre literature from page to stage. Coursework supports the development and communication of production ideas and aesthetic interpretation. (PR: THE 101)

220 **Stage Movement I: Foundations. 3 hrs.**
Exercises for flexibility, control, body-awareness and alignment.

221 **Stage Voice I: Foundations. 3 hrs.**
Vocal techniques for the actor.

222 **Acting I: Foundations. 3 hrs.**
Development of skill through foundational exercises. (PR: THE 220 and 221 or permission of instructor)

225 **Creative Dramatics. 3 hrs.**
Methods and techniques of creation of informal drama for all ages.

230 **Auditioning Techniques. 3 hrs.**
Techniques of auditioning for theatre, film, and television. (PR: THE 222)

240 **Introduction to Stage Lighting. 4 hrs.**
This introductory course exposes students to elementary principles, techniques, terminology, and application used by stage electricians to execute theatrical lighting designs. Combined lecture and laboratory instruction links theory with practice.

245 **Introduction to Technical Theatre. 4 hrs.**
Technical production, scenic construction and stage operations are explore, including critical application of traditional current computer technologies within the profession. Lecture and supervised laboratory application link theory with practice.

250 **Introduction to Costuming. 4 hrs.**
The history, design, and construction of theatrical costumes.

270 **Theatre Practicum. 1 hr.**
Acting, directing, or technical work in Marshall University Theatre productions. Register only with permission of instructor. Open to all students. May be repeated for a total of four hours.

290 **Musical Theatre Workshop I. 3 hrs.**
Applied skills in musical theatre for chorus and ensemble roles, including song presentation and integration of musical and dramatic elements. Intended for beginning and intermediate students. (PR: THE 101, 111, or 112; or permission of instructor)

295 **Sophomore Review. 0 hrs.**
This course is a series of interviews, auditions and assessment instruments designed to determine a student's potential to successfully continue and complete the theatre degree curriculum. (PR 101, 201, 220*, 221*, 222*, 240*, 245, 250. *Note: THE 220, 240 are electives for B.A. students)

320 **Acting II: Scene Study. 3 hrs.**
Development of skill through exercises and analytical study of scenes. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

322 **Stage Voice II: Dialects for the Stage. 3 hrs.**
Study and practice of dialects and accents that are commonly used in theatre, film, and television. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

323 **Stage Movement II: Physical Approaches. 3 hrs.**
Advanced exploration of movement and its application to character development and text. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

330 **Theatrical Drafting and Rendering. 3 hrs.**
The application of drafting and rendering conventions utilized in the planning and execution of theatrical productions. Mechanical drawing, computer assisted drawing, freehand sketching and color application techniques will be employed. (PR: THE 245)

340 **Stage Decor. 3 hrs.**
Identification of artistic, historical, social, philosophical and technical influences that diverse cultures offer theatrical designers. Research, critical examination, drawing, digital documentation culminate in the creation of industry-standard electronic portfolios.

354 **Stage Makeup. 3 hrs.**
Development of character make-up designs through analysis, research and application of various make-up media suitable to stage, print and film. Adherence to industry standards of hygiene, sanitation and professional etiquette. (PR: THE 245 and THE 250)

355 **Costume Design. 3 hrs.**
Practical and psychological aspects of design. Study of design theory, script analysis, rendering techniques, fabric choices. Development of designs from initial concept to final renderings. (PR: THE 250)

356 **Costume Construction. 3 hrs.**
A hands-on approach to the techniques of theatrical costuming. Period method by machine and hand, industrial machine, and some pattern making. Work on classroom projects and university productions. (PR: THE 250)

360 **Scene Design I. 3 hrs.**
Practical application of aesthetic and technical principles of scene design for the proscenium stage. Script analysis, production concepts, architectural research, mechanical and autoCAD drawings, white models, painter's elevations are utilized. (PR: Successful completion of Sophomore Review or permission of instructor)

361 **Theatrical Scene Painting. 3 hrs.**
Exploration of various techniques utilized by scenic artist including the generation of painter's evaluations, interpretive design renderings, estimating scenic demands, media selection, and execution of designs in full scale. (PR: THE 240 or permission of instructor)

362 **Stage Management. 3 hrs.**
The responsibilities of stage management are explored to prepare students entering the profession. Principles and practices of stage management are applied through scheduling, budgeting, running, cueing, and safety. (PR: THE 240 and THE 245 or permission of instructor)

370 **Theatre Practicum. 1 hr.**
Acting, directing, or technical work in Marshall University Theatre productions. Register only with permission of instructor. (PR: Successful completion of Sophomore Review or permission of instructor; open only to Theatre majors.) May be repeated for a total of four hours.

390 **Musical Theatre Workshop II. 3 hrs.**
Applied skills in musical theatre for leading and solo roles, including integration of dance, music, and dialogue in ensemble performance. Intended for advanced students with performance experience in musical theatre. (PR: THE 295 or Permission; Audition Required)

410 **Playwriting. 3 hrs.**
Study of dramatic structure, characterization, dialogue, themes, sounds, and spectacle, including the writing of one-act plays. (PR: THE 101 and successful completion of Sophomore Review or permission of instructor)

420 **Musical Theatre Studies. 3 hrs.**
Analysis of musical scripts, study of spoken and musical scenes, staging musical numbers, and preparation of audition material. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

421 **Acting for the Camera. 3 hrs.**
Projects in acting for the camera. Video taping of selected acting exercises. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

422 **Stage Combat. 3 hrs.**
Unarmed and small arms combat for theatre and film.

423 **Acting Styles. 3 hrs.**
Interpretation of roles from classical, romantic, neoclassical, and modern plays. (PR: THE 222 and successful completion of Sophomore Review or permission of instructor)

430 **Auditioning II: Professional Aspects. 3 hrs.**
Students develop skills and prepare materials for professional acting auditions. (PR: THE 230)

436 **Children's Theatre. 3 hrs.**
Theory, direction, and staging of plays for children. (PR: THE 295, permission of instructor and the Theatre program director)

437 **Directing I. 3 hrs.**
Introduction to theories, principles, techniques, and history of directing. (PR: Successful completion of Sophomore Review or permission of instructor)

438 **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 437)

440 **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)

441 **Theatre History Since 1660. 3 hrs.**
Survey of man's activities in the theatre from 1660 to present. (PR: THE 101 or permission of instructor. Courses must be taken in sequence.)

450 **Stage Lighting II. 3 hrs.**
Advanced study in lighting design principles utilized for non-proscenium stages and/or impressionistic productions will be emphasized. Combined visual, manual and computer generated documentation will comprise portfolio for final critique. (PR: Successful completion of Sophomore Review or permission of instructor)

460 **Scene Design II. 3 hrs.**
Advanced work in the process and styles of design for the stage. Abstraction, non-traditional materials and computer design utilization for various theatre forms will provide portfolio documentation for final critique. (PR: THE 245, 360)

480 **Special Topics in Theatre. 1-4 hrs.**
Program of study not normally covered in other courses. Topics vary from semester to semester. (PR: Permission of instructor)

485-488 **Independent Study. 1-4 hrs.**
Courses taught by tutorials; directed independent readings or research; problem reports, and other activities designed to fill the needs of individual students. (PR: Permission of chairman)

490 **Theatre Internship. 1-4 hrs.**
Supervised off-campus contractual work-study arrangement with external agencies or theatrical institutions. (PR: Permission of advisor and Theatre chair)

491-494 **Theatre Workshop. 1-4 hrs.**
Practical, participatory courses for advanced students and professionals. Experience in new techniques, theories, and principles. (PR: Permission of instructor)

495H-496H Honors in Theatre. 1-3 hrs.
Readings for honors in theatre. (PR: Permission of director of School of Theatre)

499 Senior Capstone Project. 3 hrs.
The capstone project serves to demonstrate the student's proficiency in the major field of study. It is the culmination of coursework in the student's area of concentration. (PR: permission of student's advisor and committee)

UNIVERSITY HONORS (HON)

The prerequisite for all courses is admission to the Honors College.

200 Second Year Seminar in Leadership, Ethics and Civic Engagement. 3 hrs.
An interdisciplinary seminar for second-year honors students that uses reflective inquiry to explore the interrelation and integration of leadership, ethics and civic engagement in a diverse, interconnected and changing world. (PR: Admission to Honors College)

290 Yeager Seminar I. 4 hrs.
(PR: Admission to the Yeager Scholars program)

291 Yeager Seminar II, 4 hrs.
(PR: Admission to the Yeager Scholars program)

292 Yeager Seminar III (CT). 4 hrs.
(PR: Admission to the Yeager Scholars program)

293 Yeager Seminar IV. 4 hrs.
(PR: Admission to the Yeager Scholars program)

294-296 Interdisciplinary Honors. 3 hrs.
294, Ideas in Social Science; 295, Ideas in Natural Science; 296, Ideas in the Humanities. These courses are subject to periodic changes in content. (PR: Admission to Honors College)

395-396 Interdisciplinary Honors. 3 hrs.
Open to distinguished sophomores and upperclassmen of the undergraduate colleges and schools. Course content varies each semester. (PR: Admission to Honors College)

480-483 Special Topics. 1-4 hrs.
A study of special topics not listed under current course offerings. (PR: Admission to Honors College)

484 Honors College Newsletter. 1-2 hrs.
Students will learn skills for and participate in information gathering, writing, editing and designing to produce the Honors College electronic newsletter, The Honors Oracle. (PR: Admission to the Honors College)

485-486 Independent Study. 1-4 hrs.
(PR: Admission to Honors College)

488 Student Association Steering Committee. 1-2 hrs.
The Honors College Student Association Steering Committee studies leadership and community-building strategies and organizes service, educational, and social functions for Honors College students. (PR: Admission to Honors College)

UNIVERSITY STUDIES (UNI)

100 Freshman First Class. 1 hr.
An introduction to the academic structures and expectations of the university**.**

101 New Student Seminar. 1 hr.
An in-depth introduction to college life, covering areas such as academic expectations and skills, personal adjustments, and social issues. Intended for freshmen.

102 Strategies for Academic Success. 1 hr.
An academic enrichment course which provides students with strategies and practical experience for academic success. Topics to be covered include research skills, critical thinking applications, and effective study skills.

103 Career Planning for Undecided Students. 1 hr.
Designed for undecided college students. Helps explore career options and majors. Topics include interest testing, career information, decision-making skills, and job finding strategies. Course does not count toward graduation.

201 Peer Mentoring for UNI 101. 1 hr.
Students trained as peer advisors will lead discussions and campus field trips, and work with faculty advisors in the design and implementation of the freshman introduction to campus life and classes.

400 Graduate School Preparation. 2 hrs.
This course will provide necessary steps, tools, and resources future graduates need in completing their undergraduate careers and pursuing graduate degrees. Designed for students graduating within one year. (PR: Junior standing)

WOMEN'S STUDIES (WS)

101 Introduction to Women's Studies.

The Faculty

ACCOUNTANCY AND LEGAL ENVIRONMENT

Professor

Jeffrey Archambault, Ph.D., C.P.A. (Associate Dean, Lewis College of Business); Nancy Lankton, Ph.D., C.P.A., C.I.S.A. (Division Head)

Associate Professor

Marie Archambault, Ph.D., C.P.A., C.M.A.; Raymond Keener, J.D., LL.M., C.P.A.; Jean B. Price, Ph.D. (Associate Dean, Lewis College of Business); Charles T. Stivason, Ph.D., C.P.A.

Assistant Professor

Casey Baker, J.D.; Susan Lanham, Ph.D., MAFF; Junwook Yoo, Ph.D.

Instructor

Parporn Akathaporn, D.B.A., Tessa Carr, M.B.A., C.P.A., C.F.P., C.G.M.A.; Amanda Thompson-Abbott, MB.A., C.P.A.;

APPLIED SCIENCE AND TECHNOLOGY

Professor

Tracy Christofero, Ph.D.; James McIntosh, M.S. (CIH, CSP); David Scott Simonton, Ph.D., PE; Anthony B. Szwilski, Ph.D., PE

Associate Professor

Jian Liu, Ph.D.; Clair Joseph Roudebush, Ph.D. (CSP)

Assistant Professor

Priyadarshini Dasgupta, Ph.D.

ART AND DESIGN

Professor

Maribea Barnes, Ph.D.; Jonathan Cox, M.F.A.; Hayson Harrison, M.B.A.; Sandra Reed, M.F.A.

Associate Professor

Frederick Bartolovic, M.F.A.; Miyuki Cook, M.F.A.; Ian Hagarty, M.F.A.; Daniel Kaufmann, M.F.A. (Interim Director); Heather Stark, Ph.D.;

Assistant Professor

Rachel Danford, Ph.D.; Daniel Dean, M.F.A.; Hanna Kozlowski-Slone, M.F.A.; Sarah McDermott, M.F.A.

BIOLOGICAL SCIENCES

Professor

Victor Fet, Ph.D.; Philipe Georgel, Ph.D.; James E. Joy, Ph.D.; David Mallory, Ph.D. (Chair); F. Robin O'Keefe, Ph.D.; Elmer Price, Ph.D.; Charles C. Somerville, Ph.D. (Dean, College of Science); Suzanne Strait, Ph.D.; Wendy Trzyna, Ph.D.; Jagan Valluri, Ph.D.; Guo-Zhang Zhu, Ph.D.

Associate Professor

Brian Antonsen, Ph.D.; Anne Axel, Ph.D.; Gary Schultz, Ph.D.; Nadja Spitzer, Ph.D.; Jayme Waldron, Ph.D.

Assistant Professor

Habiba Chirchir, Ph.D.; Herman Mays, Ph.D.; Jennifer Mosher, Ph.D.; Shane Welch, Ph.D.

Term Faculty

Travis Cyphert, Ph.D.

CHEMISTRY

Professor

Michael P. Castellani, Ph.D. (Chair); Leslie M. Frost, Ph.D.; Michael L. Norton, Ph.D.; Lawrence R. Schmitz, Ph.D.

Associate Professor

B. Scott Day, Ph.D.; Derrick R. J. Kolling, Ph.D.; Laura R. McCunn, Ph.D.; Robert J. Morgan, Ph.D.; Kenneth J. O'Connor, Ph.D.; William D. Price, Ph.D.; Bin Wang, Ph.D.

Assistant Professor

Rosalynn Quiñones, Ph.D.; John Markiewicz, Ph.D.; John F. Rakus, Ph.D.

CLINICAL LABORATORY SCIENCES

Associate Professor

Muhammad Amjad, Ph.D.; Jennifer D. Perry, M.S. (Chair)

Assistant Professor

Pamela Meadows, B.S.

COMMUNICATION DISORDERS

Professor

Karen L. McComas, Ed.D. (Executive Director, Center for Teaching and Learning), Mary E. Reynolds, Ph.D. (Associate Vice President for Assessment and Quality Initiatives)

Associate Professor

Pamela Holland, M.A.; Karen K. McNealy, Au.D. (Chair)

Assistant Professor

Ernay Adams M.S.; Patricia Agnello, M.A.; Malayna Bailey M.S.; Nancy Bockway, M.A.; Sarah Clemins, M.S.; Craig Coleman, M.A.; Shae Dean, M.A.; Loukia Dixon, M.A.; Kelly Harlow, M.A.; Sandra Kemper, M.A.; Kelly Rutherford, M.S.; Mary Weidner, A.B.D.

COMMUNICATION STUDIES

Professor

Robert B. Bookwalter, Ph.D. (Dean, College of Liberal Arts); Camilla Brammer, Ph.D. (Chair).; Barbara J. Tarter, Ph.D.

Associate Professor

Susan Gilpin, Ph.D.; Jill Underhill, Ph.D.; Steve Underhill, Ph.D.

Instructors

Clara Adkins, M.A.; Deborah Adkins, M.A.; Linda Cole, M.A.; David Cook, M.A.; Nancy Jackson, M.A.; Anita Lane, M.A.; Edward Woods, Ph.D.

COMPUTER AND INFORMATION TECHNOLOGY

Professor

Brian M. Morgan, M.S. (Chair)

Associate Professor

Hamid Chahryar, Ph.D.

Assistant Professor

David Cartwright, M.S.; Davide Mauro, Ph.D.; Matthew Mundell, M.S.

COMPUTER SCIENCE

Professor

Jamil Chaudri, PhD.; Venkat Gudivada, Ph.D.

Associate Professor

John Biros, M.S.; Paulus Wahjudi, Ph.D.

Assistant Professor

Haroon Malik, Ph.D.

CRIMINAL JUSTICE AND CRIMINOLOGY

Professor

Dhruba J. Bora, Ph.D. (Chair); Margaret Phipps Brown, J.D.; Kimberly A. DeTardo-Bora, Ph.D.

Assistant Professor

Wendy Perkins, Ph.D.; Leslie-Dawn Quick, Ph.D.; Stephen Young, Ph.D.

CURRICULUM AND INSTRUCTION

(See Education)

CYTOTECHNOLOGY

Clinical Assistant Professor

Margene Smith, B.S., C.T., (ASCP); Carolyn Stevens, B.S., C.T. (ASCP)

Clinical Instructor

Donna Deaton, B.S., C.T. (ASCP); Joseph Saxton, B.S., C.T. (ASCP)

DIETETICS

Professor

Mary Kathryn Gould, Ed.D.; Kelli J. Williams, Ph.D. (Chair)

Assistant Professor

Jana A. Hovland, M.S.

EDUCATION

Professor

Robert S. Angel, Ph.D. (Program Coordinator); Neil V. Arneson, Ed.D.; Mary Jo Graham, Ph.D.; Barbara P. Guyer, Ed.D.; Thelma Isaacs, Ed.D.; Thomas Klein, Ed.D.; Paula L. Lucas, Ed.D. (Program Coordinator); Arthur S. Maynard, Ph.D. (Program Coordinator); Ruth Ann Murphy, Ph.D.; Kathy Seelinger, Ed.D.; James Sottile, Ed.D. (Assistant Chair); Linda Spatig, Ed.D.

Associate Professor

Melinda Backus, Ed.D.; Steven R. Banks, Ed.D.; Janet Dozier, Ed.D.; Glenda Lowry, Ph.D., Mary Mhango, Ph.D. Melisa Reed, Ed.D.; George Watson, Ed.D. (Program Coordinator)

Assistant Professor

Ruthann Arneson, Ed.S.; Laura Boswell, Ed.D.; William H. Paynter, Ph.D.

ENGINEERING

Professor

Richard Begley, Ph.D.; Ronald Bieniek, Ph.D.; Gan Sheng Chen, Ph.D.; Eldon Larsen, Ph.D.; Asad Salem, Ph.D. (Division Chair), Jaime Taylor, Ph.D. (Senior Vice President for Academic Affairs and Provost); Wael Zatar, Ph.D. (Dean, CITE)

Associate Professor

Isaac Wait, Ph.D., P.E.

Assistant Professor

Almuatazbellah Boker, Ph.D.; Mehdi Esmaeilpour, Ph.D.; Salam Hajjar, Ph.D.; Tarek Masaud, Ph.D.; Ana Pena-Alvarez, Ph.D.; Yousef Sardahi, Ph.D.; Sungmin Youn, Ph.D.; Iyad Hijazi, Ph.D.; Greg Michaelson, Ph.D., P.E.

ENGLISH

Professor

Timothy Burbery, Ph.D.; Allison Carey, Ph.D. (Chair); Hyo-Chang Hong, Ph.D.; Gwenyth Hood, Ph.D.; James D. Riemer, Ph.D.; Kateryna Schray, Ph.D.; John W. Teel, M.A.; John Van Kirk, M.F.A.; John Young, Ph.D.

Associate Professor

Roxanne Aftanas, Ph.D.; David Hatfield, Ph.D.; Kristen Lillvis, Ph.D.; Rachael Peckham, Ph.D.; Kelli Prejean, Ph.D.; Michele Schiavone, Ph.D.; Sherri Smith, Ph.D. (Associate Vice President of Academic Affairs, Dean of Undergraduate Studies); Anthony Viola, Ph.D.; Jun Zhao, Ph.D.

Assistant Professor

Ryan Angus, Ph.D.; Hilary Brewster, Ph.D.; Puspa Damai, Ph.D.; Robert Ellison, Ph.D.; Carrie Oeding, Ph.D.; Eric Smith, M.F.A.; Walter Squire, Ph.D.; Jill Treftz, Ph.D.

Instructor

Teffany Armel, M.A.; Mallory Carpenter, M.A.; Sarah Chavez, Ph.D.; Abby Daniel, M.A.; Sabrina Jones, M.A.; Nicole Lawrence, M.F.A.; Daniel Lewis, Ph.D.; Mitchell Lilly, M.A.; Cody Lumpkin, Ph.D.; Joni Magnusson, M.A.; Daniel O'Malley, M.F.A.; Amine Oudghiri-Otmani, M.A.; Ian Nolte, M.A.; Rachel Rinehart, Ph.D.; Anna Rollins, M.A.; Jessica Sowards, M.A.; Kristin Steele, M.F.A.; Margaret Sullivan, Ph.D.; Stephanie Walker, M.A.

FINANCE AND ECONOMICS

Professor

Jacqueline Agesa, Ph.D.; Richard Agesa, Ph.D. (Division Head); Dallas Brozik, Ph.D.

Associate Professor

Mohammed Karim, Ph.D.; Robin McCutcheon, Ph.D.; Shaorang Zhang, Ph.D.

Assistant Professor

Nabaneeta Biswas, Ph.D.; Yi Duan, Ph.D.; Bo Feng, Ph.D.; Mohammed Karim, Ph.D.; Boniface Yemba, Ph.D.

FORENSIC SCIENCES

Professor

Menashi Cohenford, Ph.D.

Associate Professor

Josh Brunty, M.S.; John Sammons, M.S. (Chair)

Assistant Professor

Bill Gardner, M.A.

GEOGRAPHY

Professor

Kevin Law, Ph.D.; James M. Leonard, Ph.D. (Chair)

Associate Professor

Godwin Djietror, Ph.D.; Anita Walz, Ph.D.

Assistant Professor

Hilton Cordoba, Ph.D.; Jonathan Kozar, Ph.D.

GEOLOGY

Professor

Ronald L. Martino, Ph.D. (Chair)

Associate Professor

Aley El-Shazly, Ph.D.; William L. Niemann, Ph.D.

Assistant Professor

Andrew Horst, Ph.D.

HISTORY

Professor

Daniel U. Holbrook, Ph.D.; Montserrat M. Miller, Ph.D.; William G. Palmer, Ph.D.; Phillip Rutherford, Ph.D.

Associate Professor

Kevin Barksdale, Ph.D.; Robert Deal, Ph.D.; Laura Michele Diener, Ph.D.; Greta Rensenbrink, Ph.D. (Chair); Anara Tabyshalieva, Ph.D.; David J. Trowbridge, Ph.D.; Kathie D. Williams, Ph.D.

Assistant Professor

Michael Woods, Ph.D.

HUMANITIES

Professor

Jeremy Barris, Ph.D.; Gayle L. Ormiston, Ph.D.; Jeffrey Powell, Ph.D.; John N. Vielkind (Chair), Ph.D.

Associate Professor

E. Del Chrol, Ph.D.; Christina Franzen, Ph.D., Jeffrey Ruff, Ph.D.

JOURNALISM AND MASS COMMUNICATIONS

Professor

Charles G. Bailey, Ed.D. (Faculty Manager, WMUL-FM); Janet L. Dooley, M.S. (Associate Dean, College of Arts and Media; Director, W. Page Pitt School of Journalism and Mass Communications); Terry L. Hapney, Jr., Ph.D.; Dan Hollis, M.A.; Burnis Morris, M.A. (Carter G. Woodson Chair); Robert Rabe, Ph.D.; Jennifer Sias, M.A., M.L.S.; Christopher Swindell, Ph.D.

Associate Professor

Allyson Goodman, Ed.D.; Christine Ingersoll, M.F.A.

Assistant Professor

Tijah Bumgarner, M.A.; Sandra York, M.A.J.

KINESIOLOGY

Professor

Jennifer Mak, Ph.D.; Gary McIlvain, Ed.D., LAT/ATC (Chair); Terry Shepherd, Ph.D.

Associate Professor

Joseph Beckett, Ed.D.; Suzanne Konz, Ph.D., ATC, CSCS

Assistant Professor

Wanyong Choi, Ph.D.; William Z. Garrett, D.H.S., LAT/ATC, CSCS; Steve Leigh, Ph.D., AMInstP; Robert Powell, M.S.; Mark Timmons, Ph.D.; Kumika Toma, Ph.D.

MANAGEMENT AND HEALTH CARE ADMINISTRATION

Professor

Charles K. Braun, Ph.D.; Alberto M. Coustasse-Henecke, M.D., Dr.P.H.; Dennis C. Emmett, D.B.A.; Daesung Ha, Ph.D.; Doohee Lee, Ph.D.; Marjorie L. McInerney, Ph.D.; Deepak K. Subedi, Ph.D. (Division Head)

Associate Professor

Ivan S. Muslin, Ph.D.; Marc D. Sollosy, D.B.A.

Assistant Professor

Kevin Knotts, Ph..D.; Uyi Lawani, Ph.D.; Ralph McKinney, D.B.A.; William Kent Willis, Dr.P.H.; Jingran Zhang, Ph.D.

Instructor

Jamey R. Halleck, M.B.A.; Margie Phillips, M.S.

MARKETING, MANAGEMENT INFORMATION SYSTEMS, AND ENTREPRENEURSHIP

Professor

Elizabeth Alexander, Ph.D. (Division Head); Anil Gurung, Ph.D.; Deanna Mader, Ph.D.; Frederick Mader, Ph.D.; Dale Shao, Ph.D.; Uday S. Tate, D.B.A.; Rick Weible, D.B.A.

Associate Professor

Rex McClure, Ph.D.

Assistant Professor

Erik Bushey, Ph.D.; Ben Eng, Ph.D.

Instructor

Olen York, J.D. L.L.M.

MATHEMATICS

Professor

Laura J. Adkins, Ph.D.; Alfred Akinsete, Ph.D.; Ariyadasa Aluthge, Ph.D.; Clayton Brooks, Ph.D.; Matthew Carlton, Ph.D.; David A. Cusick, Ph.D.; John Drost, Ph.D.; Bonita Lawrence, Ph.D.; Karen Mitchell, Ed.D.; Evelyn Pupplo-Cody, Ph.D.; Scott Sarra, Ph.D.; Peter Saveliev, Ph.D.

Associate Professor

Alan Horwitz, Ph.D.; Basant Karna, Ph.D.; Avishek Mallick, Ph.D.; Anna Mummert, Ph.D.; Carl Mummert, Ph.D.; Elizabeth Niese, Ph.D.; Michael Schroeder, Ph.D.

Assistant Professor

Ansam Al-Aqtash, Ph.D.; Raid Al-Aqtash, Ph.D.; Andrea Duhon, Ph.D.; Alaa Elkadry, Ph.D.; JiYoon Jung, Ph.D.; Michael Otunuga, Ph.D.;

Instructor

Mary Crytzer, M.A.; Jessica Johnson, M.A.; Rob-Roy Mace, M.A.; Tracy Marsh, M.S.; Shannon Miller-Mace, M.A.; Stacy Scudder, M.A.; Vincent Smith, M.A.; Laura Stapleton, M.A.; Kusum Subedi, M.S.; Devon Wright, M.A.

MILITARY SCIENCE

Professor

LTC Paul J. Painter (Department Head)

Assistant Professor

CPT Lee Canafax, Jr.

Military Instructors

2LT Tyler D. Adamczak

Recruiting Officer/Scholarship Officer

Kelli Brewer

MODERN LANGUAGES

Professor

M. Cristina Burgueño, Ph.D.; Eric Migernier, Ph.D.; José Luis Morillo-Amo, Ph.D.

Associate Professor

Natsuki Fukunaga Anderson, Ph.D. (Chair); Shannon Butler, Ph.D.; Viatcheslav Gratchev, Ph.D.; Maria Rosario Quintana-Villamandos, Ph.D.; Zelideth M. Rivas, Ph.D.

Assistant Professor

Ida Day, Ph.D.; Nicholas Shangler, Ph.D.

MUSIC

Professor

Julio Alves, D.M.; Ann M. Bingham, D.M.A.; W. Edwin Bingham, D.M.A.; David H. Castleberry, D.M.A.(Associate Dean, College of Arts and Media); Sölen Dikener, D.M.A.; Wendell B. Dobbs, D.M.A. (Interim Dean, College of Arts and Media); James S. Hall, M.M.; Stephen Lawson, D.M.A.; Ben F. Miller, D.M.A.; Martin W. Saunders, D.M.A.; Elizabeth R. Smith, D.M.A.; Michael S. Stroeher, Ph.D.; Vicki Stroeher, Ph.D.; Susan Tusing, D.M.A. (Director); Mark Zanter, D.M.A.

Associate Professor

Henning Vauth, D.M.A.

Assistant Professor

Johan Botes, D.M.A.; Alexander Lee, D.M.A.; Briana Nannen, Ph.D.; Jesse Nolan, M.M.; Carline Waugh, D.M.A.

Instructor

Adam Dalton, D.M.A.; Jesse Stevens, M.A.; Jeff Wolfe, M.M.

NATURAL RESOURCES AND THE ENVIRONMENT

Professor

Mindy Armstead, Ph.D. (Chair)

Associate Professor

Tom Jones, Ph.D.; Min Kook Kim, Ph.D.

Assistant Professor

David Graefe, Ph.D.

Instructor

Sam Colvin, M.A.; Terry Shank, M.S.

NURSING

Professor

Rebecca Appleton, Ph.D., M.S., R.N.; Annette Ferguson, D.N.P., R.N.; Denise Landry, Ed.D., M.S.N., R.N., A.P.R.N., F.N.P-B.C.; Deanna Pope, D.N.P., R.N.; Sandra Prunty, Ph.D., M.S.N., R.N.; Lisa Ramsburg, Ed.D., M.S.N., R.N., C.N.E.; Diana Stotts, Ph.D., M.S.N., R.N., A.P.R.N.-F.N.P-B.C.; Bobbie Taylor, D.N.P, A.P. R. N., F.N.P.-B.C.; Robin Walton, Ed.D., M.S.N., R.N., A.P.R.N., F.N.P-B.C.

Associate Professor

Bethany Dyer, D.N.P., R.N.; Nancy Elkins, Ed.D., M.S.N., R.N.; Debra Greene, D.N.P., R.N., C.N.E.; Susan Imes, Ph.D., M.S.N., R.N.; Lynda Turner, Ed.D., M.S.N., R.N., A.C.N.S.-B.C., C.N.E.; Susan Welch, Ph.D., M.S., R.N., A.P.R.N., P.N.P-B.C., C.N.E.

Assistant Professor

Susan Booton, M.S.N., R.N. A.P.R.N., F.N.P-B.C., C.C.R.N.; Ashlee Gallion, D.N.P., R.N.; Tammy Minor, D.N.P., R.N.; Amber Nowlin, M.S.N., R.N.

Clinical Faculty

Sara Hodges, D.N.P., R.N.; Klara Kovacs, M.S.N., R.N., C.N.M.

NURSING: ST. MARY's MARSHALL COOPERATIVE NURSING PROGRAM FACULTY

Professor

Joey Trader, Ed.D. , M.S.N., R.N., C.N.E. (Director); Deborah Bridgewater, M.S.N., R.N., C.N.E. Brooke Leaberry, D.N. P., ANP-BC, WHNP-BC, MSN, RN, CCRN, CHFN; Tonya Taylor, M.S.N., F.N.P.-B.C., R.N.

Associate Professor

Kristina Childers, M.S.N.,A.P.R.N., F.N.P.-B.C., R.N.; Misty Cooper, M.S.N., R.N.; Rejeanne DuVall, M.S.N./Ed., R.N.; Allison Morrison, M.S.N., R.N.; Natalie Perry, M.S.N., R.N., A.P.R.N., F.N.P.-B.C.; Rebecca Porter, M.S.N., F.N.P.-B.C., R.N., C.N.E.

Assistant Professor

Angela Bartram, M.S.N., R.N.; Nancy Brumfield, MSN, RN; Amanda Burton, M.S.N., C.F.N.P., R.N.; Kimberly Damron, M.S.N., R.N.; Shelia Foster, M.S.N., R.N.; Angela Graham, M.S.N., R.N.; Sara Marriott, M.S.N., R.N.C., I.B.C.L.C.; Lynda McKendree, M.S.N./Ed., R.N., C.D.E.; Tim Mitchell, M.S.N., R.N., C.N.O.R., C.L.N.C., C.S.S.M.

PHYSICS

Professor

Ralph E. Oberly, Ph.D.; Thomas E. Wilson, Ph.D., Que Huong Nguyen, Ph.D. (Chair)

Associate Professor

Maria Babuic, Ph.D.; Xiaojuan Fan, Ph.D.; Jon Saken, Ph.D.

Assistant Professor

Sean P. McBride, Ph.D.; Curtis Foltz, Ph.D.; Howard Richards, Ph.D.; Andre Wehner, Ph.D.

POLITICAL SCIENCE

Professor

Robert W. Behrman, Ph.D.; Cheryl Brown, Ph.D. (Associate Dean, College of Liberal Arts); Jess Morrissette, Ph.D.; Shawn Schulenberg, Ph.D. (Chair); Jamie Warner, Ph.D.

Associate Professor

Marybeth Beller, Ph.D.; George Davis, Ph.D.

Assistant Professor

C. Damien Arthur, Ph.D.

Instructor

Patricia Proctor, J.D.

PSYCHOLOGY

Professor

Keith Beard, Psy.D.; Marianna Footo-Linz, Ph.D. (Chair); April D. Fugett-Fuller, Ph.D.; Christopher W. Legrow, Ph.D.; Marc A. Lindberg, Ph.D.; Steven P. Mewaldt, Ph.D.; Paige Muellerleile, Ph.D.; Pamela Mulder, Ph.D.; David J. Pittenger, Ph.D. (Interim Associate Vice President and Dean of Graduate Studies)

Associate Professor

Keelon Hinton, Ph.D.; Dawn Howerton, Ph.D.; Penny Koontz, Psy. D. Thomas D. Linz, Ph.D.; Jennifer Tiano, Ph.D.

Assistant Professor

Melissa Atkins, Ph.D.; Brittany Canady, Ph.D., ABPP; Jonathan Day-Brown, Ph.D.

SOCIAL WORK

Professor

Philip W. Carter, Jr., M.S.W.; Jo Dee Gottlieb, M.S.W., LCSW, Peggy Harman, Ph.D.

SOCIOLOGY AND ANTHROPOLOGY

Professor

Nicholas P. Freidin, D.Phil.; Brian Hoey, Ph.D. (Associate Dean, Honors College); Marty Laubach, Ph.D. (Chair); Frederick Roth, Ph.D.

Associate Professor

Robin Conley, Ph.D.; Kristi Fondren, Ph.D.; Richard Garnett, Ph.D.; Donna Sullivan, Ph.D.

TEACHER EDUCATION

(See Education)

THEATRE

Professor

John Colclough, M.F.A.; Julie Jackson, Ph.D.; Edward Leo Murphy, M.F.A.; Howard Lang Reynolds, M.F.A. (Director); Joan St. Germain, M.F.A.

UNIVERSITY LIBRARIES

Professor/Librarian IV

Gretchen Beach, M.S.L.S.; Monica Brooks, M.S.L.S., Ed.D.; Nat DeBruin, M.L.S.; Majed Khader, M.L.S., Ph.D.; Stephen Tipler, M.L.S.,, M.I.S., M.B.A.; Jingping Zhang, M.L.S.

Associate Professor/Librarian III

Tim Balch, M.S.L.S.; M.A.; Ed Dzierzak, M.S.L.S.; Lynne Edington, M.S.L.S., Ed.S.; Kelli Johnson, M.L.S., M.S., Ed.S.; Christine Lewis, M.L.S., University of South Carolina; M.S.I.R., West Virginia University; Larry Sheret, M.A.L.I.S.; Sabrina Thomas, M.I.R.L.S., M.A.; Ron Titus, M.L.S., M.A.; Thom Walker, M.S.L.S.; Paris Webb, M.S.L.S., M.A.

Assistant Professor/Librarian II

Jackie DiOrio, M.S.I.; Kat Phillips, M.L.I.S.; Eryn Roles, M.S.L.S., M.A.; Lori Thompson, M.S.L.S., M.A.

University Calendar

Marshall University Academic Calendar for 2018-2019

FIRST SEMESTER 2018-2019

August 10, Friday ..... End of summer school
August 13, Monday – August 17, Friday ..... Registration/Schedule Adjustment
August 14, Tuesday, 9 a.m. ..... Residence Halls Open for Freshmen
August 14, Tuesday -- August 19, Sunday ..... Week of Welcome for freshmen
August 18, Saturday, 9 a.m. ..... Residence halls open for upperclassmen
August 20, Monday, 8 a.m. ..... First day of classes
August 20, Monday – August 24,, Friday ..... Late registration/schedule adjustment (add-drop)
August 24, Friday ..... Last day to add a class
August 27, Monday ..... "W" Withdrawal period begins
September 1, Saturday – September 3, Monday ..... University computing services unavailable
September 3, Monday ..... Labor Day Holiday- University Closed
September 14, Friday ..... Application for December graduation due in academic dean's office
September 21, Friday ..... Last Day to Drop 1st 8 Weeks Courses
October 1, Monday ..... Final draft of thesis/dissertation delivered to committee chair
October 8, Monday, Noon ..... Freshman/Sophomore midterm grades due
October 10, Wednesday ..... 1st 8 weeks courses end
October 11, Thursday ..... 2nd 8 weeks courses begin
October 22, Monday ..... Students should schedule appointments with advisors to prepare for advance registration. (Required for students who have mandatory advising holds)
October 26, Friday ..... Last day to drop a full semester individual course
October 29, Monday ..... Recommended date to apply for May graduation
October 29, Monday - December 7, Friday ..... Complete withdrawals only
November 5, Monday - November 16, Friday ..... Advance registration for spring semester (open only to currently enrolled students)
November 13, Tuesday ..... Last day to drop 2nd 8 weeks courses
November 17, Saturday, Noon ..... Residence halls close
November 19, Monday ..... Advance registration for spring semester (open to admitted and readmitted students)
November 19, Monday - November 24, Saturday ..... Thanksgiving Break Classes dismissed
November 22, Thursday - November 23, Friday ..... Thanksgiving Holiday University closed
November 25, Sunday, 9 a.m. ..... Residence halls open
November 26, Monday ..... Classes resume
December 3, Monday – December 7, Friday ..... "Dead week"
December 7, Friday ..... Last class day; Last day to completely withdraw from fall semester
December 8, Saturday ..... Exam day for Saturday classes, Some common finals
December 10, Monday ..... Exam day
December 11, Tuesday ..... Exam day
December 12, Wednesday ..... Study Day Exams resume at 3 p.m. for Wednesday evening classes
December 13, Thursday ..... Approved Thesis/Dissertation must be submitted to the EDT website Electronic Thesis and Dissertation form and graduation fee receipt submitted to the Graduate College Office

December 13, Thursday ..... Exam Day
December 14, Friday ..... Exam day
December 15, Saturday, TBD ..... Winter Commencement, Big Sandy Superstore Arena
December 16, Sunday, Noon ..... Residence halls close
December 17, Monday, Noon ..... Final Grades due
December 24, Monday- January 2, Wednesday ..... Winter break, University closed
December 27, Thursday - December 28, Friday ..... Student Service Offices Open 10:00 a.m. – 4:00 p.m.
(Admissions, Bursar, Financial Aid, Registrar, Student Resource Center)

SECOND SEMESTER 2018-2019

January 3, 2019, Thursday ..... University reopens
January 3, Thursday – January 11, Friday ..... Registration/Schedule adjustments
January 13, Sunday, 9 a.m. ..... Residence halls open
January 14, Monday, 8 a.m. ..... First Day of Classes
January 14, Monday – January 18, Friday ..... Late registration/schedule adjustment (add-drop)
January 18, Friday ..... Last day to add a class
January 21, Monday ..... Martin Luther King, Jr. Holiday - University closed
January 22, Tuesday ..... "W" Withdrawal period begins
February 8, Friday ..... Applications for May graduation due in dean's office
February 15, Friday ..... Last day to drop 1st eight weeks courses
February 25, Monday ..... Final draft of thesis/dissertation delivered to committee chair
March 4, Monday, Noon ..... Freshman/sophomore midterm grades due
March 6, Wednesday ..... 1st 8 weeks courses end
March 7, Thursday ..... 2nd 8 weeks courses begin
March 18, Monday ..... Students should schedule appointments with advisors
to prepare for advance registration for summer and fall.
(Required for students with mandatory advising holds.)
March 22, Friday ..... Last day to drop an individual course
March 23, Saturday, Noon ..... Residence halls close
March 25, Monday – March 30, Saturday ..... Spring Break
Classes dismissed
March 25, Monday-May 3, Friday ..... Complete Withdrawals Only
April 1, Monday ..... Classes resume
April 1, Monday ..... Recommended date to apply for December 2018 graduation
April 1, Monday – April 5, Friday ..... Advance registration for summer sessions
(open only to currently enrolled students)
April 8, Monday ..... Advance registration for summer sessions begin (open to admitted/readmitted students)
April 15, Monday – April 26, Friday ..... Advance registration for fall semester
(open only to currently enrolled students)
April 16, Tuesday ..... Last day to drop a 2nd 8 weeks course
April 29, Monday ..... Advance registration for fall semester begins
(open to admitted/readmitted students except first-time fall undergraduates)
April 29, Monday – May 3, Friday ..... "Dead Week"
May 3, Friday ..... Last class day
Last day to completely withdraw from spring semester
May 4, Saturday ..... Exam day for Saturday classes
Some common finals
May 6, Monday ..... Exam Day
May 7, Tuesday ..... Exam Day
May 8, Wednesday ..... Study Day
Exams resume at 3 p.m. for Wednesday evening classes
May 9, Thursday ..... Exam Day
May 9 Thursday ..... Approved Thesis/Dissertation must be submitted to the EDT website
Electronic Thesis and Dissertation form and
graduation fee receipt submitted to the Graduate College Office

(continued)

May 10, Friday ..... Exam Day
May 11, Saturday, TBD at Big Sandy Superstore Arena .....Commencement
Official May Graduation Date
May 12 Sunday, Noon..... Residence halls close
May 14 Tuesday, Noon ..... Final Grades due

SUMMER SESSIONS 2019

May 13, Monday – August 16, Friday ..... Summer School Sessions
May 25 Saturday – May 27, Monday ..... University Computer Services Unavailable
May 27, Monday ..... Memorial Day Holiday
University closed
July 4, Thursday..... Independence Day Holiday
University closed

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