This 2005-06 Shepherd University Catalog is for information purposes only and is not considered a binding contract between Shepherd University and students. Changes may apply to both present and prospective students. Although University officials are available to advise students, it is the student’s responsibility to comply with University policies, including the requirements for degrees.
PERSONS TO WHOM INQUIRIES MAY BE DIRECTED
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POLICY OF NONDISCRIMINATION

The University provides opportunity 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, sex, sexual preference, religion, age, national origin, or disability. The University neither affiliates knowingly with nor grants recognition to any individual, group, or organization having policies that discriminate on the basis of race, color, age, religion, sex, sexual preference, national origin, or disability, as defined by applicable laws and regulations.

Shepherd University is required by Section 904, Title IX, Education Amendments of 1972, not to deny admission on the ground of blindness or severely impaired vision; by 45 CFR 84, Subpart E, Section 84.42, and by Section 504 Rehabilitation Act of 1973, nor to deny admission on basis of handicap; by 45 CFR 90, 91 not to discriminate on basis of age; and by 45 CFR 86, Subpart C, Section 86.21, not to deny admission on basis of sex. By Title VI of the Civil Rights Act of 1964, no person shall be subjected to discrimination on the ground of race, color, or national origin. Shepherd University is an equal opportunity-affirmative action employer in compliance with Title VII of the Civil Rights Act, West Virginia Human Rights Act, Title IX (Education Amendments of 1972), Section 504, Rehabilitation Act of 1973, American with Disabilities Act, and other applicable laws and regulations.

The Shepherd University Catalog is published through the cooperative efforts of the Office of the Registrar and the Office of External Affairs.
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8/12/05 Fri Orientation, Academic Advisement; Registration/Payment for New Freshmen, Transfers and Readmits
8/12/05 Fri Add/Drop and Late Registration (Late Fee Applies) via RAIL begins at 8 p.m. (All hours except 4 a.m.-8 a.m.)
8/15/05 Mon Classes Begin
8/15/05 Mon Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
8/19/05 Fri Last Day to Add/Drop or Late Register via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
8/26/05 Fri Last Day to Change a Course from Credit to Pass/Fail Status
9/5/05 Mon Labor Day—Holiday
9/6/05 Tues Last Day to Change a Course from Credit to Audit Status
9/23/05 Fri Last Day to Withdraw from first 8-weeks class—See Advisor by Noon
10/3/05 Mon First Day of Mid-term Exams
10/7/05 Fri Last Day of Mid-term Exams; Last Day to Apply for May 2006 Graduation (Office of the Registrar)
10/10/05 Mon Mid-term Grades Due—9 a.m.; Second 8-weeks Classes Begin
10/14/05 Fri Mid-term Grades Available on RAIL
10/26/05 Wed First Day of Academic Advisement for Continuing Students for Spring 2006
11/4/05 Fri Last Day to Withdraw from a Full Semester Class—See Advisor by Noon
11/7/05 Mon First Day of Spring 2006 RAIL Registration for Continuing Students; 9 a.m.-4 p.m.
11/9/05 Wed Last Day of Academic Advisement for Continuing Students for Spring 2006
11/10/05 Thu Last Day to Withdraw from second 8-weeks Class—See Advisor by Noon
11/20/05 Sun First Day of Thanksgiving Recess
11/27/05 Sun Last Day of Thanksgiving Recess
12/2/05 Fri Last Day of Classes
12/5/05 Mon First Day of Final Exams
12/9/05 Fri Last Day of Final Exams
12/12/05 Mon First Semester Grades Due 9 a.m.—End of First Semester
12/14/05 Wed Grades will be available via RAIL—Tentative
Second Semester Spring 2006
1/6/06 Fri Faculty Report for Spring Semester
1/6/06 Fri Orientation, Academic Advisement, Registration/Payment for New Freshmen, Transfers, and Readmits
1/6/06 Fri Add/Drop and Late Registration (Late Fee Applies) via RAIL begins at 8 p.m. (All hours except 4 a.m.-8 a.m.)
1/9/06 Mon Classes Begin
1/9/06 Mon Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
1/13/06 Fri Last Day to Add/Drop or Late Register via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
1/16/06 Mon Martin Luther King’s Birthday—Holiday
1/23/06 Mon Last Day to Change a Course from Credit to Pass/Fail Status
1/30/06 Mon Last Day to Change a Course from Credit to Audit Status
2/17/06 Fri Last Day to Withdraw from first 8-weeks class—See Advisor by Noon
2/27/06 Mon First Day of Mid-term Exams
3/3/06 Fri Last Day of Mid-term Exams; Last Day to Apply for August and December 2006 Graduation (Office of the Registrar)
3/6/06 Mon Mid-term Grades Due—9 a.m.; Second 8-weeks Classes Begin
3/10/06 Fri Mid-term Grades Available on RAIL
3/12/06 Sun First Day of Spring Recess
3/19/06 Sun Last Day of Spring Recess
3/27/06 Mon First Day of Summer 2006 RAIL Registration for Continuing Students, 9 a.m.-4 p.m.
3/29/06 Wed First Day of Academic Advisement for Continuing Students for Fall 2006
4/7/06 Fri Last Day to Withdraw from a Full Semester Class—See Advisor by Noon
4/10/06 Mon First Day of Fall 2006 RAIL Registration for Continuing Students, 9 a.m.-4 p.m.
4/12/06 Wed Last Day of Academic Advisement for Continuing Students for Fall 2006
4/20/06 Thu First Day of Spring Weekend Recess (If no snow days used)
4/21/06 Fri Second Day of Spring Weekend Recess (If no snow days used)
4/25/06 Tues Last Day to Withdraw from second 8-weeks class - See Advisor by Noon
4/26/06 Wed McMurran Scholars Convocation
5/2/06 Tues Last Day of Classes
5/3/06 Wed Study Day
5/4/06 Thu First Day of Final Exams
5/10/06 Wed Last Day of Final Exams
5/15/06 Mon Second Semester Grades Due 9 a.m.—End of Second Semester
5/16/06 Tue Grades will be available via RAIL—Tentative
5/20/06 Sat Commencement
5/29/06 Mon Memorial Day

First Semester Fall 2006
8/10/06 Thu New Freshmen/Transfer Orientation; Faculty Report for Fall Semester; Faculty Meetings
8/11/06 Fri Orientation, Academic Advisement; Registration/Payment for New Freshmen, Transfers and Readmits
8/11/06 Fri Add/Drop and Late Registration (Late Fee Applies) via RAIL begins at 8 p.m. (All hours except 4 a.m.-8 a.m.)
8/14/06 Mon Classes Begin
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8/18/06 Fri Last Day to Add/Drop or Late Register via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
8/25/06 Fri Last Day to Change a Course from Credit to Pass/Fail Status
9/4/06 Mon Labor Day—Holiday
9/5/06 Tues Last Day to Change a Course from Credit to Audit Status
9/22/06 Fri Last Day to Withdraw from first 8-weeks class—See Advisor by Noon
10/5/06 Thu First Day of Mid-term Exams; 2nd 8-weeks classes begin
10/6/06 Fri Last Day to Apply for May 2007 Graduation (Office of the Registrar)
10/11/06 Wed Last Day of Mid-term Exams
10/12/06 Thu Fall Break
10/13/06 Fri Fall Break
10/16/06 Mon Fall Classes Resume; Mid-term Grades Due 9a.m. (paper)/12 Noon (Web)
10/17/06 Tue Mid-Term grades available on RAIL. (tentative)
10/25/06 Wed First Day of Academic Advisement for Continuing Students for Spring 2007
11/3/06 Fri Last Day to Withdraw from a Full Semester Class—See Advisor by Noon
11/6/06 Mon First Day of Spring 2007 RAIL Registration for Continuing Students; 9 a.m.-4 p.m.
11/8/06 Wed Last Day of Academic Advisement for Continuing Students for Spring 2007
11/9/06 Thu Last Day to Withdraw from second 8-weeks Class—See Advisor by Noon
11/19/06 Sun First Day of Thanksgiving Recess
11/26/06 Sun Last Day of Thanksgiving Recess
12/5/06 Tue Last Day of Classes
12/6/06 Wed Study Day
12/7/06 Thu  First Day of Final Exams
12/13/06 Wed  Last Day of Final Exams
12/18/06 Mon  First Semester Grades Due 9 a.m. (paper)/12 Noon (Web)—End of First Semester
12/19/06 Tue  Grades will be available via RAIL—Tentative

Second Semester Spring 2007
1/10/07 Wed  Faculty Report; Orientation, Academic Advisement, Registration/Payment for New Freshmen, Transfers, and Readmits
1/11/07 Thu  Classes Begin
1/11/07 Thu  Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
1/15/07 Mon  Martin Luther King’s Birthday—Holiday
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2/1/07 Thu  Last Day to Change a Course from Credit to Audit Status
2/23/07 Fri  Last Day to Withdraw from first 8-weeks class—See Advisor by Noon
3/5/07 Mon  First Day of Mid-term Exams
3/9/07 Fri  Last Day of Mid-term Exams; Last Day to Apply for August and December 2007 Graduation (Office of the Registrar)
3/12/07 Mon  Mid-term Grades Due—9 a.m. (paper)/12 Noon (Web); Second 8-weeks Classes Begin
3/16/07 Fri  Mid-term Grades Available on RAIL—Tentative
3/18/07 Sun  First Day of Spring Recess
3/25/07 Sun  Last Day of Spring Recess
4/2/07 Mon  First Day of Summer 2007 RAIL Registration for Continuing Students, 9 a.m.-4 p.m.
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5/1/07 Tues  Last Day to Withdraw from second 8-weeks class—See Advisor by Noon
5/2/07 Wed  McMurran Scholars Convocation
5/4/07 Fri  Last Day of Classes
5/7/07 Mon  First Day of Final Exams
5/11/07 Fri  Last Day of Final Exams
5/14/07 Mon  Second Semester Grades Due—9 a.m. (paper)/12 Noon (Web)—End of Second Semester
5/15/07 Tue  Grades will be available via RAIL—Tentative
5/19/07 Sat  Commencement
5/28/07 Mon  Memorial Day

First Semester Fall 2007
8/9/07 Thu  New Freshmen/Transfer Orientation; Faculty Report for Fall Semester; Faculty Meetings
8/10/07 Fri  Orientation, Academic Advisement; Registration/Payment for New Freshmen, Transfers and Readmits
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8/24/07 Fri Last Day to Change a Course from Credit to Pass/Fail Status
8/31/07 Fri Last Day to Change a Course from Credit to Audit Status
9/3/07 Mon Labor Day—Holiday
9/21/07 Fri Last Day to Withdraw from first 8-weeks class—See Advisor by Noon
10/4/07 Thu First Day of Mid-term Exams; Second 8-weeks Classes Begin
10/5/07 Fri Last Day to Apply for May 2008 Graduation (Office of the Registrar)
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11/5/07 Mon First Day of Spring 2008 RAIL Registration for Continuing Students; 9 a.m.-4 p.m.
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Second Semester Spring 2008

1/9/08 Wed Faculty Report; Orientation, Academic Advisement, Registration/Payment for New Freshmen, Transfers, and Readmits
1/10/08 Thu Classes Begin
1/10/08 Thu Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor
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3/7/08 Fri Last Day of Mid-term Exams; Last Day to Apply for August and December 2008 Graduation (Office of the Registrar)
3/10/08 Mon Mid-term Grades Due—9 a.m. (paper)/12 Noon (Web); Second 8-weeks Classes Begin
3/14/08 Fri Mid-term Grades Available on RAIL
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4/24/08 Thu First Day of Spring Weekend Recess (If no snow days used)
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SECTION I

GENERAL INFORMATION

Shepherd University is a state-supported institution within the West Virginia system of higher education. From its beginnings over 130 years ago, the University has evolved into a comprehensive center of higher learning, serving a number of related, yet distinct roles:

• The University offers baccalaureate degrees in a wide range of fields, encompassing the liberal arts, business administration, teacher education, the social and natural sciences, and other career-oriented areas.

• The University provides credit courses for individuals with no degree aspirations, but who seek to broaden and update their knowledge in either familiar or new fields of intellectual endeavor.

• For the northern Shenandoah Valley region as a whole, the University is a center for noncredit continuing education, public service, and convenient citizen access to extensive programs in art, music, theater, athletics, and other areas of public interest.

Shepherd University has a responsibility to extend its resources beyond the campus, bringing higher education closer to those who seek it.

ACCREDITATION

The University is accredited by The Higher Learning Commission of the North Central Association, www.ncahigherlearningcommission.org, phone 312/263-0456. Individual programs are accredited by the Council on Social Work Education, the National Association of Schools of Music, the West Virginia State Board of Examiners for Registered Nurses, the National League for Nursing Accrediting Commission, the National Council for the Accreditation of Teacher Education, and the International Assembly for Collegiate Business Education.

SCENIC AND HISTORIC LOCATION

Shepherd University is situated in the Shenandoah Valley, on the banks of the Potomac River, in historic Shepherdstown, West Virginia. The oldest town in the state, Shepherdstown is a quaint university community, with the town and campus combining to offer a unique learning-living environment.

Located in the Eastern Panhandle of West Virginia, Shepherdstown is within 20 miles of nearby Maryland, Pennsylvania, and Virginia. It is only 65 miles from the metropolitan areas of Washington, D.C., and Baltimore, Maryland. Within a short hike or drive of the campus are such well-known historic landmarks as Harpers Ferry and the Antietam Battlefield. Across the Potomac River from the campus is the Chesapeake and Ohio Canal National Historical Park. The C & O Canal National Historical Park, developed along the towpath of the old canal, is a beautiful recreational sanctuary, extending 184.5 miles from Cumberland, Maryland, to Georgetown, in the nation's capital. Richmond and Williamsburg, Virginia, as well as New York and Philadelphia, are all within a few hours drive of Shepherdstown. Guest lecturers and performers, field trips, internships, and career opportunities are advantages directly related to the location of Shepherd University.
HISTORY OF THE UNIVERSITY
Shepherd University began when the county seat of Jefferson County, West Virginia, was moved from Shepherdstown to Charles Town in July 1871. The people of Shepherdstown and vicinity decided to use the vacated courthouse for educational purposes. An article of incorporation for a school to be known as Shepherd University, designed to instruct students “in languages, arts and sciences,” was drawn up and signed by C.W. Andrews, A.R. Boteler, C.T. Butler, G.M. Beltzhoover, David Billmyer, Samuel Knott, and Henry Shepherd. This body of incorporators gave itself power to elect instructors, pay salaries, and prescribe courses of study. Professor Joseph McMurran was appointed first principal of the institution, which opened with 42 students in September 1871, under the authority of the Board of Trustees.

On February 27, 1872, the Legislature of West Virginia passed the following act: “That a branch of the State Normal School be and the same is hereby established at the building known as Shepherd College, in Shepherdstown, in the county of Jefferson.”

Shepherd became a four-year college for the training of teachers on July 1, 1930, at which time the institution began granting the bachelor of arts degree. Shepherd was authorized to implement liberal arts programs in 1943, and in 1950 the bachelor of science degree was added.

Also in 1950 Shepherd was accredited by the North Central Association of Colleges and Schools and in 1951 it became a member of the Association of American Colleges.

In the past two decades, Shepherd has added 11 new buildings, including the $9 million Robert C. Byrd Science and Technology Center and the $18 million addition to the Scarborough Library, which also houses the Robert C. Byrd Center for Legislative Studies.

MISSION STATEMENT
Shepherd University, a fully accredited public institution of higher education founded in 1871 and located in the Eastern Panhandle of West Virginia, offers a wide variety of distinguished degree programs and other learning opportunities to both traditional and nontraditional students. Our University attracts students from the region, the nation, and beyond. Understanding the importance of diversity, we continue to work toward recruiting and retaining a multicultural student body, faculty, and staff.

The heart of our baccalaureate curriculum is a formal General Studies Program that prepares a student to take his or her place as an educated citizen in a changing world. The University is committed, as well, to developing and implementing a selected number of graduate programs.

At Shepherd University we are dedicated to expanding our intellectual and cultural resources with the assistance of technological advances and our advantageous location just 70 miles from the Baltimore/Washington metropolitan area. At the same time, the small, residential setting of the University creates an environment in which students are able to work closely with faculty, staff, and administrators who encourage their intellectual growth, personal fulfillment, and academic and professional excellence. Student learning is central to the culture of our institution, and finding ways to improve student learning is a continuing process.

Shepherd University, through its alliances with business organizations, industry, and government agencies, promotes economic development in the region. The University enhances the cultural atmosphere of the community with performing arts activities, public lectures, and athletic events. Outreach experiences, such as student internships and cooperative agreements, also link the University to the life of the community.

The faculty, staff, and administration of Shepherd University are dedicated to remaining in the forefront of advances in contemporary education and professional programs as we serve our students, community, and region in the 21st century.

THE RUTH SCARBOROUGH LIBRARY
The Ruth Scarborough Library collection contains varied materials, numbering 511,518 items. Printed and microtext materials compose the majority of the collection, including 164,206 printed books and bound periodicals as well as 200,474 in microfiche and microfilm. Other items in the collection include phonograph records, cassette tapes, DVDs, CDs, and video cassettes. The library
currently subscribes to 521 periodicals and newspapers in paper, and it provides access to more than 12,000 periodicals in full-text. In addition, the library provides access to electronic databases and online indexing and abstracting services.

Since 1971, the library has been a selective repository for federal government publications and regularly receives West Virginia state government publications. The library houses a special collection of printed materials relating to state and regional history. The library’s computerized catalog provides Web access to materials in the Scarborough collection, and the library maintains a Web site.

The Scarborough Library, originally built in 1965, was renovated in 2002-03. The library is a place of study and research for individual and groups. The 46,000 square foot expansion, dedicated in 2002, includes multimedia classrooms, additional reading areas and seating, and the Robert C. Byrd Center for Legislative Studies whose purpose is to promote an understanding of the United States Congress and the legislative process.

**SUMMER SESSION**

The summer session at Shepherd University is an integral part of the University year. All general University requirements relating to high academic standards, sound scholarship, and good citizenship apply in the summer just as in the regular academic year. The summer session is organized into two terms of five weeks each.
SECTION II

ADMISSIONS

OFFICE OF ADMISSIONS

Admissions Philosophy
Admission to Shepherd University is based on the academic records, leadership involvement, and personal qualities of the applicant. Before admission is offered, the applicant's credentials must strongly suggest the applicant's ability and motivation to succeed in higher education and in the Shepherd University community. A conscious effort is made to enroll students from a wide variety of backgrounds who bring with them special talents, abilities, and interests.

Admission Information
Shepherd University enrolls a diverse student population. While preference is given to West Virginia residents, other states and countries are well represented at Shepherd. The University is committed to equal opportunity for all students and all applicants shall be considered without regard to national origin, race, color, age, religion, gender, physical disability, or financial status.

Admission to Shepherd University does not guarantee admission into a specific program. Some programs, most notably nursing, music, art, and education, have special admissions requirements. Applicants should consult program descriptions in this Catalog for a complete description of any special or additional requirements specific to the programs in which they are interested.

Admission Procedure
Prospective students may obtain application materials by calling 304/876-5212 or 800/344-5231 or online at www.shepherd.edu/admweb/. The completed admission application must be returned to the Office of Admissions, Shepherd University, P.O. Box 3210, Shepherdstown, West Virginia 25443.

After all application materials and credentials have been received, the Office of Admissions will notify applicants of its decisions on a rolling basis or as the decisions are made as long as openings remain in the freshman or transfer classes. Students admitted for the fall semester must confirm their intent to enroll and submit an enrollment deposit of $100 which is refundable up to May 1. Students applying for the spring semester also must submit a $100 nonrefundable deposit.

A health form completed by a physician also is required, after acceptance and prior to the beginning of classes. The health record requirements form is sent to students upon acceptance. Students desiring financial aid should complete and mail the FAFSA by the stated deadlines. All students are encouraged to file a FAFSA.

Residence Hall Contract
Housing assignments are made based on the receipt date of the housing application and health forms. The Residence Hall Contract which includes the application, $100 nonrefundable advance housing deposit which is credited to the fall semester room charges, and $100 damage deposit should be submitted by all students desiring and/or required to live in a University residence hall (see section on Residence Life) as soon as possible after admission to the University is granted. The nonrefundable $100 advance payment is credited to the fall semester room charges. This application form is currently available from the Office of Admissions and should be submitted to Residence Life along with the $200 deposit. An online application will be available and students who have paid their $100 Shepherd University enrollment deposit will receive a Shepherd ID number and be able to complete a housing application and make deposits at the same time. For priority room assignment, housing applications must be received by Residence Life by June 1.
Students who require disability-related accommodations should provide appropriate documentation, submit their applications in a timely manner, and follow directions on the Residence Hall Contract to submit appropriate paperwork to the ADA Coordinator.

Delayed Enrollment
Students who are offered admission to the freshman class at Shepherd University may postpone their enrollment for one year. These students are guaranteed space, except in the competitive programs where enrollment is limited, if they satisfy previous admission requirements made as conditions of their original admission. Applicants for delayed enrollment should submit an explanation of their activities (employment, military service) from the time they left high school until their planned enrollment at Shepherd University. They must have an honorable record in the intervening year. Assurance of future admission does not apply to students who enroll in another college or university during the intervening period; in such cases, it is necessary to consider the student as a transfer applicant based on the course work taken at the other college or university. Students delaying enrollment must complete the status change form to update personal information and their proposed academic program. Students electing the delayed enrollment plan are not guaranteed residence hall housing and must meet established housing application deadlines.

ADMISSION REQUIREMENTS
General Freshman Admission
A student applying for general freshman admission may submit an application any time after the completion of six semesters of high school.

Applicants must submit the following documentation for consideration by the Admissions staff:

- Completed Undergraduate Application for admission;
- $35 application fee;
- Official secondary school records documenting completion of the minimum high school academic unit requirements;
- Results of the American College Test (ACT) or the Scholastic Aptitude Test (SAT), including the writing portion.

The admissions and academic personnel of Shepherd University may require enrollment in basic skills courses and programs or other appropriate measures for a student whose high school record and/or standardized test scores indicate a deficiency in certain areas.

Required Units
Units (Years)
4 English (including courses in grammar, composition, and literature).
3 social studies (including U.S. history).
3 mathematics (algebra I, and at least 2 higher units).
3 science (2 of 3 units must be laboratory science. At least 2 units from coordinated and thematic science 10, biology, chemistry, physics and other courses with a strong laboratory science orientation).
1 physical education.

It is strongly recommended, but not required, that you complete a minimum of two consecutive units of a foreign language.

Elective Units
It is recommended that the remaining elective units be chosen from the academic core (English/language arts, mathematics, science, social studies) or subjects such as computer science, fine arts, humanities, and keyboarding.

Required Grade Averages and Test Scores

- Minimum 2.0 academic grade point average (on a 4-point scale).
- Minimum composite ACT score of 19 and/or SAT score of 910.
Admission by GED Test
Non-high school graduates who are veterans or are over the age of 19 and have been out of high school at least one year or whose senior class has graduated one year previously may be admitted if they attain a standard score of 410 (which is the state requirement for a diploma) on each of the five parts of the General Educational Development (GED) Test or an average standard score of 450 or above on the entire test or a total of 2250 points on the test. GED scores must be sent directly to the Office of Admissions from the testing center or county superintendent of schools in order to be considered official.

Applicants for admission who have held the GED more than five years at the time of application for admission do not need ACT or SAT scores unless specified by a specific program. Applicants holding the GED less than five years must submit scores from either the ACT or SAT. Students admitted without ACT or SAT scores are normally required to take a placement examination prior to course registration.

Home School Admission
Shepherd University makes every effort to accommodate the special circumstances of home schooled students during the admissions process. Applicants must submit the following documentation for consideration by the Admissions staff:

- Students under the umbrella of a degree-granting organization please submit evidence of the course work completed and the level of performance;
- In absence of such a document, please submit a detailed portfolio describing the breadth of course work. This could include a research project, résumé, reading list, community service, athletic and/or artistic endeavors, and study abroad;
- Official transcript from an accredited university or college (if applicable);
- AP tests scores (if applicable);
- ACT/SAT test scores;
- Essay (highly recommended but not required).

General Transfer Admission
Applicants who have earned 15 credits or 24 quarter hours from another accredited college or university, have a minimum 2.0 grade point average (on a 4.0 point scale), and are in good standing at the institution last attended may apply as transfer students. They must submit the following documentation for consideration by the Admissions staff:

- Completed Undergraduate Application for admission;
- $35 application fee;
- Official transcripts from each college/university previously attended*;
- Student Personnel Record Form, which shows student standing at prior institution.

*Shepherd University does not, under any condition, disregard college or university courses taken or credits earned elsewhere. Failure to report enrollment at another college or university and failure to have transcripts sent to Shepherd are considered falsification of the admissions application form. Applicants found to be in violation of University policy are subject to disciplinary action, which may include expulsion.

Credit earned at other accredited colleges and universities will apply toward a degree at Shepherd University when applicable. A student who is on academic probation or suspension at another institution is not eligible for admission to Shepherd University. Individuals who have been out of school for a period of at least two full academic years (24 months) may be considered for admission on academic probation if their grade point average is less than 2.0. During the period of probation, the individual must meet the regulations of the probation policy in effect at the time of attendance. Applicants who have completed less than 15 semester or 24 quarter hours of course work at another institution must submit copies of their high school transcript and ACT or SAT scores in addition to the required university transcripts. Both high school and university credentials will be used in the admissions evaluation. Transcripts received by Shepherd become the property of the University and cannot be returned to the student.
All grades and credits transferred to Shepherd University are posted on the student’s permanent record exactly as received from all other colleges and/or universities with the following proviso: 1) plus and minus signs will be ignored, 2) D and F grades can be replaced only if earned within the first 60 hours attempted, and 3) for admission purposes, all grades on the student's transcript(s) will be used in computing the grade point average.

Credit Hours Transfer Policies

Students who transfer from a regionally-accredited junior or community college are allowed a maximum of 72 semester hours toward the 128 credit hour minimum for graduation from Shepherd University. In compliance with the West Virginia Higher Education Policy Commission, students who have completed more than 72 hours of course work may select the courses they wish to have evaluated as part of their semester hours of credit counted toward graduation. The total number of credit hours earned will be calculated in the student's overall grade point average. Credits from universities that do not have regional accreditation are assigned on the basis used by the state university in the state where the nonaccredited university is located.

After enrollment at Shepherd University, a student may not transfer to this institution any courses in major, minor, or teaching fields except by advanced permission of Shepherd faculty. Advance permission will be required to take any course at another institution and transfer it to Shepherd University. (See Section V for details.)

International Student Admission

International student applicants must follow the requirements for general freshman or transfer admissions, depending on the desired enrollment status. In addition, the following documentation is needed for consideration by the Admissions staff:

- Demonstration of both written and spoken English proficiency. Such proficiency can be established by the successful completion of the Test of English as a Foreign Language (TOEFL), administered by the Educational Testing Service. A minimum score of at least 550 on the paper test or 213 on the computer test is required for admission to Shepherd University;
- Notarized letter indicating a guarantee of financial support and/or bank statement;
- Certified scholastic attainment that is equivalent to that of a high school graduate in the United States;
- Official transcripts from each college/university previously attended; all college/university transcripts from foreign countries must be accompanied by an International Academic Credential Evaluation.

With the implementation of the SEVIS (Student and Exchange Visitor Information System) by the U.S. Department of Homeland Security, an international student applying for admission to Shepherd University must submit all items needed for admission at least four months in advance of the starting semester. Before an offer of admission can be extended to an applicant, the applicant’s information must be submitted to SEVIS. SEVIS will then advise the University if the student may be admitted and will issue the required I-20 form to the student.

Decisions about admission will be made after complete records have been received by Shepherd University.

Readmit Admissions

Individuals who have attended Shepherd College/Shepherd University as degree-seeking students and have left Shepherd in good academic standing, or students who left the institution while on academic suspension and have been out of school for more than two consecutive regular semesters (not including summer sessions) must apply for readmission through the Office of Admissions.

Applicants for readmission must submit the following documentation for consideration by the Admissions staff:

- Application for readmission, available in the Office of Admissions. As part of the re-admission process, approval from the Offices of Financial Aid, Business, Registrar, and Student Affairs will be required. The student must be in good standing with each of these offices to gain readmission;
• Applicants for readmission who have been academically suspended, who have been placed on academic probation, or who have below a 2.0 grade point average will be required to meet with student support services before the Office of Admissions can process the readmission application;
• An explanation of their activities (employment, military service) from the time of last enrollment at Shepherd until their planned return to the University.
• A health record is valid for only five years after original submission. If a student’s original health record is older than five years than a new one is required.
• Residence hall applications and deposit checks of $200 ($100 non-refundable advance room deposit which is credited to the fall semester room charges and $100 damage deposit) should be submitted after readmission to the institution has been granted if on-campus housing is desired and/or required (see section on Residence Life).

Early Decision Plan
Shepherd University offers early admission to students whose first college choice is Shepherd. Under early admission, a qualified applicant whose complete admissions application with all supporting credentials is on file in the Office of Admissions by November 15 will receive notice of acceptance within 10 days. This plan is designed to reduce the burden of the admissions process for those applicants who are considered highly desirable for admission by the University and who fully intend to enroll. A student applying for admission under the Early Decision Plan should possess academic qualifications that meet minimum admissions standards at the end of the sixth semester of high school. These students must meet all the admissions requirements outlined in the University Catalog. Students interested in applying under the Early Decision Plan should contact the Office of Admissions at Shepherd University for further information.

SPECIAL NONDEGREE STUDENT
Persons may apply and be considered for admission as special nondegree-seeking student. Special students may enroll in those courses for which they are qualified. Transcripts may be required to evaluate academic preparation before enrolling special students in certain courses. A maximum of 15 credit hours may be accumulated as a special student unless the Director of Admissions makes an exception based on individual circumstances.

If a student enrolled as a special, nondegree student wishes to change his or her enrollment status to that of a degree-seeking student, he or she needs to complete an admissions application form and a change of degree form (available in the Office of Admissions) and submit them along with the $35 admissions application fee to the Office of Admissions with all required credentials (see Admissions Requirements). Students changing degree status must meet all stated admissions requirements as listed in the Catalog at the time the change of degree status is initiated.

High School/University Concurrent Enrollment
Students may choose to be enrolled in both high school and college simultaneously. After the completion of their sophomore year in high school, students are eligible to submit an application for special admission to the University to enroll in freshman level course work, provided the student is concurrently enrolled in high school.

Students applying for concurrent enrollment must submit the following documentation for consideration by Admissions staff:
• Completed nondegree application;
• $35 application fee;
• Official copy of high school transcript indicating an academic grade point average of a 3.0 (on a 4.0 scale);
• Composite ACT score of 21 and/or SAT score of 1000, PLAN or PSAT equivalents will be accepted;
• Written recommendation from high school principal.
Transient Student Admission
A transient student is one who is primarily a student at another institution taking courses at Shepherd. Students who desire to enroll as transient students may do so upon the submission of a letter of good standing mailed directly to the Office of Admissions at Shepherd University from the institution which the student last attended. Also required is the submission of a transient application for admission at least one month prior to the opening of the semester in which the student decides to enroll.

Other Admission Categories
International Baccalaureate
Shepherd University recognizes the International Baccalaureate (IB) curriculum as a strong pre-university academic program and encourages applicants to complete the requirements for the IB diploma. Advanced standing will be awarded for higher level exams with scores of 5, 6, or 7 to students who present either the IB diploma or individual IB exam scores. Credit is not awarded for standard level exams.

Individual academic departments determine how credit will be awarded for IB exams in a manner similar to the awarding of credit for Advanced Placement exams.

To receive credit for International Baccalaureate higher level examinations, students must have the IB examination results sent to the Office of Admissions at Shepherd University. Academic departments may add or delete credit for these examinations if course content or examinations change.

Concurrent Admissions Program (ConAP)
Shepherd University participates with the U.S. Army Recruiting Command in the Concurrent Admissions Program (ConAP), which permits eligible Army enlistees to receive admission to the University concurrent with their military enlistment and defer their University enrollment for classes for up to two years after discharge, and matriculate as veterans after they leave active duty. ConAP enlistees receive information and applications about the program from their Army recruiter. After receiving the completed forms from the Army’s battalion education specialist, the Office of Admissions will send the enlistee the necessary University admissions applications. Shepherd University will serve as the enlistee’s “home university” and will approve, for transfer back to Shepherd, courses from other universities which are taken while the enlistee is on active duty. The director of admissions at Shepherd serves as the liaison with the enlistee while in the military and a selected faculty member will serve as the enlistee’s advisor.

Admission to Limited Enrollment Programs
Certain degree programs at Shepherd University have limited enrollment due either to enrollment capacity limitations or to special academic requirements. The University reserves the right to establish limited enrollment for additional programs at any time.

When enrollment is limited due to capacity constraints, the University will take in-state residency into consideration as a preferred criterion, but not as a controlling criterion. Applicants will be evaluated by the department faculty, and interviews or auditions (in the case of performing arts programs) may be required. See individual programs in this Catalog for specific details on admission requirements.

Admission to the MedSTEP Program
The MedSTEP program (Medical Students in the Eastern Panhandle) is an innovative program available to incoming freshman. It is specifically designed for students with a desire to attend medical school and provides dual admission to Shepherd and West Virginia University medical school.

The MedSTEP program is a highly selective program that assures that bright, dedicated students attending Shepherd University may automatically continue their training to become physicians at WVU Medical School. The program is open to students who are committed to becoming physicians in the Eastern Panhandle of West Virginia.
The following items are needed for your application:

- Completed application form specific to MedSTEP program;
- High school total GPA ≥ 3.6 (send hard copy transcript);
- ACT score ≥ 24; or SAT scores ≥ 1100 (send copy);
- Letter of recommendation from your high school science teacher (our form);
- Letter of recommendation from your high school principal or guidance counselor (our form);
- Letter of recommendation citing your communication skills from a community leader;
- Personal statement of your interest in the program;
- Personal interview.

Applications are due by February 15 for fall enrollment. Students selected for interviews will be interviewed during the month of March and successful candidates will be notified in April or May.

Admission to the PharmSTEP Program

The PharmSTEP (Pharmacy Students in the Eastern Panhandle) program is for incoming freshman at Shepherd University. It is specifically designed for students with a desire to attend the pharmacy school and provides dual admission to Shepherd and West Virginia University School of Pharmacy.

The PharmSTEP program is highly selective and is designed to assure that bright, dedicated students attending Shepherd University may automatically continue their training to become pharmacists at WVU School of Pharmacy. The program is open to students who are committed to becoming pharmacists in the Eastern Panhandle of West Virginia.

The following items are needed for your application:

- Completed application form;
- High school total GPA ≥ 3.6 (send official school transcript);
- ACT math score ≥ 26; or SAT math scores ≥ 600 (send official copy of scores);
- Letter of recommendation from your high school science teacher (accompanied by recommendation form);
- Letter of recommendation from your high school principal or guidance counselor (accompanied by recommendation form);
- Letter of recommendation from a community leader (accompanied by recommendation form);
- Personal statement describing your interest in becoming a pharmacist and in entering the PharmSTEP program.

Applications and letters are due by February 15 for fall enrollment. Students selected for interviews will be interviewed during the month of April.

Admission to the DentSTEP Program

The DentSTEP program (Dental Students in the Eastern Panhandle) is an innovative and highly selective program, co-sponsored by West Virginia University School of Dentistry and Shepherd University. This program is available to incoming freshman. It is specifically designed for students with a desire to attend the dental school and provides dual admission to Shepherd and West Virginia University School of Dentistry.

The DentSTEP program assures that bright, dedicated students attending Shepherd University may continue their training to become dentists at WVU School of Dentistry. It is open to students who are committed to becoming dentists in the Eastern Panhandle of West Virginia.

The following items are needed for your application:

- Completed application form;
- High school total GPA ≥ 3.25 (send hard copy transcript);
- Minimum ACT score ≥ 22; or SAT scores ≥ 1000 (send copy);
- Letter of recommendation from your high school science teacher (DentSTEP);
- Letter of recommendation from your high school principal or guidance counselor (DentSTEP);
- Letter of recommendation citing your communication skills and/or community service;
- Personal statement of your interest in the program;
- Personal interview.
Applications forms are due by February 15 for fall enrollment. Students selected for interviews will be interviewed during the month of March and successful candidates will be notified in April or May.

Admission of Students with Disabilities
In accordance section 504 of the Rehabilitation Act of 1973, and by 45 CFR 84, “Nondiscrimination on Basis of Disability,” Shepherd University is committed to nondiscrimination on the basis of disability in the areas of employment, program accessibility, admissions, accessibility of physical facilities, treatment of students, academic adjustments, housing, financial aid, employment assistance to students, and in nonacademic services. No otherwise qualified person with a disability, shall on the basis of their disability, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program sponsored by the University. Some disabilities may be considered a barrier to completion or admission into the nursing education program.

University officials desire to provide assistance when and where possible to students with disabilities. To do this, however, they must have reasonable notice of the special accommodations they will be asked to provide. Inquiries or requests should be directed to the campus Americans with Disabilities Act (ADA) coordinator.

MISCELLANEOUS ADMISSION INFORMATION
CLEP Tests
Students are awarded credit for the successful completion of many of the CLEP Subject Examinations. To obtain credit for an examination, Shepherd University has established a minimum score for each CLEP Test. A CLEP test should not be taken for a subject in which you have previously enrolled. A CLEP exam cannot be used to change a grade of D or F received for course work at Shepherd University or another institution.

Students currently enrolled at Shepherd University may take the CLEP examinations on campus. See the Career Development Center for more information on testing. Persons desiring to enroll at Shepherd University who wish CLEP credit as part of their admission must take the examinations at another testing center and have the test results sent to Shepherd. At present, the closest center to Shepherd University is located at Hagerstown Community College, Hagerstown, Maryland.

Advanced Placement Tests
To receive credit for Advanced Placement Tests, students must have the AP test results sent to the Office of Admissions at Shepherd by the testing service. As new AP tests are developed, additional credit may be awarded.

American History—grades of 3, 4, or 5; HIST 201 and HIST 202
Art History—grades of 3, 4, or 5; ART 103 and 1 hour free elective
Art History—grades 4 or 5; ART 203 (for art majors)
Biology—grades of 3, 4, or 5; BIOL 101 and BIOL 102
Calculus AB—grades of 3, 4, or 5; MATH 207
Calculus BC—grades of 3, 4, or 5; MATH 207 and 208
Chemistry—grades of 3, 4, or 5; CHEM 207, CHEM 207L, CHEM 209, CHEM 209L
Classics—no credit given
Computer Science AB—grades of 3, 4, or 5; CIS 104
Economics (macro and micro)—grades of 3, 4, or 5; ECON 205 and 206
English (language and composition)—grades of 3, 4, or 5; ENGL 101
English (literature and composition)—grades of 3, 4, or 5; ENGL 102
Environmental Science—ENVS 201
European History—grades of 3, 4, or 5; HIST 102 and HIST 103
French Language—grades of 3 or 4; FREN 101
grade of 5; FREN 101 and 102
German Language—grades of 3 or 4; GERM 101
grade of 5; GERM 101 and 102
Government and Politics (American)—grades of 3, 4 or 5; PSCI 101
Human Geography—grades 3, 4, or 5; GEOG 100
Music (Theory)—grades of 3, 4, or 5; MUSC 111 and 1 hour free elective
Music (Theory)—grades of 4 or 5; MUSC 103 (for music majors)
Physics B—grades of 3, 4, or 5; PHYS 201, 201L, 202, and 202L
Physics C-Mech—grades of 3, 4, or 5; PHYS 201, 201L
Physics C-E&M—grades of 3, 4, or 5; PHYS 202, 202L
Psychology—grades of 3, 4, or 5; PSYC 203
Spanish Language—grades of 3 or 4; SPAN 101
grade of 5; SPAN 101 and 102
Statistics—grades 4 or 5; MATH 314
World History—grades 3, 4, or 5; HIST 101 and HIST 102

**Immunization Requirement**

All new/transfer students under the jurisdiction of the West Virginia Higher Education Policy Commission are required to show proof of immunity to measles and rubella (two doses of the MMR vaccine, one administered at school age, or a rubella titre), prior to enrollment. A TB test in the year prior to enrollment is also required. Individuals born prior to 1957 are exempt of the measles and rubella requirements. The University requires a completed health record for all full-time and resident students. Students will not be permitted to register for courses until they have provided proof of immunity.

All full-time and resident students must submit a complete health record with the following information. Students with a medical exemption should attach a letter from their physician. Students claiming religious exemptions will need a statement from their religious faith leader.

1. **Immunizations**
   a. Date and results of a TB test within one year prior to entrance.
   b. A tetanus shot within 5-10 years.
   c. Proof of immunity to measles and rubella with one of the following documents (students born before 1957 are exempt from this requirement):
      i. Dates of two doses of MMR vaccine, one at age 5 or older.
      ii. Date and results of a rubella titre (a blood test).
      iii. Dates and medical verification of having had the disease.

2. Results of a physical examination given within one year prior to entrance.

**Selective Service Requirement**

A male may not enroll in a state-supported institution of postsecondary higher education unless he is in compliance with the Military Selective Act. 50 U.S.C. Appendix §451, et seq., and the amendments thereto. (WV SB. No. 524, WV Code §15-1F-10.)

**Service-members Opportunity College**

Shepherd University has been designated as an institutional member of Service-members Opportunity Colleges (SOC), a group of over 400 colleges and universities providing voluntary postsecondary education to members of the military throughout the world. As an SOC member, Shepherd recognizes the unique nature of the military lifestyle 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. SOC has been developed jointly by educational representatives of each of the Armed Services, the Office of the Secretary of Defense, and a consortium of 13 leading national higher education associations. It is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community Colleges (AACC).

**University Credit for Military Service**

Students who have completed basic training in military service may be granted a maximum of four semester hours credit, which may be used to satisfy general studies physical education and/or elective requirements. It is the student’s responsibility to request this credit and to verify this military experience to the registrar. If the student was not in the Army or other service branch that has basic
training, then Shepherd University will grant the same credit to individuals who present a certified copy of their DD-214 form after completing a minimum of one year of active military service.

Correspondence work completed at accredited institutions of higher learning cooperating with the Armed Forces Institute is accepted by Universities in West Virginia. The amount of credit allowed by the institution where credit was earned, however, must not exceed 28 semester hours.

To determine eligibility of college credit, students from the Army can go on the Web to aarts.army.mil or call toll-free 866/297-4427 to have a military transcript sent to the Office of the Registrar at Shepherd University. Sailors and Marines can go on the Web to smart.cnet.navy.mil or call toll-free 877/253-7122 to request a transcript.

Air Force ROTC
Air Force Reserve Officer Training Corps (AFROTC) is available to Shepherd University students through an agreement with the University of Maryland at University Park. AFROTC courses are scheduled so that students from Shepherd may complete all AFROTC requirements during one morning per week at the University Park campus. In addition, students are eligible to compete for all AFROTC scholarships and flying programs. The four-, three-, and two-year scholarships pay tuition, books, fees, and a $100 per month subsidy.

After graduation from Shepherd and successful completion of the AFROTC requirements at the University of Maryland, students are commissioned second lieutenants in the Air Force. Students interested in AFROTC may contact:
AFROTC Det 330
University of Maryland
Cole Field House, Room 2126
College Park, MD 20742-1021
301/314-3242 or 3243

CLASSIFICATION FOR ADMISSION AND FEE PURPOSES

General
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.

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

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 reciprocity agreement may not transfer said reciprocity status to another public institution in West Virginia.

Residence Determined by Domicile
Domicile within the state means adoption of the state as a fixed permanent home and involves personal presence within the state with no intent on the part of the applicant or, in the case of the dependent student, the applicant’s parent(s) to return to another state or county. 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 of fee payment purposes. West Virginia domicile may be established upon the completion of at least 12 months of continued presence within the state prior to
the date of registration, provided that such 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 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 should 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.

Dependency Status
A dependent student is one who is listed as a dependent on the federal state income tax return of his or 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 or she lives or to whom he or 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.

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.

Change of Residence
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 or she has established domicile in West Virginia with the intention of making a permanent home in this state. The intent to remain indefinitely in West Virginia is evidenced not only by a person’s statements, but also by that person’s actions. In making a determination regarding a request for change in residency status, the designated institutional officer shall consider those actions referenced in section two above. 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.

Military
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 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 also shall be classified as in-state students for tuition and fee purposes.

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.

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

**Former Domicile**

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

**Appeal Process**

The initial determination of residency classification by the registrar may be appealed to the institutional committee on residency appeals which is established by the president to receive and act on appeals of initial residency decisions. The decision of the institutional committee on residency appeals may be appealed to the president of the institution. The appeal shall end at the institutional level.

**How to Contact Offices and Committees Referred to in This Section**

- **Student Academic Support Services**, Shepherd University, P.O. Box 3210, Shepherdstown WV 25443-3210. Karen D. Austin, Director. Telephone: 304/876-5221. E-mail: kaustin@shepherd.edu.

- **Admissions and Credits Committee**, Chair, c/o Office of the Registrar, Shepherd University, P.O. Box 3210, Shepherdstown WV 25443-3210.

- **Office of Admissions**, Shepherd University, P.O. Box 3210, Shepherdstown WV 25443-3210. Telephone: 304/876-5212. Fax: 304/876-5165. E-mail: admoff@shepherd.edu. URL: www.shepherd.edu/admweb.

- **Americans with Disabilities Act Coordinator**, Shepherd University, P.O. Box 3210, Shepherdstown WV 25443-3210. Telephone: 304/876-5453.


STUDENT AFFAIRS
The Division of Student Affairs is committed to the holistic education and development of all students. The office is dedicated to creating inclusive learning communities inside and outside the classroom where the development of independent and creative thinking among students is honored and nurtured. Focusing on goals of student learning, social justice, and assessment, the office continuously improves the quality and scope of programs and services to enable our students to be successful citizens in the global community. Departments within Student Affairs include the Career Development Center, the Student Center, Counseling, Dining Services, Health Services, Greek Life, Judicial Affairs, Multicultural Student Affairs and Disability Services, Orientation, Residence Life, Student Activities, Student Leadership Programs and Organizations, Student Community Services and Service Learning, and Veteran’s Affairs. Student Affairs also coordinates many events that have become part of Shepherd’s tradition including Midnight Breakfast, Family Day, Homecoming, Student Recognition Day, Day of Service, and the Student Leadership Conference.

Orientation to University
Shepherd conducts a two-phase orientation program to help students make a smooth transition from high school, home, or work to university life. Phase one consists of a one-day (transfers and readmits) or a two-day (first year) summer program which gives new students an opportunity to meet with faculty, discuss their academic program, and schedule classes for the fall semester. Phase two of the program, conducted in August, also provides opportunities for academic advisement and is designed to help new students make a smooth adjustment to university life. Because the University feels that orientation is important whether the student is newly graduated from high school, entering the University from the world of work, or returning to school as a non-traditional student, all new students accepted for admission in the fall semester are required to attend. Shepherd offers nontraditional-aged students programming specifically designed to meet their needs. Exceptions to the orientation requirement may be granted for nonresident students who are 25 or older and who carry less than 9 credit hours. All new students are required to pay the one-time orientation fee. Dates for the summer program are announced to newly-admitted students early in the spring. The University also conducts an orientation program in January for new, transfer, or readmitted students.

Career Development Center
Career planning is a developmental process that should be fostered during the entire period of a student’s involvement with the institution and beyond. The primary purpose of the Career Development Center is to aid students in developing, evaluating, and effectively initiating and implementing career plans. The Career Development Center (CDC) carries out this mission through three separate components: Career Services, Cooperative Education, and the Washington Gateway Program.

Career services works with students who want to refine their career plans by offering professional, individualized career counseling, assessment, and education through the following means: up-to-date career resource library with information on graduate school, employment, and job opportunities; workshops on graduate school, resumes, interviewing, credential files, and other career-related issues; and individual appointments for individuals seeking more detailed career assistance.

Visit the CDC’s detailed Web site at www.shepherd.edu/jobweb for information related to career issues, free online job service, and links to other helpful Web sites for career exploration and employment opportunities.
The Cooperative Education (Co-op) Office works closely with students to provide them with information and opportunities that will enable them to combine classroom study with real work experiences that relate to their major.

Washington Gateway enables the University to incorporate the resources of the metropolitan area into its curriculum. Through joint coordination by the Washington Gateway and academic departments, the University offers specialized courses that are tailored to a academic disciplines. These programs permit students to travel into the Washington/Baltimore area; provide the opportunity for internships or co-ops in the metro area; and bring various Washington government leaders, speakers, and lecturers to campus.

Residence Life
At Shepherd University, residence hall life is considered an important part of the overall educational mission of the University. Because learning does not end in the classroom, the experience of living in a residence hall plays an important role in affecting the development of the whole student. The residence life staff works together to create a living environment which assists students in fostering their intellectual, emotional, physical, and spiritual development and general well-being. In order to promote this holistic development of the student, all full-time students are required to live on campus. Exceptions to the policy are explained in the Shepherd University Student Handbook.

Activities and programs are planned and carried out for the benefit of residents, providing them with opportunities to learn to live comfortably with roommates and as community members. A major value of the experience is learning to live without infringing upon the rights of others. To this end, the residence halls have specific standards developed by the staff and residents to assist in group living and citizenship education.

By accepting a room reservation in a residence hall, students agree that they will follow the rules and regulations found in the Shepherd University Student Handbook and will not conduct themselves in any way that will infringe upon the rights and privileges of other individuals or the residence community.

Rooms are furnished with single beds, dressers, desks, and chairs. Students must supply linens, pillows, blankets, bedspreads, mattress covers, and accessories to suit their tastes. Additional suggestions and prohibited items are listed in the Shepherd University Student Handbook.

Dining Services
The University operates a station-style dining facility located between Kenamond and Turner halls. The Dining Hall offers a variety of entrees including grill items, theme bars, cook-to-order entrees, pizza and pasta, and home-style meals. Vegetarian and vegan items along with salads and desserts are available. All residence hall students are required to participate in the board plan. At the University Center, dining services also has the Ram’s Den, a made-to-order retail outlet and the Fireside Bistro, a gourmet coffee and deli shop. Both food service locations are available to residence hall and commuter students. Dining services also enlists the services of a registered dietician who is available to consult with students about their dietary concerns.

Student Health Services
Student Health Services is located on the ground floor of Gardiner Hall, and services are available to main campus students. Staffed by certified University health R.N.s, health services offers an integrated approach to address the physical and emotional well-being of students. A local nurse practitioner is retained for student care. Hours of operation are Monday through Friday, 8 a.m. to 4:30 p.m. Students are seen by appointment or during urgent care walk-in hours. Health services offers basic-level medical care of common ailments such as earaches, mono, strep, bee stings, sprains, and flu-like illnesses. Services are available to all students on main campus.

Full-time students as well as ALL resident students must submit a completed health record form containing the information listed below. (Students with a medical exemption should attach a letter from their physician, and those claiming religious exemptions will need a statement from their religious faith leader.)
1. Immunizations
   a. MEASLES AND RUBELLA. The state of West Virginia requires proof of immunity to measles and rubella (MMR) for all students born after 1957, with one of the following documents:
      1. Dates of vaccination.
      2. Date and results of a rubella titre (a blood test).
      3. Dates and medical verification of having had the disease.
   b. TUBERCULOSIS. The date and results of a TB test within one year prior to entrance are required for all new, transfer, and readmit students except for those with a documented physician deferment.
   c. TETANUS. A tetanus shot is required within 5-10 years prior to entrance.

2. The results of a physical examination given within one year prior to entrance are required.

Expenses incurred by medical care outside health services, such as lab work, X-rays, hospitalization, are the responsibility of the student. Health insurance is recommended but is not offered by health services. In cases of severe illness, it is advisable that personal physician treat students at home. Special health services are available to veterans at the Veterans Administration Center, Martinsburg, West Virginia.

Counseling Center
The counseling center is located on the ground floor of Gardiner Hall and accessed through the health center. The counseling center is staffed by a full-time licensed professional counselor and is open from 8 a.m.-4:30 p.m., Monday through Friday. Appointments can be scheduled by calling the Health Center at 304/876-5161.

Free confidential counseling for individuals and groups is available on campus to all students. Referrals to outside agencies for more extensive or comprehensive services are also available; however, Shepherd University will not assume the cost for these outside services.

Student Community Services
The Office of Student Community Services and Service Learning, located in Student Center 201, is committed to providing beneficial, educational, and memorable community outreach experiences for students by assisting and coordinating individual and group opportunities for service. The staff offers support to students and faculty for service learning projects to enhance the learning opportunities at Shepherd by assisting with the integration of service into the classroom curriculum. The office also helps coordinate opportunities for all academic and social organizations, resident assistants, and staff. An Alternative Spring Break trip is planned each year that gives students the option of spending their spring break volunteering outside their immediate community. Students who wish to volunteer can register online through the Office of Student Community Services Web site www.shepherd.edu/scsweb/ and can view a list of nonprofit agencies and opportunities.

Services for Students With Disabilities
In accordance with the Americans With Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, Shepherd University is committed to fulfilling its ethical and legal responsibilities to ensure equal opportunity for all students. In addition, the University prohibits illegal discrimination against any individual on the basis of her/his disability. A person with a disability is generally defined as any individual who 1) has a physical or mental impairment, 2) has a record of such impairment, or 3) is regarded as having such an impairment, and the impairment substantially limits one or more major life activities such as self-care, walking, seeing, hearing, speaking, breathing, or learning. Disabilities can include, but are not limited to, mobility impairment, visual or hearing impairments, systemic (medical) conditions, psychological disorders (as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition), and learning impairments.

Students with disabilities at Shepherd University have the right to:
- Equal access to curricular and co-curricular programs across campus, including academic courses, student services, employment, and student activities;
- Reasonable and appropriate accommodations;
- Information available in a timely manner and in an accessible format;
• Expect all disability-related information will be treated confidentially by all University employees; and
• Appeal any disability-related accommodation decision.

Students with disabilities also must act as self-advocates. In order to obtain disability-related accommodations, students are responsible for completing all necessary forms and providing all requested documentation to the appropriate disability service provider (listed below) in accordance with posted deadlines. At a minimum, the documentation must be from an appropriate and authorized professional (e.g., physician, clinical psychologist), it must be timely, and it must verify the nature of the disability, the functional limitations it imposes, and the need for specific accommodations. The University will not be liable for any costs associated with obtaining such documentation.

All accommodations will be decided on a case-by-case basis. Please note that the University has an obligation to provide reasonable and appropriate accommodations to ensure that students with disabilities have access to all campus programs, services and functions. However, if the University can provide an accommodation that is equally as effective as the one requested by the student but is less expensive or less extensive, the University is not required to provide the more expensive or extensive one.

Please direct all accommodation inquiries to the director of multicultural student affairs/ADA coordinator, at ext. 5453. Students who wish to appeal an accommodation decision should contact the vice president for student affairs, at ext. 5214.

Students also can go to the following Web site for additional information: www.shepherd.edu/mcssweb/disabilities/.

Multicultural Student Affairs
The Office of Multicultural Student Affairs was established in 1989 as a department in the Office of Student Affairs. The primary mission of this office is to help prepare all Shepherd University students to live, learn, work, and succeed in a diverse society. Therefore, the Office of Multicultural Student Affairs embraces all students and endeavors to create awareness, appreciation, and action around issues of race, gender, sexual orientation, culture, ethnicity, national origin, and religion through programs, speakers, lecture series, and community service.

The Office of Multicultural Student Affairs administers the Multicultural Leadership Scholarship program and provides support and guidance to student organizations that promote the needs of under-represented populations such as Allies, the Shepherd University Chapter of the NAACP, United Brothers, Sistaz, and the International Student Union.

Commuters
Shepherd welcomes its substantial commuter population, composed of both traditional and nontraditional age students. The Office of Commuter Affairs, located in the Shepherd University Student center, serves to provide information, services, and programs which enhance the experiences of all students, particularly those whose place of residence is beyond campus boundaries. Look for programs such as Takin’ It to the Streets where goodies are distributed or Prime Time in the Day time which offers free billiards, bowling, or bingo. Check the bulletin board in the Ram’s Den for current events including concerts, lectures, and special programs, or visit the commuter Web site at www.shepherd.edu/safweb/commuters/index.htm.

PROGRAMS AND ACTIVITIES
The Student Center
The center for popular social and recreational activities on campus is the Student Center. The Student Center provides resources and services which enrich the community life on campus. Various boards, students clubs and organizations, committees, and Student Center staff make it the center for most cultural, social, and recreational co-curricular programs.

The Student Center is the location of a dining area known as the Ram’s Den that offers breakfast, lunch, and dinner menu items as well as snack food items. The Fireside Bistro, which has a coffeehouse atmosphere with comfortable furniture and a fireplace, offers gourmet coffee,
pastries, and made-to-order sandwiches. Also housed in the Student Center are the Bookstore and gift shop, games area, student lounge, several meeting rooms, Information Center with a lost and found desk and ticket services, and a variety of student affairs offices. A large screen TV with surround sound is available in the Ram's Den.

The games zone includes eight bowling lanes and a large activity room with billiard tables, table tennis, table soccer, and board games. The Storer Ballroom is available for movies, large meetings, and special events, and several meeting rooms are available for study, relaxation, or meetings of recognized campus organizations. The Student Government Association and Program Board offices are located in the Student Center.

**Performing Arts Series at Shepherd (PASS)**

The Performing Arts Series at Shepherd (PASS) plans and produces culturally diverse, high quality arts performances, workshops, and events that educate, enlighten, and entertain. PASS is committed to nurturing within all members of Shepherd's community the sense that each individual's story and each individual's creativity are vital to our society as a whole. We seek to explore who we are, how we have come to be here, the traditions we have brought with us, and the ways in which we influence one another.

PASS's multicultural, interdisciplinary programs complement Shepherd's curriculum and offer opportunities for learning and growth outside the classroom. Through attending our programs, both students and community members are drawn into dialogues and come to a better understanding of themselves and one another.

Some of PASS's internationally acclaimed performances have featured the Mystical Arts of Tibet, the Hot Club of San Francisco, the Second City Comedy Tour, Rennie Harris Puremovement, the Acting Company, the St. Petersburg Ballet, Poncho Sanchez, the Lakota Sioux Dance Theater, Celtic Rhythm Irish Dance Company, Latin Jazz Band, and Silk Road Dance Company. For information on the current season visit PASS's Web site [www.shepherd.edu/passweb/](http://www.shepherd.edu/passweb/).

**Student Activities Programming**

The Program Board (PB) sponsors entertaining, enlightening events that energize and enrich Shepherd's community. From comedians and coffeeshop performers to special events and films, the PB provides free entertainment for Shepherd students and their families nearly every week. The biggest PB event of the year is Shepfest, the annual spring concert experience that brings the campus community together for a day of music, food, and activities. PB strives to provide a diverse array of events—by the students, for the students. The executive board is chosen through an interview process from applications solicited from the student body. Volunteers are always needed and welcomed. To get involved, visit the PB Web site [www.shepherd.edu/pbweb](http://www.shepherd.edu/pbweb) or call 876-5326.

**Leadership Conference at Shepherd**

For over a decade, the Leadership Conference at Shepherd (LCS) has been bringing students together to develop leadership skills. Sponsored by the Student Life Council, LCS is a professionally-conducted conference for students that brings special guest lecturers, performers, community leaders, and folks from all walks of life together with representatives from every campus organization and the student body at large to share ideas on topics ranging from art and creativity to multiculturalism, politics, and science. Featured speakers and performers have included Kevin Powell and Mohommed Bilal from MTV's *Real World*, Irving Fryer from the Washington Redskins, comedian Eric Nieves, and many others. Activities during the conference range from large group sessions with dynamic keynote speakers to small, interactive group workshops as well as a banquet with a special guest performer and scholarship awards.

**Religious Life**

Shepherdstown has a variety of churches including Baptist, Episcopal, Lutheran, Methodist, Presbyterian, Reformed, and Roman Catholic. Synagogues and churches of other denominations are located in nearby communities. Various religious groups sponsor recognized campus organizations which offer many opportunities for spiritual fellowship. These organizations sponsor rap sessions, study groups, coffee houses, and other similar activities. Ministers from local churches serve campus students on an informal basis and are available for religious counseling or guidance.
Student Code of Conduct
The staff at Shepherd University assumes that students enroll with a sincere desire to become better educated individuals and to prepare themselves for useful, productive lives. The aim of the University is to facilitate student development in habits of study, application, self-control, integrity, honesty, and ethical standards by which to live and work. The University affirms that students have certain rights and responsibilities for contributing to their own personal growth and awareness within the framework of the campus community. The University reserves the right to take appropriate action, including separation from the University, for violations of accepted standards. All students are expected to be familiar with and are governed by the policies, including residence life policies, found in the Student Handbook, available in the Office of Student Affairs in the Student Center, and other published policies of the University.

Student Organizations, Groups, Committees
Allies (Alternative Lifestyles Living in Everyday Society)
Alpha Kappa Delta
Alpha Sigma Tau
Amnesty International
Art Education Association
Association for Computing Machinery
Band
Beta Beta Beta
Campus Crusade
Common Ground
Democrats
Debate and Forensics
Delta Sigma Pi
Delta Zeta
Habitat for Humanity
Homecoming Committee
Interclass Council
Interfraternity Council
International Student Union
Kappa Delta Pi
Lacrosse Club
Lambda Chi Alpha
Latter Day Saints Student Group
Leadership Conference Committee
Liberal Women’s Association
Mu Alpha Theta
Music Educators National Conference
Panhellenic Association
Performing Arts Series at Shepherd
Phi Alpha Theta
Phi Epsilon Kappa
Phi Kappa Phi
Phi Kappa Tau
Phi Mu Eta Phi
Pi Kappa Delta
Pi Sigma Alpha
The Picket Newspaper
Program Board
Progressive Action Committee
Psi Chi
Rude Mechanicals Medieval and Renaissance Players
Sans Merci
Shepherd Collegiate 4-H Club
Shepherd Dance Team
Shepherd Education Student Association
Shepherd Environmental Organization
Shepherd Historic Preservation Organization
Shepherd Republicans
Shepherd University Theater
SGAC (Student Global AIDS Council)
Sigma Alpha Iota
Sigma Pi Epsilon
Sigma Sigma Sigma
Sigma Tau Delta
SISTAZ
Social Work Association
Sociology Club
Student Community Services
Student Government Association
Student Life Council
Tau Kappa Epsilon
Theta Xi
United Brothers
WSHC Radio Station

Identification Cards
The Rambler Card is Shepherd University’s official student ID and shows the Shepherd Identification Number (SID) as the last nine digits of the card number. All students are furnished with a Rambler Card. Students are required to carry this card at all times. The Rambler Card provides secure stored value for purchases at properly equipped vending machines, copiers, printers, and other locations on and off campus including the Bookstore, Dining Hall, and Ram’s Den. It also allows students to access their chosen meal plan. When student fees are paid, the Rambler Card also provides access to student services and activities like sporting events and the Wellness Center. The Rambler Card is the property of Shepherd University, is nontransferable, and must be presented to University officials upon request. Lost/stolen cards must be reported immediately and may be replaced by paying a $25 replacement fee.
SECTION IV

EXPENSES AND FINANCIAL ASSISTANCE

TUITION AND FEES

Payment
The West Virginia Higher Education Policy Commission regulations require the University to operate strictly on a cash basis with all payments and obligations being collected in advance. All tuition and fees must be collected in full for each semester on enrollment (registration) day.

If payment is made by check, registration will be considered incomplete until the check covering the required fees has cleared the bank on which it is written. The cashier will accept cash, money orders, or approved personal checks written for the exact amount of the obligation. All checks must be payable to Shepherd University and third-party checks will not be accepted. A student’s registration may be cancelled when payment is made by a check which is dishonored by the bank. If the returned check is in payment of tuition and fees, the business office is required to declare the fees unpaid and registration cancelled. The return of a check for any reason constitutes late registration, and the applicable late-registration fee shall be assessed. In such case the student may be reinstated upon redemption of the unpaid check, payment of the $10 returned check handling charge, and payment of the applicable late fee of $25. The returned check fee of $10 will be collected for each check returned unpaid by the bank upon which it is drawn, unless the drawer obtains an admission of error from the bank.

All student charges are payable at the time of registration for each semester. Students in debt to the University from a previous semester or term will not be permitted to enroll until all obligations are paid. Any outstanding and unpaid financial obligation to the University can result in withholding the student’s grades, transcript of credits, diploma, and official reports. Students will not be permitted to attend classes until registration has been completed.

If a student has borrowed a short-term loan or has had any other outstanding financial obligation with Shepherd University and has defaulted, i.e., his or her account has been referred to an attorney, the magistrate’s court, or a collection agent, the student will not be eligible to borrow short-term loans in the future.

Student employees will be required to pay tuition and fees at the same time as other students. The student employee will receive monthly paychecks from the State of West Virginia for work performed during the previous month. All fees and expenses are subject to change without prior notice.

Enrollment Fees Per Semester 2004-2005

<table>
<thead>
<tr>
<th>Hours Enrolled</th>
<th>West Virginia Students Enrolled in a 4-year Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Hours or more (full-time)</td>
<td>1,827.00</td>
</tr>
<tr>
<td>11 Hours</td>
<td>1,661.00</td>
</tr>
<tr>
<td>10 Hours</td>
<td>1,510.00</td>
</tr>
<tr>
<td>9 Hours</td>
<td>1,359.00</td>
</tr>
<tr>
<td>8 Hours</td>
<td>1,208.00</td>
</tr>
<tr>
<td>7 Hours</td>
<td>1,057.00</td>
</tr>
<tr>
<td>6 Hours</td>
<td>906.00</td>
</tr>
<tr>
<td>5 Hours</td>
<td>755.00</td>
</tr>
<tr>
<td>4 Hours</td>
<td>604.00</td>
</tr>
<tr>
<td>3 Hours</td>
<td>453.00</td>
</tr>
<tr>
<td>2 Hours</td>
<td>302.00</td>
</tr>
<tr>
<td>1 Hour</td>
<td>151.00</td>
</tr>
</tbody>
</table>
Out-of-State Students Enrolled in a 4-year Program

<table>
<thead>
<tr>
<th>Hours</th>
<th>West Virginia Students (Full-Time Rate)</th>
<th>Out-of-State Students (Full-Time Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>4,617.00</td>
<td>2,304.00</td>
</tr>
<tr>
<td>11</td>
<td>4,224.00</td>
<td>1,920.00</td>
</tr>
<tr>
<td>10</td>
<td>3,840.00</td>
<td>1,536.00</td>
</tr>
<tr>
<td>9</td>
<td>3,456.00</td>
<td>1,152.00</td>
</tr>
<tr>
<td>8</td>
<td>3,072.00</td>
<td>768.00</td>
</tr>
<tr>
<td>7</td>
<td>2,688.00</td>
<td>384.00</td>
</tr>
</tbody>
</table>

Rates are subject to change and approval of the West Virginia Higher Education Policy Commission.

Audit Fees Per Semester

Enrollment fees for students enrolled in courses for audit (without credit) are the same as if credit were given.

Explanation as to Use of Enrollment Fees

<table>
<thead>
<tr>
<th>Fee Description</th>
<th>West Virginia Students (Full-Time Rate)</th>
<th>Out-of-State Students (Full-Time Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Fees: Restricted for statewide capital improvement purposes by West Virginia Statute.</td>
<td>$292.00</td>
<td>$767.00</td>
</tr>
<tr>
<td>Intercollegiate Athletic Fee: Restricted to defray expenses associated with the University’s intercollegiate athletic program.</td>
<td>127.00</td>
<td>127.00</td>
</tr>
<tr>
<td>Intercollegiate Athletic Equity Fee: Restricted to defray expenses associated with the Institution’s compliance with Title IX.</td>
<td>12.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Student Activity Fee: Restricted to defray expenses associated with the University’s student activity programs with recommendations from the Student Government Association.</td>
<td>36.00</td>
<td>36.00</td>
</tr>
<tr>
<td>Technology Fee: Restricted to defray expenses for the development of University technology.</td>
<td>66.00</td>
<td>66.00</td>
</tr>
<tr>
<td>Co-Curricular Fee: Utilized to defray expenses associated with organized educational activities related to instructional programs.</td>
<td>39.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Recreation Fee: Provide comprehensive recreation program for general student body.</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Student Union Fee: Restricted to defray building and other expenses associated with the Shepherd Student Center.</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>University Operation Fee: Unrestricted for general operating purposes.</td>
<td>1,134.00</td>
<td>3,449.00</td>
</tr>
<tr>
<td>Medical Fee: Restricted to defray expenses associated with the University’s Health Center</td>
<td>26.00</td>
<td>26.00</td>
</tr>
</tbody>
</table>

TOTAL $1,827.00 $4,617.00
Refund Policy
Students who withdraw in accordance with University procedures may receive a refund of tuition and fees in accordance with the schedules outlined below. The refund calculation is based on the amount paid toward tuition and fees. (No refunds on partial withdrawals.) Refunds are determined from the first day of the school term, which officially begins with orientation and registration days. The official withdrawal date is certified by the registrar. Refund checks are issued through the State Treasury, and receipt of a refund may take up to six weeks depending upon the date of withdrawal.

Regular Session
During first and second weeks.................................................................90%
During third and fourth weeks...............................................................70%
During fifth and sixth weeks .................................................................50%
Beginning with seventh week.................................................................No Refund

Summer Terms
During first and second class days........................................................90%
During third and fourth class days.........................................................70%
During fifth and sixth class days............................................................50%
Beginning seventh class day.................................................................No Refund

Special Fees
Application for Graduation.................................................................$35.00
Graduate Application Fee...................................................................40.00
Admission Application Fee (nonrefundable).........................................35.00
Diploma Replacement........................................................................20.00
Identification Card Replacement..........................................................25.00
Late Registration and Late Payment.......................................................25.00
Orientation..........................................................................................75.00
Parking—per year, per vehicle (Day)......................................................20.00
Regents Bachelor of Arts (R.B.A.) Evaluations.......................................300.00
Returned Check Handling..................................................................10.00
Special Examination per credit hour......................................................25.00
Transcripts—after first transcript........................................................5.00
Emergency Transcript.........................................................................15.00
Enrollment Deposit (nonrefundable)......................................................100.00
Applied Music Fee (per ½ credit hour)....................................................153.00
Science Lab Fee (per course)...............................................................20.00
CIS Lab Fee (per course)....................................................................25.00
Education Fee (per course) .................................................................30.00
HPERS Fee (per course)....................................................................30.00
Art Studio Fee (per course).................................................................30.00
High School Student Course Fee (per credit hour)..............................51.00
Nursing Lab Fee (per clinical course)....................................................30.00
Science Lab Fee-Sections 300 and above..............................................20.00
Music Lab Fee-Music Majors..............................................................30.00
MAT Transcript..................................................................................20.00

Reduced Tuition and Fee Program for West Virginia Residents who are at Least Sixty-five Years of Age
1. To be eligible for this program the applicant must fill out the application/registration form completely and choose one of two options:
   • register under this program for all classes for credit.
   • register under this program for all classes for noncredit.
(A student cannot mix these two options or mix this program with regular tuition course registration.)

2. A student eligible for this plan may only register in the Office of the Registrar during the late registration add/drop period in a section with at least two openings at the time of registration and with the written consent of the department chair.

3. The total tuition and standard fees for the credit option will be 50 percent of the normal rates charged to state residents by Shepherd University.

4. The total tuition and standard fees for the noncredit option will be $12.50 per credit hour.

5. Students under this plan will be expected to pay full charges for special fees, including laboratory fees, that are required of all other students. Such students are subject to regular parking rules and fees.

6. No late fee will be charged.

7. In lieu of a grade, an AU will be entered for courses in the noncredit option.

8. Students may withdraw according to established dates.

9. Must pay at time of registration (at the cashier’s window) to avoid being dropped for nonpayment.

10. The standard refund policy applies, as do all other University policies not specifically addressed herein.

11. All University academic policies apply.

12. Students registered under this program cannot preregister for the next term.

ROOM AND BOARD

Payment

Room and board charges must be paid in full at the time of registration. Private room rentals are subject to room availability and authorization of dean of student affairs. Private room cost is one and one-half times the double occupancy rate. Once a room has been occupied, the student is liable for rent for the entire semester or summer term. In accordance with the residence hall contract, no room rent will be refunded when a student withdraws from the University. Students absent from campus seven or more consecutive days because of illness or other excused reason will not be charged for meals, but no deduction will be made from room rental during the absence. Board payment will be refunded four to six weeks following the date of withdrawal from the University. All room deposits and board refunds must be authorized by the dean of student affairs.

For new freshman, transfers, and continuing students, notice of cancellation of room reservation must be received in the Office of Student Affairs by May 31 for the fall semester or by December 1 for the spring semester. Failure to meet this deadline will result in forfeiture of the room deposit.

Room and Board Rates Regular Session 2004-2005 (per semester)

<table>
<thead>
<tr>
<th>Hall Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardiner, Kenamond, Turner, Miller, Shaw, and Thacher Halls (room)</td>
<td>$1,424.00</td>
</tr>
<tr>
<td>Burkhart, Moler, Yost, Lurry, Martin, and Boteler Halls (room)</td>
<td>$1,652.00</td>
</tr>
<tr>
<td>Board</td>
<td>$1,363.00</td>
</tr>
<tr>
<td>Room Damage Deposit Traditional Halls (Refundable)</td>
<td>$100.00</td>
</tr>
<tr>
<td>Room Damage Deposit West Woods (Refundable)</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

Room Rates Summer Terms 2005 (per term)

<table>
<thead>
<tr>
<th>Hall Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Woods (room only)</td>
<td>$394.00</td>
</tr>
</tbody>
</table>

Rates are subject to change. Food service is generally not available during summer session. Meals may be purchased on a casual basis in the Student Center.
### Educational Costs Payable at Registration (per semester, 4-year degree)

<table>
<thead>
<tr>
<th></th>
<th>West Virginia Students (Full-Time Rate)</th>
<th>Out-of-State Students (Full-Time Rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>1,827.00</td>
<td>4,617.00</td>
</tr>
<tr>
<td>Room and Board*</td>
<td>3,015.00</td>
<td>3,015.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$4,842.00</td>
<td>$7,632.00</td>
</tr>
</tbody>
</table>

*Room and board rates used are the higher of the University’s room and board costs. The cost will vary according to the residence hall assigned.

In addition to the costs listed above, students should expect books and supplies expenses of approximately $425 and personal expenses and transportation expenses of $1,550 per semester. These costs are only estimates and will vary among students. More detailed information is available through the Office of Financial Aid, Gardiner Hall.

### SCHOLARSHIPS AND STUDENT FINANCIAL AID

The Office of Financial Aid is located in Gardiner Hall. To reach the Office of Financial Aid by phone, please call 304/876-5470 or 800/344-5231, or visit the Web [www.shepherd.edu/faoweb/](http://www.shepherd.edu/faoweb/).

The Office of Financial Aid at Shepherd University is committed to helping students and their families pay for a University education. Financial assistance is available on the basis of scholastic achievement, special talents and abilities, and financial need. Awards are given for a period of one academic year, and students must apply for financial aid and scholarships each year, except for those few that are automatically renewed. The financial aid year runs from July 1 to June 30. The following sections describe financial aid programs and guidelines.

#### Application Process

Any student who wishes to be considered for federal or state financial assistance or scholarships must submit the Free Application for Federal Student Aid (FAFSA). The priority filing date is March 1 for maximum consideration for aid, and awards will be made only to students who have been admitted to Shepherd University. Students are urged to begin the financial aid application process as early as possible after January 1.

Students should notify the Office of Financial Aid if their circumstances change after they submit their FAFSA (i.e., a change of income, divorce or separation, etc.).

Grants, scholarships, and work-study are awarded first, and then student loans are automatically packaged for the maximum eligible loan amount for those students who indicate an interest in loans on the FAFSA.

The U.S. Department of Education randomly selects 30 percent of all FAFSAs for a process called verification. These applicants are required to submit specified documentation, including signed copies of tax returns.

#### Shepherd University Scholars Program

Privately-funded financial support is provided through the Shepherd University Scholars Program to attract academically talented students from Shepherd’s regional service area, both in West Virginia and out of state, to attract a student body that is culturally diverse, and to attract top level scholars to the University Honors Program.

Each year the Shepherd University Scholars Program provides over 350 scholarships and awards with a total value in excess of $600,000. These scholarships are made available through the Shepherd University Foundation and the Shepherd University Alumni Association. A limited number of institutional tuition and fee waivers and other types of financial aid grants and loans also are available. The application deadline for all is February 1 and most are renewable for eight semesters.
Shepherd University Foundation Scholarships
The Shepherd University Foundation Scholarships, funded by gifts from the Ruby Clyde McCormick estate and the Ralph and Margaret Burkhart estate, are awarded to four incoming students each year, with at least two of them chosen from the Honors Program. Awards are based on academic achievement, leadership potential, high school and community involvement, and interviews with a selection committee.

Shepherd University Alumni Association Scholarships
The Shepherd University Alumni Association Scholarships, made available by gifts from the Alumni Association, are awarded to two West Virginians and two out-of-state residents. High school and community involvement are considered in selection decisions, in addition to academic achievement and leadership potential.

Presidential Scholarships
Presidential Scholarships are funded by gifts from individuals, corporations, and foundations. Some of the Presidential Scholarships may consider financial need as part of the selection criteria, but the potential for academic excellence is the primary criteria for selection. This scholarship is available to both residents and nonresidents of West Virginia. Thirty-two Presidential Scholarships are awarded each year, with at least eight awards being made to first-time freshmen.

Governor’s Honors Academy Scholarships
Governor’s Honors Academy Scholarships are available to each high school student who is a graduate of the Governor’s Honors Academy who elects to attend Shepherd University and who meets the high school GPA and ACT/SAT requirements. The scholarship is awarded to West Virginia residents only.

Eligibility
If a student is eligible for more than one scholarship from Shepherd University, the student will be awarded the scholarship with the highest dollar value. To retain scholarships for subsequent years, all scholars are required to meet minimum specific cumulative grade point averages and to complete a minimum of 24 semester hours.

For further information about the Shepherd University Scholars Program, including details about scholarship requirements, contact the Office of Financial Aid.

Anyone interested in establishing an endowed scholarship fund through the Shepherd University Scholars Program should contact the Shepherd University Foundation at 304/876-5391 or 800/344-5231, ext. 5391.

Federal and State Grant Programs
Federal Pell Grant: A federal grant available for either full-time or part-time entering undergraduate students. The amount of the grant is based on family size and income and other factors determined by FAFSA.
Federal SEOG: A federal grant given to students demonstrating exceptional financial need. Award levels are determined by individual schools.
West Virginia Grant Program: A need-based grant program for West Virginia residents administered by the Higher Education Policy Commission. The grant currently pay 70 percent of tuition and fees at Shepherd. Only available to those students whose FAFSA is filed before March 1.
Higher Education Adult Part-time Student Grant (HEAPS): A state grant for part-time West Virginia residents who are in a degree, diploma, or certificate program. The award amount is determined by individual schools.

Student Employment
Work opportunities for students are offered in almost all areas of the University community. Students interested in student employment must submit the Free Application for Federal Student Aid (FAFSA). Work study funds are limited and are awarded to the first students meeting all application and need requirements. Only students with financial need as determined by the FAFSA may receive
Federal Work Study. Regular student employment is available in some departments for students who do not qualify for work study. Both Federal Work Study and regular student employment positions pay above the federal minimum wage; some positions require special skills and are paid accordingly. Student work earnings will be paid by check twice each month.

**Student and Parent Loans**

The Office of Financial Aid at Shepherd University processes student and parent loans through the William D. Ford Direct Loan Program funded by the U.S. Department of Education. Students must be enrolled in a minimum of six credit hours to qualify for a Direct Loan. Federal regulations require that a three percent origination fee, based on the loan amount, be deducted from every Direct Subsidized and Direct Unsubsidized Loan processed. The percentage is four percent for parent loans. An up-front rebate of a percentage of the fee is currently in effect.

**Federal Direct Loans**

Any student indicating his/her interest in loans either on the FAFSA or by contacting the Office of Financial Aid is processed for the amount of student loan for which he/she is eligible. Any student who wants a lower amount need only indicate that amount on the award letter when the loan is accepted.

The amount any student may borrow each academic year is based on:

1) Grade level
2) Length of academic program
3) Dependent or independent status

Listed below are maximum amounts per year and cumulative maximum amounts a student may borrow under the Direct Loan Program as an undergraduate.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>$2,625</td>
<td>$6,625</td>
</tr>
<tr>
<td>Sophomore</td>
<td>$3,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>Junior</td>
<td>$5,500</td>
<td>$10,500</td>
</tr>
<tr>
<td>Senior</td>
<td>$5,500</td>
<td>$10,500</td>
</tr>
<tr>
<td>Cumulative</td>
<td>$23,000</td>
<td>$46,000</td>
</tr>
</tbody>
</table>

The amount and type of loan a student may receive varies by his/her total cost of education and the amount of other financial aid received. Any student borrowing under the Direct Loan Program for the first time is required to complete an entrance interview electronically. After the first student loan is processed, the student will complete a promissory note prior to monies being disbursed to the student's account. All loan monies are applied to any outstanding obligations to the University before the student receives a refund. Visit the financial aid Web site [www.shepherd.edu.fao.web](http://www.shepherd.edu.fao.web) for links.

**Direct Parent Loan for Undergraduate Students (PLUS)**

Applications for the Parent Loan for Undergraduate Students (PLUS) are available through the Office of Financial Aid. Parent loans are processed based on amount requested and the student's cost of education. A credit check by the Federal Loan Servicer is required for processing.

**Federal Perkins Loans**

The Federal Perkins Loan Program (formerly National Direct Student Loan) is administered at the campus level and awarded based on availability of funds. This loan program offers up to $1,500 per year to needy students and is awarded to early applicants until funds are exhausted.

**Alternative Loans**

Other loans may be available to students with demonstrated need or special situations. These are made by outside lenders such as SallieMae and Citi Assist. Credit worthiness or a co-borrower is required.

**Loan Repayment Information**

William D. Ford Direct Loan funds do not have to be repaid until six months after the student graduates or ceases attending on at least a half-time basis. Any student who drops below six hours
of enrollment must begin repaying his/her loan six months from that time. Only one six month
grace period is granted to each student.

Repayment for parent loans begins approximately 60 days after the last disbursement for the
year, usually in March if the loan is for two semesters.

Repayment for the Federal Perkins Loan begins nine months after graduation or when the
student ceases attending on at least a half-time basis. Again, only one nine-month grace period is
permitted for each student.

Students utilizing loan funds to assist with their education should be aware that borrowing under
both the Direct Loan Program and the Federal Perkins Loan Program will each require a minimum
payment per month and current minimum amounts are $50 for each program, depending on repay-
ment plan. Several repayment plans exist for all loan programs.

An exit interview must be completed by any student with federal loans prior to graduation
or leaving Shepherd. Holds will be placed on academic transcripts until this requirement is com-
pleted.

Other Types of Assistance

Veteran’s Re-Education Act
Eligibility for funding by the Veteran’s Re-Education Act is determined by the West Virginia Depart-
ment of Veterans Affairs, and awards are given to West Virginia residents who have exhausted all
other veteran’s benefits. Applications may be obtained from the Office of Financial Aid.

Military and Veterans Administration Education Assistance
The Veterans Administration administers a number of programs for veterans and service personnel
seeking assistance for education and/or training. Please contact your local Veterans Administration
Office to inquire about available assistance. Additional information may be obtained from the
veteran’s coordinator in the Office of Student Affairs.

Veterans Affairs Education Assistance

Vocational Rehabilitation
Students with physical or learning disabilities may be eligible for assistance with education expenses
through their state departments of vocational rehabilitation. Students should contact local offices
to inquire about programs available.

Academic Common Market Options for Out-of-State Students/Reciprocity
A student must apply to his/her home state to be certified as eligible to be considered for Com-
mon Market status and pay West Virginia in-state tuition rates. The certification must be received
by the Office of the Registrar by the first Friday in August to be considered for Common Market
status for the previous summer terms, by the third Friday in September to be considered for that
fall semester, and by the third Friday in February to be considered for that spring semester.

If a student comes to Shepherd under the Common Market and has been certified by the cor-
responding state agencies as a bona fide resident of Maryland or Virginia or any other state with
which Shepherd may have a Common Market agreement, the Common Market status is retained,
provided that the student remains in the program which was certified and maintains continuous
enrollment at Shepherd University. This status will hold even if the student’s legal or permanent
residence changes to another state.

Further information and applications forms may be obtained for the photography/computer
imagery program from Rick Bruner (304/876-5372); for the recreation and leisure studies program
from Ernie McCook (304/876-5442); and for the resource management option in the environmental
studies program from Ed Snyder (304/876-5428) or from the Admissions Office.

A Common Market student must show steady progress in taking courses specific to the al-
lowed program. If in the judgment of the registrar the student has not made such progress, based
on the Shepherd University Advisor’s Handbook, the status will be changed to out-of-state. If a
Common Market student stays out a year, he/she will have to reapply to Shepherd University and
must resubmit an application for Common Market status.
Disbursements/Refunds

Disbursement of Funds

Financial aid is awarded for the full academic year; half is available for the fall semester and half for the spring semester. Student payment for tuition and fees, room and board, and books and supplies is due prior to the start of each semester. Students receiving financial aid to assist with these expenses will have that aid available as a credit toward institutional charges. Purchase of books and supplies at the University Bookstore may be billed directly to the student account if the student has a credit balance.

Refund of Excess Financial Aid

All financial aid, including loans, is applied to the student account to cover institutional costs. No refund is given to the student until all obligations to the University are met. All Title IV funds awarded (Federal Pell Grant, Federal SEOG, Direct Loans, Federal Perkins Loan, and Federal Work Study) are refundable according to program regulations. Refund checks for excess financial aid are normally available at the Business Office five days prior to the first day of classes and on a weekly basis thereafter.

Refunds/Returns Due to Withdrawal

Students receiving financial aid funds who withdraw during the semester are subject to institutional and federal refund/return policies. No monies will be refunded to withdrawing students until institutional and federal return requirements are met. In most cases, any refund generated due to a withdrawal by a student receiving financial aid will be returned to an aid program. A student withdrawing who has received any type of tuition waiver will have that waiver adjusted to the actual amount of tuition and fees charged.

The Office of Financial Aid is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60 percent of a payment period or term. If a student leaves the institution prior to completing 60 percent of a payment period or term, the Office of Financial Aid recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV Funds formula:

\[
\text{Percentage of payment period or term completed} = \frac{\text{the number of days completed up to the withdrawal date}}{\text{the total days in the payment period or term}}. \text{ (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid. Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:}
\]

\[
\text{Aid to be returned} = (100 \text{ percent of the aid that could be disbursed minus the percentage of earned aid}) \times \text{the total amount of aid that could have been disbursed during the payment period or term.}
\]

If a student earned less aid than was disbursed, the institutions would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution. If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 30 days of the student’s withdrawal.

- Unsubsidized Federal Stafford Loan
- Subsidized Federal Stafford Loan
- Federal Perkins Loan
- Federal Parent (PLUS) Loan
- Federal Pell Grant
- Federal Supplemental Opportunity Grant
- Other Title IV assistance
- Other State, Private, and Institutional Aid
- The Student
Satisfactory Academic Progress Policy

The Policy for Satisfactory Academic Progress is effective as of May 2005 and supersedes any previous policy. Any student receiving Title IV financial aid is required to maintain satisfactory academic progress according to the Compilation of Financial Aid Regulations (34 CFR, through 12/31/95 as published by the U.S. Department of Education, section 668.34).

Every student is required to complete a certain number of hours attempted to show that he/she is progressing toward a degree in his/her program of study. Each student must also maintain a grade point average consistent with the regulations governing satisfactory academic progress.

Satisfactory academic progress is required for students to receive financial aid in any of the following programs: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work-Study, Federal Perkins Loan, Federal Direct Loan or Parent Loan for Undergraduate Students (PLUS), Federal Student Nursing Loan, and State Grant Programs including the West Virginia Higher Education Grant Program.

Standards Measured by Grade Point Average

1. All bachelor’s degree students must maintain a minimum of 2.0 GPA as of their 25th attempted hour of course work.
2. Any student admitted or readmitted on academic probation who does not meet grade point average standards may appeal to the Scholarship and Financial Aid Committee.

Standards Measured by Hours Attempted

1. Any student in a program leading to a bachelor’s degree must complete his/her program within 192 attempted hours of course work.
2. As a student progresses through his/her program, he/she must pass 70 percent of all hours attempted.
3. Attempted hours for courses with a grade of failure (F), incomplete (I), incomplete/failure (IF), withdrawal (W), or repeat (R) are counted as hours attempted and combined with all passing grades in determining progress. The committee strongly recommends that students limit their withdrawals from classes.

General Information

All student progress is measured once per year at the end of the spring semester. Any student not in compliance with the standards will be notified in writing. Any student who wishes to appeal must submit his/her appeal and supporting documents to the Office of Financial Aid. Circumstances considered in the appeal process include, but are not limited to, death of a close relative or injury/illness of the student. All appeals are considered on a case-by-case basis. For more information visit www.sheperd.edu/faoweb.
SECTION V

ACADEMIC INFORMATION

Degrees Offered: The bachelor of arts degree is conferred upon majors in mass communication, English, history, music, psychology, elementary education, secondary education and in the Regents Bachelor of Arts Program. The bachelor of fine arts degree is conferred upon graduates majoring in art. The bachelor of music education is conferred to graduates majoring in music education. The bachelor of science degree is conferred upon graduates majoring in accounting, biology, business administration, chemistry, computer and information sciences, economics, environmental studies, family and consumer sciences, mass communication, mathematics, political science, recreation, and sociology. The bachelor of science in nursing is conferred on majors in nursing. The bachelor in social work is conferred on majors in social work.

A newly or formerly enrolled Shepherd University student wishing to complete requirements for more than one degree or major must meet the requirements detailed in the section, Graduation Requirements.

ACADEMIC ADVISEMENT

Mission

Because we believe academic advising to be a developmental process, the mission of the Shepherd University Academic Advising Program is to assist students in the clarification of their educational and professional goals. Academic advisors will work closely with their students and advisees to improve student learning and to encourage their intellectual growth, their personal fulfillment, and their academic and professional excellence.

The Academic Advising Program is led by the director of advisement and by the Committee on Academic Advisement. The committee publishes the Shepherd University Faculty Advisor’s Handbook, which is intended to serve as the major resource tool for academic advisors, and it provides annual developmental training workshops for both new and existing faculty and staff who serve as academic advisors for students.

Goals

To achieve its mission, the Academic Advising Program is designed to accomplish the following goals:

• Articulate institutional requirements and policies.
• Assist students in their selection of appropriate courses.
• Assist students in developing an academic program consistent with the student’s academic interests, aptitudes, and professional goals.
• Assist students in monitoring progress toward their established educational and professional goals.
• Refer students to other appropriate institutional support services, when necessary.

Definition of Academic Advising

Academic advising is a developmental process which assists students in the clarification of their educational and professional goals and in the development of plans for the realization of those goals. It is an ongoing and multifaceted process by which students are assisted in realizing their maximum educational potential through communication and information exchanges with an advisor.

An academic advisor is initially assigned on the basis of academic interest expressed by the
It is the responsibility of both the student and his/her academic advisor to participate in the advising process equally. The academic advisor serves as a resource for planning and academic progress review and as an agent of referral to other campus services as necessary. The academic advisor is not authorized to change established policy of the University. Any advice which is at variance with established policy must be confirmed by the vice president for academic affairs. After consultation with an academic advisor, it is ultimately the student’s responsibility to choose and implement his/her academic program and to see that all specific requirements for that program and all general requirements for graduation from the University have been met in an acceptable and timely manner.

Joint Responsibilities in the Advising Process

General Responsibilities of the Academic Advisor
- The advisor should be available to students on a regular basis.
- The advisor should encourage honest and meaningful communication between faculty and students.
- The advisor should assist students in developing decision-making skills by helping students identify and assess alternatives to and the consequences of their academic choices.
- The advisor should stay informed about University programs, policies, and procedures, and should explain the specific requirements of the student’s academic program and the general requirements for graduation from the University.
- The advisor is an important source of information for the student and should be familiar with the campus resources available to students who need them.
- The advisor should know when and where to refer students to receive the assistance that they need.
- The advisor should keep accurate records and monitor the progress of advisees.
- The advisor should genuinely care about students and take the initiative to reach out to students in times of need.

General Responsibilities of the Advisee
- The student should consult with his/her academic advisor often.
- The student should seek assistance with decisions to be made rather than expect the advisor to make them.
- The student should accept responsibility for these decisions.
- The student should be knowledgeable about the academic policies, requirements, and procedures of the University.
- The student should make appointments for academic advising and scheduling of classes.
- The student should be on time for the advising session prior to registration and come to it with the necessary forms completed, an idea of the type of courses needed, and a list of alternatives, if necessary.
- The student should follow through with appropriate action after each advising session and keep the advisor informed of all changes made in the student’s class schedule.

ACADEMIC WORK

Schedule of Classes
A complete schedule of classes offered each semester showing days of the week and the hours at which they will meet will be available in print and online before the beginning of the semester. In addition, a tentative listing of course offerings planned for the following semester will be made available online. The University reserves the right to cancel classes with an enrollment of 10 or fewer students and to make changes in a student’s schedule for class balancing and other administrative purposes.

Final Examinations
University policy requires that final examinations, when included as part of course requirements, be given at the end of each semester and summer term. A schedule prepared by the Office of the
Registrar establishes each semester’s final examination period; the final day or days of each summer term are reserved for final examinations. All final examinations are to be administered at the published time, unless other arrangements are approved by the vice president for academic affairs.

Graduating seniors in their last semester, fall or spring, with a grade point average of 3.0 or better in a given course (this recommendation not to include general education courses) may be excused from the final examination at the option of the instructor. Such students may elect to take the final examination which will count in the determination of the final grade. This policy does not apply to courses taken during summer sessions.

**Academic Load**

Effective Summer 2005, semester hours earned through the Community and Technical College in Martinsburg will no longer be included in the Shepherd University academic load.

A semester hour (or credit) generally consists of one contact hour per week. To be considered full-time, an undergraduate student must be enrolled in a minimum of 12 semester hours in a semester. To complete a bachelor’s degree (a minimum of 128 semester hours) in the traditional four years, a student would need to carry an average academic load of 16 semester hours in a semester.

Degree-seeking students may register for a maximum of 19 semester hours per semester; however, the academic load for the first semester should generally not exceed 17 hours. The maximum of 19 semester hours does not apply to private applied music lessons and ensembles. The maximum academic load in the summer is 14 semester hours overall (7 semester hours per session).

A student who wishes to register for more than 19 semester hours in a regular semester, or for more than 14 semester hours overall in a summer semester, (including non-Shepherd University semester hours), must have a 3.0 or higher overall grade point average, and must not be carrying any incomplete grades from previous semesters. If these criteria have been met, the student must obtain an approval form from the Office of the Registrar, and seek approval from the academic advisor, department chair, and the vice president for academic affairs. Any exceptions to this rule must be appealed by petition to the Admissions and Credits Committee.

In no case may a student enroll for more than 23 semester hours per semester.

**Auditing Courses**

A student may initially register to audit a course. Regular University tuition and fees are charged and no credit is awarded for an audited course. Declaration of a change in course status from credit to audit must be processed within the first 15 days of classes (Monday-Friday) of a fall or spring semester or within the first three class days (Monday-Friday) of a summer session. Any subsequent change in course status must be appealed to the Admissions and Credits Committee. A student who audits a course is expected to comply with the instructor’s attendance policy.

**Special Examination for Course Credit**

Application must be made to the registrar for permission to take a special examination. To qualify for permission to take such an examination, an applicant must be a degree-seeking student enrolled full-time at Shepherd University and be recommended by the department chair and the instructor concerned. Examinations will not be given for courses in which the student has previously earned a low grade.

Applicants must pay a fee for each special examination. A receipt for the payment of the fee must be obtained from the Business Office and submitted with the application for special examination. No money will be refunded if any examination is failed. Upon successful completion of the special examination, the student will receive the credit hours for the course with no letter grade designated. This will not affect the grade point average of the student.

**Courses Taken at Other Institutions**

Effective Summer 2005, credit hours earned through the Community and Technical College in Martinsburg will be considered transfer hours, and will be subject to this policy.

Once enrolled at Shepherd University, a student must receive prior approval to enroll in and transfer any additional course work from another institution. Transfer approval is subject to the following conditions:
A student must be in good academic standing (GPA \geq 2.00). Courses taken during a period of academic suspension will not be approved for transfer.

A Shepherd course for which a grade of D, F, or W was received may not be repeated elsewhere, even when an articulation agreement exists for the course. No Shepherd University D or F grade can be replaced by an equivalent transfer course.

Courses in the major, minor, or teaching field cannot be taken at another institution.

Only courses from accredited institutions of higher education may be transferred to Shepherd.

A maximum of 72 transfer semester hours from accredited two-year institutions may count toward graduation requirements.

The last twelve hours of course work before graduation must be completed at Shepherd.

A GPA deficiency earned at Shepherd University cannot be made up at another institution.

A Transfer Approval or Consortium Registration form must be completed, including appropriate faculty signatures, and submitted to the Office of the Registrar prior to enrolling at another institution. Both forms are available in the Office of the Registrar.

Exceptions to any of these policies must be petitioned through the Admissions and Credits Committee for final action.

Special Topics Courses

The University offers courses which fulfill short-term needs not justifying permanent listing in the Catalog or which respond to requests received on short notice.

Each discipline may have two courses, one lower-level and one upper-level, bearing the designation “Special Topics: (specific title).” The numbering of these courses is generally 199, 299, 399, or 499 depending on the level. The class schedule and the student transcripts also will carry the specific title of the course. Courses will be offered upon the agreement of the vice president for academic affairs.

Credit given will be from one to four hours, and the course may be repeated as needed by the department. Topics for these courses will be created as needed by the department.

General Studies Curriculum

Shepherd University has established the following general studies program which is required for all bachelor’s degrees except the Regents B.A. degree, which has a separate set of requirements found under that section of the Catalog. The courses listed would usually be taken during the student’s first two years of University work and are designed to give the student a foundation in the humanities, life or physical sciences, mathematics, social sciences, and physical education. In addition, basic computer literacy is required including e-mail use, Internet use, electronic library research, and word processing skills. These courses and requirements should assist the student in developing the ability to synthesize knowledge, both past and contemporary, to develop values, attitudes, and traits associated with an educated person in the modern world, and to provide the basis for a liberal arts education. Courses required in general studies may be cross-counted if also required in either a student’s major or minor. Cross-counting of courses is not allowed between majors and minors. For additional information, students should contact their advisor or the registrar. A total of 47 semester hours of course work is required as follows:

**HUMANITIES—19 semester hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 111</td>
<td>Introduction to Music (waived for music major and minor)</td>
<td>2</td>
</tr>
<tr>
<td>ART 103</td>
<td>Introduction to Visual Arts OR</td>
<td>2</td>
</tr>
<tr>
<td>ART 104</td>
<td>Introduction to Visual Arts (required for art majors)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Written English AND</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Writing for the Arts and Humanities OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Writing for the Social Sciences OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 104</td>
<td>Science and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 204</td>
<td>Survey of American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 208</td>
<td>Survey of World Literature I OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Survey of World Literature II</td>
<td>3</td>
</tr>
<tr>
<td>COMM 202</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>
LIFE OR PHYSICAL SCIENCES—8 semester hours *
Students will choose one set of courses listed below:
- BIOL 101, 102 General Biological Science ................................................. 8
- BIOL 208, 209 Plants as Organisms and Animals as Organisms .................. 8
- CHEM 101, 101L, 102, 102L Chemistry in Society I and II .......................... 8
- CHEM 120, 120L, 122, 122L College Chemistry I and II ............................ 8
- CHEM 207, 207L, 209, 209L General Chemistry I and II ............................ 8
- GSCI 101, 102 Astronomy I and II ............................................................ 8
- GSCI 103, 104 General Physical Science I and II ....................................... 8
- PHYS 201, 201L, 202, 202L College Physics I and II ................................... 8
- PHYS 221, 221L, 222, 222L General Physics I and II ................................... 8

MATHEMATICS—3 semester hours
- MATH 101 Introduction to Mathematics OR ............................................. 3
- MATH 108 Precalculus OR ......................................................................... 3
- MATH 154 Finite Mathematics OR .............................................................. 3
- MATH 205 Calculus with Applications OR ................................................. 4
- MATH 314 Statistics .................................................................................. 3

SOCIAL SCIENCES—15 semester hours
- ECON 123 Contemporary Economics OR .................................................. 3
- ECON 205 Principles of Macroeconomics** ............................................... 3
- HIST 100 History of Civilization: Asian Traditions OR .............................. 3
- HIST 101 History of Civilization: The Ancient and Medieval Worlds OR .... 3
- HIST 102 History of Civilization: Change and Global Connections to the Early Modern World OR
- HIST 103 History of Western Civilization: The Modern World .................. 6
  (students will choose 2 of 4 listed but may not satisfy the requirement with both HIST 100 and HIST 101)
- PSCI 100 Politics and Government OR ...................................................... 3
- PSCI 101 American Federal Government ................................................... 3
- SOCI 203 General Sociology .................................................................... 3

PHYSICAL EDUCATION—2 semester hours
- GSPE 210 Fitness for Life ............................................................................ 2

COMPUTER LITERACY REQUIREMENT ....................................................... See advisor

FOREIGN LANGUAGE—12 semester hours (required only for B.A. programs, except education).

Students in the B.A. program (not including education) are required to complete 12 semester hours in the same foreign language, except music students whose requirements must be approved by the chairs of the Music and English and Modern Languages departments. Two years of German or French or both are recommended for students who anticipate going to graduate or professional school. The foreign language requirement for the B.A. degree can be satisfied in any of the following ways:

1. By successfully passing the University Foreign Language Placement Test.
   Beginning in the fall semester 1990, all students who have had course work in a foreign language and who wish to fulfill the foreign language requirement for the B.A. degree will take a placement test to determine their competency in that language. Placement tests in French, German, and Spanish will be administered by a member of the foreign language faculty during each preregistration period of the academic year. Performance on placement tests will be evaluated by a member of the foreign language faculty who, with the approval of the chair of the Department of English and Modern Languages, will determine the course level at which the student must begin his or her language study at Shepherd University.
A strong performance on the Foreign Language Placement Test may entitle the student to waive three, six, nine, or twelve credit hours, corresponding to one, two, three, or four semesters of foreign language study at Shepherd University. A student receives no credit for waived courses. Permission to retake a Foreign Language Placement Test rests with the chair of the Department of English and Modern Languages.

2. By receiving advanced placement credit for foreign language examinations.
   A score of four on the advanced placement tests in French, German, or Spanish entitles a student to three hours credit in the same language, while a score of five entitles a student to six hours credit. No credit will be awarded for scores of three, two, or one.

3. By successfully completing CLEP tests in French, German, or Spanish.
   For the University’s policy on taking CLEP tests, see Section II, Admissions.

*Since major fields of study may have specific requirements for mathematics or science courses, students should consult their academic advisor in selecting these courses.

**Students majoring in accounting, business administration, economics, environmental studies, and students pursuing a teaching field in social studies (5-12) must take ECON 205. Students with a minor in business administration or economics must take ECON 205. Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Classification of Students
Classification of students is made on the following basis: first year, 24 semester hours or less; second year, 25 to 56 semester hours; third year, 57 to 91 semester hours; fourth year, 92 or more semester hours.

Selecting a Major and Minor
The list of majors and minors is found at the beginning of Section VI Programs of Study with the curriculum for each following in that section. A comprehensive major needs no minor; teacher education programs are comprehensive.

   Where a minor is required, students should be aware of the value and necessity of choosing the minor early in their University career. Delaying this decision beyond the second year may mean that the student will not be able to complete the degree program in four years.

Degree-Seeking Undecided Majors
Students who seek a baccalaureate degree but have not chosen a major will be placed in the B.S. Undecided program and assigned an academic advisor in Career Services with whom they will work closely until a major is officially declared. Students will not be permitted to remain as B.S. Undecided registrants either after they have completed their third semester at Shepherd University or after they have completed 32 hours of undergraduate credit, whichever comes first. At that time, students will be assigned an academic advisor in the department of their declared major.

Withdrawal and Change of Class Schedule
Students desiring to add or drop a course during the first five class days of a semester should do so by using the RAIL system. A course dropped during this time period will not appear on the student’s transcript.

   Beginning on the sixth class day of the semester until 4 p.m. on Friday of the 12th class week, a student may withdraw from a class with a grade of W, without affecting grade point average (see Grading System). A week containing one or more scheduled class days is considered a full class week. There will be no exceptions to this deadline (see Summary of Withdrawal Dates).

   The last day for withdrawal from an eight-week class will be as posted in the academic calendar.

   During the summer sessions, any time prior to 4 p.m. of the second calendar day before the last day of classes of each summer term, a withdrawal (W) will be permitted. Failure to submit the withdrawal form to the Office of the Registrar by the deadline will result in the grade of F or IF (see Grading System).

   Until 4 p.m. on the last class day of the semester, a student may process through the Office of the Registrar a complete withdrawal from the University (all enrolled classes). Students who
discontinue attending class without following the proper withdrawal procedures will receive a grade of F or IF in the course (see Grading System).

Withdrawal from the University must be reported and financial clearance made at the Business Office (see Grading System for additional information on withdrawals).

Summary of Change of Class Schedule (abbreviated dates in summer)

Action: Add a course.
Process: No form required; add class AND PAY online through RAIL. No bill will be mailed.
Eligible Dates: First five class days.
Result: Course added.

Action: Drop a course.
Process: No form required; drop class online through RAIL.
Eligible Dates: First five class days.
Result: Course dropped; course will not appear on transcript.

Action: Withdraw from a course.
Process: Form required; obtain from advisor; submit to registrar.
Date: Sixth class day through Friday of the 12th week.
Course Grade: W.

Action: Complete withdrawal from the University.
Process: Form required; obtain from registrar.
Date: Sixth class day through the last class day of the semester.
Course Grade: W.

The withdrawal procedure is incomplete until all necessary signatures have been secured and the appropriate forms returned to the Office of the Registrar by the specified time stated in the current academic year calendar.

Any counseling provided to a student from any employee of the University, which differs from established University policies, must be confirmed by the vice president for academic affairs. Although a student may receive advice from any agent of the University, the final responsibility for a decision concerning withdrawal rests with the student, in consultation with the course instructor, in accordance with University policies. Prior to withdrawing from a course, those students receiving financial aid must refer to the “Satisfactory Academic Progress Policy” section of the Catalog.

Any student who commits academic misconduct is ineligible to withdraw from a course unless the withdrawal is approved by the instructor. This exception to the withdrawal policy applies to the entire period within which a student would otherwise be eligible to withdraw and receive a W on the transcript. This exception to the withdrawal policy may be applied retroactively to the transcript in cases where the student is ultimately found by the University to have committed academic misconduct prior to the date that a withdrawal was processed by the registrar. Refer to the Student Handbook.

Absence from University/Readmission

Students in good academic standing who must discontinue their studies for a brief time will be considered eligible to re-enroll in future semesters, as long as they return after no more than two consecutive regular semesters (not including summer sessions), and do not take courses at another institution during that time without prior approval from the University. (For procedures to take courses with permission during a time of absence, see Taking Courses at Other Institutions.)

Students who are on suspension, who take courses at another institution without prior approval, or who are absent from studies for more than two consecutive regular semesters (not including summer sessions), must re-apply through the Office of Admissions.

Students wishing to return after absence, and who do not need to re-apply through the Office of Admissions, should check the semester schedule of classes for advisement dates, and make an appointment with their advisor.
GRADING

Grade Reports
Midterm and final grade reports follow the normal grading system. A copy of the midterm and final grade reports will be available on campus for all students in their advisor's office and on RAIL. First semester freshmen and high school seniors' grades are mailed to the student's permanent address.

Grade Point Average
A student's grade-point average is computed on all work that a student has attempted for University credit (including Shepherd University credits and transfer credits). Courses with a grade of W, courses taken on a pass/fail or audit basis, and Academic Foundations courses are not considered courses attempted for University credit in the computation of a student's grade point average.

Quality points are based on the point value per semester hour multiplied by the number of hours of course work attempted. A student taking a three-hour course and receiving a grade of C would earn 6 quality points. (C = 2 quality points times 3 hours.)

To compute a grade point average, divide the total quality points accumulated by the total credit hours attempted for which University credit is given toward graduation (e.g., 220 quality points accumulated divided by 88 credit hours attempted for University credit = (220/88) = 2.50 GPA.

Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Explanation</th>
<th>Point Value per Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Below Average, lowest passing grade</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete, must be completed by date registered on incomplete form*</td>
<td>–</td>
</tr>
<tr>
<td>I/F</td>
<td>Failure to complete an incomplete course satisfactorily, or by stated deadline</td>
<td>0</td>
</tr>
<tr>
<td>IF</td>
<td>Failure due to irregular withdrawal</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>Withdraw without grade point penalty*</td>
<td>–</td>
</tr>
<tr>
<td>P</td>
<td>Pass*</td>
<td>–</td>
</tr>
<tr>
<td>AU</td>
<td>Audit*+</td>
<td>–</td>
</tr>
<tr>
<td>CR</td>
<td>Credit only awarded*+</td>
<td>–</td>
</tr>
</tbody>
</table>

*Not used in computation of grade point average.
+Declaration of a change in a course from credit status to audit status must be processed within the first 15 class days (M-F) of a fall or spring academic session or within the first 3 days of a summer session. Any later change must be appealed to the Admissions and Credits Committee. (See section, Auditing Courses)

Pass/Fail
Students may choose to take elective courses on a pass/fail basis instead of the regular grading system, in accordance with the following:

1. Electives shall be defined as courses not directly required for a degree. Thus, required electives within the major field of concentration would be excluded from the pass/fail option. In the event of change in major fields, the course previously taken on a pass/fail option if applicable to the new major field shall be substituted by approved courses. Required general studies courses also will be excluded from the pass/fail option. The ultimate responsibility for correct scheduling rests with the student.

2. A passing grade in the pass/fail option will be equivalent to the normal passing range of A through D in the conventional system.
3. All students are eligible for the pass/fail option with the exception of those currently on academic probation.
4. Students will be limited to 24 hours of pass/fail options within a degree program, with not more than one course (maximum of four semester hours) being taken on a pass/fail basis during a single semester or summer session.
5. In the Office of the Registrar, a student must make a declaration for the pass/fail option by the tenth class day of the semester. This decision will be final.

Incomplete Grades
A grade of incomplete may be given to a student who has satisfactorily completed most of the requirements for a course, but because of illness or other extenuating circumstances, has not completed all of the requirements. All incomplete grades must be accompanied by a form provided by the Office of the Registrar and completed by the instructor and, if possible, signed by the student.

Students receiving an incomplete must confer with the instructor, prior to the end of the semester, to determine the exact deficiencies that are to be made up within the next semester. These requirements will be listed on the incomplete form. This form will become the basis for the completion of the course. If the student is not available to meet with the professor prior to the end of the semester for which the incomplete grade is sought, the student must consult with the instructor early in the following semester to determine the requirements and the timetable for completing the work for the course.

Students must submit work required to complete the course to the instructor at least ten days prior to the date that final grades are due for the following regular semester. (For example, fall semester incomplete work would be due prior to the end of the following spring semester.)

When the work has been evaluated, the instructor must return all copies of the incomplete grade form to the Office of the Registrar with the new grade, no later than the date that final grades are due for the current semester. Grade changes must be made prior to the first day of registration for a regular semester, a summer term, or such change will not be posted to the student’s transcript during the first three weeks of a semester or the first week of a summer term.

If the incomplete is not made up in accordance with this time schedule, the grade automatically becomes an I/F. When an incomplete grade is changed, the student’s semester grade point average is recomputed. However, the Office of the Registrar will not revise the original academic standing (probation, suspension, etc.) posted at the end of the semester in which the incomplete course was attempted. Any exceptions to these procedures must be submitted to the Admissions and Credits Committee.

Repeating Courses
A student may not repeat a course or courses for credit where the original grade was a C or better. The only exception is a course listed in the Catalog course description as repeatable.

60 Hour Repeat Rule
A student who earns a D or F grade in any course completed no later than the semester or summer term that the 60th semester hour is attempted may repeat the course prior to receiving a baccalaureate degree. The course(s) must be repeated at Shepherd University. In such a case, the student’s grade point average shall be based on the subsequent grade or grades, not the original grade of D or F. The original grade shall not be deleted from the student’s record.

Appealing a Grade
The grade appeal policy and the procedures to follow in order to appeal a grade may be obtained from the Shepherd University Student Handbook.

GENERAL REQUIREMENTS FOR GRADUATION
Students within two semesters of graduation must submit an Application for Graduation, available in the Office of the Registrar. Deadlines for applying for graduation are published in the Academic Calendar.
Baccalaureate Degrees
A traditional degree program includes one major and one minor field; the Office of the Registrar will not evaluate an additional minor field. A comprehensive degree program consists of one major field and no minor field; the Office of the Registrar will not evaluate a minor field with a comprehensive degree program. A student may elect to complete requirements for a double major in one degree or may elect to complete requirements for two majors in separate degrees.

Minimum Credit Hours
The minimum number of credit hours for a baccalaureate degree includes 128 credit hours of courses numbered 100 and above. (This may include transfer credits that have been evaluated by Shepherd University as courses numbered 100 and above.) Of the necessary hours for graduation, 45 hours must consist of courses numbered 300 and above. (This may include transfer credits that have been evaluated by Shepherd University as courses numbered 300 and above.)

Minimum Grade Point Average
For each of the following areas, a grade point average of 2.0 or better (or a C average) is required: 1) all collegiate level course work attempted (overall GPA), 2) all Shepherd University course work attempted (institutional GPA), 3) all course work presented to satisfy major field requirements, and 4) all course work presented to satisfy minor field requirements. Higher minimums are established for some fields. Students should carefully consult major and minor field requirements.

Minimum Shepherd University Credit Hours Requirement
To earn a baccalaureate degree from Shepherd University, a student must complete at least 32 credit hours of course work at Shepherd University. The last 12 credit hours of course work for a baccalaureate degree must be completed at Shepherd University. Credit hours earned at the Community and Technical College of Shepherd prior to summer 2005 are considered Shepherd University credit hours. Non-teaching degree candidates must earn a minimum of 15 major field credit hours at Shepherd University.

Community or Junior College Credit Hour Transfer Policies
In compliance with West Virginia Higher Education Policy Commission, no more than 72 credit hours from a regionally-accredited community or junior college may be applied toward the 128 credit hours minimum for graduation from Shepherd University. Students who have completed more than 72 credit hours at a community or junior college may select the courses they wish to have evaluated as part of their credit hours counted toward graduation. All transfer credit hours will be calculated in the student's overall grade point average. Beginning summer 2005, credit hours earned at the Community and Technical College of Shepherd will be considered transfer credits and will be counted toward the 72 credit hour maximum. For policies related to the transfer of course work, see “Taking Courses at Other Institutions” above.

Additional Requirements for Graduation
1. All financial obligations to Shepherd University must be paid in advance.
2. In certain instances additional requirements may be stipulated in selected fields of study; degree candidates must consult with their academic advisors concerning such requirements.
3. A student cannot select a minor field of study whose required courses duplicate the major field requirements by more than eight semester hours. Exceptions to this rule must be approved by the vice president for academic affairs.
4. A course required by both the major and the minor cannot be applied to both programs. In these cases, the student must submit an approved course substitution for the duplicated requirement.
5. The student's faculty advisor shall approve all elective course selections in the major, minor, and teaching field. Course substitutions must be approved by the student's faculty advisor and the chair of the department for the required course.
6. It is the student's responsibility to check on all requirements and to make inquiry if there is doubt about meeting any of them. Required courses should be completed as soon as possible.
to prevent conflicts of prescribed subjects during the senior year.

7. Students maintaining continuous enrollment at the University will have a seven-year period to complete requirements under the catalog in effect at the time of entrance. Students should be aware that external accrediting agencies, as well as other factors, may at times require changes to specific degree programs. Students who are readmitted to the University after an absence of more than two consecutive regular semesters (excluding summers) must follow the catalog in effect at the time of readmission. Students may elect to graduate under a later catalog than the one under which they entered or were readmitted. However, students are not permitted to apply requirements from two different catalogs, nor may they elect to graduate under a catalog in effect prior to their entrance or readmission.

Double Degrees
Shepherd University does not award multiples of the same degree to an individual, i.e., a student cannot be awarded two bachelor of arts or two bachelor of science degrees. Students may elect to pursue two distinct degrees (B.A. and B.S., for example) by submitting an approved Academic Change Form to the Office of the Registrar.

Shepherd University students wishing to complete requirements for more than one degree prior to conferral of their bachelor’s degree may receive the additional degree when the first is conferred, provided they have met all requirements for the additional degree. A Shepherd University student who returns for an additional degree within one academic calendar year of completing the first may receive it simply by completing all requirements for the additional degree. The additional degree will be added to the transcript after the date of graduation with a comment on the date the requirements were completed. (Note: Students must meet the requirements stated in the Catalog in effect at the time of their re-enrollment in the additional degree program.)

Students possessing a baccalaureate degree from another institution who wish to attain an additional bachelor’s degree through Shepherd University must complete a minimum of 32 hours of additional course work in residence at Shepherd. (Note: hours needed to complete requirements for a degree may exceed the stated minimum.)

Graduates from Shepherd University with any bachelor’s degree except for the Regents Bachelor of Arts Program will not need to be re-evaluated for meeting the general studies requirement. A course required in both degrees will be applied to both without the need for substitution.

Double Majors
A Shepherd University student who wishes to complete requirements for more than one major prior to conferral of his or her bachelor’s degree must submit an approved Academic Change Form to the Office of the Registrar.

A Shepherd University student who returns for an extra major within one academic calendar year of graduating may receive it simply by completing all requirements for the additional major. The additional major will be added to the transcript after the date of graduation with a comment on the date the requirements were completed.

A course required in both majors will be applied to both without the need for substitution.

ACADEMIC PERFORMANCE
Office of Student Academic Support Services
The Office of Student Academic Support Services, headquartered in Knutti Hall 114, offers a variety of course work and services to assist students in achieving academic success at Shepherd. Among the responsibilities of this office are 1) the Academic Foundations Program, 2) the tutoring program, and 3) Writing Center.

The Academic Foundations Program at Shepherd is designed to bridge the gap between high school and University for interested students who do not meet the stated admissions standards. Through courses in reading, study skills, composition, and mathematics, the program can assist recent high school graduates and nontraditional students who wish to attend University but whose skills need further development. Academic foundations courses feature individualized instruction and learning assistance sessions outside of class. Completion of the Academic Foundations Program
will assist students in being academically prepared to pursue a Shepherd University degree.

In addition to academic foundations course work for selected students, this office operates the University-wide learning center called the Study Center. The Study Center offers free tutoring in most academic courses to any interested Shepherd student. In addition to offering tutoring for a variety of academic subjects, the Study Center offers tutoring specifically for writing assignments from across the curriculum. The writing tutors are strong writers who must complete an upper division course on how to help students improve their academic writing. They can help with all stages of the writing process, including outlining, argument structure, documentation, and technical control. Besides peer tutors, the Study Center employs a support staff of professional learning resource specialists in the areas of mathematics, composition, reading, and study skills to work with students individually and in small groups. The Study Center also sponsors free workshops on how-to-study skills and computer-assisted, self-study materials to be used independently to improve specific reading, writing, and mathematics skills.

Attendance

Students are expected to attend class and to know and understand the specific attendance policies established by each of their instructors. Attendance policy for a given class is established by the instructor and stated in the course syllabus. Instructors will make reasonable accommodations for occasional, unavoidable absences based on highly legitimate grounds. Instructors will determine the most appropriate means of compensating for work unavoidably and legitimately missed in their classes. To be eligible for such substitute evaluation, students are responsible for discussing any absences with their instructors: such discussions must occur in advance of foreseeable absences and as soon as possible following unpredictable ones.

Students are expected to plan their class, work, and personal schedules to avoid potential conflicts. Legitimate reasons for class absences include documented and/or verifiable instances of the following: 1) death in the immediate family; 2) incapacitating illness or injury (not including any non-emergency doctors’ appointments that could be scheduled at other times); 3) field trips required for other classes, intercollegiate competitions, or activities entailing official representation of Shepherd University; 4) seriously hazardous, weather-induced driving conditions (for commuter students only).

A student’s evaluation in a course is the instructor’s responsibility. A grade decision in a course must be made by the instructor prior to the initiation of a grade appeal. A student who believes his or her grade has been adversely affected by an instructor’s inappropriate implementation of the attendance policy may pursue a grade appeal at the close of the semester.

1. A student who has a documented medical disability or chronic illness that may affect his/her ability to attend class regularly and/or to complete scheduled in-class, graded activities (e.g., exams, oral reports, lab assignments) should confer with his/her instructors as soon as possible after the semester begins. In consultation with the student (and with doctors or Shepherd staff when appropriate), the professor can develop a contingency plan to accommodate any absences that may occur because of the disability or illness. The instructor may create alternative assignments or otherwise determine the best means of assuring that the student’s semester grade will not suffer should the student have to miss classes as a direct result of his/her disability or medical condition. To the greatest extent consistent with the particular disability involved, a chronically ill or disabled student will not only be treated equally with other students, but will also be equally expected to adhere to course policies and assignments established for all students.

2. In rare instances a student may suffer an unanticipated medical problem or must meet a military-service obligation requiring complete absence from school over an extended period (i.e., weeks rather than days). Such a situation will create the need to confer with instructors as soon as is feasible—possibly through a relative or other responsible surrogate. An instructor may be able to design alternative assignments that can be done independently. However, some courses by their nature do not lend themselves to compensation for prolonged periods of missed classes and assignments: for such classes, the alternatives may be limited to either a Withdrawal or an Incomplete specifically mandating that the student actually take some or all of the relevant course when it is next offered. In such circumstances, the Admissions and Credits Committee will review any necessary requests for waivers regarding institutional
deadlines regarding Withdrawals or Incompletes when 1) the student’s petition clearly and fully explains the situation calling for the waiver, 2) appropriate documentation is presented, 3) the request is supported in writing by both the instructor and the student’s advisor, and 4) the student’s request is made in a timely manner, but no later than the tenth class day of the following spring or fall semester.

Graduation with Honors
Honors are determined by the cumulative quality point average of the student’s work at graduation. Until fall 2000 there will be two standards running for determining honors according to the catalog date of the student.

For students earning bachelor degrees following the 1997-99 Catalog or earlier catalogs, honors will be awarded according to these criteria: highest honors, Summa Cum Laude, 3.750 to 4.000; high honors, Magna Cum Laude, 3.500 to 3.749; and honors, Cum Laude, 3.000 to 3.499. For students entering the University as of fall 1999 or thereafter, or students using the 1999-2000 Catalog or any catalog thereafter, honors will be awarded according to these criteria: highest honors, Summa Cum Laude, 3.850 to 4.000; high honors, Magna Cum Laude, 3.700 to 3.849; and honors, Cum Laude, 3.500 to 3.699.

To graduate with honors in the Regents Bachelor of Arts Degree program, a student must have 80 semester hours of traditional credits, with 32 of these credits earned at Shepherd University.

For students earning an associate’s degree only, honors will be awarded according to these criteria: honors, 3.50 to 3.74, and high honors, 3.75 to 4.00.

Note that when a student chooses to pursue a program in a later catalog than the one in effect upon admission, all aspects of that catalog will apply including the honors standards.

McMurray Scholars
In 1961 the faculty created the award of McMurray Scholar, which is the highest academic honor awarded at Shepherd University.

Joseph McMurray Scholars are individuals who are enrolled in a major program leading to the four-year baccalaureate degree and who:

1. Have been presented by the vice president for academic affairs to the Honors Committee as being eligible as a scholar, having amassed:
   a. A minimum of 92 semester hours for which a traditional grade has been given (Pass-Fail, CLEP, special examination grades and veteran’s credit do not count).
   b. A minimum 3.8 quality point average.
2. Have completed two consecutive semesters of study at Shepherd University, exclusive of summer work, for an average of 15 credit hours per semester, or for an average of 12 credit hours per semester where the supervised teaching process is involved.
3. Have been nominated by a minimum of three faculty members who have sufficient knowledge of them for demonstrating the capacity and inclination to pursue scholarly inquiry. At least two of these faculty members should come from the nominee’s major department, and the third should come either from this department or from a closely allied discipline.
4. Have subsequently been approved by the faculty at large (a listing of all nominees along with the names of the three faculty in support of each nominee will be distributed to the faculty at large). Any faculty member feeling he or she has just cause may challenge the nomination by submitting a statement of position to the Honors Committee chair. All challenges shall be returned to the originating department for consideration and action.

The elected Scholars are appropriately recognized at an annual formal University convocation and the commencement exercises.

Dean’s List
To be named to the Dean’s List, a student must earn at least 15 hours of work or be in the professional teaching block and must maintain a 3.4 average for the semester.
Assessment

The Shepherd University Mission Statement says “student learning is central to the culture of our institution and finding ways to improve student learning is a continuing process.”

The University can derive many benefits from integrating a campus-wide assessment program. Academic departments have the opportunity to take the step back and reflect on what the departmental mission is, and what a graduate from that program will know, value, and be able to do. Students will find it very helpful to know the goals of the major and how each course in the program relates to those goals. Faculty will also be able to use the assessment results to determine if program goals are being met. If particular goals are not being met, faculty will have specific evidence concerning what curricular changes need to be made to improve student attainment of program goals. Academic support services, such as the library, student affairs, academic advising, and financial aid, also make a tremendous contribution to student learning on campus. Thus, all programs can assess how they contribute to the learning environment and what changes they might make to maximize that learning experience.

**Participation in Assessment Activities:** Shepherd University **REQUIRES** student participation in assessment tests and surveys. The results enable the University to monitor its programs and services, to assist students in fulfilling their academic goals, and to fulfill reporting requirements to accrediting and government agencies. The assessment task force and the assessment coordinator oversee development and reporting of assessment activities. Both academic and administrative departments throughout the University will require student input about their functions from time to time.

Students will be notified when they are expected to participate in assessments. The assessments of freshman writing abilities and a survey of graduating seniors are well-established University-wide assessments. Sophomores’ skills in general education outcomes will be undertaken regularly. In addition, each program conducts its own assessments of student learning. Other assessments will be conducted as needed. Generally these assessments can be completed in a modest period of time. The University will seek employers’ input on the ability of graduates to perform in the workplace.

Failure to participate when required or any violation of the assessment or testing procedure can result in administrative action including withholding of grades and/or restriction from registration until the requirements are met.

**Learning Communities:** A learning community represents a group of students who take two of the same classes, which are linked by theme or content. This program enhances students’ entire University experience by allowing them to become part of a close-knit academic community sharing common academic, social, and residential experiences. Learning communities foster connections among students, students and teachers, and disciplines and ideas. Learning communities promote active, collaborative learning and allow exploration of diverse perspectives. Some learning communities will have a residence hall component to provide students with the chance to live with other students who are also interested in this innovative learning approach.

**Academic Forgiveness Policy**

Revised and approved November 11, 2002

The academic forgiveness policy does not alter, change, or amend any other existing policies at Shepherd University and is formulated to be consistent with Series 20 of the West Virginia Higher Education Policy Commission and supersedes all previous academic forgiveness policies at Shepherd University.

Academic forgiveness is intended for the student who is returning to University with a grade point deficiency. A student readmitted after July 1995 may be eligible for academic forgiveness unless the student has been placed on final academic suspension. (A student who has incurred three academic suspensions from any institution of higher education is on final academic suspension and does not qualify for academic forgiveness. However, a student on final suspension may appeal this decision to the Admissions and Credits Committee, according to procedures in the section titled “Academic Suspension” in the Shepherd University Catalog. If the third suspension in repeated, the student may apply for forgiveness by submitting a written request to the registrar as established below.) The Regents Bachelor of Arts Program is governed by a different forgiveness policy.
This policy covers only those students who have not been enrolled as a full-time student (12 or more semester credit hours) at any institution of higher learning during the five consecutive academic years immediately preceding the readmission semester. This policy is limited to students who have not yet been awarded their first academic degree. Academic forgiveness will be granted only once for any student.

To be eligible for academic forgiveness, a student who does not qualify for readmission because of a low GPA may be admitted to the University and placed on academic probation. The academic forgiveness policy may be applied after a readmitted student has earned 12 credit hours that apply toward graduation with a minimum GPA of 2.0. These 12 hours must be earned at Shepherd University.

During the first semester of re-enrollment, a student desiring academic forgiveness must complete a written request form and file it in the Office of the Registrar. This request must certify that the applicant has not been enrolled as a full-time student (12 or more credit hours) in any institution of higher learning during the five consecutive academic years immediately preceding the readmission semester. If the student has attended any institution of higher education on a part-time basis during the specified five-year period, the student must have earned at least a 2.0 GPA in all course work attempted.

This request will indicate whether the applicant wishes to exclude from the GPA calculation (1) all F and IF grades; or (2) all F, IF, and D grades earned prior to the five consecutive academic years immediately preceding the beginning of the readmission semester. This includes those grades appearing as transferred grades on the official transcript. If a student chooses to have all D grades excluded from the GPA calculation, it is with the understanding that the courses for which the D grades were earned cannot be used to satisfy any requirements for graduation.

When and if all prerequisite conditions have been met, academic forgiveness will be granted upon the successful completion of the readmission semester. The registrar will then officially calculate the student's current GPA. However, no grade will be removed from the permanent record. A student awarded forgiveness under this policy does not qualify for graduation with honors.

This policy pertains only to the calculation of the GPA required for graduation. Academic forgiveness does not pertain to a GPA calculated for special academic recognition (such as graduating with honors) or to the requirements for licensure boards, external agencies, or the West Virginia Board of Education.

The University is not bound by the decision of any other institution to disregard grades earned in University courses. Similarly, students should be aware that other institutions may not recognize academic forgiveness extended by Shepherd University.

Academic Probation
At the end of each grading period each student’s Shepherd University and cumulative grade point average is calculated. The calculation is determined by dividing the number of earned quality points by the number of quality hours. In the computation of the Shepherd and cumulative grade point average, a grade of I will not be included in the quality hours. When the grade of I is replaced by a passing or failing grade, the student's grade point average will be revised by the Office of the Registrar.

Freshman/New Transfer Students: At the conclusion of the first semester of attendance at Shepherd University, a student must attain a 2.0 Shepherd University and semester average. If the student fails to achieve a 2.0 in the first semester of residency, the student will be placed on academic probation. A student must then attain a 2.0 on all course work, excluding academic foundations courses, attempted during the next semester at Shepherd University.

Continuing Students: A student who has been enrolled for more than one semester and whose Shepherd University GPA or cumulative GPA falls below a 2.0 in any semester will be placed on probation. If the student fails to attain a 2.0 semester average during the next semester, that student will be suspended for the following semester.

To be removed from probation, a student must attain BOTH a 2.0 Shepherd University GPA and a cumulative GPA (includes course work attempted from other institutions).

Academic Suspension
During a period of academic suspension, no credits earned at another institution will be accepted at Shepherd.
Summer School: Suspension will be waived temporarily for those who wish to attend either one or both summer sessions (at Shepherd) immediately following notice of suspension. The student placed on probation at the beginning of the fall semester must attain a 2.0 institutional grade point average on his or her combined hours for the fall, spring, and summer session(s) to be eligible to return for the following fall semester. The student placed on probation at the beginning of the spring semester must attain a 2.0 institutional grade point average on his or her combined hours for the spring and summer session(s) to be eligible to return for the following fall semester.

The student who has been suspended from the University for the first time may apply for readmission after one semester by completing an application for admission. The student who has been suspended from the University for the second time may apply for readmission after one academic year by completing an application for admission. The student who has been suspended from the University for the third time may apply for readmission after one academic year by completing an application for admission and petitioning the Admissions and Credits Committee. The Admissions and Credits Committee will review the application and render a decision in writing to the applicant.

The student on probation who withdraws from the University after the first five weeks of the semester will not be permitted to enroll in the University for the next regular semester or summer school. Any student who fails 50 percent or more of work attempted in any semester is subject to dismissal at the end of that semester.

Appeals to the above regulations may be made to the Admissions and Credits Committee. Students receiving federal financial aid must also adhere to a satisfactory academic progress requirement. The specifics of this requirement may be found in the Catalog under the Section IV, Expenses and Financial Assistance.

Academic Dishonesty
Cheating in all its forms, including plagiarism and cheating on visual work, is considered an academic matter to be controlled and acted upon by the individual faculty member.

Students guilty of academic dishonesty on examinations in any course shall receive, as a minimum penalty, a grade of F in that course. Such action shall be taken by the instructor, with written notification to the appropriate University administrators. Repeated offenses shall subject the student to suspension or dismissal from the University. Students involved in facilitating academic dishonesty among others, such as by the unauthorized dissemination of examination materials, will be subject to disciplinary action beyond that called for by their own cheating in a course.

Plagiarism is “the act of stealing and using, as one’s own, the ideas, or the expression of the ideas of another.” Whether that other is another student or a published author, plagiarism is cheating. Detailed instructions on avoiding plagiarism will be provided in required English courses, and comments also may be made by instructors in other courses for which papers are written. Guidelines and policies affecting dishonesty and most other aspects of student life may be found in the Shepherd University Student Handbook.

SPECIAL PROGRAMS
First-Year Experience
Shepherd University is committed to providing resources for our first-year students to help them acclimate to University life, enjoy academic success, and integrate into the University community. Several course options in the first semester offer students interdisciplinary learning experiences, close ties to a faculty mentor, a community of other students to support learning, and essential information to make the transition into University easier.

Learning Communities
Learning communities are designed to link courses that students need to enroll in as part of the general studies program. A cohort of students enroll in both courses, and professors teaching the courses work together to interface course material. In some cases, the two professors team-teach and are involved in both courses. Often, the professors work together outside of the classroom to form links in course material. Relevant field trips are also part of the learning community experience. Credits are awarded based on credits assigned to each course in the learning community.
First-Year Experience FYEX Courses
First-year orientation (FYEX 100)
First-year orientation for Athletics (FYEX 101)
Interest groups (FYEX 102)
See FYEX course descriptions for more information.

Independent Study Program
To encourage independent reading and the spirit of research, the faculty will admit, upon recommenda-
tion of academic advisors, properly qualified students as candidates for independent study.

University credit (determined at registration for course) of one to three semester hours will be
allowed for independent programs on the recommendation of the study director with the approval
of the department chair. Credit gained in independent study may not be substituted for required
course work.

To receive credit for independent study, the student must fulfill the following requirements:
1. Engage in reading and research as directed by the study director to supplement knowl-
edge from sources not supplied by the courses taken in the major field.
2. Submit to the department chair with the approval of the study director, not later than
one week before the end of the semester, the original and two carbon copies of an ac-
ceptable research paper embodying the findings of the study.
3. At the discretion of the department, pass an oral examination on the subject of the
research paper before an examining committee consisting of a minimum of the study
director, the department chair, the vice president for academic affairs, and another
faculty member selected by the student, with the study director acting as chair. (When
the department chair and the study director are the same person, another representative
from the department will be named by the department chair.)

To be admitted to candidacy, a student must satisfy the following conditions:
1. Have an overall average of 3.0 in not less than 80 semester hours attempted.
2. Have an average of 3.0 in the major field or teaching field.
3. Submit, through his or her advisor and study director to the chair of the department
concerned, a research proposal together with an abstract of the proposal.
4. Have application approved by the chair of the department.

It is suggested that independent study may be particularly desirable to some students as a
summer project.

Honors Program
The Honors Program at Shepherd University is designed to provide a varied and stimulating cur-
criculum to students who have demonstrated the ability and willingness to engage in intellectual
challenges. Honors courses encourage critical thinking, in-depth analysis, and a greater level of
student involvement. Most honors courses incorporate field trips to Washington, D.C., and Bal-
timore; honors courses have also included international trips as well as travel within the United
States in conjunction with course work in history, literature, and culture.

Mission of the Honors Program
The mission of the Honors Program at Shepherd University is to create an academic environment
in which gifted students can experience education in a dynamic and interactive way. Through
seminars that promote active engagement in the subject area, independent research, student-cen-
tered curriculum, and innovative teaching techniques, students in the Honors Program have the
opportunity to become more self-directed in their learning. In the Honors Program, education
does not simply take place in the classroom or through texts. Students become directly involved in
the area of study through field trips, one-to-one interaction with their professors and classmates,
and a variety of activities outside the classroom, including international and domestic travel. In
addition to expanding the students’ academic horizons, the Honors Program encourages student
leadership and service to the community. The aim is to create graduates of Shepherd University’s
Honors Program who are independent thinkers, life long learners, and responsible, socially conscious
citizens. Honors students will leave Shepherd equipped to attend the finest graduate schools in the
country and to be successful as solid contributors in their chosen professional careers.
Honors Academic Requirements
Admissions Requirements
Approximately 40 students are selected each year to enter the Honors Program. Admission to the program typically requires a high school grade point average of 3.6 or above. Students must also have a combined SAT score of 1200 or better or, if the student has taken the ACT for admission, a 27 or above is usually required. Lower SAT/ACT scores may be offset by an outstanding GPA and vice versa. During the application process, students will also provide a writing sample.

Required Honors Courses
In order to remain in the Honors Program, students must maintain an overall 3.0 GPA and a 3.0 GPA in honors courses. Students must also participate in all required Honors courses. During the first year, Honors students must participate in the Honors core: Honors Written English and Honors History of Civilization. This Honors learning community introduces first year Honors students to major types of expository and critical writing in conjunction with the study of Western civilization. Topics focus on philosophical thought throughout history with emphasis on changes in government, economics, arts, science, and literature. In their sophomore year, students participate in a second Honors Learning Community: Survey of World Literature and History of Asian Traditions. Honors students may also choose Honors courses in a specific discipline or special topics courses. Honors sections of many General Studies courses are often offered and have included Biology, Chemistry, World Literature, and Introduction to Music. In addition, each semester the Program offers one or two Honors Special Topics courses. Special topics courses are team-taught seminars that cover interdisciplinary studies. In the past, these courses have included analysis of environmental issues; an exploration of the arts through theater, fine art, music, and dance; and the study of the history and culture of regions both within the United States and on an international level.

During the junior year, Honors students begin research toward a major thesis to be completed as a graduation requirement. Each student chooses a mentor from the faculty, usually in the student’s academic major or minor, and begins to formulate a reading list that would contribute to a thesis proposal. In collaboration with their thesis mentor, the student develops an original idea about the chosen topic and then analyzes the information using research to substantiate this idea. The final requirement is that the student must then present the project during an Honors Senior Thesis Presentation session scheduled toward the end of each semester.

In order to graduate from the Honors Program, students must complete 27 hours of Honors courses including the required core courses (12 hours), directed readings (3 hours), and the senior thesis or project (3 hours). All other honors credits are acquired through electives.

Special Features of the Honors Program
Honors Spring Orientation
The Honors Program spring orientation is an opportunity for students who have been accepted to the Honors Program for the fall to experience campus life firsthand. Students arrive on Thursday evening and attend a dinner where they meet current students, faculty members, advisory board members, and administrators. High school seniors attending the orientation are greeted by a “host” student, a current member of the Honors Program, with whom they stay overnight and attend classes on Friday. Time for socializing, touring campus facilities, and meeting professors is part of the orientation schedule.

Honors Conferences
Shepherd University maintains membership in the Southern Regional Honors Council and the National Collegiate Honors Council. Opportunities to present research, serve on student panels, and attend workshops at the yearly conferences of each organization are available to members in good standing in the Honors Program. A substantial portion of conference expenses are paid by the Honors Program when a student participates.

The Honors Advisory Board
The Honors Advisory Board consists of an elected faculty member from each school, the Honors director, a representative from Residence Life, past Honors directors, and four Honors student
representatives. The board meets each month to discuss and evaluate the Honors Program, plan for new events, and collaborate on decisions about policy and procedures.

**International Study**
The Honors Program utilizes a variety of options for students to study abroad. Up to this point, international travel has been in conjunction with a particular course (i.e., a winter trip to Hungary after a fall course in Hungarian culture and history). The Honors Center works closely with the Modern Languages Department at Shepherd University to coordinate international study and travel. An Honors student who wishes to pursue an independent language course in a foreign country is encouraged to research the course of interest and submit a proposal to the Honors director and the Modern Language Department. This proposal should include an overview or syllabus of the class, the host college/university, and the credit hours expected. In some cases, depending on the rigor of the course work, the student may receive Honors credit for this class.

**Shepherd University Honors Center**
Miller Hall is the home of the Shepherd University Honors Center and is reserved for the work, recreation, and residence of Honors students. Miller Hall is the official Honors residence hall. It was named after Shepherd University president Thomas C. Miller. Construction on the building was completed in 1915, making Miller the oldest residence hall on campus. Today about 30 students live in the residence hall. Students in Miller share suite-style rooms with four or five people per suite. Each room has its own particular character, and the building has many interesting architectural features including carved wood stairwells and large, sturdy columns at the main entranceway. The Honors Program Office is situated on the first floor next to a computer lab, which is open to all Honors students. Miller Hall also contains two study lounges, one on each floor. These comfortable lounges are available 24 hours a day, 7 days a week for studying and socializing.

**Honors Trips**
Once a year students in the Honors Program travel to New York City. An Honors student favorite, the New York trip offers freedom to explore the Big Apple. The Honors Program provides transportation to and from New York, and a discounted room rate. Participating students cover expenses for food, entertainment, and accommodations. From time to time, the Honors Program will also commission the use of a bus or van to take a day trip to any number of interesting places and events. Examples include the Renaissance Festival in Westminster, MD, and the Performing Arts Center at George Mason University.

**Required Honors Courses**

**Freshman Interdisciplinary Written English and History of Civilization Seminar**
This two-semester, team-taught seminar introduces freshman honors students to major types of expository and critical writing in conjunction with the study of Western civilization. Topics focus on philosophical thought throughout history with emphasis on changes in government, economics, arts, science, and literature. Field trips include trips to Washington, New York, and Baltimore museums and theaters. Trips focus on the literary and historical connections of political thought and literary development. (English 101H, 102H, History 101H, 102H, or 103H.)

**Directed Reading/Thesis**
After completing a proposal in the Directed Reading course, students have one semester to complete the honors thesis, the final requirement for graduation from the Honors Program. The thesis should be a carefully prepared argument, in which the student explains an area of interest in the major or minor in which he/she will graduate. Students may also opt to complete a project (this may be applicable for such majors as graphic design, etc.) A project must also have a proposal leading up to its completion. The thesis culminates in a formal presentation of research to an audience consisting of faculty, students, friends, and family. (488H, 489H.)

**Washington Gateway**
Shepherd University’s Washington Gateway program draws upon the resources of the nation’s capital and the University’s proximity to those resources. Committed to excellence, Shepherd
University provides a series of organized, in-depth, academic, cultural, and career experiences in the political and information capital of both our nation and the entire world.

The Gateway Program provides a variety of lectures, workshops, seminars, and field trip opportunities in such a way that the Washington, D.C.-Baltimore region becomes an exciting extension of the Shepherd experience.

The Washington Gateway includes five components:

- The Washington Semester at Shepherd University (see Experiential Education);
- Cooperative education and internship experiences (see Experiential Education);
- Special course offerings;
- Seminars and lectures;
- Junior High Washington Gateway program.

Contact the Washington Gateway Office in Gardiner Hall for more information.

**Washington Gateway Courses**

Each semester, unique and exciting Washington Gateway courses are sponsored by Shepherd University academic departments. These specialized courses utilize approximately 20 to 50 percent of class time in the metropolitan area. In these courses, students may visit Washington and Baltimore with faculty to observe Congress and government at work, attend concerts and cultural events, study government policy, and more. Recent Gateway course topics have included Shakespeare; Opera; Literature and the Sexes; Therapeutic Recreation in the Metro Area; and Graphic Design.

**Seminar/Lecture Program**

The Washington Gateway supports Shepherd’s cultural arts programs in planning and coordinating various lectures and seminars relating to the metropolitan area. A number of well-known speakers and performers from the metropolitan area visit campus regularly to speak with students, faculty, and members of the community.

**Junior High Washington Gateway Program**

The Junior High Washington Gateway program at Shepherd University is designed to be an educational experience for West Virginia students entering the eighth grade. Using Shepherd's campus and the resources of the metropolitan area, the Gateway program attempts to provide a supportive, learning environment that introduces students to University planning. Gateway’s primary intent is to motivate students who need the challenge into becoming better students and to “turn them on” to college.

**The Washington Semester**

The Washington Semester is a Washington Gateway program that allows a student to spend an entire semester working in Washington four days a week. The intern gets the opportunity to experience the world of work, face questions of real importance in business and national or international life, and give serious consideration to the choice of a career. The graduate then enters the job market as an applicant with demonstrated experience and references from work supervisors as well as academic advisors.

**Who is Eligible:** The Washington Semester is open to students from any major field. Half the 128 hours needed for graduation must be completed before the internship begins, with an overall GPA of 2.5. The student also must have completed at least nine credits in the major field or in the field most closely related to the internship, with a GPA of 2.5 in those courses. The Washington Semester is also available in the semester after the student completes all the requirements for graduation. The Washington Semester is now available to associate’s degree students in the semester after they complete all the requirements for the associate’s degree.

**How it Works:** The placement is tailored to the individual’s goals, interests, and skills. Interns may work in any of the branches of government, in private trade organizations, or with not-for-profit groups. There is a supervisor at the workplace who trains, directs, and evaluates the intern.

Interns commute to Washington four days a week, then spend the fifth day at Shepherd taking part in the interdisciplinary Washington Semester Seminar, open only to participants in the
Washington Semester program. The fifth day also allows time for work on the seminar paper and for meetings with academic advisors.

The internship earns 12 credits; the seminar earns 3 credits. Separate letter grades are assigned to the internship and the seminar; a pass/fail option is not available. These credits are counted as electives or, with the approval of the department, as partial fulfillment of the requirements of the major field.

Cooperative Education or Co-op
Cooperative education offers the student the opportunity to integrate classroom learning and practical work experience with the added advantage of ongoing support and guidance from the Cooperative Education Office in the Career Development Center.

Student Benefits: Besides providing employment opportunities, cooperative education enables the student to gain invaluable pre-graduation experience in the career field; the opportunity, in many programs, to earn credit toward a degree; an opportunity to explore career interest; a permanent record of co-op experience on the student’s transcript; the opportunity to relate academic training to the real world of work; financial assistance with University expenses; increased confidence; and increased employability after graduation.

Student Eligibility: Students are required to have a minimum of a 2.5 cumulative GPA. The Cooperative Education Office will not require an in-major GPA. Students must have earned at least 24 credits prior to participating in co-op. Six credit hours within their major must be completed prior to participation.

There is no minimum or maximum number placed on co-op participation. Each academic department will have the right to establish higher standards. Departmental approval is required for those students who do not meet the minimum qualification standards.

Students seeking a two-year degree need to have a 2.5 cumulative GPA and have completed 6 credit hours in their major prior to participation in co-op.

Application Procedure: Qualified students can apply by completing the co-op application in the Career Development Center. The Cooperative Education Office will assist students in finding assignments. All assignments must be approved by the academic department sponsoring the placement before the beginning of work. A learning agreement is signed by the department, employer, and student. Co-op students will be evaluated by an assigned faculty coordinator and the employer supervisor. A record of an approved co-op experience will be entered on the student’s transcript.

Program Flexibility: There are two co-op schedules. A parallel schedule enables the student to participate in a co-op (part-time) and attend classes as well. In an alternating schedule, the co-op experience (full-time) and class work alternates by semester. The co-op schedule is determined by the nature of the work, the employer’s needs, and the student’s academic schedule and flexibility.

Co-op for Credit: Shepherd’s co-op program is a cross-campus program. Many departments have integrated co-op into programs of study. Check with the director of cooperative education or academic chair in major to determine which programs are participating. Students earning credit for co-op may earn between 1 to 9 credit hours per experience depending on department policy and type of experience. Co-op is a multi-semester program and must be repeated at least twice before graduating. Each experience is evaluated individually. The co-op course is as follows (The xx represents department numbers that need to be inserted by the sponsoring department):

XX 392. COOPERATIVE EDUCATION (1-9)
Cooperative education allows students to acquire essential, practical skills by being exposed to the reality of the work world beyond the boundaries of campus. May be repeated for credit, but not in the same term. Students are required to have a minimum of a 2.5 cumulative GPA. The Cooperative Education Office will not require an in-major GPA. Students must have earned at least 24 credits prior to participating in co-op. Six credit hours within their major must be completed.
prior to participation. There is no minimum or maximum number placed on co-op participation. Each academic department will have the right to establish higher standards. Departmental approval is required for those students who do not meet the minimum qualification standards. Students seeking a two-year degree need to have a 2.5 cumulative GPA and have completed 6 credit hours in their major prior to participation in co-op.

**Internship**

A form of independent study that integrates classroom study with supervised work experiences, an internship enables students to acquire practical skills and to integrate the world of work with classroom knowledge. Although some interns do receive pay or subsistence benefits, the primary focus is upon the experience and the skills learned. An internship generally lasts no longer than a semester. Interns are not employees of the sponsoring company/organization. Since interns earn credit, students must enroll in an internship course and complete necessary academic work to earn a credit and a grade. An internship agreement is signed by on-site supervisor, faculty, and student. For more information, students should check with their advisor and/or department chair in their major field of study. The Career Center will assist students in finding internship sites.

**XX 292. INTERNSHIP (1-6)**

Practical experience in local, regional, and other organizations such as government offices, museums, arts agencies, social action groups, research laboratories, and private corporations/companies. Interns learn how to translate classroom theory and methods into professional skills and opportunities. Usually offered every term. May be repeated. Prerequisite: Must have sophomore class standing with minimum 2.5 overall GPA and prior approval by the academic department. Note: Departments may have additional prerequisites; refer to specific course listings.

**Transcript Requests**

Transcripts are released only upon written request from the student with the student’s signature and printed name plainly shown. E-mail requests cannot be accepted. A transcript may be requested from the: Office of the Registrar, P.O. Box 3210, 118 Ikenberry Hall, Shepherd University, Shepherdstown, WV 25443-3210. For full details go to [www.shepherd.edu/register/tranreq.html](http://www.shepherd.edu/register/tranreq.html).

The first transcript EVER requested is free. The fee for each additional transcript is $5. Transcripts require a minimum of three working days for processing. Emergency transcripts are $15 each for 24-hour processing. Transcripts are sent first class mail. For FedEx, UPS, etc., you must include a prepaid, pre-addressed mailing envelope. All fees are subject to change.

Approximately a month from the date of graduation is needed before a final transcript may be issued. However, a student may request a letter of verification to confirm that requirements for graduation have been met. All financial obligations to Shepherd University must be reconciled before a transcript will be released; this includes the loan exit interview for all students who had a financial aid loan.

**24-Hour Faxed Transcripts**

There must be a signed request by the student. This request may be faxed to 304/876-5136. Faxed transcripts are unofficial and the fee for each is $15. This payment may be presented as a check sent by mail, by credit card in the Cashier’s Office (304/876-5284), or by cash in the Office of the Registrar. Payment must be received before the transcript is faxed. In addition to providing the fax number the transcript is to be sent to, students must provide a phone number for contact in case of problems.
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ACCOUNTING
Due to the complexities of modern tax laws and governmental regulations, as well as the need for adequate cost information by business firms, the demand for accountants remains high, in both the private and public sectors of the economy. Courses are offered to provide job entry skills and to prepare students to take the Uniform CPA Examination.

Curriculum for a Major in Accounting
Specific general studies requirements:
- ECON 205  Principles of Macroeconomics ................................................. 3
- MATH 154  Finite Mathematics ................................................................. 3
Total hours required for a major .................................................................... 54

Business core requirements ........................................................................... 27
- CIS 102  Microcomputer Applications ....................................................... 3
- ACCT 201, 202  Introductory Accounting I and II ................................. 6
- ECON 206  Principles of Microeconomics .................................................. 3
- BADM 312  Business Law I ................................................................. 3
- BADM 224  Business Statistics ............................................................. 3
- BADM 300  Introduction to Financial Management .................................. 3
- BADM 310  Principles of Management .................................................... 3
- BADM 340  Marketing ........................................................................... 3

Accounting major requirements .................................................................... 27
Requisite courses, 21 hours:
- ACCT 329, 330, 331  Intermediate Accounting I, II, and III ..................... 9
- ACCT 335  Income Tax Accounting ........................................................ 3
- ACCT 336  Cost Accounting .................................................................... 3
- ACCT 402  Auditing .............................................................................. 3
- ACCT 406  Advanced Accounting ........................................................ 3

Elective hours from the following courses, 6 hours:
- ACCT 392  Cooperative Education in Accounting ....................................... 1-3
- ACCT 401  Computer-Based Accounting .................................................. 3
- ACCT 403  Fund Accounting ................................................................. 3
- ACCT 408  Auditing II ........................................................................... 3
- ACCT 410  Accounting Theory .............................................................. 3
- ACCT 435  Income Tax II ....................................................................... 3
- BADM 313  Business Law II ................................................................. 3
- BADM 407  Business Strategy and Policy ................................................ 3
- MATH 205  Calculus with Applications ..................................................... 4

Students should complete MATH 154, ACCT 201, ACCT 202, CIS 102, BADM 224, ECON 205, and ECON 206 during their first two years of study. They should also complete ECON 205 and MATH 154 as their general studies requirements during their first two years.

NOTE: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Curriculum for a Minor in Accounting
Total hours required for a minor .................................................................... 15

Required courses, 9 hours ............................................................................ 9
- ACCT 329  Intermediate Accounting I* ............................................... 3
- ACCT 330  Intermediate Accounting II ............................................... 3
- ACCT 331  Intermediate Accounting III ............................................. 3

Elective hours from the following courses, 6 hours: ..................................... 6
- BADM 338  Business Information Systems ........................................... 3
- ACCT 410  Accounting Theory .......................................................... 3
- ACCT 403  Fund Accounting ............................................................... 3
- ACCT 335  Income Tax ........................................................................ 3
- ACCT 336  Cost Accounting ............................................................... 3
ACCT 305  Managerial Accounting .................................................. 3
*Prerequisite: ACCT 201 & ACCT 202

ANTHROPOLOGY/GEOGRAPHY
This minor introduces the student to cultures and their adaptation to physical environments. Past and present cultures in their broadest scope are examined, along with humans’ use of natural resources, existing reserves, energy policy, and political economy.

Curriculum for a Minor in Anthropology/Geography
Total hours required ........................................................................ 24
GEOG 101  Principles of World Geography ................................................................................................. 3
GEOG 301  World Economic Geography ..................................................................................................... 3
ANTH 300  Introduction to Archaeology ...................................................................................................... 3
ANTH 314  General Anthropology .............................................................................................................. 3
ANTH 315  Cultural Anthropology .............................................................................................................. 3
Elective courses—3 credits selected from any course offering in geography and 6 credits in any combination from either anthropology or geography electives.............. 9

ART
The programs in the Department of Art are designed to provide students with a diversified experience in art and an in-depth experience in one major concentration area. Students are challenged and encouraged to grow creatively and professionally as artists, graphic designers, photographers, and teachers. They progress through a carefully developed series of courses mixing the development of technical skills, language, and theories of the visual arts with the broad-based knowledge of the liberal arts essential to artists in the complex contemporary world. The programs lead to either the bachelor of fine arts (B.F.A.) degree, the only recognized degree for those who wish to compete for professional positions in studio art or to enter graduate school for an M.F.A., or the bachelor of arts (B.A.) degree in secondary education with a concentration in art education for those who intend to enter the teaching profession.

Curriculum for a Comprehensive Major in Art
Total hours required (including free electives) .................................................... 129
General studies .................................................................................................................. 48
(*All art majors are required to take ART 104 instead of ART 103)
Fine arts core ..................................................................................................................... 39
ART 140  Visual Thinking I ................................................................................................. 3
ART 170  Visual Thinking II ............................................................................................... 3
Art history core .................................................................................................................. 9
ART 104  Introduction to Visual Arts ................................................................. 3
ART 203  Survey of Western Art ................................................................. 3
ART 204  Contemporary Art ................................................................. 3
ART 304  Special Topics in Art History ................................................................. 3
Professional practices core .............................................................................................. 9
ART 208  Professional Practice I ................................................................. 3
ART 390  Professional Practice II ................................................................. 3
ART 490  Capstone ................................................................................................. 3
Select 9 hours from the classes below with assistance from your advisor .............. 9
(Courses required in concentration area cannot be utilized twice.)
ART 115  Drawing I ................................................................................................. 3
ART 230  Painting I ................................................................................................. 3
ART 250  Sculpture I ................................................................................................. 3
ART 260  Printmaking I ............................................................................................. 3
ART 305  Illustration I ................................................................................................. 3
GRDS 200  Graphic Design I ..................................................................................... 3
PHOT 281  Black and White Photography I .......................... 3
Select 6 hours from the classes below with assistance from your advisor ....... 6
(Courses required in concentration area cannot be utilized twice.)
ART 215  Drawing II ................................................. 3
ART 330  Painting II .................................................. 3
ART 350  Sculpture II ................................................. 3
ART 361  Printmaking II ............................................. 3
ART 405  Illustration II .............................................. 3
ART 400  Special Topics in Studio Art ............................ 3
GRDS 340  Graphic Design II ........................................ 3
PHOT 282  Black and White Photography II .................... 3

Concentrations (choose ONE)
In order to progress and to graduate the student enrolled in any B.F.A concentration must receive a minimum of a C in each course within the concentration, a minimum grade of C in ART 208 Professional Practices I and ART 490 Capstone.

Graphic design concentration ........................................................................... 42
Required courses .................................................................................................. 33
ART 115  Drawing I ....................................................... 3
ART 215  Drawing II .................................................... 3
GRDS 200  Graphic Design I ......................................... 3
GRDS 300  Typography .................................................. 3
GRDS 320  Digital Studio I ........................................... 3
GRDS 340  Graphic Design II ....................................... 3
GRDS 360  Digital Studio II .......................................... 3
GRDS 380  History of Graphic Design ............................ 3
GRDS 410  Typography II ............................................ 3
GRDS 420  Advertising Design and Photography .............. 3
GRDS 430  Advanced Design ........................................ 3
Select 9 hours from the following (to be discussed with advisor) ............... 9
GRDS 400  Special Topics in Graphic Design .................... 3-9
GRDS 440  Interactive Design ....................................... 3
GRDS 450  Annual Report Studio ................................... 6
GRDS 460  Internship in Graphic Design ......................... 3-6

Painting concentration ......................................................................................... 42
Required courses .................................................................................................. 36
ART 115  Drawing I ....................................................... 3
ART 215  Drawing II .................................................... 3
ART 230  Painting I ...................................................... 3
ART 330  Painting II .................................................... 3
PHOT 385  Computer Digital Imagery ............................. 3
ART 403  Art Criticism ................................................. 3
ART 410  Advanced Drawing ........................................... 3
ART 434  Advanced Painting Studio .................................. 3
ART 434  Advanced Painting Studio .................................. 3
ART 434  Advanced Painting Studio .................................. 3
ART 475  Interdisciplinary Studio .................................... 3
Select 6 hours from the following (to be discussed with advisor) ............... 6
ART 375  Research Studio (summer only) .......................... 3
ART 391  Internship ..................................................... 3-6
ART 410  Advanced Drawing ........................................... 3
ART 434  Advanced Painting Studio .................................. 3
ART 475  Interdisciplinary Studio .................................... 3
Photography computer digital imagery concentration .......................................................... 42
Required courses .................................................................................................................. 24
PHOT 281 Black and White Photography I ............................................................... 3
PHOT 282 Black and White Photography II ............................................................... 3
PHOT 380 History of Photography ...................................................................................... 3
PHOT 381 Studio I ................................................................................................................ 3
PHOT 383 Color Photography I .......................................................................................... 3
PHOT 385 Computer Digital Imagery I .............................................................................. 3
PHOT 481 Graphic Design/Photography ............................................................................ 3
PHOT 485 Color Photography II ........................................................................................ 3
Select 18 hours from the following (to be discussed with advisor) ..................... 18
PHOT 384 Photojournalism ................................................................................................. 3-6
PHOT 387 Multi-Media ......................................................................................................... 3
PHOT 400 Special Topics in Photography/Computer Imagery ......................... 3
PHOT 480 Research in Photography .................................................................................. 3-12
PHOT 484 Studio Photography II ....................................................................................... 3
PHOT 486 Advanced Photography ..................................................................................... 3-12
PHOT 488 Internship in Photography .................................................................................. 3-6

Printmaking concentration .................................................................................................. 42
Required courses .................................................................................................................. 36
ART 115 Drawing I ............................................................................................................... 3
ART 215 Drawing II ............................................................................................................. 3
ART 260 Printmaking I ......................................................................................................... 3
ART 361 Printmaking II ..................................................................................................... 3
PHOT 385 Computer Digital Imagery ................................................................................. 3
ART 403 Art Criticism ......................................................................................................... 3
ART 410 Advanced Drawing .............................................................................................. 3
ART 464 Advanced Printmaking Studio ............................................................................. 3
ART 464 Advanced Printmaking Studio ............................................................................. 3
ART 475 Interdisciplinary Studio ...................................................................................... 3
ART 475 Interdisciplinary Studio ...................................................................................... 3
Select 6 hours from the following (to be discussed with advisor) ......................... 6
ART 375 Research Studio (summer only) ....................................................................... 3
ART 391 Internship ........................................................................................................... 3-6
ART 410 Advanced Drawing ........................................................................................... 3
ART 464 Advanced Printmaking Studio ............................................................................. 3
ART 475 Interdisciplinary Studio ...................................................................................... 3
ART 400 Special Topics: Studio Art ................................................................................... 3

Sculpture concentration ...................................................................................................... 42
Required courses .................................................................................................................. 36
ART 115 Drawing I ............................................................................................................... 3
ART 215 Drawing II ............................................................................................................. 3
ART 250 Sculpture I ............................................................................................................. 3
ART 350 Sculpture II ........................................................................................................... 3
PHOT 385 Computer Digital Imagery ................................................................................. 3
ART 403 Art Criticism ......................................................................................................... 3
ART 410 Advanced Drawing ........................................................................................... 3
ART 450 Advanced Sculpture Studio ................................................................................. 3
ART 450 Advanced Sculpture Studio ................................................................................. 3
ART 450 Advanced Sculpture Studio ................................................................................. 3
ART 475 Interdisciplinary Studio ...................................................................................... 3
ART 475 Interdisciplinary Studio ...................................................................................... 3
Select 6 hours from the following (to be discussed with advisor)................................. 6
ART 375 Research Studio (summer only)................................................................. 3
ART 391 Internship .................................................................................................. 3-6
ART 410 Advanced Drawing ..................................................................................... 3
ART 450 Advanced Sculpture Studio ........................................................................ 3
ART 475 Interdisciplinary Studio .............................................................................. 3

Curriculum for a Teaching Field in Art

A student who wishes to earn a bachelor of arts in art education takes University required general studies courses (47 hours), fine arts core (12 hours), studio art and art theory (21 hours), methods and theory of teaching art (9 hours), education professional studies courses (30 hours), and electives to total 128 semester hours minimum. The major, outlined below, consists of studio courses, studio art and art theory, and methods and theory of teaching art courses.

Note that art education majors are encouraged to take ART 104 Introduction to Visual Arts (for art majors, 3 credits), over ART 103 Introduction to Visual Arts (for non-majors, 2 credits). Students who enroll in ART 104 will take a total of 129 credits, while students who enroll in ART 103 will complete 128 credits on graduation.

Total semester hours required ................................................................................... 42
Fine arts core requirements ...................................................................................... 33
ART 115 Drawing I .................................................................................................. 3
ART 140 Visual Thinking Skills I .............................................................................. 3
ART 170 Visual Thinking Skills II .......................................................................... 3
ART 203 Survey History of Western Art ............................................................... 3
ART 204 Contemporary Art .................................................................................... 3
ART 230 Painting I ................................................................................................. 3
ART 250 Sculpture I ............................................................................................... 3
ART 361 Printmaking II ......................................................................................... 3
ART 403 Art Criticism and Aesthetics .................................................................. 3
GRDS 200 Graphic Design I .................................................................................. 3
PHOT 281 Black and White Photography I ............................................................ 3

Methods and theory of teaching art requirements ...................................................... 9
ARED 180 Inclusive Approaches to Art Education OR
EDUC 360 Survey of Exceptional Children ............................................................ 3
ARED 345 Visual Thinking Skills ......................................................................... 3
ARED 365 Art Education Inquiry .......................................................................... 3
See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching Art is EDUC 427.

Curriculum for a Minor in Art

Total hours required ............................................................................................... 27
ART 140 Visual Thinking Skills I .............................................................................. 3
ART 250 Sculpture I ............................................................................................... 3
ART 115 Drawing I ................................................................................................. 3
ART 203 Survey History of Western Art ............................................................... 3
ART 204 Contemporary Art .................................................................................... 3
ART 230 Painting I ................................................................................................. 3
ART 260 Printmaking I ............................................................................................ 3
PHOT 281 Black and White Photography I ............................................................ 3
GRDS 200 Graphic Design I .................................................................................. 3
Curriculum for a Minor in Graphic Design

Total hours required ........................................................................................................... 24
Total design courses ........................................................................................................ 18

ART 140 Visual Thinking Skills I .................................................................................. 3
ART 115 Drawing I ........................................................................................................ 3
GRDS 200 Graphic Design I .......................................................................................... 3
GRDS 340 Graphic Design II .......................................................................................... 3
GRDS 276 Introduction to Computer Applications ...................................................... 3
GRDS 374 Typography ................................................................................................... 3

Select 6 hours from the following ...................................................................................... 6
GRDS 373 Digital Printing Technologies ......................................................................... 3
GRDS 378 Seminar in the History of Graphic Design .................................................... 3
GRDS 400 Special Topics in Graphic Design OR ......................................................... 3
GRDS 480 Individualized Study/ Alternatives in Graphic Design* ................................ 3
GRDS 481 Computer Applications in Graphic Design/Photography ........................ 3

* To be either an internship or independent study in an area/field of interest that related
to design and career goals.

Curriculum for a Minor in Photography/Computer Imagery

Total semester hours required .......................................................................................... 24

ART 140 Visual Thinking Skills I .................................................................................. 3
PHOT 380 History of Photography ................................................................................. 3
PHOT 281 Black and White Photography I ................................................................. 3
PHOT 282 Black and White Photography II ................................................................. 3
PHOT 381 Studio Photography I ................................................................................... 3
PHOT 383 Color Photography I ...................................................................................... 3
PHOT 385 Computer Digital Imagery I ......................................................................... 3
PHOT 387 Multi-Media .................................................................................................. 3

BIOLOGY

The biology curricula enable students to build a knowledge base about their physical and biological
universe; foster an attitude of inquiry; and develop a functional understanding of the process
of science, the interrelatedness of the various scientific disciplines, and the interactions of science,
society, and technology. The biology curricula also provide opportunities for students to develop
a variety of laboratory, field, and technical skills vital to success in the pursuit of knowledge
in biology. Each student will be given the opportunity to gain invaluable experience in biology
through the required internship component of the curriculum to be completed at local, state, or
federal institutions. In some cases this may also be accomplished by working with specific faculty
on research topics. In addition to the above goals, the biology 9-12 teaching field complies with
and endorses the conceptual framework of the Shepherd University teacher education program
and strives to produce teachers who are capable reflective problem solvers.

Curriculum for a Major in Biology

Specific general studies requirements

CHEM 207, 207L General Chemistry and Lab ............................................................... 4
CHEM 209, 209L General Chemistry and Lab ............................................................... 4
MATH 205 Calculus with Applications OR
MATH 314 Statistics ....................................................................................................... 3-4

NOTE: The prerequisite for MATH 205 is competence equivalent to successful completion
of MATH 108 and the prerequisite for MATH 314 is competence equivalent to successful completion
of MATH 108 or 154.

Total hours required .......................................................................................................... 46-49

Required biology courses ................................................................................................. 30-33
BIOL 208 Plants as Organisms ....................................................................................... 4
BIOL 209 Animals as Organisms ..................................................................................... 4
BIOL 305  Cell Biology ......................................................... 4
BIOL 394  Principles of Biological Research ............................ 3
BIOL 344  Genetics and Evolution ........................................ 4
BIOL 406  Developmental Biology .......................................... 4
BIOL 420  General Ecology .................................................. 4
BIOL 415  Biological Research OR
BIOL 425  Internship in Biology .......... 3-6

Elective biology courses ........................................................................ 8
Any courses numbered BIOL 302 through BIOL 450 except BIOL 350
Required related courses ......................................................... 8
PHYS 201, 201L  University Physics and Lab AND
PHYS 202, 202L  University Physics and Lab OR ...................... 8
PHYS 221, 221L  General Physics and Lab AND
PHYS 222, 222L  General Physics and Lab .................................. 8

Curriculum for a Minor in Biology
Option I. Traditional Track
Specific general studies requirements
CHEM 207, 207L  General Chemistry and Lab ....................... 4
CHEM 209, 209L  General Chemistry and Lab ....................... 4
Total hours required ...................................................................... 24
Required biology courses .................................................................. 20
BIOL 208  Plants as Organisms .............................................. 4
BIOL 209  Animals as Organisms ............................................ 4
BIOL 305  Cell Biology .......................................................... 4
Any two of the following:
BIOL 344  Genetics and Evolution ........................................ 4
BIOL 406  Developmental Biology ......................................... 4
BIOL 420  General Ecology .................................................... 4
Elective biology courses .............................................................. 4
BIOL 302  Microbiology ........................................................ 4
BIOL 310  Plant Pathology ..................................................... 3
BIOL 313  Invertebrate Natural History .................................. 4
BIOL 324  Plant Taxonomy I Fall Flora ................................... 2
BIOL 325  Plant Taxonomy II Spring Flora .............................. 1
BIOL 332  Comparative Anatomy ........................................... 4
BIOL 344  Genetics and Evolution ........................................ 4
BIOL 401  Histology ............................................................. 4
BIOL 404  Immunology .......................................................... 4
BIOL 406  Developmental Biology ......................................... 4
BIOL 410  Plant Physiology .................................................... 3
BIOL 412  Animal Physiology ................................................ 3
BIOL 416  Molecular Biology ................................................ 4
BIOL 418  Virology ............................................................... 4
BIOL 420  General Ecology .................................................... 4

Option II. Molecular Track
Specific general studies requirements
CHEM 207, 207L  General Chemistry and Lab ....................... 4
CHEM 209, 209L  General Chemistry and Lab ....................... 4
Required biology courses .................................................................. 27
BIOL 208  Plants as Organisms .............................................. 4
BIOL 209  Animals as Organisms ............................................ 4
BIOL 305  Cell Biology .......................................................... 4
BIOL 302  Microbiology ........................................................ 4
BIOL 344  Genetics and Evolution ........................................ 4
BIOL 394 Principles in Biological Research ........................................ 3
BIOL 404 Immunology OR
BIOL 416 Molecular Biology OR
BIOL 418 Virology ........................................................................... 4
NOTE: For the minor, the student must also take any 3 credit hour mathematics course numbered MATH 108 or above, other than MATH 111 or MATH 101.

Curriculum for a Biology Teaching Field Grades 9-12

Specific general studies requirements
CHEM 207, 207L General Chemistry and Lab .................................. 4
CHEM 209, 209L General Chemistry and Lab .................................. 4
MATH 205 Calculus with Applications ............................................. 4
Total hours required ........................................................................ 48

Required courses
A. Interdisciplinary core ........................................................................ 23
BIOL 208 Plants as Organisms ...................................................... 4
BIOL 209 Animals as Organisms .................................................... 4
GSCI 301 Geology ............................................................................. 4
PHYS 201, 201L University Physics I and Lab ................................ 4
PHYS 202, 202L University Physics II and Lab ............................... 4
MATH 314 Statistics .......................................................................... 3
B. Biology 9–12 specialization .............................................................. 25
BIOL 225 Human Anatomy and Physiology .................................... 3
BIOL 226 Human Anatomy and Physiology .................................... 3
BIOL 302 Microbiology ..................................................................... 4
BIOL 305 Cell Biology ....................................................................... 4
BIOL 344 Genetics and Evolution ................................................... 4
BIOL 394 Principles of Biological Research .................................... 3
BIOL 420 General Ecology ............................................................... 4

Note Concerning Math Requirement: The prerequisite for MATH 205 is mathematical competence equivalent to the successful completion of MATH 108 Precalculus, and the prerequisite for MATH 324 is competence equivalent to the successful completion of MATH 108 or 154.

Other Requirements: Although one may declare secondary education with a specialization in biology 9–12 as a major upon admission to the University, to be officially admitted to the Shepherd University teacher education program and pursue this teaching field, the student must meet the following criteria as well as those criteria that apply to all teaching specializations:

1. The student must have completed BIOL 208 Plants as Organisms, BIOL 209 Animals as Organisms, CHEM 207 and 209 General Chemistry, CHEM 207L and 209L General Chemistry Lab, or their equivalents with a grade of C or better in each course.
2. The student must have completed a minimum of 24 semester hours of academic work at Shepherd University with an overall GPA of at least 2.5 and a GPA of at least 2.5 in this specialization.

See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching Sciences is EDUC 423.

Retention in and completion of this program requires the student to meet retention, admission to student teaching, and certification standards set by the Professional Education Unit Council. All of the standards for this program can be found in Information and Planning Handbook for Students Pursuing the Biology 9–12, Chemistry 9–12, or General Science 5–12 Specializations.

Contact Person: Dr. Jason Best, Byrd Science Center 115, 304/876-5331.
BUSINESS ADMINISTRATION
The bachelor of science in business administration is designed to give students a fundamental understanding of the substance and context of business in a world that is highly competitive and dynamic. Students are exposed to a diversified background in the various disciplines necessary for achieving success in the business arena.

Graduates of the bachelor of science in business administration major secure positions in insurance companies, banks, retail businesses, personnel and human resource departments, college or health care administration, government services, and/or manage their own businesses.

Curriculum for a Major in Business Administration with a Concentration in General Business
The concentration in general business provides students with flexibility in the job market. It prepares generalists who should be able to meet changes in the specific employment needs of the business community.

Specific general studies requirements:
- ECON 205 Principles of Macroeconomics ................................................. 3
- MATH 154 Finite Mathematics .................................................................. 3

Total hours required for a major ........................................................................ 48

Business core requirements .................................................................................. 36
- CIS 102 Microcomputer Applications ....................................................... 3
- ACCT 201, 202 Introductory Accounting I and II .................................. 6
- ECON 206 Principles of Microeconomics ................................................ 3
- BADM 224 Business Statistics .................................................................. 3
- BADM 312 Business Law I ......................................................................... 3
- BADM 300 Introduction to Financial Management ..................................... 3
- BADM 310 Principles of Management ...................................................... 3
- BADM 319 Business Ethics ........................................................................ 3
- BADM 340 Marketing ................................................................................ 3
- BADM 359 International Business .............................................................. 3
- BADM 407 Business Strategy and Policy .................................................. 3

General business requirements ........................................................................... 12
- One of the following accounting courses:
  - ACCT 305 Managerial Accounting ......................................................... 3
  - ACCT 329 Intermediate Accounting I .................................................... 3
  - ACCT 335 Income Tax ............................................................................ 3
  - ACCT 336 Cost Accounting ..................................................................... 3
- One of the following marketing courses:
  - BADM 350 Retailing ............................................................................... 3
  - BADM 365 Promotional Strategy .............................................................. 3
  - BADM 375 Strategic Marketing ............................................................... 3
  - BADM 395 Consumer Behavior .............................................................. 3
  - BADM 405 Marketing Research ............................................................... 3
  - ENGL 280 Introduction to Technical Communications ........................ 3
- One of the following management courses:
  - BADM 324 Labor Problems/Collective Bargaining .................................. 3
  - BADM 323 Human Resource Management ........................................... 3
  - BADM 413 Quantitative Methods ............................................................ 3
  - PSYC 321 Industrial/Organizational Psychology ...................................... 3
  - ENGL 280 Introduction to Technical Communications ........................ 3
- One additional upper division (300 or above) three hour course from ACCT, BADM, or ECON.

NOTE: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Students should complete MATH 154, ACCT 201, ACCT 202, CIS 102, BADM 224, BADM 312, ECON 205, and ECON 206 during their first two years of study.
Curriculum for a Major in Business Administration with a Concentration in Entrepreneurship and Small Business Management

The concentration in entrepreneurship and small business management is designed to provide students with the knowledge and skills to facilitate the creation, development, and operational management of small businesses.

Specific general studies requirements:
ECON 205 Principles of Macroeconomics ................................................. 3
MATH 154 Finite Mathematics ................................................................. 3
Total hours required for the major .......................................................... 48

Business core requirements ........................................................................ 36
CIS 102 Microcomputer Applications ....................................................... 3
ACCT 201, 202 Introductory Accounting I and II ....................................... 6
ECON 206 Principles of Microeconomics .................................................. 3
BADM 312 Business Law I ................................................................. 3
BADM 224 Business Statistics ................................................................. 3
BADM 300 Introduction to Financial Management ..................................... 3
BADM 310 Principles of Management ...................................................... 3
BADM 319 Business Ethics ................................................................. 3
BADM 340 Marketing .......................................................................... 3
BADM 359 International Business .......................................................... 3
BADM 407 Business Strategy and Policy ................................................... 3

Entrepreneurship and small business management concentration requirements ........................................ 12
BADM 311 Small Business Management .................................................. 3
BADM 323 Human Resource Management .............................................. 3
BADM 350 Retailing ........................................................................... 3
BADM 411 Entrepreneurship and New Venture Formation ......................... 3

Note: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Curriculum for a Major in Business Administration with a Concentration in Finance

The finance concentration emphasizes evaluation and control of finance programs in banking and other financial institutions as well as studying the regulatory agencies responsible for overseeing the institutions.

Specific general studies requirements:
ECON 205 Principles of Macroeconomics ................................................. 3
MATH 154 Finite Mathematics ................................................................. 3
Total hours required for the major .......................................................... 48

Business core requirements ........................................................................ 36
CIS 102 Microcomputer Applications ....................................................... 3
ACCT 201, 202 Introductory Accounting I and II ....................................... 6
ECON 206 Principles of Microeconomics .................................................. 3
BADM 312 Business Law I ................................................................. 3
BADM 224 Business Statistics ................................................................. 3
BADM 300 Introduction to Financial Management ..................................... 3
BADM 310 Principles of Management ...................................................... 3
BADM 319 Business Ethics ................................................................. 3
BADM 340 Marketing .......................................................................... 3
BADM 359 International Business .......................................................... 3
BADM 407 Business Strategy and Policy ................................................... 3

Finance concentration requirements .......................................................... 9
BADM 302 Intermediate Financial Management ........................................ 3
BADM 301 Money Markets and Financial Institutions OR
ECON 305 Money and Banking ................................................................. 3
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<thead>
<tr>
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<tr>
<td>BADM 425</td>
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<td>Required elective</td>
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<tr>
<td>BADM 325</td>
<td>International Finance OR</td>
<td>3</td>
</tr>
<tr>
<td>BADM 308</td>
<td>Financial Planning and Insurance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Curriculum for a Major in Business Administration with a Concentration in Human Resource Management**

The concentration in human resource management (HRM) is designed to provide students with the knowledge and skills to pursue, acquire, and function in entry level positions in HRM areas of responsibility.

Specific general studies requirements:
- ECON 205 Principles of Macroeconomics ......................... 3
- MATH 154 Finite Mathematics .................................... 3

Total hours required for a major ........................................ 48

Business core requirements .................................................. 36
- CIS 102 Microcomputer Applications ............................... 3
- ACCT 201 and 202 Introductory Accounting I and II .......... 6
- ECON 206 Principles of Microeconomics .......................... 3
- BADM 312 Business Law I ............................................ 3
- BADM 224 Business Statistics ...................................... 3
- BADM 300 Introduction to Financial Management ............... 3
- BADM 310 Principles of Management ............................... 3
- BADM 319 Business Ethics .......................................... 3
- BADM 340 Marketing .................................................. 3
- BADM 359 International Business .................................. 3
- BADM 407 Business Strategy and Policy .......................... 3

Human resource management requirements ............................... 12
- BADM 320 Employment Law ........................................... 3
- BADM 323 Human Resource Management ............................ 3
- BADM 324 Labor Problems/Collective Bargaining ............... 3
- PSYC 321 Industrial/Organizational Psychology ................. 3

Note: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

**Curriculum for a Major in Business Administration with a Concentration in Management**

The concentration in management is designed to provide students with knowledge and skills in solving both quantitative and behavioral problems associated with the management functions of planning, organizing, leading, and controlling.

Specific general studies requirements:
- ECON 205 Principles of Macroeconomics .......................... 3
- MATH 154 Finite Mathematics ...................................... 3

Total hours required for a major ........................................ 48

Business core requirements .................................................. 36
- CIS 102 Microcomputer Applications ............................... 3
- ACCT 201, 202 Introductory Accounting I and II .............. 6
- ECON 206 Principles of Microeconomics .......................... 3
- BADM 312 Business Law I ............................................ 3
- BADM 224 Business Statistics ...................................... 3
- BADM 300 Introduction to Financial Management ............... 3
- BADM 310 Principles of Management ............................... 3
- BADM 319 Business Ethics .......................................... 3
- BADM 340 Marketing .................................................. 3
- BADM 359 International Business .................................. 3
![Shepherd University](image)

**BADM 407 Business Strategy and Policy** ........................................... 3

Management concentration requirements ........................................................................ 12

**Group I Business/Management Courses**
Select one of the following courses, 3 hours:

- **BADM 320 Employment Law** ....................................................... 3
- **BADM 323 Human Resource Management** .................................... 3
- **BADM 324 Labor Problems/Collective Bargaining** ......................... 3
- **BADM 385 Business Externship** .................................................... 3
- **BADM 392 Business Co-op** ............................................................ 3
- **ENGL 280 Introduction to Technical Communications** .................. 3
- **PSYC 321 Industrial/Organizational Psychology** ............................ 3

**Group II Quantitative Courses**
Select one of the following courses, 3 hours:

- **BADM 413 Quantitative Methods** .................................................. 3
- **BADM 415 Operations and Production Management** ....................... 3
- **BADM 205 Calculus with Applications** ............................................ 4

**Group III Economics Courses**
Select one of the following courses, 3 hours:

- **ECON 301 Intermediate Microeconomics** ....................................... 3
- **ECON 303 Managerial Economics** .................................................. 3
- **ECON 350 Government and Business** .............................................. 3

**Group IV Accounting Courses**
Select one of the following courses, 3 hours:

- **ACCT 305 Managerial Accounting** ............................................... 3
- **ACCT 336 Cost Accounting** ............................................................ 3

Students should complete MATH 154, ACCT 201, ACCT 202, CIS 102, BADM 224, BADM 312, ECON 205, and ECON 206 during their first two years of study.

Note: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

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**Curriculum for a Major in Business Administration with a Concentration in Marketing**

Emphasis on problems of marketing including production controls, transportation, merchandising, purchasing, and sales has created expanding job opportunities in this field.

Specific general studies requirements:

- **ECON 205** Principles of Macroeconomics ................................. 3
- **MATH 154** Finite Mathematics .................................................... 3

Total hours required for a major .................................................................................. 48

**Business core requirements** ................................................................................. 36

- **CIS 102** Microcomputer Applications ............................................ 3
- **ACCT 201, 202** Introductory Accounting I and II ......................... 6
- **ECON 206** Principles of Microeconomics ........................................ 3
- **BADM 312** Business Law I ............................................................. 3
- **BADM 224** Business Statistics ....................................................... 3
- **BADM 300** Introduction to Financial Management ......................... 3
- **BADM 310** Principles of Management ............................................. 3
- **BADM 319** Business Ethics ............................................................ 3
- **BADM 340** Marketing ................................................................. 3
- **BADM 359** International Business .................................................. 3
- **BADM 407** Business Strategy and Policy ......................................... 3

**Marketing concentration requirements** ................................................................. 12

- **ACCT 305** Managerial Accounting ............................................... 3
- **BADM 375** Strategic Marketing ..................................................... 3
- **BADM 395** Consumer Behavior ..................................................... 3
- **BADM 405** Marketing Research ..................................................... 3
Students should complete MATH 154, ACCT 201, ACCT 202, CIS 102, BADM 224, BADM 312, ECON 205, and ECON 206 during their first two years of study.

Note: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Curriculum for a Minor in Business Administration

Specific general studies requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 205</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 154</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Total hours required for a minor</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>ACCT 201, 202</td>
<td>Introductory Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>ECON 206</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 224</td>
<td>Business Statistics*</td>
<td>3</td>
</tr>
<tr>
<td>BADM 312</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BADM 300</td>
<td>Introduction to Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 310</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 340</td>
<td>Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students not majoring in economics may, with the permission of the chair of the Department of Business Administration, substitute MATH 314 Statistics for BADM 224. Students required to take MATH 314 in their major will substitute a business elective ACCT, BADM, ECON or CIS 300 or higher.

NOTE: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

CHEMISTRY

The Department of Chemistry offers a B.S. degree in chemistry. There are three concentrations—the traditional, the biochemistry, and the environmental chemistry concentrations, the former emphasizing the more quantitative, the second the more biological aspects of chemistry, and the latter the aspects related to the environment. Training in chemistry is a good foundation for careers in fields as diverse as industrial chemistry, environmental science, forensic science, and biotechnology. The biochemistry track provides excellent preparation for students who wish to enter medical, dental, and other health-related professional schools.

Graduates of the program have obtained jobs as chemists and technicians in industrial and government laboratories or have entered graduate programs at leading universities in chemistry, chemical engineering, medicine, and pharmacology.

The chemistry curricula foster an attitude of inquiry, develop an understanding of the process of science, the interrelatedness of scientific disciplines, and the interactions of science, society, and technology. The chemistry curricula also provide opportunities for students to develop a variety of laboratory and technical skills important to the chemical profession.

In addition to the above goals, the chemistry 9–12 teaching field complies with and endorses the conceptual framework of the Shepherd University teacher education program and strives to produce teachers who are reflective problem solvers.

Curriculum for a Major in Chemistry–Traditional Concentration

Specific general studies requirements.................................................. 8

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>Total hours required</td>
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<td>49</td>
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<tr>
<td>Core courses....................................................... 35</td>
<td></td>
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<tr>
<td>CHEM 315, 315L</td>
<td>Organic Chemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 316, 316L</td>
<td>Organic Chemistry II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 321, 321L</td>
<td>Analytical Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 322, 322L</td>
<td>Instrumental Analysis and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Computers in Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 327, 327L</td>
<td>Solution Chemistry and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>
CHEM 450  Research in Chemistry .......................................................... 4
PHYS 201, 201L  University Physics I and Lab AND
PHYS 202, 202L  University Physics II and Lab OR
PHYS 221, 221L  General Physics I and Lab AND
PHYS 222, 222L  General Physics II and Lab ........................................ 8
Additional required courses .................................................................. 14
MATH 207  Calculus I ............................................................... 4
MATH 208  Calculus II ............................................................. 4
CHEM 427, 427L  Spectroscopy and Advanced Physical Chemistry Lab ...... 4
CHEM 428  Thermodynamics ...................................................... 2

Curriculum for a Comprehensive Major in Chemistry–Biochemistry Concentration

Specific general studies requirements ...................................................... 8
CHEM 207, 207L  General Chemistry and Lab AND .................................. 4
CHEM 209, 209L  General Chemistry and Lab ....................................... 4
Total hours required ............................................................................ 76-79
Core courses .......................................................................................... 69-71
PHYS 201, 201L  University Physics I and Lab AND
PHYS 202, 202L  University Physics II and Lab OR
PHYS 221, 221L  General Physics I and Lab AND
PHYS 222, 222L  General Physics II and Lab ........................................ 8
BIOL 208  Plants as Organisms ......................................................... 4
BIOL 209  Animals as Organisms ....................................................... 4
BIOL 305  Cell Biology ................................................................. 4
BIOL 344  Genetics and Evolution ..................................................... 4
BIOL 394  Principles in Biological Research ...................................... 3
MATH 207  Calculus I AND ......................................................... 4
MATH 208  Calculus II OR ............................................................ 4
MATH 205  Calculus with Applications AND ..................................... 4
MATH 314  Statistics ......................................................................... 3
CHEM 315, 315L  Organic Chemistry I and Lab .................................. 4
CHEM 316, 316L  Organic Chemistry II and Lab .................................. 4
CHEM 321, 321L  Analytical Chemistry and Lab .................................. 4
CHEM 322, 322L  Instrumental Analysis and Lab .................................. 4
CHEM 325  Computer in Science ...................................................... 3
CHEM 327, 327L  Solution Chemistry and Lab .................................... 4
CHEM 329, 329L  Biochemistry I and Lab .......................................... 4
CHEM 330, 330L  Biochemistry II and Lab ......................................... 4
CHEM 450  Research in Chemistry .................................................. 4-6
Electives .............................................................................................. 7-8
CHEM 436  Advanced Protein Chemistry ......................................... 3
BIOL 302  Microbiology .................................................................... 4
BIOL 404  Immunology .................................................................... 4
BIOL 416  Molecular Biology .......................................................... 4
BIOL 418  Virology ........................................................................... 4

Curriculum for a Comprehensive Major in Chemistry–Environmental Chemistry Concentration

Total hours required (including free electives) ...................................... 128
Specific general studies requirements
MATH 314  Statistics ......................................................................... 3
PHYS 201, 201L  University Physics I and Lab AND
PHYS 202, 202L  University Physics II and Lab OR
PHYS 221, 221L  General Physics I and Lab AND
PHYS 222, 222L  General Physics II and Lab ........................................ 8
Core courses.................................................................. 42
CHEM 207, 207L General Chemistry I and Lab......................... 4
CHEM 209, 209L General Chemistry II and Lab......................... 4
CHEM 315, 315L Organic Chemistry I and Lab......................... 4
CHEM 316, 316L Organic Chemistry II and Lab......................... 4
CHEM 321, 321L Analytical Chemistry and Lab......................... 4
CHEM 322, 322L Instrumental Analysis and Lab......................... 4
CHEM 325 Computers in Science........................................... 3
CHEM 327, 327L Solution Chemistry and Lab............................ 4
CHEM 329, 329L Biochemistry I and Lab................................. 4
CHEM 333 Environmental Chemistry....................................... 3
CHEM 450 Research in Chemistry (Environmental)................... 4

Environmental science concentration requirements..................... 13
ENVS 201 Dimensions of Environmental Science I...................... 3
ENVS 305 Environmental Law and Regulations OR
ENVS 306 Environmental Policy.............................................. 3
ENVS 308 Physical Resource Management................................. 3
ENVS 401 Conservation Ecology.............................................. 4

Choose two of the following courses............................................. 8
ENVS 440 Solid Waste/Air Quality Management and Lab................ 4
ENVS 441 Hydrology and Lab................................................ 4
GSCI 301 Physical Geology.................................................... 4
GSCI 303 Meteorology......................................................... 4

Additional requirements............................................................ 8
BIOL 102 General Biology II.................................................. 4
MATH 204 Calculus with Applications OR
MATH 207 Calculus I......................................................... 4

Curriculum for a Minor in Chemistry, Physical Analytical Track

Total hours required................................................................... 24

Required chemistry courses....................................................... 8
CHEM 207, 207L General Chemistry I and Lab.......................... 4
CHEM 209, 209L General Chemistry II and Lab......................... 4

Elective chemistry courses (at least two must be lab courses)........... 16
CHEM 301 Inorganic Chemistry............................................... 3
CHEM 308 Radiochemistry................................................... 3
CHEM 321, 321L Analytical Chemistry and Lab........................ 4
CHEM 322, 322L Instrumental Analysis and Lab......................... 4
CHEM 327, 327L Solution Chemistry and Lab............................ 4
CHEM 427,* Spectroscopy..................................................... 3
CHEM 427L Advanced Physical Chemistry Lab........................ 1
CHEM 428* Thermodynamics.................................................. 2
CHEM 450 Research in Chemistry .......................................... 1

* MATH 207 Calculus I and MATH 208 Calculus II are prerequisites for CHEM 427 and CHEM 428.

Curriculum for a Minor in Chemistry, Traditional Track

Total hours required................................................................... 24

Required chemistry courses....................................................... 16
CHEM 207, 207L General Chemistry I and Lab.......................... 4
CHEM 209, 209L General Chemistry II and Lab......................... 4
CHEM 315, 325L Organic Chemistry I and Lab.......................... 4
CHEM 316, 316L Organic Chemistry II and Lab......................... 4

Elective chemistry courses (at least one must be a lab course)........... 8
CHEM 301 Inorganic Chemistry............................................... 3
CHEM 308 Radiochemistry................................................... 3

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<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CHEM 311</td>
<td>Chemical Pharmacology</td>
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<td>CHEM 321, 321L</td>
<td>Analytical Chemistry and Lab</td>
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<td>CHEM 322, 322L</td>
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<td>Solution Chemistry and Lab</td>
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<td>CHEM 329, 329L</td>
<td>Biochemistry I and Lab</td>
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<tr>
<td>CHEM 330, 330L</td>
<td>Biochemistry II and Lab</td>
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<tr>
<td>CHEM 333, 333L</td>
<td>Environmental Chemistry and Lab</td>
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<td>CHEM 415</td>
<td>Advanced Organic Chemistry I</td>
<td>3</td>
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<td>CHEM 416</td>
<td>Advanced Organic Chemistry II</td>
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<td>CHEM 427*</td>
<td>Spectroscopy</td>
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<td>CHEM 427L</td>
<td>Advanced Physical Chemistry Lab</td>
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<td>CHEM 428*</td>
<td>Thermodynamics</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 436</td>
<td>Advanced Protein Chemistry</td>
<td>3</td>
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*MATH 207 Calculus I and MATH 208 Calculus II are prerequisites for CHEM 427 and CHEM 428.

## Curriculum for a Teaching Field in Chemistry Education Grades 9-12

### Specific general studies requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry and Lab</td>
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<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry and Lab</td>
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<tr>
<td>MATH 314</td>
<td>Statistics</td>
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**Total hours required**: 49

### A. Interdisciplinary core

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<tr>
<td>BIOL 208, 209</td>
<td>Plants as Organisms and Animals as Organisms</td>
<td>8</td>
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<td>GSCI 301</td>
<td>Geology</td>
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<tr>
<td>PHYS 201, 201L</td>
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<tr>
<td>PHYS 202, 202L</td>
<td>University Physics II and Lab</td>
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**Total hours required**: 20

### B. Chemistry 9–12 specialization

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<td>Organic Chemistry I and Lab</td>
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<td>CHEM 316, 316L</td>
<td>Organic Chemistry II and Lab</td>
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<td>CHEM 321, 321L</td>
<td>Analytical Chemistry and Lab</td>
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<td>CHEM 327, 327L</td>
<td>Solution Chemistry</td>
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<tr>
<td>CHEM 329</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM xxx</td>
<td>Elective in Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 205</td>
<td>Calculus with Applications</td>
<td>4</td>
</tr>
</tbody>
</table>

**Note Concerning Elective in Chemistry**: The required elective must be an upper division CHEM course approved by the academic advisor. Strongly recommended courses are CHEM 301 Inorganic Chemistry, CHEM 322 and 322L Instrumental Analysis, and CHEM 325 Computers in Science.

**Note Concerning Math Requirement**: The prerequisite for MATH 205 is mathematical competence equivalent to the successful completion of MATH 108 Precalculus.

### Other Requirements: Although a student may declare secondary education with a specialization in chemistry education 9-12 as a major upon admission to the University, to be officially admitted to the Shepherd University teacher education program and pursue this teaching field, the student must meet the following criteria as well as those criteria that apply to all teaching specializations:

1. The student must have completed BIOL 208 Plants as Organisms, BIOL 209 Animals as Organisms, CHEM 207 and 209 General Chemistry, CHEM 207L and 209L General Chemistry Lab or their equivalents with a grade of C or better in each course.
2. The student must have completed a minimum of 24 semester hours of academic work at Shepherd University with an overall GPA of at least 2.5 and a GPA of at least 2.5 in this specialization.

Retention in and completion of this program require the student to meet retention, admission to student teaching, and certification standards set by the Professional Education Unit Council. All of the standards for this program can be found in Information and Planning Handbook for Students Pursuing the Biology 9–12, Chemistry 9–12, and General Science 5–12 Specializations. See professional education course listings under Education: Professional Studies Core for Secondary
Programs of Study • 83

Education (30 hours required). Special Methods of Teaching Sciences in EDUC 423.

Contact Person: Dr. Jason Best, Byrd Science Center 115, 304/876-5331.

COACHING–ATHLETIC

The HPERS Department offers a minor in athletic coaching and officiating. This minor may be taken with any major. Additional requirements may be needed to coach in West Virginia schools.

Minor in Coaching

Total hours required for a minor ........................................................................ 24
Required courses.................................................................................................. 18

HLTH 225 First Aid/CPR ................................................................. 3
ATHC 324 Care and Prevention of Athletic Injuries ......................... 3
PHED 380 Perceptual Motor Learning ................................................ 3
ATHC 403 Principles of Coaching ...................................................... 3
ATHC 405 Psychology of Coaching .................................................... 3
ATHC 450 Coaching Internship .......................................................... 3

Choose two of the following ............................................................................. 6
ATHC 350 Coaching of Football ............................................................... 3
ATHC 351 Coaching of Basketball .......................................................... 3
ATHC 352 Coaching of Baseball ............................................................... 3
ATHC 353 Coaching of Tennis ................................................................. 3

COMPUTER AND INFORMATION SCIENCES

Curriculum for a Comprehensive Major in Computer and Information Sciences

This comprehensive program provides students with the concepts and skills necessary to develop and manage state-of-the-art computer systems. The interdisciplinary nature of the program reflects the importance of computer and information sciences in virtually every kind of organization. Graduates of the program will be prepared to apply their knowledge professionally and to pursue graduate training.

Total hours required (including free electives) ............................................... 128

Specific general studies requirement: Select one
MATH 154 Finite Mathematics (in CPIS and NDC concentrations) .... 3
MATH 108 Precalculus (in CS concentration) ......................................... 3

Core requirements ............................................................................................ 29
CIS 102 Microcomputer Applications ....................................................... 3
CIS 104 Introduction to Computer and Information Sciences ............ 3
CIS 211 Computer Language Concepts ................................................ 4
CIS 234 Introduction to Networking .......................................................... 3
CIS 314 Advanced Computer Language Concepts .................................. 4
CIS 321 Data and File Structures .............................................................. 4
CIS 386 Computer Organization .............................................................. 4
CIS 388 Database Management Systems ................................................. 4

Computer programming and information systems (CPIS) concentration ........................................................................ 39
Required business and mathematics courses .......................................... 18
MATH 314 Statistics ............................................................................... 3
ACCT 201 Introductory Accounting I ................................................. 3
ACCT 202 Introductory Accounting II ............................................... 3
BADM 310 Principles of Management .................................................. 3
BADM 345 Business Communications ................................................. 3
BADM 413 Quantitative Methods .......................................................... 3

Required CIS courses ..................................................................................... 9
CIS 287 Systems Analysis and Design ....................................................... 3
CIS 302 Windows Programming .................................................. 3
CIS 417 Advanced Applications Programming ........................... 3
Required electives ..................................................................... 12
Any CIS course numbered CIS 200 or above

Computer science (CS) concentration ........................................ 44
Required mathematics courses .................................................. 17
MATH 207 Calculus I ................................................................. 4
MATH 208 Calculus II ................................................................. 4
MATH 254 Discrete Mathematics ............................................... 3
MATH 307 Introduction to Linear Algebra .................................. 3
MATH 321 Probability and Statistics OR
MATH 314 Statistics ................................................................. 3
Required CIS courses ................................................................. 15
CIS 331 Programming Languages .............................................. 3
CIS 390 Operating Systems ....................................................... 3
CIS 421 Computer Architecture ............................................... 3
CIS 431 Algorithms and Data Structures ................................. 3
CIS 487 Software Engineering .................................................. 3
Required electives ..................................................................... 12
Any CIS course numbered CIS 200 or above

Networking and data communications (NDC) concentration ........ 43
Required mathematics courses .................................................. 6
MATH 254 Discrete Mathematics ............................................... 3
MATH 314 Statistics ................................................................. 3
Required CIS courses ................................................................. 25
CIS 287 Systems Analysis and Design ........................................ 3
CIS 390 Operating Systems ....................................................... 3
CIS 418 Management Information Systems ................................ 3
CIS 419 Data Communications and Local Area Networks ........ 3
CIS 421 Computer Architecture ............................................... 3
CIS 434 Inter-Intra Networking ............................................... 3
CIS 423 Server Operating Systems ............................................ 3
CIS 486 Network Security ......................................................... 4
Required electives ..................................................................... 12
Any CIS course numbered CIS 200 or above

Curriculum for a Minor in Computer and Information Sciences
When selecting a minor, the student must be aware that 45 hours of upper division credits are required for graduation.
Total hours required for a minor .................................................. 22
A total of 22 credit hours in CIS is required. Of these, 9 credit hours must be upper division credits.

ECONOMICS
The study of economics helps develop skills for understanding how individuals, firms, a nation or groups of nations make economic choices. The programs help prepare students for careers in business, finance, governmental service, law, graduate studies, and research.

Students majoring or minoring in economics must take ECON 205 Principles of Macroeconomics for their general studies economics requirement and MATH 154 Finite Mathematics for their general studies mathematics requirement.
Curriculum for a Major in Economics

Specific general studies requirements:
ECON 205  Principles of Macroeconomics ................................................. 3
MATH 154  Finite Mathematics ................................................................. 3
Total hours required for a major ..................................................................... 30
Required courses............................................................................................ 15
BADM 224  Business Statistics ................................................................. 3
ECON 206  Principles of Microeconomics ................................................. 3
ECON 301  Intermediate Microeconomics ................................................. 3
ECON 302  Intermediate Macroeconomics ................................................. 3
ECON 450  Senior Seminar in Economics .................................................. 3
Electives from the following courses............................................................... 15
BADM 413  Quantitative Methods ............................................................. 3
ECON 303  Managerial Economics ............................................................. 3
ECON 304  History of Economic Thought ................................................. 3
ECON 305  Money and Banking ................................................................. 3
ECON 310  Public Finance ........................................................................... 3
ECON 320  Urban Economics................................................................. 3
ECON 325  International Finance ............................................................... 3
ECON 326  International Trade .................................................................... 3
ECON 330  Economics of Developing Countries ........................................ 3
ECON 350  Government and Business ....................................................... 3
ECON 392  Cooperative Education ............................................................ 3
HIST 311  Economic History of the United States ..................................... 3
MATH 205  Calculus with Applications ....................................................... 4
NOTE: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

Curriculum for a Minor in Economics

Total hours required for a minor ..................................................................... 15
Required courses* .......................................................................................... 6
ECON 301  Intermediate Microeconomics ................................................. 3
ECON 302  Intermediate Macroeconomics ................................................. 3
Elective hours from the following courses* .................................................. 9
BADM 413  Quantitative Methods ............................................................. 3
ECON 303  Managerial Economics ............................................................. 3
ECON 304  History of Economic Thought ................................................. 3
ECON 305  Money and Banking ................................................................. 3
ECON 310  Public Finance ........................................................................... 3
ECON 320  Urban Economics................................................................. 3
ECON 325  International Finance ............................................................... 3
ECON 326  International Trade .................................................................... 3
ECON 330  Economics of Developing Countries ........................................ 3
ECON 350  Government and Business ....................................................... 3
ECON 450  Senior Seminar in Economics .................................................. 3
HIST 311  Economic History of the United States ..................................... 3
MATH 205  Calculus with Applications ....................................................... 4

*Some of these courses have as a prerequisite, BADM 224 and ECON 206.
NOTE: Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.
EDUCATION
Philosophy and Theme
The teacher education program faculty members believe that in order to be effective in today’s school, a teacher must be knowledgeable, possess a professional disposition, and conduct teaching/learning experiences that ensure the development of all children’s abilities to be critical participants in and productive members of a democratic society. The professional education unit faculty members have agreed that a teacher education program at Shepherd University that enables prospective teachers to acquire the above characteristics will be based on the following philosophical position:

The teacher education program faculty members are committed to the idea that knowledge enables one to make informed choices, to actively participate in the shaping of one’s own life and the shaping of the social, cultural, political, and economic structures of a democratic society. Education should empower all students and teachers to do this. Our purpose is to facilitate the development of prospective teachers who demonstrate the willingness and capacity for a pedagogy that truly empowers all P-12 students. The schooling context is very complex and characterized by a significant degree of ambiguity. This ambiguous complexity of the teaching context precludes a formulaic approach to teaching. So, the emphasis is on the prospective teacher developing a philosophy and a set of principles that guide practice and the reflective process of problem solving. The teacher must be able to function in this complex and ambiguous context in a reflective manner, identifying problems, framing them, considering alternative solutions and choosing and implementing courses of action. The criteria for the assessment of effective teaching must include not only curricular and pedagogical concerns but also the ethical dimensions of teaching/learning. Schooling is not done to students, it is done with students.

Consistent reflection of the nature and practice of education is a hallmark of a critically-thinking teacher. Consequently, the chosen theme of the teacher education program at Shepherd University is Teacher as Reflective Problem Solver (TARPS). We have established a framework for the development of reflective dispositions. In order to effectively respond to the range of concerns found in today’s classrooms, a teacher needs to be concurrently reflective across three fields of consideration: action, interpretation, and critical reflection. The effective teacher examines his/her action and is concerned with the effective application of pedagogical knowledge and strategies to achieve stated educational goals for every child. This action is subject to interpretation. Here the teacher explicates and justifies the assumptions and predispositions that underlie his/her teaching/learning activity. During the process of critical reflection, the teacher assesses the adequacy of the educational goals toward which the educational experience leads and incorporates moral and ethical criteria in assessing the outcomes of teaching/learning activity.

In recognition of the rapidly increasing knowledge base for teaching and teacher education and the critical demand for excellent and effective teachers, the faculty members in teacher education continually evaluate the curriculum and instructional strategies. This has led to revisions in the teacher education program. This reflective problem-solving approach will lead to further changes that strengthen the teacher education program at Shepherd University. It is important that students consult their specialization handbook to become familiar with the most recent and/or applicable revisions and requirements.

Certification Areas
Shepherd University offers the bachelor of arts in elementary education and the bachelor of arts in secondary education degrees which may lead to certification in elementary and secondary education. Shepherd University offers specializations in teacher education that lead to certification in a variety of elementary and secondary education areas.

Specializations
The following specializations are offered:
- Art Education PreK-Adult
- Biology Education 9-12
- Chemistry Education 9-12
Elementary Education K-6
Early Education PreK-K
English Education 5-Adult, 5-9
Family and Consumer Science Education 5-Adult
General Science Education 5-Adult
Health Education 5-Adult
Mathematics Education 5-Adult, General Mathematics through Algebra I Education 5-9
Music Education PreK-Adult
Physical Education PreK-Adult
Social Studies Education 5-Adult, 5-9

Contact Person: Dr. Douglas Kennard, 304/876-5330 or Department of Education, Knutti Hall 108, 304/876-5305.

Policies and Procedures
General Information
A student who wishes to pursue a teacher education degree should plan an academic program to be followed for the time of matriculation. This will include three components: general studies, specialty studies, and professional studies. The general studies courses are required of all Shepherd graduates and may be found in the Catalog under that heading. The specialty studies courses prepare students to teach in the certification field and they are listed alphabetically by specialization throughout the Catalog. The professional studies courses prepare students in abilities common to teachers irrespective to their teaching specialization.

Admission to Shepherd University does not guarantee admission to teacher education. Selection into teacher education requires, at the least, meeting common minimum standards across specialization areas and particular standards set by specific specialization areas. Admission may be denied or reversed for any student whose performance fails to meet these standards. Written specification of details of the common minimum standards may be obtained through the Department of Education Office.

Specific specialization and endorsement policies and procedures are published in individual specialization handbooks available from an advisor or specialization coordinator. These handbooks should be consulted for the areas in which students are seeking certification. The most recent requirements for each specialization are found in the handbooks.

If program space should be limited, those students demonstrating the highest standards will be given preference. All candidates should note that meeting all the objective standards but failing to gain the confidence of the faculty will not be sufficient. Students exhibiting habits associated with reflectiveness, dependability, honesty, cooperativeness, diligence, and achievement will merit such confidence.

Students should note that an education (professional education and specialty studies courses) GPA of 2.5 and an overall GPA of 2.5 are the minimums required for admission to the teacher education program and for student teaching. A GPA of only 2.5 is weak and could be interpreted as detracting from promise for teaching.

In fall 1990 the following specific policy became effective: A student who has been convicted of a felony will be denied admission to the teacher education program.

The teacher education program does not discriminate against students having disabilities as long as those conditions do not interfere with the capacity to acquire the ability and knowledge needed for performing all the activities required of teachers. All prospective students should be aware that majoring in teacher education entails the responsibility for demonstrating ability to teach in addition to, but not in place of, demonstrating knowledge about teaching.

Selection and Screening of Candidates for Teacher Education
The following policies and procedures outline the elements common to all specialization areas. Students should consult their advisors about particular requirements for their own specialization of interest.
Admission to Program (Juncture 1 Review)
Eligibility for admission as a student into the teacher education program include but are not limited to:

1. Student completes and submits application for Juncture I Review to the Department of Education Office, Knutti Hall 108. To be eligible for admission to the teacher education program (TEP) the student must:
   A. Have as an official academic advisor a faculty member in the Department of Education if seeking admission to the elementary teacher education program or, if seeking admission to a secondary specialization, the specialization coordinator of the specialization field or his/her designee;
   B. If adding an additional teaching field, have as an official academic advisor a faculty member in the Department of Education. If seeking admission to the elementary education program or if seeking admission to a secondary specialization, have as an official academic advisor the specialization coordinator of the specialization field or his/her designee;
   C. Have completed EDUC 150, EDUC 200, and EDUC 320 with no grade lower than C;
   D. Have passed all sections of the PPST or provide official proof of exemption;
   E. Have earned an overall GPA of 2.5 on at least 24 degree credits taken at Shepherd University. Transfer students must have earned an overall GPA of 2.5 and an earned GPA of 2.5 on at least 9 degree credits taken at Shepherd University;
   F. Document computer competency;
   G. Document satisfactory progress in portfolio development;
   H. Have completed ENGL 101, ENGL 102 or 103, and COMM 202 with a grade of at least C;
   I. Have no grade lower than a C in any professional studies or specialty studies courses;
   J. Submit a statement he/she has signed attesting that he/she has not been convicted of any felony as established by West Virginia Code; and
   K. Have met specific requirements in the specialization handbook for the area into which he/she wishes to be admitted.

Admission to Student Teaching (Juncture 2 Review)
To be eligible for student teaching review the student must:

1. Have passed Juncture I Review;
2. Have full status in the teacher education program;
3. Have required GPA (2.5 minimum in both education studies and overall);
4. Have no grade lower than C in education studies;
5. Document satisfactory progress in portfolio development;
6. Have met all requirements as specified by the specialization in the Catalog or the specialization handbook; and
7. Continue to be free of conviction for felony.

Certification (Juncture 3 Review)
To be eligible for certification review, the student must:

1. Have full status in the teacher education program;
2. Have completed all course work applied toward the degree including a minimum of 45 upper division hours;
3. Have required GPA of 2.5 in each education studies and overall (unless specified higher by the specialization);
4. Have no grade lower than a C in all education specialty studies;
5. Have met any additional specialization requirements;
6. Pass state mandated tests for West Virginia certification; and
7. Have submitted required forms and fees for certification.
All teacher education students should be mindful that, in order to be recommended for certification, the West Virginia Board of Education requires that the appropriate University official attest to the following statement: To the best of my knowledge, the applicant is of good moral character and physically, mentally, and emotionally qualified to perform the duties of an educator and is not the subject of any criminal conviction or currently pending charges (felonies or misdemeanors) which would show a lack of good moral character.

Curricular Policies for Teacher Education

The following curricular policies are common to all teaching specializations. Please refer to the specialization area handbook for specific policies for your area of interest.

1. No more than seven years must have elapsed between completing any course in specialty and professional studies areas and the completion of the teacher education program. In order to complete a teacher education program:
   A. Students must complete within seven years the graduation requirements of the Catalog which they have chosen. They may choose a Catalog in effect at their initial admission to the University or a subsequent Catalog. If no Catalog choice is explicitly made, the student is assigned one. Students may not split Catalog requirements.
   B. State-mandated changes, if they occur, override requirements in the Catalog on an implementation schedule determined by the state. Otherwise, the University Catalog is the binding document for all audits of graduation requirements.
   C. Rules affecting the internal progress of students within the education programs are provided in the specialization handbooks, and exceptions to these rules must be approved by the Professional Education Unit Council.

2. Once a student has been admitted to Shepherd University, transfer course work to be applied to meeting specialty studies and professional studies requirements must be approved. In the case of specialty courses, the approval must come from the specialization coordinator or his/her designee. In the case of professional studies, the approval must come from the chair of the Department of Education or his/her designee. It is the student's responsibility to provide sufficient information regarding the courses under consideration to permit an informed judgment based on the content and thematic requirements of the teacher education program.

3. All students seeking elementary or secondary education degrees must satisfy the requirements for graduation that apply to all Shepherd University graduates and, in addition, maintain at least a GPA of 2.5 in education (consists of Professional and Specialty Studies Curriculum) and an overall GPA of at least 2.5.

4. Each specialization area determines the courses which must be satisfactorily completed prior to student teaching.

5. All required professional education courses except the student teaching seminar and capstone seminar must be completed prior to student teaching.

6. Specialization areas may identify critical courses and experiences which require more rigorous levels of performance than the minimums established by the professional education unit.

Elementary Education

The purposes of elementary education multi-subjects specialization are:

1. To promote teachers who are reflective problem solvers in the daily workplace of elementary schools;
2. To promote teachers who plan and implement a learning environment responsive to the social and psychological conditions which characterize their school;
3. To promote a strong background in child development and related pedagogical practices;
4. To provide teachers with a wide range of teaching methodologies and strategies across many content areas;
5. To promote a broadly based understanding of elementary school and its place and function in society; and
6. To promote a desire for continued investigation of the teaching/learning dialectic beyond the undergraduate preparation.

Curriculum for a Major in Elementary Education

Specific general studies requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCI 103, 104</td>
<td>General Physical Science I and II</td>
<td>8</td>
</tr>
<tr>
<td>MATH 101</td>
<td>Introduction to Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Professional Studies Core for Elementary Education

Hours required: 42

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 150</td>
<td>Seminar in Education</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 200</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 320</td>
<td>Social and Psychological Conditions of Learning</td>
<td>5</td>
</tr>
<tr>
<td>EDUC 351</td>
<td>Integrated Pedagogy I</td>
<td>9</td>
</tr>
<tr>
<td>EDUC 352</td>
<td>Integrated Pedagogy II</td>
<td>9</td>
</tr>
<tr>
<td>EDUC 400</td>
<td>Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 450</td>
<td>Student Teaching K-6</td>
<td>9</td>
</tr>
<tr>
<td>EDUC 460</td>
<td>Senior Capstone Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Studies for Elementary Education K–6

Hours required: 37

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 102</td>
<td>Music as an Art and Science</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 226</td>
<td>Music Materials and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ARED 325</td>
<td>Aesthetic Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 301</td>
<td>Health and Safety in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>PHED 110</td>
<td>Elementary School PE Activities</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>History of the United States to 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>History of the United States, 1865 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 309</td>
<td>West Virginia and the Appalachian Region</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Principles of World Geography</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Life Science for Elementary Teachers</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemical Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 100L</td>
<td>Chemical Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MATH 300</td>
<td>Mathematics for Elementary Teachers</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives: Students are encouraged to pursue a concentration in a content area through the use of their elective hours. Students are encouraged to select upper division courses for these electives. The variety of options for such concentrations and courses can be discussed with an advisor.

Other Requirements: The Department of Education has the responsibility for both the professional studies and specialty studies components of the elementary education specialization, so the student’s advisor will be from this department. Students should consult the elementary education specialization handbook for the most up-to-date policies, procedures, and requirements for this specialization.

Contact Person: Dr. Doug Kennard, Knutti Hall 1061 304/876-5330, or Department of Education, Knutti Hall 108, 304/876-5305.

Specialty Studies for Early Education PreK-K

Students who are especially interested in education in nursery schools, day care centers, or at the kindergarten level may wish to pursue this specialization.

Hours required: 49

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 102</td>
<td>Music as an Art and Science</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 226</td>
<td>Music Materials and Procedures</td>
<td>3</td>
</tr>
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<td>ARED 325</td>
<td>Aesthetic Inquiry</td>
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</tr>
<tr>
<td>HLTH 301</td>
<td>Health and Safety in the Elementary School</td>
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<tr>
<td>PHED 110</td>
<td>Elementary School PE Activities</td>
<td>3</td>
</tr>
<tr>
<td>HIST 201</td>
<td>History of the United States to 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>History of the United States, 1865 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>
HIST 309  West Virginia and the Appalachian Region ................. 3
GEOG 101  Principles of World Geography .................................. 3
BIOL 100  Life Science for Elementary Teachers ........................ 4
CHEM 100, 100L  Chemical Science and Lab .................................. 4
MATH 300  Mathematics for Elementary Teachers ........................ 3
EDUC 314  Foundations of Early Education .............................. 3
EDUC 334  Instructional Strategies in Early Education ............... 3
EDUC 336  Clinical Experiences in Early Education .................. 3
FACS 304  Child Development .................................................. 3
EDUC 314, 334, and 336 are offered every third semester in the above sequence. The sequence begins with EDUC 314 in fall 2004 and again in spring 2006. Students should plan accordingly in order to follow this sequence.

In addition to these courses, two additional courses are required: GSCI 103 and GSCI 104. The last two courses fulfill general studies requirements in science. MATH 101 is a prerequisite for MATH 300.

Electives: Students are encouraged to pursue a concentration in a content area through the use of their elective hours. Students are encouraged to select upper division courses for these electives. The variety of options for such concentrations and courses can be discussed with an advisor.

Other Requirements: The Department of Education has the responsibility for both the professional studies and specialty studies components of the elementary education specialization, so the student’s advisor will be from this department. Students should consult the elementary education specialization handbook for the most up-to-date policies, procedures, and requirements for this specialization.

Contact Person: c. lynne hannah, Knutti 109, 304/876-5279, or Department of Education, Knutti Hall 108, 304/876-5305.

Middle School Education
The middle school certification includes 5-9 grade ranges. The required courses in professional studies are listed below. See individual specialization areas for specialty curriculum. Students who want middle school certification must complete two middle school specializations or one middle school specialization AND either the elementary education multi-subjects K-6 specialization or one secondary education specialization.

Professional Studies Core for Middle School Education
Hours required ........................................................................... 29
EDUC 150  Seminar in Education ............................................... 1
EDUC 200  Foundations of Education ....................................... 3
EDUC 319  Middle School Curriculum ...................................... 3
EDUC 320  Social and Psychological Conditions of Learning .... 5
EDUC 4XX  Special Methods ..................................................... 3
EDUC 435  Special Methods Practicum ...................................... 2
EDUC 400  Student Teaching Seminar ...................................... 3
EDUC 453  Student Teaching, Grades 5-9 ................................. 9

Contact Person: Dr. Doug Kennard, Knutti Hall 101A, 304/876-5330 or Department of Education, Knutti Hall 106, 304/876-5305.

Secondary Education
The secondary certification includes K–12, 5-9, 5–12, or 9–12 grade ranges. The required courses in professional studies are listed below. See individual specialization areas for specialty curriculum.

Professional Studies Core for Secondary Education
Hours required .......................................................................... 30-33
EDUC 150  Seminar in Education ............................................... 1
EDUC 200  Foundations of Education ....................................... 3
EDUC 320  Social and Psychological Conditions of Learning .... 5
EDUC 370  Creating Learning Environments .......................... 4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4XX</td>
<td>Special Methods</td>
<td>3-6*</td>
</tr>
<tr>
<td>EDUC 400</td>
<td>Student Teaching Seminar</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 435</td>
<td>Special Methods Practicum</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 45X</td>
<td>Student Teaching</td>
<td>9</td>
</tr>
</tbody>
</table>

* Family and consumer sciences education requires 6 hours. See each specialization for specific course numbers and titles.

**Education Minor**

The education minor is offered to students who may have some interest in teaching or who wish to develop a more critical understanding of the role of schooling in society. It combines a core set of classes and selections made from three areas emphasizing the foundations, the sociological, and the psychological areas. THE EDUCATION MINOR DOES NOT LEAD TO A RECOMMENDATION FOR TEACHER CERTIFICATION.

**Curriculum for a Minor in Education**

Total hours required: 22-23

**Required core:**

- EDUC 200 Foundations of Education 3
- EDUC 320 The Social and Psychological Conditions of Learning 5
- EDUC 392 Cooperative Education in Education OR 3
- EDUC 429 Adult Education Models and Practices OR 2
- EDUC 336 Clinical Experiences in Early Education OR 3
- EDUC 390 Experiential Learning 3

**Electives:**

Choose one course from each of the three groups below and an additional course which may be selected from any of the three groups.

**Foundations**

- ENGL 203 Teaching Reading and Adolescent Literature 3
- EDUC 314 Foundations of Early Education 3
- EDUC 360 Survey of Exceptional Children 3
- PHIL 315 Ethics 3
- PSCI 412 Metropolitan Politics 3

**Sociological**

- ENGL 360 Literature and the Sexes 3
- WMST 201 Introduction to Women's Studies 3
- EDUC 310 Educational Sociology 3
- SOWK 305 Human Behavior in the Social Environment 3
- SOWK 417 Sex and Gender in Contemporary Society 3
- SOCI 205 Social Problems 3
- SOCI 303 The Family 3
- SOCI 403 Ethnic Relations 3
- SOCI 411 Social Stratification 3

**Psychological**

- EDUC 334 Instructional Strategies in Early Education 3
- PSYC 301 Adolescent Development 3
- FACS 304 Child Development 3
- PSYC 305 Social Psychology 3
- PSYC 430 Humanistic Psychology 3
ENGINEERING
Curriculum for a Minor in Engineering
Students with this minor still need to meet the 45-hour upper division requirements.
Total hours required ........................................................................................................ 27
ENGR 101 Engineering I .......................................................... 3
ENGR 102 Engineering II ...................................................... 3
ENGR 221 Introduction to Electrical Engineering ..................... 3
ENGR 241 Engineering Statics .............................................. 3
ENGR 242 Engineering Dynamics .......................................... 3
PHYS 221, 221L General Physics I and Laboratory .................... 4
MATH 207 Calculus I ............................................................. 4
MATH 208 Calculus II ............................................................. 4

ENGLISH
The Department of English seeks to help prepare students to live in a complex, technological, and diverse world by introducing them to varying perspectives offered by a thorough study of literature and language. Through these perspectives, sociological and personal barriers may be broken down, and the possibilities as well as the paradoxes of human existence may be better understood.

The primary objectives of the English curriculum include the following:
1. To encourage students to think critically and to communicate their thoughts effectively by helping them develop the skills necessary to understand and utilize the English language;
2. To contribute to the liberal arts education of all students by exposing them to the diversity and richness of the world’s best literature;
3. To prepare English education majors to become reflective problem solvers, capable of teaching English on the middle or secondary levels, in a country as ethnically diverse as ours;
4. To provide students, particularly English majors, with a broad background in languages and literature which will enable them to pursue graduate study;
5. To give English and English education majors a knowledge of the basic tools of effective written communication, technology, and an understanding of literature that will enable them to pursue any vocation and function in a diverse and global work world.

Curriculum for a Major in English
Total hours required for an English major ......................................................... 31*
Required courses ........................................................................................................ 16
ENGL 310 Survey of British Literature I........................................ 3
ENGL 311 Survey of British Literature II..................................... 3
ENGL 370 Structure and Evolution of English OR
ENGL 375 History of the English Language ................................. 3
ENGL 418 Studies in Chaucer and Milton ................................... 3
ENGL 421 Shakespeare ............................................................ 3
ENGL 485 Senior Capstone Practicum ........................................ 1
Electives ................................................................................................................. 15
Of the 15 remaining hours (5 elective courses), a minimum of one course MUST come from EACH of the following period groupings:
Ancient/Medieval/Renaissance:
ENGL 300 Greek Mythology ..................................................... 3
ENGL 302 The Bible as Literature ............................................. 3
ENGL 315 Medieval Literature ............................................... 3
ENGL 316 Medieval Drama ...................................................... 3
ENGL 320 Renaissance Prose and Poetry ................................. 3
ENGL 321 Renaissance Drama .................................................. 3
ENGL 322 Hamlet in Context ..................................................... 3
Restoration/Eighteenth Century:
ENGL 330 Restoration and Eighteenth-Century Literature .................. 3
ENGL 331 Restoration and Eighteenth-Century Drama ...................... 3
ENGL 332 **The British Novel................................................. 3
ENGL 333 Satire ........................................................................ 3
ENGL 360 **Literature and the Sexes......................................... 3

Nineteenth Century:
ENGL 332 **The British Novel .................................................. 3
ENGL 340 British Romantic Literature ......................................... 3
ENGL 341 Nineteenth-Century British Literature (1837-1900) ........... 3
ENGL 346 **American Fiction .................................................... 3
ENGL 347 **American Poetry .................................................... 3
ENGL 360 **Literature and the Sexes ......................................... 3
ENGL 445 Studies in American Literature .................................... 3

Modern:
ENGL 346 **American Fiction .................................................... 3
ENGL 347 **American Poetry .................................................... 3
ENGL 355 American Ethnic Literature ......................................... 3
ENGL 357 Contemporary American Poetry .................................. 3
ENGL 361 Short Story ................................................................ 3
ENGL 362 Modern Novel ......................................................... 3
ENGL 363 Modern Dramatic Literature ....................................... 3
ENGL 365 Contemporary Literature .......................................... 3

Seminars: With the consent of the department chair, one of the following Seminar in Literature courses or an approved special topics course may be substituted for a course in any appropriate period grouping listed above:
ENGL 405 Seminar in Literature ................................................. 3
ENGL 406 Seminar in Literature ................................................. 3
ENGL 407 Seminar in Literature ................................................. 3

**Courses designated with a double asterisk (**) cover more than one period but may be taken to satisfy only ONE period requirement.

Curriculum for a Minor in English
Total hours required for an English minor .......................................... 18
Required courses ............................................................................. 12
ENGL 310 Survey of British Literature I ...................................... 3
ENGL 311 Survey of British Literature II ..................................... 3
ENGL 372 Advanced Composition OR
  ENGL 280 Introduction to Technical Communication OR
  ENGL 377 Peer Tutoring and Composition Theory ..................... 3
ENGL 421 Shakespeare ................................................................ 3
Electives .......................................................................................... 6
Two literature courses, numbered 300 or above, must be selected from TWO DIFFERENT period groupings listed above.

Curriculum for a Teaching Field in English Education 5-Adult
In addition to the course work required for the specialization, all prospective student teachers must make a satisfactory grade on the English Competency Exam and participate in at least TWO laboratory activities in language arts—writing for a University publication (newspaper, literary magazine), taking part in forensic activities, taking part in theatrical activities, working for the University radio station, being an English tutor, working in the University Writing Center, taking an English practicum course, or participating in some other activity approved in advance by the specialization coordinator. One of these activities must be tutoring in the University Writing Center.
Total hours required for a teaching field ................................................................. 43*

See course listings under Education for professional courses.

Required courses ........................................................................................................ 31

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 307</td>
<td>Teaching Reading and Adolescent Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300</td>
<td>Greek Mythology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 310</td>
<td>Survey of British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 311</td>
<td>Survey of British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 355</td>
<td>American Ethnic Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Literature and the Sexes OR</td>
<td></td>
</tr>
<tr>
<td>ENGL 366</td>
<td>Women in the Arts and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 370</td>
<td>Structure and Evolution of English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 377</td>
<td>Peer Tutoring and Composition Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 421</td>
<td>Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 486</td>
<td>English Education Capstone Presentation</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 360</td>
<td>Exceptional Child OR</td>
<td></td>
</tr>
<tr>
<td>ENGL 356</td>
<td>Appalachian Culture OR</td>
<td></td>
</tr>
<tr>
<td>ENGL 373</td>
<td>Creative Writing OR</td>
<td></td>
</tr>
<tr>
<td>ENGL</td>
<td>Additional English Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives .................................................................................................................. 12

Of the 12 remaining hours (four elective courses) a minimum of three hours (one course) MUST come from EACH period grouping listed below:

**Ancient/Medieval/Renaissance:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 302</td>
<td>Bible as Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 315</td>
<td>Medieval Literature</td>
<td>3</td>
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<tr>
<td>ENGL 316</td>
<td>Medieval Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>Renaissance Prose and Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 321</td>
<td>Renaissance Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 322</td>
<td>Hamlet in Context</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 418</td>
<td>Studies in Chaucer and Milton</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restoration/Eighteenth Century:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 330</td>
<td>Restoration and Eighteenth-Century Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 331</td>
<td>Restoration/Eighteenth-Century Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 332</td>
<td>**British Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 333</td>
<td>Satire</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Literature and the Sexes</td>
<td>3</td>
</tr>
</tbody>
</table>

**Nineteenth Century:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 332</td>
<td>**British Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 340</td>
<td>British Romantic Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 341</td>
<td>Nineteenth-Century British Literature (1837-1900)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 346</td>
<td>**American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 347</td>
<td>**American Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 445</td>
<td>Studies in American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>**Literature and the Sexes</td>
<td>3</td>
</tr>
</tbody>
</table>

**Modern:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 346</td>
<td>**American Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 347</td>
<td>**American Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 357</td>
<td>Contemporary American Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 361</td>
<td>Short Story</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Modern Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 363</td>
<td>Modern Dramatic Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 365</td>
<td>Contemporary Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

*This total of 43 hours is in addition to the 12 hours of general studies requirements in English.

**Courses designated with a double asterisk (**) cover more than one period but may be taken
to satisfy only ONE period requirement.
See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching English is EDUC 421.
Contact Person: Dr. Sylvia Shurbutt, Knutti Hall 223, 304/876-5207, sshurbut@shepherd.edu.

Curriculum for a Teaching Field in English Education 5-9
The English education 5-9 program is intended primarily for students preparing to teach in middle schools. In addition to the course work required for the 5-9 specialization, all prospective student teachers must make a satisfactory grade on the English competency exam and participate in at least TWO laboratory activities in language arts—writing for a University publication (newspaper, literary magazine), taking part in forensic activities, taking part in theatrical activities, working in the University Writing Center, taking Practicum in English, or participating in some other activity approved in advance by the advisor and the department chair.
Total hours required........................................................................................................ 24
ENGL 307 Teaching Reading and Adolescent Literature ........................................... 3
ENGL 300 Greek Mythology ......................................................................................... 3
ENGL 310 Survey of British Literature I ................................................................. 3
ENGL 311 Survey of British Literature II ................................................................. 3
ENGL 355 American Ethnic Literature ...................................................................... 3
ENGL 360 Literature and the Sexes OR
ENGL 366 Women in the Arts and Literature .......................................................... 3
ENGL 370 Structure and Evolution of English OR
ENGL 377 Peer Tutoring and Composition Theory .................................................. 3
ENGL 421 Shakespeare ............................................................................................... 3
See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required).
Contact Person: Dr. Sylvia Shurbutt, Knutti Hall 223, 304/876-5207, sshurbut@shepherd.edu.

ENVIRONMENTAL STUDIES
The environmental studies degree consists of a curriculum core which provides the student with a general background in major components of the environmental area. Upon completion of this core, students will follow one of five possible concentrations: environmental science; resource management; aquatic science; historic preservation; or environmental engineering.

Curriculum for a Comprehensive Major in Environmental Studies
Total hours required (including free electives) ............................................................ 128-131
General studies requirements (not required by concentrations) .................................. 47
Specific general studies requirement for all concentrations
ECON 205 Principles of Macroeconomics .................................................................. 3
Required core courses ........................................................................................................ 28
ENVS 201 Dimensions of Environmental Science I ...................................................... 3
ENVS 202 Dimensions of Environmental Science II ..................................................... 3
ENVS 306 Environmental Policy .................................................................................... 4
ENVS 401 Conservation Ecology .................................................................................. 4
ENVS 451 Senior Research Seminar ............................................................................. 3
ENVS 490 Applied Remote Sensing ............................................................................. 4
ECON 206 Principles of Microeconomics ................................................................... 3
GSCI 301 Physical Geology ......................................................................................... 4
Portfolio Requirement for Environmental Studies Major: It is required that each major complete a portfolio prior to graduation. Please see advisor for specific details.

Environmental Science Concentration
The environmental science concentration is designed to prepare the student for a future in scientific study of the environment, with the broad range of topics covered providing the student with perspective on the numerous parameters environmental scientists must consider in their work. Instructional
emphasis also provides the student with the background necessary for graduate study.

Additional specific general studies requirements

**BIOL 208, 209** Plants as Organisms and Animals as Organisms 8

**MATH 205** Calculus with Applications OR

**MATH 314** Statistics 3-4

Concentration requirements 55

Required courses 23

**ENVS 307** Introduction to Historic Preservation 3

**ENVS 308** Physical Resource Management 3

**ENVS 450** Environmental Internship 6

**CHEM 207, 207L** General Chemistry I and Lab AND

**CHEM 209, 209L** General Chemistry II and Lab 8

**CHEM 325** Computers in Science 3

Environmental science and biological resources 8

**ENVS 340** Sustainable Agriculture 4

**ENVS 422** Stream Ecology 4

**BIOL 302** Microbiology 4

**BIOL 305** Cell Biology 4

**BIOL 310** Plant Pathology 3

**BIOL 313** Invertebrate Natural History 4

**BIOL 324** Plant Taxonomy I 2

**BIOL 325** Plant Taxonomy II 1

**BIOL 410** Plant Physiology 3

**BIOL 412** Animal Physiology 3

**BIOL 344** Genetics 4

**BIOL 416** Molecular Biology 4

**GSCI 306, 307** Introduction to Oceanography and Lab 4

*Cell Biology (BIOL 305) is required for enrollment in Genetics (BIOL 344).

**Cell Biology (BIOL 305) or Genetics (BIOL 344) is required for Molecular Biology (BIOL 416).

Chemical sciences 8

**CHEM 315, 315L** Organic Chemistry I and Lab 4

**CHEM 316, 316L** Organic Chemistry II and Lab 4

**CHEM 321, 321L** Analytic Chemistry and Lab 4

**CHEM 322, 322L** Instrumental Analysis and Lab 4

**CHEM 327, 327L** Solution Chemistry and Lab 4

**CHEM 329, 329L** Biochemistry I and Lab 4

**CHEM 330, 330L** Biochemistry II and Lab 4

**CHEM 333, 333L** Environmental Chemistry and Lab 4

Earth sciences 8

**ENVS 360** Sedimentology and Stratigraphy 4

**ENVS 362** Soil Science 4

**ENVS 440** Solid Waste/Air Quality Management 4

**ENVS 441** Hydrology and Lab 4

**GSCI 303** Meteorology 4

**GSCI 312** Historical Geology 4

**PHYS 201, 201L** College Physics I and Lab AND

**PHYS 202, 202L** College Physics II and Lab OR

**PHYS 221, 221L** General Physics I and Lab AND

**PHYS 222, 222L** General Physics II and Lab 8

Resource Management Concentration

The resource management concentration provides the student with a strong, interdisciplinary background in the environmental arena. Upon completion of this option, students will be able to investigate and implement policies relating to the environment, be prepared for employment in state
and national parks, undertake environmental advocacy, develop programs for cultural and physical resource management and education, and continue study in these areas at the graduate level.

Additional specific general studies requirements

BIOL 101, 102 General Biological Science OR
BIOL 208, 209 Plants as Organisms and Animals as Organisms .......... 8
MATH 205 Calculus with Applications OR
MATH 314 Statistics ......................................................... 3-4

Concentration requirements ................................................................................. 53-57

Required courses ........................................................................................................ 23

ENVS 307 Introduction to Historic Preservation .................................................. 3
ENVS 308 Physical Resource Management ......................................................... 3
ENVS 450 Environmental Internship ...................................................................... 6
CHEM 101, 101L Chemistry in Society I and Lab AND
CHEM 102, 102L Chemistry in Society II and Lab OR
CHEM 207, 207L General Chemistry I and Lab AND
CHEM 209, 209L General Chemistry II and Lab .................................................. 8
CHEM 325 Computers in Science ............................................................................ 3

Environmental science and biological resources ..................................................... 7-8

BIOL 310* Plant Pathology ...................................................................................... 3
BIOL 313* Invertebrate Natural History ................................................................. 4
BIOL 324/325* Plant Taxonomy I and II ................................................................. 3
BIOL 410* Plant Physiology ................................................................................... 3
ENVS 422 Stream Ecology ...................................................................................... 4
GSCI 306/307 Introduction to Oceanography and Lab ........................................... 4
ENVS 362 Soil Science ............................................................................................ 4

*For students taking these courses, Plants and Animals as Organisms (BIOL 208, 209) is preferred

Environmental science and physical resources ......................................................... 8

GSCI 302 General Astronomy ................................................................................ 4
GSCI 303 Meteorology ............................................................................................ 4
GSCI 312 Historical Geology ................................................................................... 4
ENVS 360 Sedimentology ......................................................................................... 4
ENVS 440 Solid Waste/Air Quality Management ............................................... 4
ENVS 441 Hydrology and Lab ................................................................................ 4

Management of our resources ................................................................................. 6-8

ENVS 210 Introduction to Park Administration ..................................................... 3
ENVS 301 Wildlife Management ............................................................................ 3
ENVS 302 Forestry .................................................................................................. 3
ENVS 305 Environmental Law and Regulation .................................................. 4
ENVS 309 Regional Geology and Geomorphology ........................................... 3
ENVS 310 Park Management ................................................................................ 3
ENVS 311 Resource Management .......................................................................... 3
ENVS 319 Land Use Planning ................................................................................ 3
ENVS 340 Sustainable Agriculture ........................................................................ 4
ENVS 341 Sustainable Energy and Development ............................................... 4
ENVS 368 Geology of National Parks ................................................................. 3

Human and economic resources .............................................................................. 9-10

ANTH 225 Introduction to Museum Studies ......................................................... 3
ANTH 300 Introduction to Archaeology ................................................................. 3
ANTH 315 Cultural Anthropology ........................................................................... 3
ANTH 345 Archaeological Field Methods and Lab ............................................. 4
ANTH 370 American Architecture Heritage ......................................................... 3
ANTH 380 Historical Archaeology and Lab ........................................................... 3
ENVS 320 Communication Strategies for Environmental Studies ................. 3
ENVS 322 Environmental History ........................................................................... 3
ENGL 220 Appalachian Culture ......................................................... 3
HIST 309 West Virginia and the Appalachian Region ...................... 3
GEOG 301 World Economic Geography .............................................. 3
GEOG 400 Latin America Geography ................................................ 3

Aquatic Science Concentration
The aquatic science concentration provides training in the practical skills required to directly enter employment in industry, consulting firms, or government in positions where practitioners monitor or ameliorate aquatic habitats. In addition, the aquatic science concentration would prepare students who plan to pursue graduate studies in a diverse range of disciplines such as aquaculture, fisheries management, ecology, and environmental studies.

Additional specific general studies requirements
BIOL 208, 209 Plants as Organisms and Animals as Organisms .......... 8
MATH 205 Calculus with Applications OR
MATH 314 Statistics ........................................................................ 3-4

Concentration requirements .................................................................... 45

Required courses ......................................................................................... 39
CHEM 325 Computers in Science .......................................................... 3
ENVS 307 Introduction to Historic Preservation .................................... 3
ENVS 308 Physical Resource Management ......................................... 3
ENVS 342 Limnology ......................................................................... 4
ENVS 343 Aquatic Entomology OR
ENVS 344 Ichthyology ....................................................................... 4
ENVS 422 Stream Ecology .................................................................. 4
ENVS 441 Hydrology and Lab ............................................................... 4
ENVS 450 Environmental Internship ..................................................... 6
PHYS 201, 201L University Physics I and Lab AND
PHYS 202, 202L University Physics II and Lab OR
PHYS 221, 221L General Physics I and Lab AND
PHYS 222, 222L General Physics II and Lab ........................................ 8

Biological and earth sciences ..................................................................... 4
ENVS 360 Sedimentology ................................................................. 4
ENVS 362 Soil Science ....................................................................... 4
ENVS 440 Solid Waste/Air Quality Management ................................ 4
GSCI 303 Meteorology ..................................................................... 4
GSCI 306, 307 Introduction to Oceanography and Lab .................... 4
GSCI 312 Historical Geology .............................................................. 4
BIOL 302 Microbiology ................................................................... 4
BIOL 305 Cell Biology ....................................................................... 4
BIOL 310 Plant Pathology ................................................................. 3
BIOL 313 Invertebrate Natural History .............................................. 4
BIOL 324 Plant Taxonomy I ............................................................... 2
BIOL 325 Plant Taxonomy II .............................................................. 1
BIOL 344* Genetics ........................................................................ 4
BIOL 410 Plant Physiology ............................................................... 3
BIOL 412 Animal Physiology ............................................................. 3
BIOL 416** Molecular Biology .......................................................... 4

*Cell Biology (BIOL 305) is required for enrollment in Genetics (BIOL 344).
**Cell Biology (BIOL 305) or Genetics (BIOL 344) is required for Molecular Biology (BIOL 416).

Chemical sciences .................................................................................... 12
CHEM 207, 207L General Chemistry I and Lab AND
CHEM 209, 209L General Chemistry I and Lab .................................. 8
CHEM 315, 315L Organic Chemistry I and Lab OR
CHEM 321, 321L Analytic Chemistry and Lab OR
CHEM 333, 333L Environmental Chemistry and Lab ......................... 4
Historic Preservation Concentration

The Historic Preservation Act of 1966 established requirements for federal level protection of cultural resources, with programs typically carried out by the state or contracted to private consultants. Students with background in the theory and practical application of historic preservation and cultural resource management have numerous employment opportunities with federal or state agencies or working with consultants in the protection of our irreplaceable cultural resources.

With urban sprawl and population increase in the Washington-Baltimore metroplex, the demand for individuals trained in this exciting and challenging area is experiencing phenomenal growth.

The historic preservation concentration is designed to prepare the student for employment in this challenging field and provide academic background necessary for success in graduate school.

Additional specific general studies requirements

| BIOL 101, 102 | General Biological Science OR |
| BIOL 208, 209 | Plants as Organisms and Animals as Organisms OR |
| CHEM 101, 101L | Chemistry and Society I and Lab AND |
| CHEM 102, 102L | Chemistry and Society II and Lab OR |
| CHEM 207, 207L | General Chemistry I and Lab AND |
| CHEM 209, 209L | General Chemistry II and Lab |
| MATH 314 | Statistics |

Concentration requirements: 54-57

Required courses: 36

| ANTH 225 | Introduction to Museum Studies |
| ANTH 300 | Introduction to Archaeology |
| ANTH 370 | American Architectural Heritage |
| CHEM 325 | Computers in Science |
| ENVS 307 | Introduction to Historic Preservation |
| ENVS 308 | Physical Resource Management |
| ENVS 371 | Documentation of Historic Properties |
| ENVS 372 | Preservation Technology |
| ENVS 450 | Environmental Internship |
| HIST 201 | History of the United States to 1865 |
| HIST 202 | History of the United States, 1865 to Present |

Management of our resources (select two courses): 6-7

| ENVS 210 | Introduction to Park Administration |
| ENVS 305 | Environmental Law and Regulation |
| ENVS 309 | Regional Geology and Geomorphology |
| ENVS 310 | Park Management |
| ENVS 319 | Land Use Planning |
| ENVS 368 | Geology of National Parks |

Historical perspective (select two courses): 6

| ENVS 320 | Communication Strategies for Environmental Studies |
| ENVS 321 | American Decorative Arts |
| ENVS 325 | Oral History |
| HIST 302 | Am. Colonial History and Revolutionary Experience |
| HIST 303 | The Early Republic |
| HIST 304 | The American Civil War and Reconstruction |
| HIST 305 | History of the Lower Shenandoah Valley |
| HIST 309 | West Virginia and the Appalachian Region |
| ENV 220 | Battlefield Preservation |

Archaeology and anthropology (select two courses): 6-8

| ANTH 315 | Cultural Anthropology |
| ANTH 345 | Archaeological Field Methods and Lab |
| ANTH 380 | Historical Archaeology and Lab |
| ANTH 390 | Native American Ethnography |
Environmental Engineering Concentration

The environmental engineering concentration is designed to prepare the student for a future in application of engineering technology to environmental issues and problems. The need for trained environmental engineers is illustrated through the numerous employment opportunities available for individuals trained in this field in industry, at state and federal agencies, and with environmental consulting firms. The program structure provides the student with the skills to achieve success in this challenging field and with further required field experience through a required internship. Instructional emphasis also prepares the student with the academic skills necessary for graduate study in environmental engineering.

Additional specific general studies requirements
CHEM 207, 207L  General Chemistry I and Lab AND
CHEM 209, 209L  General Chemistry I and Lab ........................................ 8
MATH 207  Calculus I ........................................................................ 4
Concentration requirements ........................................................................ 52-53
Required courses ......................................................................................... 41
ENGR 101  Engineering I ................................................................. 3
ENGR 102  Engineering II ............................................................... 3
ENGR 221, 222  Introduction to Electrical Engineering and Lab .......... 4
ENGR 241  Engineering Statics ......................................................... 3
ENGR 242  Engineering Dynamics ...................................................... 3
ENGR 301  Engineering Thermodynamics OR
ENGR 351  Introduction to Fluid Mechanics ........................................ 3
ENVS 450  Environmental Internship .................................................. 3
MATH 208  Calculus II ................................................................. 4
MATH 310  Differential Equations ......................................................... 4
PHYS 221, 221L  General Physics I and Lab AND
PHYS 222, 222L  General Physics II and Lab ....................................... 8
Environmental science (select three courses) ........................................... 11-12
GSCI 341  Sustainable Energy and Development .............................. 4
GSCI 362  Soil Science ........................................................................ 4
ENVS 422  Stream Ecology ............................................................. 4
ENVS 440  Solid Waste/Air Quality Management ................................ 4
ENVS 441  Hydrology and Lab ........................................................... 4
MATH 329  Mathematical Modeling ...................................................... 3

Curriculum for a Minor in Environmental Studies

Specific general studies requirements
CHEM 101, 101L  Chemistry in Society I and Lab AND
CHEM 102, 102L  Chemistry in Society II and Lab OR
CHEM 207, 207L  General Chemistry I and Lab AND
CHEM 209, 209L  General Chemistry II and Lab .................................... 8
Total hours required .................................................................................. 28
ENVS 201  Dimensions of Environmental Science I ............................ 3
ENVS 202  Dimensions of Environmental Science II ......................... 3
ENVS 306  Environmental Policy ......................................................... 4
ENVS 307  Introduction to Historical Preservation ............................... 3
ENVS 308  Physical Resource Management ....................................... 3
ENVS 401  Conservation Ecology ......................................................... 4
GSCI 301  Physical Geology ................................................................ 4
Select one of the following ...................................................................... 4
CHEM 333, 333L  Environmental Chemistry and Lab .......................... 4
GSCI 303  Meteorology ...................................................................... 4
GSCI 306, 307  Introduction to Oceanography and Lab ....................... 4
GSCI 312  Historical Geology .............................................................. 4
ENVS 340  Sustainable Agriculture ..................................................... 4
FAMILY AND CONSUMER SCIENCES

A career in family and consumer sciences, a helping profession, is one that includes many specialties. The men and women who are family and consumer scientists deliver services to benefit people in their daily lives. The services focus primarily on prevention and intervention. Family and consumer scientists are employed by human service organizations, manufacturers, businesses, government, the cooperative extension service, and public agencies. The family and consumer sciences curriculum is a general one which provides courses in each of the five distinct areas. A student chooses a minor to complement this major and his or her personal interests, skills, and talents. Upon satisfactory completion of the family and consumer sciences curriculum, a student is awarded a bachelor of science degree.

Curriculum for a Major in Family and Consumer Sciences

Total hours required .............................................................................................................. 40
Required courses ............................................................................................................. 32
FACS 101 Textiles .......................................................... 3
FACS 102 Clothing ........................................................ 4
FACS 202 Food and Meal Management ......................... 4
FACS 300 Marriage Relations ......................................... 3
FACS 304 Child Development ........................................ 3
FACS 306 Interior Design ............................................. 3
FACS 307 Family and Consumer Science Management .... 3
FACS 308 Housing ........................................................ 3
FACS 318 Nutrition ....................................................... 3
FACS 403 Consumer Economics .................................... 3
Electives ........................................................................................................................... 8
FACS 215 Fashion Analysis ............................................ 3
FACS 310 Parents and Children through the Lifespan ........ 3
FACS 315 Cultural Influences on Clothing ....................... 3
FACS 392 Co-op in Family and Consumer Sciences ........ 3
FACS 410 Special Studies ............................................ 1-4
EDUC 429 Adult Education Models and Practices ........... 2

* A student is required to take the courses listed in the Catalog under General Studies except that Chemistry in Society CHEM 101, CHEM 101L, CHEM 102, and CHEM 102L or General Biological Science BIOL 101 and BIOL 102 must be selected for the science requirement.

Family and Consumer Sciences (Minors)
The minors in family and consumer sciences are designed for students in other curricula to enhance their major and broaden their marketable skills.

Curriculum for a Minor in General Family and Consumer Sciences

Total hours required ........................................................................................................... 26
FACS 101 Textiles .......................................................... 3
FACS 102 Clothing ........................................................ 4
FACS 202 Food and Meal Management ......................... 4
FACS 300 Marriage Relations ......................................... 3
FACS 304 Child Development ........................................ 3
FACS 306 Interior Design OR
FACS 308 Housing ........................................................ 3
### Curriculum for a Minor in Family and Consumer Sciences with a Child Development Emphasis

Students in any curriculum may choose family and consumer sciences as a minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 304</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 300</td>
<td>Marriage Relations</td>
<td>3</td>
</tr>
<tr>
<td>FACS 310</td>
<td>Parents and Children through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>FACS 318</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 303</td>
<td>The Family</td>
<td>3</td>
</tr>
</tbody>
</table>

*Offered on a rotation plan.

### Curriculum for a Minor in Family and Consumer Sciences with a Fashion Emphasis

Students in any curriculum may choose family and consumer sciences as a minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 101</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FACS 102</td>
<td>Clothing</td>
<td>4</td>
</tr>
<tr>
<td>FACS 307</td>
<td>Family and Consumer Sciences Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 345</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>FACS 215</td>
<td>Fashion Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FACS 306</td>
<td>Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>FACS 315</td>
<td>Cultural Influences on Clothing</td>
<td>3</td>
</tr>
<tr>
<td>FACS 403</td>
<td>Consumer Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Curriculum for a Teaching Field in Family and Consumer Sciences Education Grades 5-12

The family and consumer sciences education student is provided with experiences to increase knowledge and skill in preparation for teaching family and consumer sciences in grades 5-12.

The purposes of the family and consumer sciences program are:

1. To prepare teachers who can work with cultural and ethnic diversity and who are sensitive to gender issues;
2. To provide practice in dealing with the perennial practical problems of families;
3. To make a commitment to enhancing the quality of life for individuals and families as they strive to achieve their selected goals; and
4. To promote knowledge and critical thinking skills.

Upon satisfactory completion of curriculum requirements, the student is awarded a bachelor of arts degree in secondary education and must apply to the State Department of Education for vocational certification.

Total hours required ........................................................................................................ 43
EDUC 429 Adult Education Models and Practices ........................................... 2
Electives with consent of advisor ........................................................................ 6

Students are required to take the courses listed in the Catalog under General Studies and under The Professional Studies Core for Secondary Education except that Chemistry in Society I and II CHEM 101, 101L and 102, 102L or General Biological Science BIOL 101 and BIOL 102 must be selected for the science requirement.

See professional education course listings under Education: Professional Studies Core for Secondary Education (33 hours required). Special Methods of Teaching Family and Consumer Sciences in EDUC 428.

Contact Person: Dr. Patricia Stealey, Stutzman-Slonaker Hall 211, 304/876-5318.

GENERAL SCIENCE

The Department of Biology and the Department of Physical Sciences jointly offer a comprehensive program of courses in the natural sciences which allows students to obtain the knowledge base and experiences necessary to become certified to teach science in grades 5–12, or for students not majoring in biology or chemistry to minor in general science.

The general science curricula enable students to build knowledge bases about their physical and biochemical universe; foster an attitude of inquiry; and develop a functional understanding of the process of science, the interrelatedness of the various scientific disciplines, and the interactions of science, society, and technology. These curricula also provide opportunities for students to develop a variety of laboratory and technical skills vital to success in the pursuit of knowledge in the natural sciences. In addition to the above goals, the general science 5-12 teaching field complies with and endorses the conceptual framework of the Shepherd University teacher education program and strives to produce teachers who are capable reflective problem solvers.

Curriculum for a Teaching Field in General Science Grades 5-12

Specific general studies requirements
BIOL 208, 209 Plants as Organisms and Animals as Organisms ....................... 8
MATH 314 Statistics ......................................................................................... 3

See course listings under Education for professional courses

Required courses ........................................................................................................ 47
A. Interdisciplinary core ............................................................................................. 20
CHEM 207, 207L General Chemistry I and Lab AND
CHEM 209, 209L General Chemistry II and Lab ....................................................... 8
GSCI 301 Physical Geology ..................................................................................... 4
PHYS 201, 201L University Physics I and Lab AND
PHYS 202, 202L University Physics II and Lab ........................................................... 8
B. General science 5-12 specialization ...................................................................... 27
BIOL 225, 226 Human Anatomy and Physiology ................................................. 6
GSCI 302 General Astronomy .................................................................................. 4
GSCI 303 Meteorology ............................................................................................ 4
MATH 205 Calculus with Applications ..................................................................... 4
Electives in science ..................................................................................................... 9

Notes Concerning Electives in General Science: Electives must be upper division BIOL, CHEM, and GSCI courses. Electives must be distributed between the aforementioned disciplines. Electives must be approved by the NSTSC. Strongly recommended courses are BIOL 301 Microbiology, BIOL 344 Genetics and Evolution, BIOL 394 Principles of Biological Research, CHEM 315/316 Organic Chemistry, CHEM 315L/316L Organic Chemistry Lab, CHEM 325 Computers in Science, and GSCI 306 Introduction to Oceanography.

Notes Concerning the Math Requirement: The prerequisite for MATH 205 and MATH 314 is mathematical competence equivalent to the successful completion of MATH 108 Precalculus or MATH 154 Finite Mathematics.

Other Requirements: Although one may declare secondary education with a specializations in general science education 5-12 as a major upon admission to the University, to be officially admitted to the Shepherd University teacher education program and pursue this teaching field the student must
meet the following criteria as well as those criteria that apply to all teaching specializations:

1) The student must have completed BIOL 208 Plants as Organisms, BIOL 209 Animals as Organisms, CHEM 207 and 209 General Chemistry, CHEM 207L and 209L General Chemistry Lab or their equivalents with a grade of C or better in each course, and
2) The student must have completed a minimum of 24 semester hours of academic work at Shepherd University with an overall GPA of at least 2.5 and a GPA of at least 2.5 in this specialization.

See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching Science is EDUC 423. Retention in and completion of this program require the student to meet retention, admission to student teaching, and certification standards set by the Professional Education Unit Council. All of the standards for this program can be found in Information and Planning Handbook for Students Pursuing the Biology 9–12, Chemistry 9–12, and General Science 5–12 Specializations.

**Contact Person:** Dr. Jason Best, Byrd Science Center 115, 304/876-5331.

**Curriculum for a Minor in General Science**

Students with this minor still need to meet the 45-hour upper division requirements.

Total hours required ................................................................. 27

Required hours ........................................................................ 16

Any two of the following three groups:

**Group 1**
- BIOL 208 Plants as Organisms ............................................. 4
- BIOL 209 Animals as Organisms ............................................ 4

**Group 2**
- CHEM 207, 207L General Chemistry I and Lab ...................... 4
- CHEM 209, 209L General Chemistry II and Lab ...................... 4

**Group 3**
- PHYS 201, 201L University Physics I and Lab ......................... 4
- PHYS 202, 202L University Physics II and Lab OR .................... 4
- PHYS 221, 221L General Physics I and Lab ............................ 4
- PHYS 222, 222L General Physics II and Lab ............................ 4

Electives ...................................................................................... 11

Any upper division elective courses from areas BIOL, CHEM, PHYS and/or GSCI may be included except GSCI 350 Natural Science Interpretation.

NOTE: No student with a major in either biology or chemistry shall be permitted to have a minor in general science.

**HEALTH EDUCATION**

The Department of HPERS, in conjunction with the Department of Education, prepares health educators who are critical-thinking problem solvers able to encourage others to improve personal fitness and wellness habits, attitudes, and skill, thus promoting a more healthy and meaningful lifestyle.

This endorsement area may only be taken by students enrolled in and completing the Curriculum for Teaching Field in Physical Education K-12. It may not be taken alone, with any other certification program, or as a minor.

**Curriculum for a Teaching Endorsement in Health Education Grades 5-12**

Total hours required for the teaching field.............................................. 29

Required courses

- HLTH 103* Personal Health ..................................................... 3
- HLTH 225* First Aid/CPR ...................................................... 3
- GSPE 201* Wellness/Fitness .................................................. 1
- PHED 370* Applied Anatomy and Physiology ......................... 4
- PHED 405* Applied Kinesiology ............................................. 3
- HLTH 300 Substance Use and Abuse ..................................... 3
HLTH 360  School Health Problems .......................................................... 3
HLTH 370  Community Health Education .................................................. 3
FACS 300  Marriage Relations ................................................................. 3
FACS 318  Nutrition ................................................................................. 3

*Indicates courses that are also a part of the Curriculum for Teaching Field in Physical Education.

Other Requirements for Health Education 5-12:

I. Academic Requirements

Students in health education 5-12 student teaching field must meet the following criteria before enrolling in EDUC 455 Student Teaching Grades K-4, 5-8, 9-12:

1. Earn a GPA of 2.5 in all health education and professional education courses combined;
2. Earn an overall GPA of 2.5 in all course work attempted;
3. Satisfy all requirements in the Handbook for Teachers of Health Education and Physical Education; and
4. Be interviewed by the HPERS faculty for entrance into the teacher education program (Juncture 1) and student teaching block (Juncture 2).

II. Out-of-Class Requirements for Teaching Health Education (complete four of the following health education growth experiences):

1. Participate in organizing and administering four blood drives;
2. Work as a student assistant in the Wellness Center;
3. Participate in a state, district, or national professional health education conference;
4. Participate in a sanctioned workshop or activity related to health education;
5. Observe in a 15-hour public school health education classroom experience; or
6. Observe at 15 hours in a special (adapted) physical education class in an off-campus setting.

Individual potential as a professional educator will be closely examined as the student progresses through the curriculum. The Pro 05 evaluation form is for this purpose.

See Professional Education course listings under Education: Professional Studies Course for Secondary Education (30 hours required). Special Methods of Teaching Health EDUC 432 is also required.

Contact Person: Dr. J. Michael Jacobs, Butcher Center 204, 304/876-5233.

HISTORIC PRESERVATION
Curriculum for a Minor in Historic Preservation

Total hours required .................................................................................. 24-26
Required courses ....................................................................................... 18
ANTH 225  Introduction to Museum Studies ................................................. 3
ANTH 300  Introduction to Archaeology ...................................................... 3
ANTH 370  American Architectural Heritage ............................................. 3
ENVS 307  Introduction to Historic Preservation ........................................ 3
ENVS 371  Documentation of Historical Properties ................................... 3
ENVS 372  Preservation Technology and Historic Materials ....................... 3
Select two of the following electives ......................................................... 6-8
ANTH 315  Cultural Anthropology ............................................................. 3
ANTH 345  Archaeological Field Methods and Lab .................................... 4
ANTH 380  Historical Archaeology and Lab .............................................. 4
ENVS 210  Introduction to Park Administration ......................................... 3
ENVS 319  Land Use Planning ................................................................. 3
ENVS 321  American Decorative Arts ....................................................... 3
ENVS 325  Oral History ............................................................................ 3
ENVS 220  Battlefield Preservation .......................................................... 3
**HISTORY**

History is the exploration of the past as a key to understanding the human condition. Historical study enables students to understand their own and other civilizations and to confront the present and future with intelligence and perspective.

**Curriculum for a Major in History**

Specific general studies requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 101</td>
<td>American Federal Government</td>
<td>3</td>
</tr>
</tbody>
</table>

Total hours required for a major: 30

**Required courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 201 and 202</td>
<td>History of the United States</td>
<td>6</td>
</tr>
<tr>
<td>HIST 333</td>
<td>Modern European History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 314</td>
<td>Recent United States History OR</td>
<td></td>
</tr>
<tr>
<td>HIST 404</td>
<td>World History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 412</td>
<td>History of Russia Since 1855 OR</td>
<td></td>
</tr>
<tr>
<td>HIST 420</td>
<td>Modern East Asia Since 1800</td>
<td>3</td>
</tr>
</tbody>
</table>

Required courses: 15

Traditional concentration: 15

Any 300- or 400-level history courses or PSCI 400 The Supreme Court and Constitutional Law.

**Public history concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 345</td>
<td>Introduction to Public History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 300</td>
<td>Historic Preservation (crosslisted as ENVS 307)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 432</td>
<td>Internship in Public History OR</td>
<td></td>
</tr>
<tr>
<td>HIST 435</td>
<td>Civil War Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

One course from the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 318</td>
<td>The United States and World War II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 360</td>
<td>Evolution of European Government</td>
<td>3</td>
</tr>
<tr>
<td>HIST 375</td>
<td>First World War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 304</td>
<td>Civil War America, 1850-1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 307</td>
<td>The Reconstruction Era, 1865-1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 430</td>
<td>Civil War Seminar OR</td>
<td></td>
</tr>
<tr>
<td>HIST 435</td>
<td>Practicum in Civil War Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Any 300 or 400 level course in American history (not HIST 432 or 435), 3

Any other 300 or 400 level history course by special arrangement with instructor, 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 221</td>
<td>Introduction to Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 345</td>
<td>Archaeological Field Methods and Lab</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 370</td>
<td>Historic Architecture in the United States</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 220</td>
<td>Battlefield Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 322</td>
<td>Environmental History</td>
<td>3</td>
</tr>
<tr>
<td>HIST xxx</td>
<td>Any 300 or 400 level history course OR</td>
<td></td>
</tr>
<tr>
<td>PSCI 400</td>
<td>Supreme Court and Constitutional Law</td>
<td>3</td>
</tr>
</tbody>
</table>

Civil War and Nineteenth-Century America concentration: 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 304</td>
<td>Civil War America, 1850-1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST 307</td>
<td>The Reconstruction Era, 1865-1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 430</td>
<td>Civil War Seminar OR</td>
<td></td>
</tr>
<tr>
<td>HIST 435</td>
<td>Practicum in Civil War Studies</td>
<td>3</td>
</tr>
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</table>

One course from the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 303</td>
<td>The Early Republic</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>The Old South</td>
<td>3</td>
</tr>
<tr>
<td>HIST 405</td>
<td>Introduction to African American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 438</td>
<td>Soldiers and American Society, 1861-1865</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective course: 3

Any 300- or 400-level history course or PSCI 400 The Supreme Court and Constitutional Law.
Curriculum for a Minor in History
Specific general studies requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 101</td>
<td>American Federal Government</td>
<td>3</td>
</tr>
</tbody>
</table>

Total hours required for a minor .......................................................... 24

Required courses .............................................................................................................. 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 201 and 202</td>
<td>History of the United States</td>
<td>6</td>
</tr>
<tr>
<td>HIST 333</td>
<td>Modern European History</td>
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</tr>
<tr>
<td>HIST 314</td>
<td>Recent United States History OR</td>
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</tr>
<tr>
<td>HIST 404</td>
<td>World History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 412</td>
<td>History of Russia OR</td>
<td>3</td>
</tr>
<tr>
<td>HIST 420</td>
<td>Modern East Asia Since 1800</td>
<td>3</td>
</tr>
</tbody>
</table>

Any 300- or 400-level history course........................................................................... 9

JOURNALISM
Shepherd University recognizes the interdisciplinary nature of the field of print journalism and has thus constructed a minor that reflects the variety of skills and the knowledge base necessary for the success in this dynamic field. The primary objectives of the print journalism minor include the following:

1. To provide students with the language and communication skills necessary for success in this competitive field;
2. To provide students with the technical skills required for understanding the nature of news writing and news production;
3. To provide students with the practical experience necessary to function in the real world of print journalism; and
4. To help students develop the critical thinking skills and reflective insights needed for analyzing, reporting, and writing print news stories.

For more information about this minor, contact the Department of English and Modern Languages.

Curriculum for a Minor in Print Journalism

Total hours required............................................................................................................ 21

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 204</td>
<td>Introduction to Print Journalism</td>
<td>3</td>
</tr>
<tr>
<td>COMM 203</td>
<td>Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 370*</td>
<td>Structure and Evolution of English OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 382</td>
<td>Technical Editing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 444**</td>
<td>Practicum in <em>The Picket</em></td>
<td>3</td>
</tr>
<tr>
<td>JOUR 451</td>
<td>Internship in Print Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 316</td>
<td>Magazine Writing OR</td>
<td></td>
</tr>
<tr>
<td>ENGL 280</td>
<td>Introduction to Technical Communication OR</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 372</td>
<td>Advanced Composition</td>
<td></td>
</tr>
</tbody>
</table>

*Students may take a placement test in order to “test out” of Structure and Evolution of English; thus the total number of hours required for the minor may be only 18.

**Students may receive multiple credit for JOUR 444.

MASS COMMUNICATION
The Department of Communications recognizes the value of an education that integrates professional knowledge and critical understanding. Mass communication and computer-mediated communication are changing the ways that people generate, disseminate, receive, and use information. The mass communication program accounts for these changes by offering a curriculum that is focused, fundamental, and flexible. The mass communication curriculum is grounded in student participation and empowerment, and provides students with the skills necessary to communicate effectively and appropriately. Students also will critically examine their own experiences, recognize the complexities of living in the global village, and explore the ways that communication
technologies infuse and impact their lives. The program also is designed to prepare graduates to be intellectually resilient and prepared for inevitable change. Graduates have gone on to work in television, radio, film, advertising, public relations, news writing, sales, marketing, and other areas including graduate school. Capstone experiences include senior projects, seminars, and/or internships. Students may select the Washington Gateway program and intern in the Washington, D.C., area—an educational opportunity unique to colleges in the state.

Curriculum for a Major in Mass Communication

<table>
<thead>
<tr>
<th>Required courses</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 203 Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 222 Voice and Diction</td>
<td>3</td>
</tr>
<tr>
<td>COMM 302 Writing for the Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 320 Presentations for Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 326 Radio Practicum</td>
<td>3</td>
</tr>
<tr>
<td>COMM 329 Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>COMM 339 Public Relations Writing and Design</td>
<td>3</td>
</tr>
<tr>
<td>COMM 342 Media Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMM 350 Single-Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 352 Computer-Mediated Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 355 Advertising and Imagery</td>
<td>3</td>
</tr>
<tr>
<td>COMM 360 Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 400 Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 405 Advertising, Writing, and Design</td>
<td>3</td>
</tr>
<tr>
<td>COMM 392 Cooperative Education in Communication OR COMM 402 Seminar in Communication OR COMM 450 Internship in Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 461 Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Mass communication majors and minors must earn a C or better in all required 300 and 400 level communications courses. One cannot major in mass communication and minor in mass communication. One may major in mass communication and minor in journalism provided that the student substitutes all repetitive courses with elective courses approved by the journalism coordinator. Please note that COMM 203 is a prerequisite for all courses in the mass communication major, mass communication minor, and journalism minor. COMM 203 is to be the first course taken by mass communication majors and minors.

Note: All students are required to take 45 hours of upper division courses to qualify for graduation.

Minor in Mass Communication

<table>
<thead>
<tr>
<th>Required hours for a minor</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 203 Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 302 Writing for the Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 350 Single-Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>COMM 326 Radio Practicum</td>
<td>3</td>
</tr>
<tr>
<td>COMM 329 Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>COMM 332 Computer-Mediated Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 360 Studio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Mass communication minors must earn a C or better in all required 300 and 400 level communications courses.
MATHEMATICS
The purposes of mathematics are to lead students to a grasp of the beauty and power of mathematical ideas; to prepare the prospective teacher to teach creatively; to furnish mathematical tools necessary for other disciplines; and to help provide vocational direction when needed.

Curriculum for a Major in Mathematics
Total hours required: 41-49

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108</td>
<td>Precalculus (general studies requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 112</td>
<td>Engineering II OR CIS 211 Computer Language Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MATH 207</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 254</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 307</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 309</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 321*</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>* MATH 154 Finite Mathematics and MATH 314 Statistics may be substituted for MATH 321 Probability and Statistics.</td>
<td></td>
</tr>
</tbody>
</table>

Concentration, Traditional Mathematics: 13

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 312</td>
<td>Introduction to Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 414</td>
<td>History and Development of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 434</td>
<td>Senior Capstone Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

Two of the following courses: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 329</td>
<td>Mathematics Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 354</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 404</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 405</td>
<td>Topics in Modern Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 409</td>
<td>Introduction to Complex Variables</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 415</td>
<td>Introduction to Topology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 424</td>
<td>Foundations of Geometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration, Industrial Mathematics: 21

Specific general studies requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 205</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 222, 222L</td>
<td>General Physics II and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

Courses required for concentration: 21

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 221</td>
<td>Introduction to Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 354</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 392</td>
<td>Cooperative Education in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CISC 321</td>
<td>Data and File Structure OR CISC 487 Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CISC 234</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>CISC 434</td>
<td>Inter/Intra Networking</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Requirement: In addition to the course work required, prospective major students must demonstrate competency in a computer programming language or receive a minimum grade of C in MATH 317 Computational Mathematics OR ENGR 102 Engineering II OR CISC 211 Computer Language Concepts.
Curriculum for a Minor in Mathematics

Track A, Traditional

Total hours required ......................................................... 26
MATH 106 Trigonometry ......................................................... 3
MATH 108 Precalculus ......................................................... 3
MATH 207 Calculus I ............................................................. 4
MATH 208 Calculus II ........................................................... 4
MATH 254 Discrete Mathematics ............................................ 3
Approved mathematics courses numbered above MATH 301 ................. 9

Track B, Applied

Total hours required ............................................................ 25
MATH 108 Precalculus ......................................................... 3
MATH 205 Calculus with Applications OR
     MATH 207 Calculus I ............................................................. 4
MATH 254 Discrete Mathematics ............................................ 3
MATH 314 Statistics OR
     BADM 224 Business Statistics ............................................ 3
MATH 317 Computational Mathematics .................................... 3
Three of the following 4 courses ............................................ 9
MATH 307 Linear Algebra, MATH 318 Numerical Analysis, MATH 321 Probability and Statistics,
     MATH 413 Quantitative Methods.

Curriculum for Mathematics Teaching Field Grades 5-12

Total hours required ............................................................ 42
Content skill level:
ACFN 050* Consumer Mathematics
MATH 105* Algebra
MATH 106 Trigonometry ......................................................... 3
MATH 108 Precalculus (general studies requirement)
MATH 200 University Geometry ............................................. 2
Mathematics core:
MATH 207 Calculus I ............................................................. 4
MATH 208 Calculus II ........................................................... 4
MATH 254 Discrete Mathematics ............................................ 3
MATH 309 Calculus III .......................................................... 4
MATH 329 Mathematical Modeling .......................................... 3
MATH 434 Senior Capstone Practicum ..................................... 1
Advanced mathematics for education:
MATH 307 Linear Algebra ..................................................... 3
MATH 312 Introduction to Abstract Algebra ............................ 3
MATH 321** Probability and Statistics ................................... 3
MATH 414 History and Development of Mathematics ................. 3
MATH 424 Foundations of Geometry ..................................... 3
Education course:
EDUC 360 Survey of Exceptional Children ............................. 3
*Course may be waived by departmental competency test.
**MATH 154 Finite Mathematics and MATH 314 Statistics may be substituted for MATH 321 Probability and Statistics.

Special Requirement: In addition to the course work required for the specialization, all prospective student teachers, prior to student teaching, must demonstrate competency in a computer programming language or receive a minimum of C in MATH 317 Computation Mathematics OR ENGR 102 Engineering II OR CIS 211 Computer Language Concepts.

See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching mathematics is EDUC 420.

Contact Person: Dr. Suda Kunyosying, Stutzman-Slonaker Hall 211D, 304/876-5282.
Curriculum for Mathematics Teaching Field Grades 5-9 General Mathematics through Algebra I

Total hours required ................................................................................................. 24

Content skill level:

ACFN 050* Consumer Mathematics
MATH 105 Algebra ................................................................. 3
MATH 106 Trigonometry ................................................................. 3
MATH 108 Precalculus ................................................................. 3
MATH 200 University Geometry ............................................... 2
MATH 205 Calculus with Applications ........................................ 4

Additional mathematics for education:

MATH 101 Introduction to Mathematics (general studies requirement)
MATH 300 Mathematics for Elementary Teachers ...................... 3
MATH 314 Statistics ........................................................................ 3

Education course:

EDUC 360 Survey of Exceptional Children .................................. 3

*Course may be waived by departmental competency test.

See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required) or Professional Studies Core for Middle School Education (29 hours required). Special Methods of Teaching Mathematics is EDUC 420.

Contact Person: Dr. Suda Kunyosying, Stutzman-Slonaker Hall 211D, 304/876-5282.

MODERN LANGUAGES

By exposing students to a study of the language and literature of other countries, the modern language component of the University seeks to help prepare students for life in a multinational, multicultural global society. The primary objectives of the modern language program include the following:

1. To provide a vital and useful part of a student’s liberal arts education;
2. To help students gain an international perspective by introducing them to the language, literature, and culture of other countries;
3. To give students an adequate background in French, German, or Spanish sufficient to pursue graduate study, or to pursue a professional career in which a knowledge of one or more modern languages is necessary;
4. To impress upon students the value associated with a knowledge of modern languages in such areas as written and oral skills, literature, and culture.

Curriculum for a Minor in French

*Total hours required for minor in French .................................................................. 24

Required courses ....................................................................................................... 12

FREN 101 Elementary French I .................................................... 3
FREN 102 Elementary French II ................................................... 3
FREN 203 Intermediate French I .................................................... 3
FREN 204 Intermediate French II ................................................... 3

Electives .................................................................................................................... 12

FREN 303 Survey of French Literature ......................................... 3
FREN 304 Survey of French Literature ......................................... 3
FREN 401 Advanced Grammar and Composition ........................ 3
FREN 402 Applied Linguistics in Oral French .............................. 3
FREN 403 Advanced French Conversation .................................. 3
FREN 404 French Civilization and Culture .................................. 3
FREN 419 Independent Study in French ....................................... 3
**Curriculum for a Minor in Spanish**

*Total hours required for a minor in Spanish* ................................................................. 24

**Required courses** ........................................................................................................... 12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 101</td>
<td>Elementary Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>Elementary Spanish II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 203</td>
<td>Intermediate Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 204</td>
<td>Intermediate Spanish II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives** .................................................................................................................. 12

**Nonliterary Track**:  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 301</td>
<td>Advanced Conversation and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 303</td>
<td>Contemporary Hispanic World</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 304</td>
<td>Introduction to Spanish/Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 305</td>
<td>Spanish for Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**Literary Track**:  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 310</td>
<td>Survey of Spanish Literature I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 311</td>
<td>Survey of Spanish Literature II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 312</td>
<td>Survey of Latin American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 313</td>
<td>Survey of Latin American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 400</td>
<td>Seminar in Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 401</td>
<td>Seminar in Spanish II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 402</td>
<td>Seminar in Spanish III</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 403</td>
<td>Seminar in Spanish IV</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 410</td>
<td>Practicum in Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 419</td>
<td>Independent Study in Spanish</td>
<td>3</td>
</tr>
</tbody>
</table>

*Advanced Placement credit for foreign language courses may lessen the number of courses actually required for the minor. Also, many liberal arts majors require the first two-year language sequence for degree fulfillment; thus students in the liberal arts majors who take the Spanish minor need only take an additional 12 hours for the minor.

**Students may take courses from both literary and nonliterary tracks toward fulfillment of the minor. In addition to those in French and Spanish, sequenced courses in Elementary and Intermediate German are offered. Each of these courses carries three hours credit, and twelve hours in any one language is sufficient to satisfy the foreign language requirement for the B.A. degree. For individual listings of these courses, see Section VII; and for regulations governing advanced placement credit for foreign language courses and the foreign language waiver policy, see Section V (at end of Program of General Studies).*

**MUSIC**

The Department of Music strives to inspire student growth in creative, artistic, and professional terms by providing a climate conducive to the development of the comprehensive musician. This is achieved through a highly personalized and student-centered approach to the development of a unified core of musical experiences. Toward this end, the program is designed:

1. To develop performance and/or compositional skills which exhibit artistic integrity and competence;
2. To establish and foster music ensembles which demonstrate the highest standards in artistic excellence;
3. To foster student inquiry, interaction, and self-discovery;
4. To provide a strong foundation for future graduate study in the field of music;
5. To train students seeking public school music careers according to approved standards of teacher education;
6. To develop student capacity to communicate music and its role in society to others;
7. To develop the aesthetic sense of the general student in terms of musical understanding, appreciation, and perception;
8. To provide avocational opportunities for interested students through participation in the various music ensembles and other music activities; and
9. To enhance the image of the School of the Arts and Humanities, the Department of Music, and the University by serving as a hub of artistic activity for the community.

Programs
The bachelor of arts degree in music is a four-year program with concentrations offered in orchestral, piano, voice, guitar, or music theater performance; music composition; and piano pedagogy. The program prepares students for recital work, private studio instruction, creative music in the communicative arts, church music, community music, or graduate school.

The bachelor of arts in secondary education with a teaching field in comprehensive music grades K-12 is a four-year program designed to provide the graduate with skills and technical knowledge in music combined with an understanding and experience in the educational process. Upon satisfactory completion of curriculum requirements, the student is awarded a bachelor of arts degree in secondary education and can apply to the State Department of Education for certification.

Facilities
The Department of Music is housed in the Frank Creative Arts Center which provides the physical resources to meet ever-changing vocational and educational demands. The facility contains 14 traditional and acoustic environment practice-rooms, classrooms, and studio-offices in addition to unique areas such as a computer lab, electronic piano lab, a recording studio, vocal and instrumental rehearsal areas, a music resource center, and a music recital hall. Other performance spaces include the main theater of the Frank Center and Reynolds Hall on East Campus. Equipment is continually updated.

Curriculum for a Comprehensive Major in Music
Total hours required........................................................................................................128-132
General education requirements .................................................................................. 43*
Foreign language requirement ......................................................................................... 12
Music core requirements ................................................................................................ 32
Music concentration area plus electives.............................................................................39-43

Basic music core:
MUEN 374 Concert Choir ................................................................................................. 1
MUSC 100 First Year Seminar for Music Majors ............................................................. 1
MUSC 103 Theory I ........................................................................................................... 3
MUSC 104 Aural Skills I ................................................................................................... 1
MUSC 105 Theory II ......................................................................................................... 3
MUSC 106 Aural Skills II .................................................................................................. 1
MUSC 203 Theory III ....................................................................................................... 3
MUSC 204 Aural Skills III ................................................................................................ 1
MUSC 205 Theory IV ....................................................................................................... 2
MUSC 206 Aural Skills IV ............................................................................................... 1
MUSC 303** Forms and Analysis ..................................................................................... 3
MUSC 310 Music History I .............................................................................................. 3
MUSC 311 Music History II ............................................................................................ 3
MUSC 312 Music History III ........................................................................................... 3
MUSC 498 Senior Music Seminar ................................................................................. 1
MUAP 397 Junior Recital ................................................................................................. 1
MUAP 497 Senior Music Activity .................................................................................... 1

*Music majors do not need MUSC 111.
**Music theater majors may substitute MUSC 316 for MUSC 303.

In addition to the basic music core, the following courses are required according to the declared concentration (choose one concentration area):
Performance concentration (select one emphasis) ......................................................... 39-43
Orchestral instrument performance concentration:
MUAP xxx Applied Major Instrument ........................................................................... 8
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUEN 360</td>
<td>Band</td>
<td>8</td>
</tr>
<tr>
<td>Non-music electives</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

**Piano performance concentration:**
MUAP 340* | Applied Piano | 8 |
* Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 8.
MUEN 360 | Band | 1 |
MUEN 373 | Piano Ensemble and Accompanying | 6 |
MUEN 374 | Concert Choir | 3 |
MUSC 314 | Keyboard Literature | 3 |
MUSC 321 | Piano Pedagogy | 2 |
MUSC 329 | Electronic Music Media | 2 |
Non-music electives | 17 |

**Voice performance concentration:**
MUAP 344* | Applied Voice | 8 |
* Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 8.
MUEN 374 | Concert Choir | 7 |
MUSC 237 | Diction I | 3 |
MUSC 316 | Vocal Literature | 3 |
MUSC 323 | Vocal Pedagogy | 2 |
THEA 203 | Acting I OR | 3 |
THEA 204 | Introduction to Theater | 3 |
THEA 207 | Theater Practice OR | 3 |
THEA 208 | Theater Practice | 3 |
Non-music electives | 14 |

**Guitar performance concentration:**
MUAP 342* | Applied Guitar | 8 |
* Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 8.
MUEN 360 | Band OR | 1 |
MUEN 374 | Concert Choir | 1 |
MUEN 372 | Guitar Ensemble | 4 |
MUSC 320 | Guitar Pedagogy | 2 |
Non-music electives | 23 |

**Music theater performance concentration:**
MUAP 344* | Voice | 8 |
* Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 6.
MUEN 374 | Concert Choir | 5 |
MUEN 380 | Music Theater/Opera Workshop | 3 |
MUSC 317 | Opera and Oratorio Literature | 3 |
MUSC 318 | Music Theater Literature | 2 |
MUSC 237 | Diction I | 3 |
MUSC 238 | Voice Performance Technique | 1 |
MUSC 323 | Vocal Pedagogy | 2 |
THEA 203 | Acting I OR | 3 |
THEA 204 | Introduction to Theater | 3 |
THEA 207 | Theater Practice OR | 3 |
THEA 208 | Theater Practice | 3 |
Non-music electives | 10 |

**Composition concentration** | 43 |
MUAP xxx | Applied Major Instrument (must achieve level 6 or higher) | 6 |
MUAP xxx | Applied Minor Instrument (must achieve level 3 or higher) | 2 |
MUAP 430 | Music Composition | 4 |
MUAP 450 | Orchestration/Arranging | 2 |
MUEN 360 | Band | 1 |
MUEN 374  Concert Choir OR
MUEN 375  Masterworks Chorale OR
MUEN 376  Chamber Singers OR
MUEN 377  Contemporary Vocal Ensemble ........................................... 1
MUSC 227  Introduction to Conducting .................................................. 1
MUSC 230  Woodwind Techniques I ......................................................... 1
MUSC 231  Woodwind Techniques II ......................................................... 1
MUSC 232  Brass Techniques ................................................................. 1
MUSC 233  String Techniques ................................................................. 1
MUSC 234  Percussion Techniques ........................................................... 1
MUSC 327  Advanced Choral Conducting OR
MUSC 328  Advanced Instrumental Conducting ................................... 3
MUSC 329  Electronic Music Media ......................................................... 2
COMM 329  Sound Design ......................................................................... 3
Non-music electives ............................................................................. 13

Piano pedagogy concentration ............................................................. 43
MUAP 340  Applied Piano ...................................................................... 8
*Applied lessons. Must have 8 hours credit to graduate, and must receive a jury level of 7.
MUEN 360  Band ................................................................................. 1
MUEN 373  Piano Ensemble & Accompanying ....................................... 6
MUEN 374  Concert Choir ................................................................. 2
MUSC 144  Voice Class ........................................................................ 1
MUSC 314  Keyboard Literature ............................................................ 3
MUSC 321  Piano Pedagogy ................................................................. 2
MUSC 329  Electronic Music Media ....................................................... 2
MUSC 420  Apprenticeship in Music Pedagogy .................................... 4
PSYC 203  Introduction to Psychology OR
MUSC 350  Music Psychology ............................................................... 3
PSYC 301  Adolescent Development .................................................... 3
EDUC 150  Seminar in Education ........................................................... 1
Non-music electives ............................................................................. 7

Curriculum for a Minor in Music
Total semester hours required ................................................................... 27
MUSC 103*  Music Theory I ................................................................. 3
MUSC 104  Aural Skills I ................................................................. 1
MUSC 105  Music Theory II ............................................................... 3
MUSC 106  Aural Skills II ................................................................. 1
MUAP  Applied Major Instrument ......................................................... 2
MUEN  Ensembles ............................................................................... 2
MUSC 310  Music History I Antiquity to Early Baroque OR
MUSC 311  Music History II Early Baroque to 1890 OR
MUSC 312  Music History III 20th Century and World Musics ........... 3
Choose 12 hours from the following courses ........................................ 12
(Please note that MUSC 103 is a prerequisite for all electives unless noted otherwise)
MUSC 203  Theory III ......................................................................... 3
MUSC 204  Aural Skills III ................................................................. 1
MUSC 205  Theory IV ....................................................................... 2
MUSC 206  Aural Skills IV ................................................................. 1
MUSC 303  Forms and Analysis .......................................................... 3
MUSC 310  Music History I Antiquity to Early Baroque .................... 3
MUSC 311  Music History II Early Baroque to 1890 ......................... 3
MUSC 312  Music History III 20th Century and World Musics .......... 3
MUSC 313  Women in Music ............................................................. 3
MUSC 314  Keyboard Literature ......................................................... 3
MUSC 315  History of Jazz Styles .................................................... 3
MUSC 316  Vocal Literature ............................................................... 3
MUSC 317  Opera and Oratorio Literature ..................................... 3
MUSC 318  Music Theater Literature ............................................. 3
MUSC 321  Piano Pedagogy ............................................................... 2
MUSC 329  Electronic Music Media ................................................ 2
MUSC 340  Advanced Topics in Western Music ............................. 3
MUSC 341  Advanced Topics in World Music ................................. 3
MUSC 342  American Music .............................................................. 3
MUSC 350  Music Psychology .......................................................... 3

*Students must place into Theory I via an entrance exam. If students do not pass the exam, they must take MUSC 101 Foundations of Music Theory. This course does not count toward the music minor. See coordinator of music theory for details. Students graduating with a minor in music will have MUSC 111 waived.

Curriculum for a Teaching Field in Music

<table>
<thead>
<tr>
<th>Total minimum semester hours required</th>
<th>142</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional education requirements</td>
<td>30</td>
</tr>
<tr>
<td>General education requirements</td>
<td>45</td>
</tr>
<tr>
<td>Music requirements</td>
<td>67</td>
</tr>
</tbody>
</table>

| MUAP xxx | Applied Major Instrument | 7 |
| MUEN 497  | Senior Music Activity | 1 |
| MUEN 360  | Band | 1 |
| MUEN 374  | Concert Choir | 1 |
| MUEN 360  | Concert Choir (vocalists) | 6 |
| MUSC 100  | First Year Seminar for Music Majors | 1 |
| MUSC 103  | Theory I | 3 |
| MUSC 104  | Aural Skills I | 1 |
| MUSC 105  | Theory II | 3 |
| MUSC 106  | Aural Skills II | 1 |
| MUSC 203  | Theory III | 3 |
| MUSC 204  | Aural Skills III | 1 |
| MUSC 205  | Theory IV | 2 |
| MUSC 206  | Aural Skills IV | 1 |
| MUSC 227  | Introduction to Conducting | 1 |
| MUSC 230  | Woodwind Techniques I | 1 |
| MUSC 231+ | Woodwind Techniques II | 1 |
| MUSC 232  | Brass Techniques | 1 |
| MUSC 233+ | String Techniques | 1 |
| MUSC 234+ | Percussion Techniques | 1 |
| MUSC 237** | Diction I | 3 |
| MUSC 303  | Forms and Analysis | 3 |
| MUSC 310  | Music History I | 3 |
| MUSC 311  | Music History II | 3 |
| MUSC 312  | Music History III | 3 |
| MUSC 320  | Guitar Pedagogy OR | 3 |
| MUSC 321  | Piano Pedagogy | 2 |
| MUSC 322  | Instrumental Pedagogy | 2 |
| MUSC 323** | Vocal Pedagogy | 2 |
| MUSC 324+ | Marching Band Pedagogy | 2 |
| MUSC 325  | Choral Methods and Materials | 3 |
| MUSC 326  | Teaching Elementary Education | 2 |
| MUSC 327  | Conducting II-Choral OR | 3 |
| MUSC 328  | Conducting II-Orchestral | 3 |
| MUSC 329  | Electronic Music Media | 2 |
MUSC 498  Senior Music Seminar  ............................................................... 1
* Not required for choral music education emphasis.
** Not required for instrumental music emphasis.
See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching Music is EDUC 426.
Contact Person: Coordinator of Music Education, Frank Center M-01, 304/876-5225.

Special Requirements for Music Majors (entrance audition required)

I. GPA Requirement
Music majors must achieve an average of 2.75 in all MUSC courses with no less than a grade of C in any given MUSC course. Students receiving grades lower than C in any MUSC course must retake the course.

II. Private Applied Lesson Requirement
Music majors are required to enroll for private applied lessons on their major instrument with an appropriate resident Shepherd University faculty member every semester prior to their graduation. Only those music education majors who have completed their senior recital may waive the requirement during the semester of directed teaching. Should the student desire supplementary lessons by someone other than University faculty, such lessons are at the discretion of the student and should be discussed with the department chair and/or the University applied instructor.

III. Ensemble Participation
A. Music majors are required to participate in the appropriate ensemble every semester of their University careers, with or without credit, save for the semester during which they are doing directed teaching.
B. Students are encouraged to participate in other instrumental and vocal ensembles in addition to the basic band or choir involvement. Under certain rare circumstances, such an ensemble may count singly as satisfying the ensemble participation requirement for a given semester. This is contingent upon the approval of the appropriate ensemble director, the student’s advisor, and the department chair.
C. Participation in any ensemble is interpreted to mean attendance at all rehearsals and participation in all programs and concerts presented by that ensemble. Individual exceptions to this rule are left to the discretion of the ensemble director as determined during the registration procedures.
D. Ensemble directors will determine whether or not the ensemble requirement has been met. The director will notify the student’s advisor, the student, and the department chair.
E. Students may petition the department to be excused from that semester’s portion of the ensemble participation requirement.
F. Bachelor of arts in music students should refer to the specific requirements relative to ensemble participation as listed under the concentration area elsewhere in the Catalog.

IV. Concert Attendance Requirement
All Shepherd University students majoring in music are required to attend a minimum of 100 concerts/recitals prior to graduation. See the Department of Music Student Handbook, available in the Music Resource Center, for details.

V. Music Department 1:10 Recital Requirement
Music majors may not register for any class that meets during the Wednesday 1:10 time slot. Students must attend the weekly 1:10 Departmental Recital each Wednesday in Frank Center M08. All students, except first-semester freshmen, must perform on the 1:10 recital each semester. See the Department of Music Student Handbook, available in the Music Resource Center, for details.

VI. Piano Proficiency
All music majors must complete the piano proficiency exam before graduation from a degree
program. In addition, music education majors must pass the piano proficiency exam in order to pass Juncture 2 in the senior year.

A. To acquire the specific skills needed for the piano proficiency exam, it is suggested that the student enroll in the class piano sequence (MUSC 138, 140, 141). Students who have some keyboard experience may place out of MUSC 138 and move into MUSC 140 Class Piano I. In addition to class piano, students may enroll in private applied lessons in order to prepare for the exam. For all sections of class piano, students must receive a grade of C or above in order to be qualified to take the exam.

B. Exams will be scheduled at the end of each semester during finals week. Students will sign up for individual exam sessions with the coordinator of keyboard studies. Students must pass ALL components of the exam. If a student does not pass one of the components, he/she may retake that portion of the exam at a later time.

C. Exam contents and study exams may be obtained from the keyboard studies coordinator.

D. Students will audition at the beginning of their freshman year for placement in the appropriate class piano level. Students who can demonstrate proficiency in the exam requirements will be exempt from class piano study and the keyboard proficiency examination. Students who cannot demonstrate this proficiency should enroll in class piano courses until their proficiency requirement is satisfied.

VII. Performance Levels
All music majors must achieve the appropriate performance level to meet graduation requirements. Levels are achieved through the music jury process which is held one week before final exams each semester. The appropriate levels are: performance emphasis, VIII; piano pedagogy, VII; composition, music education, and music theater performance, VI. Students must be within one full level of the graduation requirement for their degree concentration before presenting a senior recital/activity and within two full levels of the graduation requirement before presenting a junior recital.

VIII. Sophomore Music Competency Exam
All sophomore music majors must demonstrate an acceptable level of knowledge in aural skills, written theory, basic music vocabulary, and music history and literature prior to registration for their junior-year classes. This level will be determined through a competency exam. The exam will be administered each spring semester and the results distributed before the registration period for fall courses. The exam will be offered in the fall semester as needed and the results distributed before the registration period for spring courses. Students must receive a passing score (70 percent or higher) on the exam to graduate.

IX. Senior Music Activity
All music majors must complete a senior music activity appropriate to their major and area of concentration. Students must be within one full level of the graduation requirement for their degree concentration before presenting their senior music activity.

A. For music education majors and students concentrating in piano pedagogy in the bachelor of arts program, the senior music activity will be completed in one of the following three formats:
   1. **Recital** (minimum total time: one hour)
      The recital will involve a minimum of 45 minutes of actual music on one or more instruments.
   2. **Lecture-Recital** (minimum total time: one hour)
      The lecture-recital will involve a minimum of 25 minutes of actual music, plus comments appropriate to the works presented.
   3. **Project-Presentation** (minimum total time: one hour)
      The project-presentation will involve a creative endeavor that may take the form of original composition, arranging, conducting, innovative pedagogy, or focused research. The results of the project will be publicly presented in an appropriate format, most likely a lecture presentation. Thesis-like papers alone will not fulfill the requirement.

B. All students concentrating in performance in the bachelor of arts program are required to present a senior recital. Successful completion of the junior recital is a prerequisite.
C. All students concentrating in composition in the bachelor of arts program are required to present a performance of their own music containing no less than 45 minutes of actual music.

D. Procedures for the senior music activity are listed in the Department of Music Student Handbook available in the Music Resource Center.

X. Exit Exam
As a culmination of the senior seminar, students will take an appropriate examination to demonstrate their musical knowledge and skills. Score standards adopted by the music faculty will determine pass/fail outcomes of the test and the course.

Professional Associations for Music Students

MENC Student Chapter
Music students can affiliate with professional music educators and with music students from other colleges and universities in the United States through membership in a student chapter of the Music Educators National Conference (MENC). This organization affords excellent opportunities for professional orientation and development during the University years.

IAJE Student Chapter
Students from all disciplines with an interest in jazz may join the International Association of Jazz Educators. Membership provides the student with the opportunity to affiliate with others with like interests in this art form through participation in area and national conventions, concerts, and campus activities.

Phi Mu Alpha Sinfonia
The International Professional Music Fraternity for Men, Phi Mu Alpha Sinfonia has established a chapter at Shepherd University. Students from all academic disciplines may be selected for membership in this prestigious organization which is dedicated to the art of music and its cross-cultural dissemination.

Sigma Alpha Iota
Sigma Alpha Iota International Academic Fraternity for Women in the Field of Music chapter at Shepherd University is dedicated to the art of music and its development. The women of Sigma Alpha Iota have the opportunity to share their interests with other members in a worldwide network. Students from all academic disciplines may be selected for membership in this prestigious organization.

American Choral Directors Association
ACDA is the largest organization in the United States devoted to the art of choral music. Membership dues include a yearly subscription to the Choral Journal, an invaluable resource for the latest in repertoire and standards, pedagogy, and the many facets of choral music.

Music for the General Student
The general student is encouraged to participate in music ensembles, music courses, and other activities of the Music Department.

1. Private Applied Music. Lessons are available to students who perform in an ensemble or have declared a music minor. With consent of the professor, lessons may be taken for half or full hours of credit per semester. One half-credit hour is based on a weekly 25-minute lesson plus a minimum of six hours of practice per week. One full credit hour is based on a weekly 50-minute lesson plus a minimum of twelve hours of practice per week. The same course number can be applied any number of times for credit. Music fee required.

2. Music Ensembles. Band, Choir, Jazz Ensemble, Jazz Choir, Chamber Singers, Masterworks Chorale, and other music ensembles are open to the general student, as based on the entrance guidelines formulated by the particular faculty member involved. The department seeks involvement of the general student body in these activities.

3. Music Courses. The general student is encouraged to select music courses for elective
credit. Prerequisites and other information are included with the specific course descriptions contained elsewhere in this Catalog.

NURSING
The bachelor of science in nursing (B.S.N.) degree prepares nurses to function as generalists within diverse health care systems. The program provides students the opportunity to acquire knowledge of theory and clinical practice.

The B.S.N. program also focuses on the professional nurse as a consumer of research and practitioner of community health. The B.S.N. program culminates with preparation for management and leadership roles as a health care provider. This foundation is necessary for the development of critical thinking, communication, service, lifelong learning, and for understanding people of diverse cultures.

The mission of the Shepherd University Department of Nursing Education is to enhance the health status of the region by educating professional nurses for practice in a rapidly changing health care environment. The bachelor of science in nursing program prepares professional nurses for entry into practice as nurse generalists. The program also provides opportunities for registered professional nurses to continue their formal education at the baccalaureate level. In addition, the Department provides continuing nursing education opportunities for professional nurses in this region. Emphasis is placed on building a new foundation for the pursuit of lifelong learning, personally and professionally, by providing a caring climate and student-faculty relationships that encourage the intellectual, ethical, and personal development of each student.

The goals of the B.S.N. program are to prepare a graduate who is able to:
1. Integrate a background in the liberal arts with the knowledge, skills, and values of professional nursing in order to influence the health of individuals, families, groups, communities, and populations.
2. Assume the role of professional nurse in developing health policy through recognizing, evaluating, and responding to the changing needs of society.
4. Engage in research-based, cost-effective professional nursing practice.
5. Practice professional nursing incorporating nursing theory and leadership/management principles, using critical thinking, therapeutic nursing interventions, communication, and collaboration.
6. Participate in personal and professional lifelong learning, value service to the community, appreciate cultural diversity, and accept accountability for own actions.

Accreditation
West Virginia Board of Examiners for Registered Professional Nurses
101 Dee Drive
Charleston, WV 25311
304/558-3596

National League for Nursing Accrediting Commission
61 Broadway
New York, NY 10006
800/669-1656

Admission to the B.S.N. Program
The generic student seeking enrollment in the bachelor of science in nursing degree program must meet the requirements for admission to Shepherd University, as stated in the University Catalog. Freshman and sophomore students will be designated as pre-nursing students and must be advised by nursing faculty. The B.S.N. program is a limited enrollment program (see section titled Admission to Limited Enrollment Programs).
Students become candidates for admission into the nursing program in their sophomore year upon meeting the following criteria:

1. Eligible to complete the 67 lower division course hours as identified in pre-nursing curriculum prior to matriculation;
2. Completion of NURS 231 Introduction to Nursing;
3. Cumulative grade point average of 2.5. Must achieve grade C or above in the following courses: BIOL 225/227, BIOL 226/228, NURS 231;
4. Submit a Department of Nursing Education application for admission; and
5. Meet with academic advisor by March 1 for intended enrollment in the fall semester or October 1 for intended enrollment in the spring semester.

Special Requirements of Nursing Majors

1. Submission of completed health data requirement prior to July 1 following acceptance into the program for fall semester and December 1 following acceptance into the program for the spring semester;
2. Submission of yearly PPD results (or chest x-ray, if appropriate) and evidence of CPR prior to July 1 of each year if admitted in the fall and December 1 if admitted in the spring;
3. Attend annual nursing assembly as scheduled;
4. Adhere to the policies and procedures in the Department of Nursing Education Student Handbook and Policy Manual;
5. Undergo a criminal background check, which is scheduled by the Department of Nursing Education;
6. Complete all course work within five years of admission into the program;
7. Pay a required special fee each semester for standardized testing.
8. Meet the core performance standards of the nursing program.

R.N.-to-B.S.N. Track Program

The R.N.-to-B.S.N. track is designed to expand the registered nurse’s education. This program provides flexibility with a wide continuum of education and experience, based upon advisement and development of an individual growth plan. Previous education and experience are evaluated through the use of a professional portfolio. The expected competencies of R.N.-to-B.S.N. graduates are the same as those for graduates of the generic baccalaureate program.

R.N.-to-B.S.N. Admission Process

The following must be submitted to the department chair no later than March 15 prior to summer enrollment in NURS 410: Advanced Nursing Concepts and Practice:

1. Department of Nursing Education admission application;
2. Official transcript copy on file; transcript must be reviewed and academic advisement form signed by advisor and advisee;
3. Proof of current R.N. licensure;
4. A professional portfolio which includes the following:
   a. Résumé of nursing work experience (include a narrative summary of most recent work experience roles and responsibilities);
   b. Personal and professional goals for completing the B.S.N. program (including how program completion will affect applicants’ work and future educational goals);
   c. Professional activities for the last three years:
      1. Continuing nursing education completed (seminars, courses, programs)
      2. Professional development (committees, nursing organizations/associations)
      3. Community involvement (church, school, children's activities);
   d. Letter of professional reference, assessing ability to successfully complete the B.S.N. program.

Articulation: R.N.s will receive 38 credits, based on graduation from an approved associate degree nursing program. After completing NURS 410, students will be given credit for NURS 311, NURS 315, NURS 316, NURS 318, NURS 320, NURS 322, NURS 415, NURS 417, NURS 419,
NURS 421, NURS 422, NURS 424, NURS 426, NURS 428. Completion of NURS 410 waives the requirement of NURS 231, NURS 317, and NURS 326.

Statistics Course
Both generic and R.N.-to-B.S.N. students are strongly encouraged to enroll in a statistics course.

Progression
In order to progress and to graduate, the student enrolled in the B.S.N. program must:
1.  Receive a minimum of C in each nursing course;
2.  Maintain a minimum of 2.0 cumulative grade point average;
3.  Satisfy pre- and corequisite requirements as scheduled.

Ratio Clock to Credit Hour
The ratio of theory clock to credit hour is 1:1. A 2:1 ratio of clinical clock hours to credit hours in maintained. A clock hour equals 50 minutes.

Graduation
Upon successful completion of the program, graduates are eligible to apply for the NCLEX-RN exam.

Eligibility for Licensure
The nursing law of West Virginia addresses criteria for application for licensure. The West Virginia State Board of Examiners for Registered Professional Nurses has the power to deny opportunity to procure licenses through testing if the applicant has willfully committed a felony under the laws of West Virginia. Any student entering the nursing program who has committed any illegal offenses (felony or misdemeanor) is encouraged to discuss these matters with the department chair for clarification prior to admission. Details are requested when the graduate makes application for licensure.

Curriculum for a Comprehensive Major in Nursing
Total hours required for the degree (including free electives).................................................. 130
Related required courses ........................................................................................................ 67
Nursing requirements ............................................................................................................. 60
Elective..................................................................................................................................... 3

Freshman: first semester
ENGL 101 Written English .......................................................................................... 3
CHEM 120* College Chemistry I ................................................................. 3
CHEM 120L* College Chemistry I Laboratory .............................................. 1
GSPE 210 Fitness for Life ......................................................................................... 2
MUSC 111 Introduction to Music .................................................................................. 2
MATH 101 Introduction to Mathematics OR
any 3 or 4 credit hour mathematics course numbered
MATH 106 or above except MATH 111 .................................................. 3-4
HIST 100 History of Civilization: Asian Traditions OR
HIST 101 History of Civilization: The Ancient and Medieval Worlds OR
HIST 102 History of Civilization: Change and Global Connections in the Early Modern World OR
HIST 103 History of Civilization: The Modern World ......................... 3
(Students will choose two of four history courses, but may not select both HIST 100 and 101.)
Freshman: second semester

ENGL 103 Writing for the Social Sciences OR
ENGL 102 Writing for the Arts and Humanities OR
ENGL 104 Science and Technical Writing.........................3
CHEM 122* College Chemistry II ........................................3
CHEM 122L* College Chemistry II Laboratory .........................1
ART 103 Introduction to the Visual Arts ................................2
PSCI 100 Politics and Government OR
PSCI 101 American Federal Government ................................3
HIST 100 History of Civilization: Asian Traditions OR
HIST 101 History of Civilization: The Ancient and Medieval World OR
HIST 102 History of Civilization: Change and Global Connections in the Early Modern World OR
HIST 103 History of Civilization: The Modern World ...................3
(Students will choose two of four history courses, but may not select both HIST 100 and 101.)

Sophomore: first semester

ENGL 208 Survey of World Literature I OR
ENGL 209 Survey of World Literature II .................................3
BIOL 225* Human Anatomy and Physiology .............................3
BIOL 227* Human Anatomy and Physiology Lab ..........................1
BIOL 302* Microbiology ................................................4
SOCI 203 Sociology ................................................3
PSYC 203 Introduction to Psychology .......................................3
NURS 231 Introduction to Nursing...........................................2

Sophomore: second semester

ENGL 204 Survey of American Literature .................................3
BIOL 226* Human Anatomy and Physiology .............................3
BIOL 228* Human Anatomy and Physiology Laboratory .............1
ECON 123 Contemporary Economics OR
ECON 205 Principles of Macroeconomics ................................3
FACS 318 Nutrition ................................................................3
COMM 202 Fundamentals of Speech .........................................3
*Science courses must be taken in order listed

Junior: first semester

NURS 311 Nursing I Introduction to Health Care .......................3
NURS 313 Nursing I-A Health Assessment ...............................3
NURS 315 Nursing I-B Clinical Component ...............................3
NURS 317 Essentials of Clinical Pharm/Patho in Nursing ............2
EDUC 300 Human Growth and Development .............................3
Elective ........................................................................3

Junior: second semester

NURS 316 Nursing II Health Care of the Adult ............................3
NURS 318 Nursing II Clinical Component .................................3
NURS 320 Nursing III Psychiatric/Mental Health Care ...............3
NURS 322 Nursing III Clinical Component ...............................2
NURS 324 Nursing Research ...............................................2
NURS 326 Essentials of Clinical Pharm/Patho in Nursing ............2

Senior: first semester

NURS 411 Nursing IV Community Health Care .........................3
NURS 413 Nursing IV Clinical Component .................................3
NURS 415 Nursing V Health Care of Children and Families ........3
NURS 417 Nursing V Clinical Component .................................2
NURS 419 Nursing VI Health Care of Women ............................3
NURS 421 Nursing VI Clinical Component .................................2
Senior: second semester

NURS 422 Nursing Health Care of the Adult: Gerontology Focus .......... 3
NURS 424 Nursing VII Clinical Component ......................................... 3
NURS 426 Nursing VIII Health Care of the Adult with Complex Problems........................................ 3
NURS 428 Nursing VIII Clinical Component ....................................... 2
NURS 434 Management and Issues in Health Care ............................... 3
NURS 436 Senior Capstone Seminar .................................................. 1

Special Fee: Standardized testing (per semester) approximately $85.

R.N.-to-B.S.N. Curriculum Plan
I. Prior to matriculation into the B.S.N. program, students must complete the general studies and prerequisites listed previously.

Total credit hours required for degree ............................................................................ 130
General studies and prerequisites .................................................................................. 71
R.N. curriculum ............................................................................................................. 59
Previous nursing courses credit ..................................................................................... 38
B.S.N. courses ............................................................................................................... 21

II. Upon completion of general studies and prerequisites, the R.N. will enroll in:

Fall:
NURS 313 Nursing I-A Health Assessment ........................................ 3

Spring:
NURS 324 Nursing Research ................................................................. 2

Summer:
NURS 410 Advanced Nursing Concepts and Practice ...................... 6
Fall:
NURS 411 Nursing IV Community Health ........................................... 3
NURS 413 Nursing IV Clinical Component ........................................... 3

Spring:
NURS 434 Management and Issues in Health Care ......................... 3
NURS 436 Capstone Seminar ................................................................. 1

School Nurse Certification Program
The school nurse certification program is designed for R.N.s with a B.S.N. and for students in the B.S.N. program who desire to complete a program of study leading to State of West Virginia certification as a school nurse.

Admission to the School Nurse Certification Program
1. Apply to Shepherd University as a special, non-degree seeking student if not currently enrolled in the B.S.N. program.
2. Submit school nurse certification registration form to the Department of Nursing Education.
3. Submit current immunization record and CPR certification to the Department of Nursing Education.

Progression
Before enrollment in NURS 440: Complete EDUC 200 and achieve a passing score on the Praxis I (PPST) test in the areas of reading, writing, and mathematics.

Certification
Candidate is recommended for West Virginia certification by the director of teacher education upon completion of:
1. Required courses with cumulative GPA of 2.5.
2. Evidence of current license as a registered nurse.
3. Criminal background check completed within the last three months.
Curriculum for School Nurse Certification
Completion of a B.S.N. program or currently enrolled in the Shepherd University B.S.N. program, with the addition of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 200</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>NURS 440</td>
<td>School Health Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYSICAL EDUCATION
The Department of Health, Physical Education, Recreation, and Sport (HPERS), in conjunction with the Department of Education, prepares highly-trained teachers in the area of skill acquisition and movement education. These future teachers are critical-thinking problem solvers able to analyze movement and give organized feedback to the learner.

To pursue this teaching specialization and graduate in four years, students should be enrolled in the program the first semester of the freshman year. Entering this program after the freshman year will extend the date of graduation beyond four years.

Curriculum for a Teaching Field in Physical Education
Total hours required ........................................................................................................... 45

See course listings under Education for professional courses.

Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 103</td>
<td>Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 225</td>
<td>First Aid/CPR</td>
<td>3</td>
</tr>
<tr>
<td>PHED 104</td>
<td>Foundations of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 246</td>
<td>Aquatics</td>
<td>1</td>
</tr>
<tr>
<td>PHED 301</td>
<td>Elementary School Physical Education I</td>
<td>3</td>
</tr>
<tr>
<td>PHED 315</td>
<td>Teaching Tumbling and Gymnastics</td>
<td>2</td>
</tr>
<tr>
<td>PHED 325</td>
<td>Team Sport Activities</td>
<td>3</td>
</tr>
<tr>
<td>PHED 326</td>
<td>Individual Sport Activities</td>
<td>3</td>
</tr>
<tr>
<td>PHED 370</td>
<td>Applied Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHED 380</td>
<td>Perceptual Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>PHED 400</td>
<td>Current Issues and Trends in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 401</td>
<td>Teaching Adaptive Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 405</td>
<td>Applied Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHED 406</td>
<td>Curriculum and Administration of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 410</td>
<td>Tests and Measurements in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>GSPE 210</td>
<td>Fitness for Life</td>
<td>2</td>
</tr>
</tbody>
</table>

Students should look under Curriculum for a Teaching Field in Health Education 5-12 for specific electives if they plan to be certified in health.

In addition to the course work required for this specialization, all prospective candidates are expected to participate in professional growth and service requirements prior to student teaching. Documentation must be submitted to candidate’s advisor.

Other Requirements for Physical Education Grades K-12:

I. Academic Requirements

Students in physical education K-12 student teaching specialization must meet the following criteria before enrolling in EDUC 455 Student Teaching Grades K-4, 5-8, 9-12:

1. Earn a GPA of 2.5 in all physical education and professional education courses combined;
2. Earn an overall GPA of 2.5 in all course work attempted;
3. Satisfy all requirements in the Handbook for Teachers of Health Education and Physical Education; and
4. Be interviewed by the HPERS faculty for entrance into the teacher education program (Juncture 1) and student teaching block (Juncture 2).

II. Out-of-Class Requirements for Teaching Physical Education K-12:

Individual potential as a professional educator will be closely examined as the student progresses through the curriculum. The Pro 05 evaluation form is for this purpose. In addition to the aca-
demic requirements, the student must complete any four of the following professional growth experiences:

1. Participate for one season as an intercollegiate athlete, manager, or trainer;
2. Organize and administer intramurals for one full season;
3. Attend a state, district, or national professional physical education conference;
4. Attend an elementary physical education conference, i.e., Camp Caesar;
5. Participate in a sanctioned workshop or activity related to physical education

See Professional Education course listings under Education: Professional Studies Core for Secondary Education (30 hours required). Special Methods of Teaching Physical Education EDUC 431 is also required.

Contact Person: Dr. J. Michael Jacobs, Butcher Center 204, 304/876-5233.

PHYSICS

The University offers a program of courses in physics designed to serve those students who wish to supplement their majors with a minor in a fundamental field of science. In particular, this minor would complement a major in chemistry, environmental studies, biology, or mathematics. The courses offered provide challenging application in applied mathematics. The 300-level physics courses are offered as tutorial courses: the student will work independently, with periodic meetings with a physics faculty member for discussions and testing. Students interested in pursuing the physics minor should contact a physics faculty member (physics is housed within the Institute of Environmental Studies) to discuss the program and the scheduling of the 300-level courses.

Curriculum for a Minor in Physics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 221L, 221</td>
<td>General Physics I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>PH 222L, 222</td>
<td>General Physics II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>PH 322</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>PH 323</td>
<td>Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PH 330</td>
<td>Advanced Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 242</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 207</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Calculus II</td>
<td>4</td>
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</tbody>
</table>

POLITICAL SCIENCE

The study of political science develops knowledge and understanding of national and international government, politics, and policy. The program prepares students for careers in public service and private business, as well as for graduate work leading to careers in a variety of areas including law, public administration, policy analysis, foreign service, journalism, and University teaching. Proximity to Washington, D.C., allows enhancement of traditional classroom work with opportunities to observe the federal government in operation.

Curriculum for a Major in Political Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 102</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 201</td>
<td>Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 315</td>
<td>Early Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 316</td>
<td>Recent and Contemporary Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 325</td>
<td>Comparative Government: Western Europe OR</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 327</td>
<td>Comparative Government: The Soviet Union and its Aftermath OR</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 328</td>
<td>Comparative Government: Asia</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 403</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 413, 414</td>
<td>Conduct of Political Inquiry I and II</td>
<td>6</td>
</tr>
</tbody>
</table>
Elective courses .................................................................................................................. 15
Any 300 or 400 level course in political science* OR
ECON 350 Government and Business
ECON 310 Public Finance
HIST 402 Diplomatic History of the United States
See Note.

Curriculum for a Minor in Political Science
Total hours required ............................................................................................................ 24
Required courses .............................................................................................................. 15
PSCI 102 State and Local Government ................................................................. 3
PSCI 201 Public Administration ................................................................................. 3
PSCI 315 Early Political Theory OR
PSCI 316 Recent and Contemporary Political Theory ......................................... 3
PSCI 325 Comparative Government: Western Europe OR
PSCI 327 Comparative Government: The Soviet Union and its Aftermath OR
PSCI 328 Comparative Government: Asia.............................................................. 3
PSCI 403 International Relations ................................................................................. 3
Elective courses .................................................................................................................. 9
Any 300 or 400 level course in political science.*
* No more than six hours of PSCI 443, Internship in Government, can be counted toward the political science major or minor (additional internship hours will be considered as general electives).

NOTE: Most 300 and 400 level political science courses can only be offered every other year. Students should plan their schedules accordingly. It is strongly recommended that minors consult periodically with political science faculty members to assure that their work in political science is proceeding appropriately.

PRE-PROFESSIONAL STUDIES
Pre-professional studies include several with substantial concentration in the basic sciences and mathematics and constitute recommended course selections from the Shepherd University academic offerings which may prepare students for application to professional schools of dentistry, medicine, veterinary medicine, and others. As such, these course work recommendations should be viewed as requirements of institutions other than Shepherd University unless, as is commonly the case, a student pursues a specific Shepherd University degree program as well.

Pre-professional programs do not count as a major for financial aid purposes or to meet graduation requirements.

Pre-Dentistry, Pre-Medicine, Pre-Veterinary Medicine
The majority of successful applicants to professional schools in these areas are those who have completed a four-year baccalaureate degree program, although a small percentage of exceptional third-year University undergraduates may be admitted, particularly to dental schools.

The recommended undergraduate preparatory course of study is one which concentrates within the basic sciences of biology, chemistry, and physics, but professional schools usually recommend that the undergraduate program include a broader academic background as well, like that provided by the Shepherd University program of general studies.

Therefore, it is suggested that students pursuing career goals of the practice of dentistry, medicine, and/or veterinary medicine undertake, while at Shepherd University, course work leading to a bachelor of science degree in either biology or chemistry with a science-oriented minor field. Requirements for the baccalaureate major and minor fields in biology or chemistry are listed in this Catalog. The Shepherd University general studies requirements and other general baccalaureate degree requirements are described in this Catalog as well.

Before the end of their sophomore year, students pursuing any of these pre-professional avenues of study are urged to solicit from professional schools of primary interest, specific admission information in order to insure that any exceptional requirements may be taken into account in
planning the balance of the pre-professional course of study at Shepherd University. West Virginia residents may qualify for cooperative programs with universities and professional schools in other states in the areas of veterinary medicine, podiatric medicine, and optometry.

**Pre-Law**

Law schools generally require applicants to possess a baccalaureate degree. It is suggested that students interested in pre-law major in political science. Although law schools do not specify any one undergraduate major as being more appropriate than another for consideration for admission to their programs, applicants usually possess bachelor's degrees in political science, history, economics, or accounting. Most recent Shepherd University graduates who have entered law schools have majored in political science. The criteria for admission are usually threefold: 1) the applicant's overall grade-point average; 2) the score on the Law School Admission Test (LSAT); and 3) recommendations from major professors and from those who are familiar with the applicant's character.

The student who is interested in entering law school should plan an academic program that develops breadth of vocabulary and reading comprehension, written expression, discernment for subtleties of language and thought, analytical ability, and knowledge of governmental procedures and forms. One leading law school cautions that a pre-law student should be involved in an undergraduate curriculum "which is intellectually challenging and demanding and which requires rigorous academic discipline." Another warns that applicants presenting courses "without intellectual content of substantial value" will not be considered. The pre-law advisor in the political science department is available for consultation and advisement, and can provide information about the Law School Admission Test.

**PSYCHOLOGY**

Shepherd University offers a program in psychology leading to the bachelor of arts degree. The purpose of the psychology program includes the following:

1. To encourage the student to pursue a traditionally-oriented liberal arts curriculum as a broad educational foundation.
2. To expose the student to the nature of scientific explanation and scientific research within psychology as well as to provide a conceptual framework for understanding human behavior.
3. To provide, for the qualified student, actual experience in career settings involving teaching, research, or service work within psychology, or a combination of these (this is accomplished through the practicum program).
4. To contribute to the preparation of the student for admission to graduate school and to schools offering advanced professional certification.

In addition to a major in psychology, a student must also complete the general studies program, select a minor field of study, meet the 12-hour foreign language requirement, and include at least 45 upper-division hours in their program in order to meet graduation requirements for the bachelor of arts degree. ENGL 103 Writing for the Social Sciences is also recommended.

**Curriculum for a Major in Psychology**

The curriculum for a major in psychology requires 34 hours. Sixteen hours are required, and 18 additional hours are to be selected from a prescribed listing. (Note: With permission of the chair of the Department of Psychology and the student's advisor, six of the 18 elective hours may be career-track electives. These are courses that clearly relate to the student's career plans, but they cannot overlap with courses comprising the student's minor field of study.)

<table>
<thead>
<tr>
<th>Total hours required .................................................................</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required hours: ...........................................................................</td>
<td>16</td>
</tr>
<tr>
<td>PSYC 203 Introduction to Psychology .......................................</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 400 Experimental Psychology ............................................</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 420 History and Systems of Psychology ...............................</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 485 Senior Thesis ............................................................</td>
<td>3</td>
</tr>
<tr>
<td>BADM 224 Business Statistics OR ................................................</td>
<td>3</td>
</tr>
<tr>
<td>MATH 314* Statistics .....................................................................</td>
<td>3</td>
</tr>
</tbody>
</table>
Electives ........................................................................................................................................... 18

Restricted electives, Group I (choose two courses)
PSYC 461 Survey of Physiological Psychology ................................................................. 3
PSYC 471 Cognitive Psychology OR
PSYC 472 Psychology of Learning .................................................................................... 3
PSYC 415 Tests and Measurement ......................................................................................... 3

Restricted electives, Group II (choose two courses)
PSYC 405 Social Psychology ................................................................................................. 3
PSYC 410 Psychology of Personality ...................................................................................... 3
PSYC 460 Abnormal Psychology ............................................................................................ 3

Free electives (choose a minimum of two courses)
PSYC 301 Adolescent Development ..................................................................................... 3
PSYC 302 Psychology of Aging............................................................................................... 3
PSYC 304 Computers in the Behavioral and Social Sciences ............................................... 3
PSYC 311 Introduction to Clinical Psychology ..................................................................... 3
PSYC 312 Practicum in Psychology I ...................................................................................... 3
PSYC 313 Practicum in Psychology II .................................................................................... 3
PSYC 314 Field Experience in Art Therapy ............................................................................ 3
PSYC 316 Art Therapy ............................................................................................................. 3
PSYC 320 Human Sexual Behavior ......................................................................................... 3
PSYC 321 Industrial/Organizational Psychology ................................................................... 3
PSYC 325 Health Psychology ................................................................................................. 3
PSYC 326 Psychology of Substance Abuse ........................................................................... 3
PSYC 330 Family Therapy ....................................................................................................... 3
PSYC 364 Lifespan Developmental Psychology ................................................................... 3
PSYC 365 Psychopharmacology .............................................................................................. 3
PSYC 367 Motivation and Emotion ........................................................................................ 3
PSYC 370 Sensations and Perception .................................................................................... 3
PSYC 404 Psychology Seminar .............................................................................................. 3
PSYC 420 History and Systems of Psychology ...................................................................... 3
PSYC 430 Humanistic Psychology ......................................................................................... 3
FACS 304 Child Development ................................................................................................ 3
PSYC 206, 306, 406 Special Topics in Psychology .............................................................. 3

*MATH 205 Calculus with Applications may be substituted for MATH 314 Statistics.

Curriculum for a Minor in Psychology
Total hours required .................................................................................................................. 22

Required courses ..................................................................................................................... 10
PSYC 203 Introduction to Psychology .................................................................................... 3
PSYC 400 Experimental Psychology ...................................................................................... 4
BADM 224 Business Statistics OR
MATH 314* Statistics .................................................................................................................. 3

Electives ...................................................................................................................................... 12

Restricted electives, Group I (choose one course)
PSYC 461 Survey of Physiological Psychology ................................................................... 3
PSYC 471 Cognitive Psychology OR
PSYC 472 Psychology of Learning ...................................................................................... 3
PSYC 415 Tests and Measurement ......................................................................................... 3

Restricted electives, Group II (choose one course)
PSYC 405 Social Psychology ................................................................................................. 3
PSYC 410 Psychology of Personality ...................................................................................... 3
PSYC 460 Abnormal Psychology ............................................................................................ 3

Free electives (choose a minimum of two courses)
PSYC 301 Adolescent Development ..................................................................................... 3
PSYC 302 Psychology of Aging ............................................................................................... 3
Programs of Study • 131

PSYC 304  Computers in the Behavioral and Social Sciences .................. 3
PSYC 311  Introduction to Clinical Psychology ................................. 3
PSYC 312  Practicum in Psychology I ............................................ 3
PSYC 313  Practicum in Psychology II ............................................ 3
PSYC 314  Field Experience in Art Therapy ................................... 3
PSYC 316  Art Therapy ................................................................. 3
PSYC 320  Human Sexual Behavior .............................................. 3
PSYC 321  Industrial/Organizational Psychology ............................... 3
PSYC 325  Health Psychology ....................................................... 3
PSYC 326  Psychology of Substance Abuse ..................................... 3
PSYC 330  Family Therapy ........................................................... 3
PSYC 364  Lifespan Developmental Psychology .................. 3
PSYC 365  Psychopharmacology .................................................... 3
PSYC 367  Motivation and Emotion .............................................. 3
PSYC 370  Sensations and Perception ........................................... 3
PSYC 404  Psychology Seminar ..................................................... 3
PSYC 420  History and Systems of Psychology ................................. 3
PSYC 430  Humanistic Psychology ................................................. 3
FACS 304  Child Development ....................................................... 3
PSYC 206, 306, 406  Special Topics in Psychology ......................... 1-3

*MATH 205 Calculus with Applications or BADM 224 Business Statistics may be substituted for MATH 314 Statistics. Where the student has taken Statistics for the major, an additional upper-level PSYC course may be substituted.

RECREATION AND LEISURE STUDIES
Shepherd University offers a comprehensive major in recreation and leisure studies that prepares students for a variety of recreation, sport, and leisure careers. In addition to the required core courses of study, each student is required to select at least one of the following concentrations:

Athletic Coaching and Officiating
This concentration prepares students to coach and officiate football, basketball, softball/baseball, and soccer at both the recreational and high school level. As physical educators benefit from a Health Certification for Teaching, those in the coaching and recreational management need officiating certification for marketability.

Commercial Recreation/Tourism
This concentration prepares students for careers in travel, tourism, entertainment, hotel/resort/spa industry, convention and visitor’s bureaus, gaming, and many private recreation endeavors.

Leisure Management Option: An option in leisure management adds a stronger management base to the commercial recreation/tourism concentration and prepares students for management positions in the commercial recreation field.

Sport Communication
This concentration prepares students for careers in sport broadcasting, sport reporting, free-lance sport writing, sport promotions/marketing, sport fund raising, sport information, and public relations.

Fitness/Exercise Science
This concentration prepares students for careers such as fitness instructors, personal trainers, corporate fitness managers, strength and conditioning coaches, and sports medicine and rehabilitation personnel.

Fitness Management Option: This option adds a management base to the concentration in fitness/exercise science and prepares students for management positions in the fitness/exercise science and sport and event management fields.
Sport and Event Management
This concentration prepares students for management positions in a variety of settings including professional and semiprofessional sports, sport and recreation organizations, YMCAs, and public recreation and parks in such areas as ticket operations, stadium or facilities management, event coordination, marketing, community relations, corporate and group sales, and recreation supervision.

Therapeutic Recreation
This concentration prepares students for the NCTRC exam, which certifies individuals as Certified Therapeutic Recreation Specialists (CTRS). Certified therapeutic recreation majors are employed by hospitals, nursing homes, health care agencies, alternative schools, group homes, camps, and other settings dealing with handicapped, disabled, and impaired individuals.

Out-of-Class Requirements for Recreation and Leisure Studies Majors
The following requirements must be met for graduation:

1. It is REQUIRED that each major be an active member of an approved state or national organization in his or her specialization during the academic years while pursuing this major;
2. It is REQUIRED that all recreation majors attend two or more state and/or national conferences in their concentration during the academic years while pursuing this major.

Curriculum for a Comprehensive Major in Recreation and Leisure Studies
Total hours required (including free electives) ............................................................. 128
General studies requirements ......................................................................................... 47
Concentration .................................................................................................................... 24-25
Electives .......................................................................................................................... 5-11
Core requirements ........................................................................................................... 46
BADM 310 Principles of Management .............................................................................. 3
CIS 102 Microcomputer Applications ............................................................................. 3
HLTH 225 First Aid/CPR ............................................................................................... 3
HLTH 300 Substance Use and Abuse .............................................................................. 3
RECR 140 Introduction to Leisure Studies ..................................................................... 3
RECR 210 Leisure Activities ......................................................................................... 3
RECR 316 Recreational Programming .......................................................................... 3
RECR 320 Facilities Management ................................................................................... 3
RECR 335 Leisure for the Aging .................................................................................... 3
RECR 370 Environmental Education ............................................................................ 3
RECR 407 Administration of Leisure Services .............................................................. 3
RECR 440 Late Adulthood Issues .................................................................................. 3
RECR 449 Pre-Practicum ............................................................................................... 1
RECR 450 Recreation Internship .................................................................................... 9

Concentrations (Choose one of the following):

Athletic Coaching/Officiating Concentration
Required courses ............................................................................................................. 15
ATHC 324 Care and Prevention of Injuries ...................................................................... 3
ATHC 403 Principles of Coaching .................................................................................. 3
ATHC 405 Psychology of Coaching .............................................................................. 3
PHED 380 Motor Learning .............................................................................................. 3
PHED 490 Growth and Development in HPERS ............................................................ 3
Choose one of the following ......................................................................................... 3
RECR 465 Essentials of Strength and Conditioning ....................................................... 3
PHED 405 Kinesiology ................................................................................................. 3
HLTH 390 Exercise Prescription .................................................................................... 3
Choose one of the following.................................................................3
FACS 318 Nutrition ........................................................................3
HLTH 468 Sport Nutrition ...............................................................3
Choose any two specific coaching class ........................................6
ATHC 350 Coaching of Football .......................................................3
ATHC 351 Coaching of Basketball ..................................................3
ATHC 352 Coaching of Baseball ......................................................3
ATHC 353 Coaching of Tennis ........................................................3
Choose any two sport officiating classes .......................................4
ATHC 360 Officiating Football .........................................................2
ATHC 361 Officiating Basketball....................................................2
ATHC 362 Officiating Softball/Baseball ........................................2
ATHC 364 Officiating Soccer ..........................................................2
Free electives ..................................................................................4

Commercial Recreation/Tourism Concentration
Required courses ...........................................................................25
ACCT 201 Introductory Accounting I ...........................................3
BADM 340 Marketing ...................................................................3
FACS 202 Food and Meal Management .......................................4
RECR 125 Introduction to Commercial Recreation/Tourism ........3
RECR 343 21st Century Tourism ..................................................3
RECR 344 Hospitality ....................................................................3
RECR 350 Field Experience in Leisure Studies and Seminar OR
RECR 392 Cooperative Education in Recreation/Leisure Studies ...3
Select one of the following:
BADM 323 Human Resource Management .................................3
RECR 226 Sport Promotion/Fund Raising ...................................3
RECR 228 Sport Administration ....................................................3
RECR 342 Campus Recreation and Event Management ..............3

Leisure Management Option
Students in the commercial recreation/tourism concentration may choose to add the leisure management option. Students must take all commercial recreation courses as stated above, plus the following courses:
BADM 312 Business Law I ...........................................................3
BADM 365 Promotional Strategy ...................................................3
RECR 108 Introduction to Sport Studies .......................................3
Select one of the following:
BADM 311 Small Business Management ....................................3
RECR 226 Sport Promotion/Marketing/Fund Raising ..................3

Sport Communication Concentration
Required courses .........................................................................24
COMM 203 Introduction to Mass Communication .......................3
COMM 302 Writing for the Mass Media .......................................3
COMM 329 Sound Design .............................................................3
COMM 352 Computer Mediated Communication .......................3
COMM 360 Studio Production ......................................................3
RECR 324 Sport Writing ...............................................................3
RECR 350 Field Experience in Leisure Studies ............................3
RECR 355 Sport Photography .......................................................3
Fitness/Exercise Science Concentration
Required courses ...................................................................................................... 25
ATHC 324 Care and Prevention of Athletic Injuries ........................................... 3
FACS 318 Nutrition ................................................................................................. 3
HLTH 103 Personal Health ..................................................................................... 3
HLTH 200 Health and Wellness ............................................................................... 3
HLTH 390 Exercise Prescription ............................................................................. 3
PHED 370 Applied Anatomy and Physiology ...................................................... 4
PHED 380 Perceptual Motor Learning .................................................................. 3
PHED 405 Applied Kinesiology ............................................................................. 3
Fitness/exercise science concentration students may add the fitness management option by taking the following courses:
ACCT 201 Introductory Accounting I ................................................................. 3
BADM 312 Business Law I .................................................................................... 3
BADM 340 Marketing ............................................................................................. 3
Select one of the following:
BADM 323 Human Resource Management ....................................................... 3
RECR 226 Sport Promotion/Fund Raising ............................................................ 3
RECR 228 Sport Administration .......................................................................... 3
RECR 342 Campus Recreation and Event Management ........................................ 3

Sport and Event Management Concentration
Required courses ...................................................................................................... 24
ACCT 201 Introductory Accounting I ................................................................. 3
BADM 312 Business Law I .................................................................................... 3
BADM 340 Marketing ............................................................................................. 3
BADM 365 Promotional Strategy .......................................................................... 3
RECR 108 Introduction to Sport Studies ............................................................... 3
Select one of the following:
BADM 323 Human Resource Management ....................................................... 3
RECR 228 Sport Administration .......................................................................... 3
RECR 342 Campus Recreation and Event Management ........................................ 3
Select one of the following:
BADM 311 Small Business Management ........................................................... 3
RECR 226 Sport Promotion/Marketing/Fund Raising ........................................... 3
Select one of the following:
ACCT 202 Introductory Accounting II ............................................................... 3
RECR 350 Field Experience in Leisure Studies and Seminar ............................. 3
RECR 392 Cooperative Education in Recreation/Leisure Studies ........................ 3

Therapeutic Recreation Concentration
Required courses ...................................................................................................... 25
PHED 370 Applied Anatomy and Physiology ...................................................... 4
PHED 380 Perceptual Motor Learning .................................................................. 3
PHED 401 Teaching Adapted Physical Education ................................................. 3
RECR 115 Introduction to Therapeutic Recreation .............................................. 3
RECR 331 Medical Terminology .......................................................................... 3
RECR 350 Field Experience in Leisure Studies .................................................... 3
RECR 430 Therapeutic Recreation Programming ............................................... 3
RECR 431 Issues and Trends in Therapeutic Recreation ...................................... 3
Required for certification ....................................................................................... 6
PSYC 360 Abnormal Psychology .......................................................................... 3
EDUC 300 Human Growth and Development ..................................................... 3
Curriculum for a Minor in Recreation and Leisure Studies

Total hours required ................................................................. 24

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 225</td>
<td>First Aid/CPR</td>
<td>3</td>
</tr>
<tr>
<td>RECR 115</td>
<td>Introduction to Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>RECR 125</td>
<td>Introduction to Commercial Recreation and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>RECR 140</td>
<td>Introduction to Leisure Studies</td>
<td>3</td>
</tr>
<tr>
<td>RECR 316</td>
<td>Recreation Programming</td>
<td>3</td>
</tr>
<tr>
<td>RECR 320</td>
<td>Facilities Management</td>
<td>3</td>
</tr>
<tr>
<td>RECR 370</td>
<td>Environmental Education</td>
<td>3</td>
</tr>
<tr>
<td>RECR 407</td>
<td>Management in Recreation and Leisure Services</td>
<td>3</td>
</tr>
</tbody>
</table>

REGENTS BACHELOR OF ARTS DEGREE PROGRAM

The Regents B.A. Degree Program, offered at Shepherd University and all other public baccalaureate institutions in West Virginia, is a flexible higher education plan. Originally designed for those adults whose University educations had been interrupted or discontinued, this versatile program also meets the needs of many adults who have had no previous University work. It provides a means by which experiential learning may be evaluated for the awarding of University equivalent credit. Credits earned at regionally-accredited institutions can be transferred; American Council on Education guidelines on non-collegiate sponsored training programs and educational experience in the armed services are honored; and credits may be earned through CLEP testing.

The Regents B.A. Degree Program provides mature persons a special opportunity to complete baccalaureate degree studies. It is not an option for traditional-aged University students, and it specifically is not an alternative for students who are disqualified from traditional programs for reasons of poor scholarship. Applications are not accepted from anyone who was graduated from high school (or was awarded a GED) less than four years prior to seeking admission. Baccalaureate degree holders are not eligible for admission.*

Students seeking admission to the Regents B.A. Degree Program must first be admitted to Shepherd University. There is no program application fee, and tuition costs are the same as for students in other degree programs at Shepherd University. A fee of $300 is charged if a comprehensive evaluation of experiential learning is requested, regardless of the number of semester hours of credit awarded. A $10 per credit posting fee will be applied after July 1, 2005.

The degree is intentionally unstructured regarding academic discipline emphasis and neither requires nor recognizes majors.

Admission to the Regents B.A. Degree Program requires a minimum cumulative 2.0 grade point average for all University work, as well as a 2.0 average on all Shepherd University credit. Graduation requires a total of 128 semester hours of credit with a minimum of 2.0 on all Shepherd work as well as cumulative 2.0 grade point average.** In order for Regents B.A. Degree Program students to be considered for honors at graduation, they must have earned a minimum of 80 semester hours for which a traditional grade has been given with 32 of these semester hours of resident study completed at Shepherd.***
There are no required courses in the program; instead there are required areas in which credits must be earned. General education credits must be earned as follows:

<table>
<thead>
<tr>
<th>Required Area</th>
<th>Sem. hrs.</th>
<th>Typical Courses in Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>6</td>
<td>literature, history, philosophy, art or music appreciation</td>
</tr>
<tr>
<td>Communications</td>
<td>6</td>
<td>grammar, composition</td>
</tr>
<tr>
<td>Social science</td>
<td>6</td>
<td>sociology, economics, geography, psychology, political science</td>
</tr>
<tr>
<td>Natural science</td>
<td>6</td>
<td>biology, chemistry, physics, general science, geology, astronomy</td>
</tr>
<tr>
<td>Additional from one or any combination of the above four areas</td>
<td>9</td>
<td>MATH 101, 105, 154 (with satisfactory placement score). May require prerequisite ACFN 065 or 085.</td>
</tr>
</tbody>
</table>

Total required general education 36

A further requirement is 40 semester hours credit in 300 and senior level courses. Students are permitted to select these courses without restrictions as to field of study. They must, however, meet the prerequisites for these courses. In this way students may plan a program designed to suit their individual needs or ambitions. Appropriate credits, no matter by which means they are awarded, may be applied toward any requirement.

*A student may not be enrolled simultaneously in the Regents B.A. Degree Program and another baccalaureate degree program.

**Twenty-four semester hours must be earned at institutions under the administration of the West Virginia Higher Education Policy Commission, with a minimum of 12 semester hours at the host institution (Shepherd).

***Rules relating to Fs: All Fs received four years or more before admission to the Regents B.A. Degree Program are disregarded.

**SOCIAL STUDIES**

The social studies program, which offers a comprehensive major, is intended primarily for students preparing to teach in middle or high schools. These curricula provide a multi-disciplinary foundation for prospective teachers who enter integrated social studies educational situations.

**Curriculum for Teaching Field in Social Studies Grades 5-12**

Specific general studies requirements ................................................................. 6

PSCI 101 American Federal Government ......................................................... 3

ECON 205 Principles of Macroeconomics ......................................................... 3

Required courses ................................................................................................. 45

HIST 201 History of the United States to 1865 AND

HIST 202 History of the United States 1865 to Present .......................... 6

HIST 309 West Virginia and the Appalachian Region ................................. 3

HIST 314 Recent United States History OR

HIST 405 Introduction to African-American History ................................. 3

HIST 333 Modern European History ................................................................. 3

HIST 338 European Women to 1500 OR

HIST 339 European Women since 1500 OR

HIST 411 Latin American History OR

HIST 412 History of Russia since 1855 .............................................................. 3
Curriculum for Teaching Field in Social Studies Grades 5-9
The social studies 5-9 program, which offers a subject specialization for certification, is intended primarily for students preparing to teach in middle schools.
Specific general studies requirements........................................................................6
Required courses ...............................................................................................................24
See professional education course listings under Education: Professional Studies Core for Secondary Education (30 hours required) or Professional Studies Core for Middle School Education (29 hours required). Special Methods of Teaching Social Studies is EDUC 422.
Contact Person: Dr. Robin Good, Knutti Hall 103C, 304/876-5222 or the Department of Education, Knutti Hall 107, 304/876-5305.

SOCIAL WORK
The Program Mission
The mission of the social work program is to prepare competent and effective beginning level professional practitioners who possess the knowledge, values, skills, and ethics necessary to intervene effectively on behalf of clients on micro, mezzo, and macro practice levels. Core to this professional preparation is a liberal arts education that builds a sophisticated basis for generalist-based baccalaureate social work education. Additionally, the program is committed through education and training to the development of knowledge to benefit the practice community in enhancing the social functioning of clients. Furthermore, the social work program is committed to providing leadership and advocacy, through the contributions of students, faculty, and graduates, to improve the social service delivery system serving the community. The social work program seeks to assist in impacting the social and personal problems that prevent citizens from reaching their goals, and advocate for the diversity of clients served by the profession.
Accredited by the Council on Social Work Education, Shepherd University offers a four-year liberal arts curriculum leading to a bachelor in social work degree. The curriculum has been designed to provide for a broad educational base in the humanities, the biological sciences, the social and behavioral sciences, creative arts, and communication, together with a sequenced program of social work courses. The primary purpose of the social work program is to prepare generalist beginning-level social work professionals. The course content also is appropriate to the preparation of students for admission to graduate schools of social work offering advanced professional education.

Preparation for practice includes classroom instruction, audiovisual laboratory experience, field observation, field work experience, community and on-campus workshops, and an intensive program of academic and professional advisement. Social work students are also encouraged to take advantage of opportunities to further their development as individuals as well as to fulfill their obligations as responsible citizens in a democratic society.

The social work program curriculum is based on a philosophy of social welfare through social change. The curriculum therefore emphasizes generic content areas, principles, and methodologies that will allow for generalist practice with various client and target systems. Students are exposed to a variety of intervention theories and methodologies and are encouraged to select for their practice those interventions which are compatible with the philosophy of social work and which are most useful to the tasks at hand.

In keeping with the mission of the University and the social work program, the goals are:

1. To prepare students for beginning-level generalist social work practice particularly with the oppressed and vulnerable, through development of the knowledge, skills, values, and ethics base that allows for competent practice and a focus on social justice with individuals and their families, other groups, organizations, and communities.
2. To promote cultural understanding and awareness of social problems on the campus and in the community and region as means to encourage social change.
3. To contribute to the knowledge base of the profession in order to enhance the delivery of social services.
4. To serve the local professional and lay community by lending leadership and support to those groups, services, and programs that address human service needs.

Admission to Social Work Program and Field Experience

Students may declare a major in social work as early as the freshman year. In order to become formally accepted into the program, students must complete SOWK 201 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.

Upon completion of all general education requirements and the requisite courses for the comprehensive major, a student must apply for an agency-based field experience of 600 hours which is to be completed over two semesters in the senior year.

Transfer Credit

The University does grant transfer credit from accredited two and four-year institutions. The program director works closely with the registrar to ensure that credit is given appropriately. In regard to social work classes and core courses, it is the exclusive purview of the program director to sign off on these credits. In evaluating transferability of all other credits, it is the policy of the program to give transfer credit only in those cases where it can be demonstrated by review of course syllabi that the course’s objectives, content, and learning experiences are substantially equivalent to those at Shepherd. In considering academic credit for students transferring from other CWSE accredited social work programs, the program recognizes prior educational achievement. Course work from an accredited program in which the student received a grade of “C” or better is accepted as equivalent to similar course work at Shepherd University. In the case of transfers from unaccredited programs, credit is not awarded for either core social work courses or field instruction; proficiency exams have never been utilized. Field instruction credit can only be earned through the Shepherd social work program. The program director works closely with
the admissions officer in advising regional two-year institutions of our curriculum requirements so that transfer of credit for non-social work courses can be expeditiously achieved. These policies and procedures are written in the Social Work Student Handbook; the Admissions Office and Office of the Registrar have copies.

**No Academic Credit for Previous Experience**
Academic credit for life experience and previous work experience is not given, in whole or in part, in lieu of the field practicum or the courses in the professional foundation areas. In addition, only those students who are candidates for the baccalaureate degree in social work are admitted to the field practicum and methods courses. The curriculum and methods of instruction are consistent with the EPAs for baccalaureate social work education. This policy is articulated in the *Student Handbook*.

**Field Practicum Restrictions**
The senior field experience practicum is restricted to social work majors who have completed all required courses in the major.

**Field Placements and Student Employment**
Traditionally, in the field program at Shepherd and in the B.S.W. education generally, students are not placed in agencies in which they are employed. As undergraduates, they do not have a license to practice social work and, therefore, are not by definition employable in this capacity. However, in the unlikely event that this circumstance arises, students would be placed under supervision and given assignments which differ from that of their employment (CSWE Standard 2.1.6).

Students may be employed in a paraprofessional capacity in the agency prior to their internship. In this event, employers would be asked to sign an agreement that 1) weekly supervision will be provided by an M.S.W. or B.S.W. social worker who was not designated as the direct supervisor of the student when an employee; 2) the tasks undertaken by the student in the completion of their internship will be different in nature and scope; and 3) the hours completed as internship may or may no be paid at the discretion of the agency.

**Termination**
Continuation in the social work major is based upon positive ongoing faculty evaluation of the student’s grades, professional attributes, and performance in real or simulated professional situations. A student may be suspended or terminated from the social work major for deficiencies in the above mentioned areas or failure to maintain a 2.0 grade point average in the major.

**Termination Policies and Protocol**

**Early Termination**
A request for early termination of a placement may be initiated for valid reasons by the agency, the program, or the student. Some possible reasons for early termination of the placement include, but are not limited to:

- Lack of fit between the educational needs of the student and the learning opportunities provided by the agency.
- Inability of the student to adapt to the practice context of the agency and/or community.
- Chronic absence and/or lack of punctuality.
- Failure of the student to notify the field instructor of a planned or unplanned absence.
- Unethical behavior related to boundary issues, confidentiality, respect for self-determination of the client, and other serious breaches of the Code of Ethics.
- Lack of compliance with completion of assigned tasks, including paperwork, in a timely manner.

Prior to actual termination for any reason, negotiations involving the student, the program, and the agency will be held. The protocol for early termination is outlined below.

1) **Desire for early termination is expressed by any one of the three parties.**
2) **The field liaison discusses identified issues and concerns with the initiating party.**
3) A conference is held among all parties to clarify the reasons for termination and explore alternatives.
4) The field coordinator provides mediation if required.
5) Termination is accomplished as soon as feasible, allowing time for closure, attention to continuity of service, and administrative arrangements.
6) This process does not preclude replacement of the student in another agency after a round of interviews.
7) Termination at a particular agency cannot be appealed since the program does not exercise authority over outside agencies.
8) Termination from the program will result if the student is not accepted by a second placement agency following a round of interviews.
9) In the event that the student is not viewed as a candidate for another field placement, the student will be assisted in pursuing another major or the R.B.A. degree offered by the University.
10) Any appeal of this decision would be handled by a committee composed of representatives from the faculty and the board of advisors.
11) An appeal must be submitted in writing within two weeks to the field coordinator who will forward the petition to the program director.
12) The program director will convene the committee which makes a response within one month.

Curriculum for a Comprehensive Major in Social Work
Minimum hours required (including free electives) ............................................................... 128
General studies requirements .................................................................................................. 47
Specific general studies requirements:
BIOL 101 General Biological Science ................................................................. 4
BIOL 102 General Biological Science ................................................................. 4
MATH 314 Statistics ......................................................................................... 3
Students are to complete Finite Math (MATH 154) as the prerequisite for Statistics (MATH 314).
Social work curriculum requirements .......................................................... 68
SOWK 201 Introduction to Social Work ................................................................. 3
SOWK 300 Community Service Learning ................................................................. 3
SOWK 301 Social Welfare as a Social Institution ................................................. 3
SOWK 305 Human Behavior in the Social Environment I .................................. 3
SOWK 306 Human Behavior in the Social Environment II .................................. 3
SOWK 311 Social Work Methods I ........................................................................ 3
SOWK 312 Social Work Methods II ........................................................................ 3
SOWK 313 Social Work Methods III ........................................................................ 3
SOWK 325 Orientation to Field Practicum ................................................................. 1
SOWK 404 Social Welfare Seminar ................................................................. 3
SOWK 407 Field Experience in Social Work I ......................................................... 3
SOWK 408 Field Experience in Social Work II ......................................................... 3
SOWK 411 Field Experience in Social Work III ......................................................... 3
SOWK 409 Field Experience Seminar ................................................................. 2
SOWK 410 Field Experience Seminar ................................................................. 2
Related required courses:
PSYC 203 Introduction to Psychology ................................................................. 3
SOCI 410 Social Theory ......................................................................................... 3
SOCI 205 Social Problems ......................................................................................... 3
SOCI 303 The Family ................................................................................................. 3
SOCI 405 Research Methods ......................................................................................... 3
FACS 304 Child Development OR
EDUC 300 Human Growth and Development OR
PSYC 364 Lifespan Development Psychology ................................................................. 3
Required electives (9 hours, one from each group):

Diversity:
- HIST 405 Introduction to African-American History .................. 3
- SOCI 309 Sociology of Religion ............................................. 3
- SOCI 403 Ethnic Relations .................................................... 3
- WMST xxx Any women’s studies offering including SOWK 417 Sex and Gender in Contemporary Society .......... 3

Social and economic justice:
- SOCI 402 Criminology .......................................................... 3
- PSCI 331 Race, Gender, and Politics ......................................... 3
- PSCI 411 Politics of Poverty .................................................... 3
- SOCI 411 Social Stratification .................................................. 3

Populations at risk:
- SOWK 320 Child Welfare ....................................................... 3
- HIST 309 West Virginia and the Appalachian Region ................. 3
- SOCI 312 Introduction to Juvenile Delinquency ......................... 3
- SOWK 402 Social Gerontology ................................................ 3
- SOWK 417 Sex and Gender in Contemporary Society .............. 3

**SOCIOMETRY**

The sociology program, with both a traditional and a criminal justice concentration, offers students a behavioral education which is based in the liberal arts and which is designed to encourage and develop scientific inquiry and an understanding of human behavior, culture, and society. Competencies within the program assist students in recognizing their total University experiences as cumulative, coherent, and unified. The program helps students develop as individuals and as responsible citizens in a democratic society. Students are encouraged and prepared to pursue graduate work in sociology. Aided by a location with superior resources, the program is an integral part of the overall University curriculum and of several specific degree offerings within and outside the School of Business and Social Sciences. The program does not focus on specific career-related training but provides a solid basis for students to develop skills applicable to a wide range of employment opportunities.

The four-year curriculum leads to the bachelor of science degree in sociology. Candidates for this degree are required to complete a minimum of 128 semester hours.

**Curriculum for a Major in Sociology, Traditional Concentration**

Total hours required .................................................................... 36

Required courses ........................................................................... 21

- SOCI 205 Social Problems ....................................................... 3
- SOCI 303 The Family ............................................................... 3
- SOCI 312 Introduction to Juvenile Delinquency OR SOCI 402 Criminology .................................................. 3
- SOCI 403 Ethnic Relations ....................................................... 3
- SOCI 405 Research Methods .................................................... 3
- SOCI 410 Social Theory ........................................................... 3
- MATH 314 Statistics ............................................................... 3

Elective courses ............................................................................ 15

Any 300 or 400 level sociology or anthropology course, EDUC 310 Educational Sociology, SOWK 402 Social Gerontology, or SOWK 417 Gender and Sex Roles.

**NOTE:** It is assumed that SOCI 203 General Sociology will be taken as a general studies requirement preparatory to pursuance of the sociology major or minor curriculum. SOCI 205 Social Problems is a prerequisite for the following courses: SOCI 312, SOCI 402, SOCI 403, SOCI 405, SOCI 410.
Curriculum for a Major in Sociology, Criminal Justice Concentration

Total hours required .................................................................................................................. 42

Required courses in sociology .................................................................................................. 18
SOCI 205 Social Problems ................................................................. 3
SOCI 303 The Family ................................................................. 3
MATH 314 Statistics ................................................................. 3
SOCI 403 Ethnic Relations ................................................................. 3
SOCI 405 Research Methods ................................................................. 3
SOCI 410 Social Theory ................................................................. 3

Required courses in criminal justice .................................................................................. 15
SOCI 312 Introduction to Juvenile Delinquency ................................................................. 3
SOCI 320 The Criminal Justice System ................................................................. 3
SOCI 325 The Correctional Institution ................................................................. 3
SOCI 402 Criminology ........................................................................... 3
SOCI 419 Internship in Sociology/Criminal Justice ................................................................. 3

Electives in criminal justice and sociology ................................................................................. 9
Choose any 3 of the following courses:
CJST 210 Introduction to Forensic Science ................................................................. 3
CJST 220 Criminal Investigation ........................................................................... 3
CJST 230 Principles of Criminal Law and Procedures OR CRIM 310 Principles of Criminal Law ................................................................. 3
CJST 240 Police Organization and Management OR CRIM 425 Police and Community Relations ................................................................. 3
SOCI 390 Sociology of Violence ........................................................................... 3
SOCI 411 Social Stratifications ........................................................................... 3
SOCI 407 Collective Behavior ........................................................................... 3
SOWK 417 Sex and Gender Roles in Contemporary Society ................................................................. 3

All students transferring from or completing a two-year program at Shepherd may use all the sociology and criminal justice courses taken in the two-year program to substitute for required courses and electives in the sociology major with the criminal justice concentration. All courses transferring from other educational systems will have to be examined on a course-by-course basis.

Curriculum for a Minor in Sociology

Total hours required .................................................................................................................. 24

Required courses ...................................................................................................................... 15
SOCI 205 Social Problems ................................................................. 3
SOCI 303 The Family ................................................................. 3
SOCI 312 Introduction to Juvenile Delinquency OR SOCI 402 Criminology ................................................................. 3
SOCI 403 Ethnic Relations ................................................................. 3
SOCI 410 Social Theory ................................................................. 3

Elective courses ......................................................................................................................... 9
Any 300 or 400 level sociology or anthropology course, EDUC 310, SOWK 402, SOWK 417, or MATH 314.

TECHNICAL COMMUNICATION

The English Department's technical communication minor will prepare students to be writers and communication specialists for a wide variety of fields following graduation. In addition to developing professional skills and writing proficiency, this minor ensures expertise in contemporary electronic communication. Since professional technical communicators must possess many skills, this minor is interdisciplinary and is intended to allow students to specialize in a subfield of technical communication once they have completed the four required courses. Students who earn a minor in technical communication will have:
1. Knowledge of the types of electronic communication—especially e-mail and Web pages—used in contemporary technical communication;

2. Skill in conducting research and synthesizing the results of that research into clear, precise reports;

3. The ability to work collaboratively on a project toward a goal;

4. Knowledge gained through extensive research of contemporary issues and problems faced by technical communicators;

5. An understanding of what constitutes ethical behavior in technical communication; and

6. An internship that allows practice in technical communication.

**Curriculum for a Minor in Technical Communication**

Total hours required: 18

<table>
<thead>
<tr>
<th>Required courses</th>
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<tbody>
<tr>
<td>ENGL 280 Introduction to Technical Communication</td>
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<tr>
<td>ENGL 380 Advanced Technical Communication OR ENGL 385 Web Content Development</td>
<td>3</td>
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<td>ENGL 382 Technical Editing</td>
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<td>ENGL 483 Internship in Technical Communication</td>
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Electives from the following: 6

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<td>CIS 332 Web Programming I</td>
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<td>CIS 334 Web Programming II</td>
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<td>COMM 352 Computer-mediated Communication</td>
<td>3</td>
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<tr>
<td>ENGL 372 Advanced Composition</td>
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<td>ENGL 490 Independent Study in English</td>
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<td>GRDS 200 Graphic Design I</td>
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<td>JOUR 204 Introduction to Journalism</td>
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<tr>
<td>JOUR 316 Magazine Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Contact person: Dr. Linda Tate, Knutti 214, 304/876-5365, ltate@shepherd.edu.

**THEATER**

The theater program concentrates on providing conservatory classes in a liberal arts atmosphere. The four-year course of study, leading to a minor in theater, is designed for those students who intend to pursue professional theater careers, as well as those who may enter other fields where theater skills are desirable.

The program provides the student with a well-rounded knowledge of the art as well as the opportunity to specialize in acting. The student will learn from intensive classroom study, theory and practical application, and experience in theater productions.

The department annually produces four major productions as well as workshop performances. These productions provide practical experience for theater students and serve as a source of culture and education for the northern Shenandoah Valley region.

**Curriculum for a Minor in Theater**

Total hours required: 24

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<td>THEA 204 Introduction to Theater</td>
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<td>THEA 205 Theater Technology</td>
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<td>THEA 203 Acting I</td>
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<td>THEA 309 Directing I</td>
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<td>THEA 207 Theater Practice</td>
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(Electives: 9 hours from one of the following two areas)

**Acting/Directing**

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<tr>
<td>THEA 312 Acting Studio I</td>
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<td>THEA 314 Acting Studio II</td>
<td>3</td>
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<tr>
<td>THEA 316 Acting Studio III</td>
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<tr>
<td>THEA 341 History of the Theater</td>
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<td>THEA 311 Directing II</td>
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</table>
Design/Technician
THEA 346  Theater Design ......................................................... 3
THEA 340  Stage Management ..................................................... 3
THEA 310  Production ................................................................. 3
THEA 208  Theater Practice ......................................................... 3
ENGL 421  Shakespeare ............................................................. 3

WOMEN’S STUDIES
Curriculum for a Minor in Women’s Studies
Total hours required ........................................................................ 21
Required courses ............................................................................. 6
WMST 201  Introduction to Women’s Studies ................................. 3
WMST 421  Women’s Studies Capstone/Independent Study ............ 3
Elective courses .............................................................................. 15
PSYC 320  Human Sexual Behavior .............................................. 3
HIST 315  Women in America ...................................................... 3
HIST 338  European Women to 1500 .............................................. 3
HIST 339  European Women since 1500 ........................................ 3
ENGL 355  American Ethnic Literature ........................................ 3
ENGL 360  Literature and the Sexes .............................................. 3
ENGL 366  Women in the Arts and Literature ............................... 3
SOWK 417  Sex and Gender in Contemporary Society .................. 3
SOCI 303  Family ........................................................................ 3
PSCI 331  Race, Gender, and Politics ............................................. 3
PSCI 411  Politics of Poverty ....................................................... 3
SOWK 320  Child Welfare Services .............................................. 3
SOWK 402  Social Gerontology ................................................... 3
COMM 342  Media Studies ......................................................... 3
COMM 355  Advertising and Imagery ........................................... 3

For information contact Dr. Betty Ellzey, Department of English and Modern Languages, or Dr. Anders Henriksson, Department of History.
COURSE NUMBERING SYSTEM

The unit of credit is the semester hour. Some courses are not offered every semester.

- Courses numbered 001-099 are not for degree credit
- Courses numbered 100-199 are normally for freshmen
- Courses numbered 200-299 are normally for sophomores
- Courses numbered 300-399 are normally for juniors
- Courses numbered 400-499 are normally for seniors

DISCIPLINE NUMBER SYSTEM

Courses in the various disciplines can be identified by the appropriate prefix numbers as listed below:

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<th>New Prefix</th>
<th>Old Prefix</th>
<th>New Prefix</th>
<th>Old Prefix</th>
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<td>Academic Foundations</td>
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<td>ACCT</td>
<td>10 Accounting</td>
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<td>BADM</td>
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<td>CPIS</td>
<td>14 Computer Programming and Information Systems</td>
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<td>ENGR</td>
<td>89 Engineering</td>
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<td>31 Private Applied Music and Ensembles</td>
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SECTION VII

COURSES OF INSTRUCTION

ACADEMIC FOUNDATIONS
The credit hours for these courses apply toward hours needed to qualify as a full-time student but do not count toward fulfilling graduation requirements. The grade earned does not count in the grade point average.

ACFN 010. INTRODUCTION TO CRITICAL COMPOSITION (3)
Students will be introduced to composition which involves critical analysis of reading material, forming of hypotheses, and construction of intelligent, coherent, full-length essays. Mechanical issues such as grammar, punctuation, and spelling will be addressed primarily on an individual basis as students are encouraged, with assistance, to recognize their own strengths and weaknesses. Several workshop sessions will be held. Grading is pass/fail only.

ACFN 020. BASIC DRUG CALCULATIONS (3)
Develops skills to solve typical computational problems encountered in nursing practice. Operations of arithmetic (addition, subtraction, multiplication, and division) including fractions and decimals, ratio, proportion, introduction to algebraic notation, and the metric system. Examines units in the household and apothecary systems; dosage conversion among these systems; intravenous calculations. Optional units include powders and crystals, solutions, and children’s dosages. Enrollment as audit is not permitted unless recommended by the appropriate student academic support services or nursing personnel.

ACFN 050. CONSUMER MATHEMATICS (1)
Develops problem-solving skills to deal with consumer topics. Topics include interest and saving account computations, maturity values, commissions, markups, discounts, payroll deductions, tax forms, comparison shopping, credit costs, income and expenditures to budgets, and interpretations of tables and charts. Enrollment other than audit permitted only if advised by the appropriate student academic support services personnel. Prerequisite or corequisite ACFN 060 or permission of instructor.

ACFN 065. PRE-ALGEBRA (3)
This is the first in a two-semester series in developmental mathematics. In addition to traditional classroom lectures and question and answer sessions, the student is required to complete an independent study component. The student’s independent study is the mechanism by which the student assesses and addresses their course progress. Students in this course will examine the arithmetic operations (addition, subtraction, multiplication, and division) as applied to whole numbers, fractions, and decimal numbers. The concepts of ratios, proportions, unit rates, percent, and measurement systems will be studied. Introductory geometry and statistics concepts will be incorporated. The student will learn how to perform operation on signed numbers, the implications of exponent and the order of operation, and how to evaluate expressions. Students will solve equations for an unknown, literal equations for a variable, and evaluate simple/compound inequalities and their graphs. Students will learn to interpret and graph linear equations. Prerequisite: SASS Placement.
ACFN 085. BASIC ALGEBRA (3)
This is the second in a two-semester series in developmental mathematics. In addition to traditional classroom lectures and question and answer sessions, the student is required to complete an independent study component. The student's independent study is the mechanism by which the student assesses and addresses their course progress. Students in this course will examine systems of equations and methods for solving them, the translation of English sentences and phrases into algebraic statements, and the skills required to solve application problems in one and two variables. This course includes discussions and applications of the concepts of integral exponent manipulation, basic operations performed on polynomials, rational and radical expressions. Methods of factoring and solving quadratic equations are given a great deal of attention. Prerequisite: ACFN 065 or SASS Placement.

ACFN 095. DEVELOPING UNIVERSITY READING AND STUDY SKILLS (3)
The course will provide opportunity to develop and improve basic reading necessary to do University-level work. Emphasis will be on vocabulary development, comprehension, interpretation, and evaluation.

ACFN 096. UNIVERSITY STUDY SKILLS (2)
The course will provide a systematic exposure to successful study skills for University, such as organizational skills, note-taking skills, and library skills. The course will expose students to those Shepherd University services and resources which will assist the individual student in achieving academic goals.

ACCOUNTING
ACCT 201. INTRODUCTORY ACCOUNTING I (3)
Fundamentals of accounting including basic accounting models, inventory methods, classified statements, negotiable instruments, internal control, accounting for property and equipment, and special journals in conjunction with sole proprietorships.

ACCT 202. INTRODUCTORY ACCOUNTING II (3)
Study of the basic structure of partnerships and corporations, manufacturing accounting, analysis of financial statements, and an introduction to cost accounting. Prerequisite: ACCT 201.

ACCT 292. INTERNSHIP IN ACCOUNTING (1-3)
A form of independent study which integrates classroom study with supervised work experience. The primary focus is upon the experience and skills learned. Internships generally last no longer than a semester. Interns are not employees of the sponsoring company. Prerequisite: ACCT 202.

ACCT 305. MANAGERIAL ACCOUNTING (3)
Techniques of interpreting accounting, financial, and statistical data for use in management decision-making. Topics include financial reporting for internal and external use; measurement and interpretation of cost data; capital budgeting; budgets as a means of management control; and financial statement analysis. Prerequisite: ACCT 202.

ACCT 329. INTERMEDIATE ACCOUNTING I (3)
An in-depth study of the principles, concepts, and theory underlying published financial statements. Emphasis is placed upon the components of these statements and the limitations involved in their preparation. Prerequisite: ACCT 202.

ACCT 330. INTERMEDIATE ACCOUNTING II (3)
A continued in-depth study of published financial statements. Emphasis is placed upon principles and pronouncements established by authoritative bodies as it applies to equity accounts, tax allocation, inflation accounting, accounting changes, and correction of errors. Prerequisite: ACCT 329.
ACCT 331. INTERMEDIATE ACCOUNTING III (3)
A continued in-depth study of financial reporting issues including, but not limited to, long-term requirements in accounting for pensions and leases, cash flows, financial statement analysis, reporting changes, and inflation effects. Prerequisite: ACCT 330.

ACCT 335. INCOME TAX (3)
A study of the Internal Revenue Code and regulations relating to individuals, partnerships, and corporations. Prerequisite: ACCT 202.

ACCT 336. COST ACCOUNTING (3)
The economic, industrial engineering, and managerial aspects of cost accounting including process, job order, and standard cost systems. Prerequisites: ACCT 202 and BADM 224.

ACCT 337. VOLUNTEER INCOME TAX ASSISTANCE (1)
Students prepare state and federal income tax returns on a volunteer basis. This is a program (VITA) sponsored through the Internal Revenue Service. Returns are prepared for the elderly and those individuals who cannot afford to go to a paid tax preparer.

ACCT 392. COOPERATIVE EDUCATION IN ACCOUNTING (1-6)
A form of independent study which integrates classroom study with paid, planned, and supervised work experience in the public and private sectors. Students are exposed to the reality of the work world beyond the boundaries of the campus, enhancing their self-confidence and career direction. Co-op students are employees of the sponsoring company and earn a salary and University credit. Generally, sponsoring employers seek upperclassmen with knowledge and background in the discipline. Maximum of three credit hours may be used as accounting elective credit by majors only. Prerequisite: ACCT 329.

ACCT 401. COMPUTER-BASED ACCOUNTING (3)
This course employs general purpose accounting software and requires the student to design, implement, and utilize an accounting system. Prerequisite: ACCT 331, 335.

ACCT 402. AUDITING (3)
Concepts, objectives, standards, procedures, and techniques relating to the performance of the audit. Emphasis on decisions which involve judgment that are important to final reporting. Prerequisite: ACCT 331.

ACCT 403. FUND ACCOUNTING (3)
Application of accounting principles to various funds of governmental and institutional units. Special emphasis placed upon budgetary accounting and its potential usefulness in planning and controlling revenues and expenditures. Prerequisite: ACCT 329.

ACCT 406. ADVANCED ACCOUNTING (3)
Current theories and procedures relating to partnerships and consolidated statements. Prerequisite: ACCT 331.

ACCT 408. AUDITING II (3)
This course is designed to address advanced technical concepts and current topical issues of auditing. It will also build upon concepts learned in Auditing I utilizing in-depth case studies and applications. Prerequisite: ACCT 402.

ACCT 410. ACCOUNTING THEORY (3)
Contemporary financial accounting issues as reflected in pronouncements of leading professional research and policy organizations such as the Financial Accounting Standards Board and the American Institute of Certified Public Accountants. A frame of reference for assimilating and evaluating the historical foundation of the basic accounting theories and concepts as they appear in the current accounting standards. Prerequisite: ACCT 331.
ACCT 435. INCOME TAX II (3)
An in-depth study of the Internal Revenue Code as it relates to C-corporations, S-corporations, partnerships, estates, and trusts. Prerequisite: ACCT 335.

ANTHROPOLOGY
ANTH 225. INTRODUCTION TO MUSEUM STUDIES (3)
Survey of the history, philosophy, and management of museums including curatorship and public interpretation. Basic examination of the principles of museum exhibit design as well as aspects of exhibit preparation will be emphasized. This course will be essential to students interested in cultural resources in such agencies as the National Park Service.

ANTH 300. INTRODUCTION TO ARCHAEOLOGY (3)
Course surveys the history, theory, and methodology of archaeology as a subdiscipline of anthropology. Field skills necessary; the scientific collection of data on past cultures will be discussed as well as topics in prehistoric, historic, industrial, and underwater subareas.

ANTH 314. GENERAL ANTHROPOLOGY (3)
A general survey of the origins of humans and the development of prehistoric cultures.

ANTH 315. CULTURAL ANTHROPOLOGY (3)
A study of primitive cultures with respect to range and variability of human behavior. Presented to show the continuity of social life from basic human beginnings to present-day civilization.

ANTH 345. ARCHAEOLOGICAL FIELD METHODS AND LAB (4)
A study of theories, methods, and techniques of archaeology as applied to analysis of environmental impacts on historic and prehistoric sites. This includes the use of social scientific techniques for mitigating the impacts of planned changes to the physical or cultural environment such as site survey, excavation techniques, laboratory techniques, and artifact analysis. This course will provide valuable knowledge on the techniques of data collection used in the study of cultural groups, with these techniques applied to environmental impact statements, urban planning, and resource management. This is predominantly a field-based and laboratory-based course.

ANTH 370. AMERICAN ARCHITECTURAL HERITAGE (3)
The role of American architecture as a cultural resource worthy of study and preservation is the focus of this course. Styles and periods of architecture, the consideration of architectural resources in planning and environmental education, and the reflection of American culture in the built environment will be discussed. This course will serve as an elective in cultural resource management and will be essential for students with an interest in urban planning or park administration. Crosslisted as HPRE 102.

ANTH 380. HISTORICAL ARCHAEOLOGY AND LAB (4)
This course will focus on the archaeology of North America, emphasizing the methods of historical archaeology. This course will include laboratory procedures for the processing, identification, analysis, and conservation of historic period artifacts. The evolution of American culture from colonial to recent industrial society will be investigated. This course is essential for students interested in the management of historical parks and sites as well as students who plan to assist in field work and analysis necessary for environmental impact statements.

ANTH 390. NATIVE AMERICAN ETHNOGRAPHY (3)
A survey of traditional Native American cultures in North America. This course will cover aspects of Upper Paleolithic migrations into the New World, prehistoric developments, and the ethnography and ethnohistory of traditional and contemporary cultures. Prerequisite: SOCI 203.
ART
(Also see Graphic Design and Photography/Computer Imagery)
ART 103. INTRODUCTION TO THE VISUAL ARTS (2)
An introductory course, required of all students, designed to give insight into the nature of the visual arts and their relationship to contemporary life. Includes a study of the language and functions of painting, sculpture, and architecture. The development of styles, aesthetic principles, and the ideas of art are surveyed.

ART 104. INTRODUCTION TO THE VISUAL ARTS (3)
A corequisite or prerequisite for all 200 level and above studio and art history classes. This course is an introduction to the themes and concepts of contemporary art. Students begin to utilize the terms and language of art in discussion and writing about the relationship between form and content as it relates to and is utilized in contemporary artworks. Students are introduced to movements, Western and non-Western, in the history of art that have a strong influence on contemporary artists.

ART 115. DRAWING I (3)
An introductory course for development of basic drawing skills and practice in the use of various drawing materials. Observation, memory training, and composition are stressed to give the student a wide experience and solid base in the art of drawing.

ART 140. VISUAL THINKING SKILLS I (3)
A corequisite or prerequisite for all 200 level and above studio and art history classes. All students pursuing a major or minor in art must enroll in this course during the fall semester upon acceptance into a program in the Department of Art. This introductory course examines the concepts and nature of visual image making. The student begins to comprehend contemporary art and the function of the visual elements and principles of design to communicate concepts and ideas in a nonliteral way. Students utilize symbol and metaphor and develop problem-solving skills essential to creative thinking.

ART 170. VISUAL THINKING SKILLS II (3)
A corequisite or prerequisite for all 200 level and above studio and art history classes. Transfer students may receive transfer credit for this course ONLY if they complete ART 140 with a grade of C or better. This course continues to examine the concepts and nature of visual image making. Students refine their understanding of contemporary art and the function of the visual elements and principles of design to communicate concepts and ideas in a nonliteral way. Students continue to develop problem-solving skills essential to the development of creative thinking. Students will demonstrate an understanding of symbol and metaphor and hone problem-solving skills.

ART 203. SURVEY HISTORY OF WESTERN ART (3)
A history of Western art from prehistoric through post-Impressionism with an emphasis on those time periods in the history of art which continue to inspire and influence contemporary art ideas and discussion including non-Western influences. Students will encounter and begin to understand artists and art works that molded the current dialogue and motivation of art making in the 21st century. Prerequisite: ART 103 or ART 104, 140, 170.

ART 204. CONTEMPORARY ART (3)
A history of art in the 20th and 21st centuries with special emphasis on artists and artwork of the 21st century. A study is made of the history and philosophy of the various movements, their origins and growth, and the relationship of their development to contemporarily culture and thought. Students comprehend the move from representation to abstraction to art as a form of cultural critique. Prerequisites: ART 103 or 104, 140, 170, 230.

ART 208. PROFESSIONAL PRACTICES I (3)
An entry level prerequisite or corequisite course to enrolling in upper division bachelor of fine arts courses. This multi-sectioned, disciplined-based course must be taken the second semester of
the sophomore year or after completing three courses in the concentration area. Students write a letter of introduction, résumé, and artist statement and assemble a professional portfolio of work. Students acquire interview skills and information essential for professional level competitions or work in their field. Students participate in a portfolio review conducted by a team of faculty at the conclusion of the course. Students must earn a grade of C or better during their portfolio presentation to continue in the B.F.A. program. Prerequisites: ART 103 or 104, 140, 170, 203, and three courses in the concentration area.

**ART 215. DRAWING II (3)**
A continuation of the basic drawing and perceptual skills developed in Drawing I. Prerequisite: ART 115.

**ART 230. PAINTING I (3)**
An introduction to the materials, philosophies, techniques, and processes of the painter. Students will work with acrylic paint and mediums and will approach the creative experience of painting through the study of subject matter, for, and content. Color theory, sketching, and different painting techniques and styles will be emphasized. Prerequisite/corequisite: ART 140 or permission.

**ART 250. SCULPTURE I (3)**
An introduction to the materials, philosophies, techniques, and processes of the sculptor. Sculpture is approached as a creative experience involving traditional methods and concepts as well as those of the contemporary sculptor. Prerequisite: ART 140.

**ART 260. PRINTMAKING I (3)**
Students are introduced to relief processes, intaglio processes, and monoprint or monotype processes of printmaking. Half of the semester is devoted to developing skills and vocabulary of relief processes; the other half of the course is devoted to monoprint techniques and intaglio. With each process the student explores the use of value, line texture, and color to create visual images utilizing innovative as well as traditional printmaking techniques in relief and intaglio.

**ART 304. SPECIAL TOPICS IN ART HISTORY (3-9)**
This course will vary in content with each offering as areas of particular interest or timeliness not covered by the regular curriculum are explored. Offerings may focus on a specific art movement, time period, geographical location, an individual artist, or a particular topic. Each course offering under this title bears a subtitle which indicates the specific subject to be covered. This course may be repeated for credit when course content is changed. Prerequisite: ART 203, ART 303.

**ART 305. ILLUSTRATION I (3)**
An introduction to the craft and problem-solving skills associated with producing hand-drawn, painted, or digitally manipulated visual images for a client. The class will explore a variety of techniques associated with illustration. Prerequisite/corequisite: ART 115, ART 230, ART 170.

**ART 330. PAINTING II (3)**
A continuation of the skills and techniques developed in ART 230. Compositional experimentation, creative and expressive modes, and evaluation skills are emphasized. Prerequisites: ART 230, ART 208.

**ART 350. SCULPTURE II (3)**
A continuation of the skills and techniques developed in ART 250 with additional emphasis placed on selected concepts and processes. Prerequisites: ART 250, ART 208.
ART 361. PRINTMAKING II (3)
Students are introduced to lithography processes, intaglio processes, and monoprint or monotype processes of printmaking. Half of the semester is devoted to developing skills and vocabulary of the lithographic process; the other half of the course is devoted to monoprint techniques and intaglio. With each process the student explores the use of value, line texture, and color to create visual images utilizing innovative as well as traditional printmaking techniques in lithography and intaglio.

ART 375. RESEARCH STUDIO (3-6)
This course allows upper level students to pursue a studio experience during summer school. Approval must be granted by the coordinator of the program in which the student desires to work, and a written plan for summer study must be submitted to both the program coordinator and the faculty member supervising and directing the Research Studio course for the summer. It is expected that the plan involve advanced and challenging ideas reflecting a maturity necessary for some independent pursuit. Prerequisite: 18 hours of art including a minimum of 12 hours in the program area in which the student desires to work.

ART 390. PROFESSIONAL PRACTICES II (3)
This junior level course continues the preparation begun in Professional Practices I. This course is designed to provide the emerging artist with the practical knowledge necessary to understand the workings of the art world and to provide the information necessary to market, sell, and exhibit work. Students will develop promotional packets and materials and learn the importance of documenting work and maintaining accurate listings of employment and clients. Grant writing, gallery representation, contracts, pricing, commissions, arts advocacy, and employment opportunities will also be covered. The business of art, graphic design, and photography will be explored in detail in this multi-sectioned course associated with individual concentration areas. Prerequisite: ART 208.

ART 391. INTERNSHIP (3-9)
Individually designed experimental learning. May include field studio or internship placements such as graphic design, museum or gallery work, or work in a professional artist's studio. Lectures and discussions are utilized to prepare students for intern placement through résumés, interviews, job applications, and professional practices in the work place. Prerequisite: ART 390; must have completed 30 hours of art in area of concentration.

ART 392. COOPERATIVE EDUCATION IN ART (1-6)
Intended to provide a bridge between the classroom and the professional world, cooperative education provides supervised work experience directly related to a student's major subject area and career goals. Placement will be in a gallery, museum, or studio. May be repeated for credit up to a maximum of 9 hours (not in the same term). Usually offered every term. Prerequisite: Junior level standing with minimum overall GPA of 2.3, 2.7 in the concentration area, approval of academic department, and placement by the Career Development Center. It is recommended that the student complete an internship or practicum prior to entering a cooperative education placement. Prerequisite: ART 390.

ART 400. SPECIAL TOPICS IN STUDIO ART (3)
This course will vary in content with each offering as areas of particular interest or timeliness not covered by the regular curriculum are explored. Offerings may focus on a specific art process or style or on a specific area of content. Each course offering under this title bears a subtitle which indicates the specific subject covered. This course may be repeated for credit when course content is changed. Prerequisite: Permission of instructor and 18 hours of studio art.

ART 403. ART CRITICISM (3)
An investigation of the aesthetic dimension of the visual arts is made in relation to the studio experience and the history of art, preparing the student to analyze, evaluate, and judge a work of art. Prerequisites: 22 hours of art, ART 203, ART 204.
ART 405. ILLUSTRATION II (3)
A continuation of craft and problem-solving skills associated with producing visual images for a client. Students have an opportunity to expand upon the variety of techniques and types of illustration while developing a personal style and approach to illustration. Prerequisite/corequisite: ART 305.

ART 410. ADVANCED DRAWING (3-6)
This class, designed for upper level drawing students, will focus on the developmental continuation of skills and perceptions of drawing. The course will focus on the figure and other three-dimensional subject matter as well as explore media and the perceptions of drawing as a fine art medium. Prerequisites: ART 115, ART 215.

ART 434. ADVANCED PAINTING STUDIO (3-9)
An upper-division course designed as a culminating experience within the concentration area of painting. An opportunity is provided for the student to pursue a specific area of painting. Prerequisite: ART 330.

ART 450. ADVANCED SCULPTURE STUDIO (3-9)
An upper-division course designed as a culminating experience within the concentration area of painting. An opportunity is provided for the student to pursue a specific area of painting. Prerequisite: ART 350.

ART 464. ADVANCED PRINTMAKING STUDIO (3-9)
An upper-division course designed as a culminating experience within the concentration area of printmaking. The student is expected to experimentally pursue an aspect of the printmaking area on a significant level. Prerequisite: ART 361.

ART 475. INTERDISCIPLINARY STUDIO (3-9)
This studio course explores the nature and process of contemporary art. Students are encouraged to investigate mixed media. Integration of processes is promoted. Students interested in photography, graphic design, painting, printmaking, sculpture, installation, performance, and conceptual art work together solving creative problems with a team of faculty whose expertise is broad and varied. Faculty mentors encourage boundaries to be broken, limits to be pushed, and students to explore both conceptually and technically the range of artistic opportunity. Prerequisite: 18 credit hours in art, 6 hours in an area of concentration in art, ART 230 and 330 or ART 250 and 350 or ART 260 and 361 or PHOT 281 and 282 or GRDS 171 and 371.

ART 480. INDIVIDUALIZED STUDY (3-9)
This course allows selected senior level students to pursue a self-directed and self-motivated experience in any studio area in which the student has completed a minimum of 30 credit hours. Approval must be granted by the program coordinator in which the student desires to work and a written plan for the individualized study must be approved. It is expected that the plan involves advanced and challenging ideas reflecting a maturity necessary for individualized study. Prerequisites: Completion of 30 hours within the studio area and approval by the program coordinator.

ART 490. CAPSTONE (3)
Students planning to graduate in May, August, or December must enroll in Capstone during the spring semester prior to graduation. Professionals in the discipline conduct an exit review to determine preparedness of the student to compete for placement in graduate school and the professional world after graduation. Photography and studio art majors will be expected to mount a senior exhibit in addition to assembling a professional portfolio. Graphic design students will be expected to make a professional presentation, create a Web site, and assemble a professional portfolio. Prerequisite: To be taken in the spring semester of the senior year prior to graduation.
ART EDUCATION
ARED 180. INCLUSIVE APPROACHES TO ART EDUCATION (3)
ARED 180 provides students with an overview of practices used in teaching visual art to exceptional children. The course will examine current legislative policies and ethical issues associated with teaching special needs and special abilities students through art. In addition, this course will model teaching and classroom management strategies useful for teaching art through multicultural perspectives and to special populations.

ARED 325. AESTHETIC INQUIRY (3)
The purpose of this course is to acquaint education majors with the broad range of themes and issues considered in the visual arts and in effective teaching of art in K-12 grades. Students will study the philosophy of art and the history of aesthetic arguments concerning the nature, definition, purpose, and value of art. Course content will present a variety of pedagogical strategies including, among others, methods to teach studio art, art history, art criticism, aesthetics, psychology, the interdisciplinary approach, the multicultural approach, and technology. Moreover, students will explore historic and recent trends in curriculum development and regional and national instructional standards. Students will employ critical reading, writing and discussion skills. Prerequisite: ART 103.

ARED 345. VISUAL THINKING SKILLS (3)
A comprehensive study of the psychology of art intended for art education majors. This course surveys methods of critical, analytical, and evaluative thinking associated with creative problem solving. Visual communication principles, social issues, group dynamics, and research methods are stressed. Prerequisites: ART 104, ART 140, and ARED 180.

ARED 365. ART EDUCATION INQUIRY (3)
This course will use the model of a teacher-researcher to investigate contemporary issues in art education. Students will create and conduct an original project in the form of a library-based research paper, a case study observation, and/or an experimental investigation. Following the completion of the research, students will provide written documentation and will present their research outcomes. Prerequisite: ARED 245.

ATHLETIC COACHING
ATHC 193. VARSITY ATHLETICS (1)
For intercollegiate athletic team members. Athletes receive instruction in skills, techniques, and rules in an intercollegiate sport and must participate in practice sessions and athletic events. Can be taken one time only during athletic participation for one credit. Permission of the coach/instructor. (Does not count for GSPE credit.)

ATHC 324. CARE AND PREVENTION OF ATHLETIC INJURIES (3)
A theory and laboratory course that studies prevention, care, and taping of athletic injuries with emphasis on safety in sports activities and prevention of injuries through conditioning programs.

ATHC 350. COACHING OF FOOTBALL (3)
For individuals who anticipate active involvement in coaching football. Emphasis is on scheme, strategy, fundamentals, position techniques, and team theory as well as an in-depth study of offense, defense, kicking game, scouting, and evaluation of personnel.

ATHC 351. COACHING OF BASKETBALL (3)
For individuals who anticipate active involvement in coaching basketball. Emphasis is on coaching philosophy, problems, individual and team offense and defense, drills, professional attitude, and advancement.

ATHC 352. COACHING OF BASEBALL (3)
For individuals who anticipate active involvement in coaching baseball. Emphasis is on developing
a thorough knowledge of the sport and an understanding of the rules, skills, offense and defensive strategies, and coaching techniques of the game.

ATHC 353. COACHING OF TENNIS (3)
For individuals who anticipate active involvement in coaching tennis. A study of the physical, mental, and emotional areas of human development critical to growth as a tennis player. Emphasis is on teaching methods, philosophy, skills, strokes, tactics, drills, etiquette, and equipment.

ATHC 360. PRINCIPLES OF OFFICIATING FOOTBALL (2)
Covers the essentials of successful football officiating including communication, conflict-resolution, and decision making. Sport specific principles teach proper mechanics, positioning, rule application and interpretation, legal responsibilities, professional dress and equipment, team-officiating concepts, and sport signals. Those who successfully complete this course will receive the certification of the American Sports Education Program (ASEP) and the National Federation of High Schools (NFHS).

ATHC 361. PRINCIPLES OF OFFICIATING BASKETBALL (2)
Covers the essentials of successful basketball officiating including communication, conflict-resolution, and decision making. Sport specific principles teach proper mechanics, positioning, rule application and interpretation, legal responsibilities, professional dress and equipment, team-officiating concepts, and sport signals. Those who successfully complete this course will receive the certification of the American Sports Education Program (ASEP) and the National Federation of High Schools (NFHS).

ATHC 362. PRINCIPLES OF OFFICIATING SOFTBALL/BASEBALL (2)
Covers the essentials of successful softball/baseball officiating including communication, conflict-resolution, and decision making. Sport specific principles teach proper mechanics, positioning, rule application and interpretation, legal responsibilities, professional dress and equipment, team-officiating concepts, and sport signals. Those who successfully complete this course will receive the certification of the American Sports Education Program (ASEP) and the National Federation of High Schools (NFHS).

ATHC 364. PRINCIPLES OF OFFICIATING SOCCER (2)
Covers the essentials of successful soccer officiating including communication, conflict-resolution, and decision making. Sport specific principles teach proper mechanics, positioning, rule application and interpretation, legal responsibilities, professional dress and equipment, team-officiating concepts, and sport signals. Those who successfully complete this course will receive the certification of the American Sports Education Program (ASEP) and the National Federation of High Schools (NFHS).

ATHC 403. PRINCIPLES OF COACHING (3)
This course examines functions, roles, and responsibilities associated with coaching from elementary through University level. Career advancement, coaching philosophy, coaching assistants, and the interview process are also studied.

ATHC 405. PSYCHOLOGY OF COACHING (3)
For students who anticipate active involvement in coaching. Emphasis is on psychological demands in athletics with special attention to personality, activation motivation, aggression, anxiety, audience, and social and group interaction.

ATHC 450. COACHING INTERNSHIP (3)
Provides practical coaching experience under a qualified head coach for an entire season. Students must serve as an assistant coach in a public junior or senior high school or collegiate athletic program (minimum of 150 hours). Specific procedures are outlined in Coaching Internship Manual. May be repeated.
BIOLOGY

BIOL 100. LIFE SCIENCE FOR ELEMENTARY TEACHERS (4)
Open only to students pursuing curricula in elementary and early education. Develops skills of observation and manipulation in laboratory and out-of-door settings. Stresses application of scientific method as applied to living things. Basic concepts of biology introduced as a vehicle for these objectives. Consideration of methods and subject matter appropriate to K-8 grade levels.

BIOL 101. GENERAL BIOLOGICAL SCIENCE (4)
Not for biology majors. With BIOL 102, satisfies general education science requirement. Integrated approach to the biology of plants, animals, and microorganisms. Half of the course is centered around environmental principles, and the other half is centered around organismic homeostatic (regulatory) principles. Laboratory topics and sequence integrated with lecture.

BIOL 102. GENERAL BIOLOGICAL SCIENCE (4)
Not for biology majors. With BIOL 101, satisfies general education science requirement. Integrated approach to the biology of plants, animals, and microorganisms. Half of the course is centered around reproductive principles, and the other half is centered around cell physiology. Laboratory topics and sequence integrated with lecture.

BIOL 208. PLANTS AS ORGANISMS (4)
This course is part of the sequence of courses required for students pursuing some field in biology. It is a required course for all students seeking a teaching field in biology, chemistry, or general science. The emphasis is on physiological and field approaches involving the use of plants to illustrate general principles of biology. Attention is given to the morphological framework within which the physiological activities occur. The activities in plants are related to the patterns in which they impinge upon the economy of nature.

BIOL 209. ANIMALS AS ORGANISMS (4)
The study of general principles of biology that are either distinctive for the animal kingdom or readily illustrated with zoological materials. Emphasizes the process of living, whole organisms integrated with those principles of histology, morphology, and phylogeny that are required for a balanced understanding of physiology, development, and behavior. This is a required course for all students seeking a teaching field in biology, chemistry, or general science.

BIOL 225. HUMAN ANATOMY AND PHYSIOLOGY (3)
Semester one of a two-course sequence that provides a detailed review of the human organism. In a lecture format, this course provides an overview of the human body and the chemical basis for activities occurring within the body and a detailed review of the cell and tissues and the integumentary, skeletal, muscular, and nervous systems as well as an overview of the human senses. Students taking this course should possess a high school level understanding of biology and chemistry.

BIOL 226. HUMAN ANATOMY AND PHYSIOLOGY (3)
Semester two of a two-course sequence that provides a detailed review of the human organism. In a lecture format, this course provides a detailed review of cardiovascular, lymphatic, endocrine, respiratory, digestive, urinary, and reproductive systems. Students taking this course should possess a high school level understanding of biology and chemistry.

BIOL 227. HUMAN ANATOMY AND PHYSIOLOGY LAB (1)
A laboratory course in human anatomy and physiology to be taken concurrently with or following BIOL 225.

BIOL 228. HUMAN ANATOMY AND PHYSIOLOGY LAB (1)
A laboratory course in human anatomy and physiology to be taken concurrently with or following BIOL 226.
BIOL 302. MICROBIOLOGY (4)
Part of the required curriculum in nursing and medical technology and a recommended elective for any biology student. The course will emphasize the impact of microbial activity on human health and disease, including the conditions contributing to microbial increase, spread and virulence, conditions contributing to the body responses leading to resistance and immunity, and methods of interceding in the usual etiology for the purpose of bringing about informed control. The nonmedical aspects of microbiology also will be considered, in regard to the basic activities in interacting biological systems, as symbionts, as critical energy conversion agencies, as agents for driving biogeochemical cycles, and as experimental subjects for the discovery of basic biological principles such as intermediary metabolism and the genetic code. Prerequisites: One semester of a University level biology course and one semester of a University level chemistry course.

BIOL 305. CELL BIOLOGY (4)
A sophomore-level lecture and laboratory course in which eukaryotic cells are considered as the basic structural and functional units of biological organization. Selected cell structures and activities are discussed from the cytological, ultrastructural, and metabolic points of view. Laboratory work is sequenced with lecture. Topics emphasized are bioenergetics, macromolecular and transport synthesis, regulation of cellular activities, and internal organization of cells. Prerequisites: BIOL 208; BIOL 209, or BIOL 225 and BIOL 226; CHEM 207, 207L, 209, 209L, or their equivalents.

BIOL 313. INVERTEBRATE NATURAL HISTORY (4)
A field-oriented study emphasizing living organisms in their natural habitats, their life cycles, and interaction with humans, other organisms, and the physical environment. Collection, culture, and identification of the major orders of the parasitic and free living freshwater and temperate terrestrial invertebrate phyla. Prerequisites: BIOL 208, BIOL 209.

BIOL 324. PLANT TAXONOMY I FALL FLORA (2)
First eight weeks of first semester. Field work in the identification of grasses, fall flowers, and woody plants. Designed to illustrate the principles of nomenclature and descriptive morphology. Prerequisite: BIOL 208.

BIOL 325. PLANT TAXONOMY II SPRING FLORA (1)
Second eight weeks of second semester. Field work in the identification of ferns and spring flowering plants. Designed to illustrate the principles and applications of scientific nomenclature and descriptive morphology. Prerequisite: BIOL 208.

BIOL 332. COMPARATIVE ANATOMY (4)
A comparative study of organs and systems of representative forms of chordates keeping in mind the evolutionary development and relationships of these forms. Concepts of embryology are applied to an understanding of the adult organism. Laboratory work is concerned with a detailed dissection and comparative study of the amphioxus, necturus, dogfish, and cat. Prerequisite: BIOL 209 or equivalent.

BIOL 344. GENETICS AND EVOLUTION (4)
Mechanisms of inheritance, the nature of genes, and genetic systems are examined in relation to the capacities of living systems for continuity, self-regulation, and adaptive change. Molecular, cellular, and organismal reproduction are considered as processes of information storage, transfer, and generation. The evolution of the gene concept is traced from its origin as mathematical abstraction, through progressive definition as a unit of nuclear structure and function, to final characterization as nucleic acid. Prerequisites: BIOL 208, BIOL 209, BIOL 305.

BIOL 350. SPECIAL TOPICS FOR NON-MAJORS (1-3)
Elective in biology intended to stimulate an interest in nature or in areas of biology having public interest or political significance. Bird life, local flora, economic botany, psychopharmacology, and biological energy resources are representative topics. Persons interested in a specific topic should contact the department chair. Permission of instructor.
BIOL 394. PRINCIPLES OF BIOLOGICAL RESEARCH (3)
A junior level course taken after the student has completed introductory courses in biology, chemistry, and mathematics. Statistics is recommended prior to the course. The lectures will address the history/background of science and the special properties of the scientific process and the basic abilities required to conduct scientific inquiry. Emphasis will be given to the universality of the scientific approach to problem solving rather than to specific methodologies. Topics included are literature review, experimental design, data analysis, scientific communication, and research ethics. The course also is intended to prepare the student for the research internship program required of all biology majors. During the course students will be given an application form for the internship program. Completed forms will be reviewed by the faculty and students will be assigned to either an internship (BIOL 425), biological research (BIOL 415), or alternative study (BIOL 415).
Prerequisites: BIOL 208, BIOL 209, BIOL 305, BIOL 344.

BIOL 404. IMMUNOLOGY (4)
A senior-level lecture and laboratory course designed to introduce the student to the study of immunological processes and the methods used to initiate, describe, differentiate, and measure such processes. Attention is given to the biological basis of immunity, the nature of the humoral and cell mediated immune responses, the chemical and biological features of immunoglobulins, \textit{in vivo} and \textit{in vitro} antigen antibody interactions, and immunologic diseases. Prerequisites: BIOL 305, BIOL 344, CHEM 315, CHEM 315L, CHEM 316, CHEM 316L.

BIOL 406. DEVELOPMENTAL BIOLOGY (4)
Concentrates upon mechanisms and principles involved in cellular differentiation and integration that accompany development of organisms from single cells into complex, multicellular structures. Beginning with relatively simple organisms and progressing to more complex examples of higher plant and animal developmental processes, the student is exposed to both descriptive information and experimental investigative techniques. Prerequisites: BIOL 208, BIOL 209, BIOL 305, BIOL 344.

BIOL 412. ANIMAL PHYSIOLOGY (3)
Detailed study of selected topics, e.g. muscle contraction, circulation, excretion, to demonstrate the diverse ways in which different kinds of animals meet their functional requirements. Prerequisites: BIOL 208 and BIOL 209 or equivalent and CHEM 207, CHEM 207L, CHEM 209, and CHEM 209L.

BIOL 413, BIOL 414. SEMINAR IN BIOLOGY (1 each)
Recommended for juniors and seniors pursuing at least a minor program in biology. This course emphasizes library research and oral presentation of subjects of interest and importance in the various fields of biology. Permission of biology staff.

BIOL 415. BIOLOGICAL RESEARCH (3-6)
This course awards academic credit for Department of Biology-approved research supervised on campus in a field, laboratory, or other professional setting which enables a student to gain practical knowledge in pure and applied science. A student wishing to enroll in this course must submit a written proposal (following department and/or agency guidelines that can be obtained from the chair of the Department of Biology) to the chair of the Department of Biology or his/her appointed representative before the 12th week of the semester preceding the proposed research project. All proposals must be approved by a majority of the faculty members of the Department of Biology. Prerequisite: BIOL 394 or permission of the department chair.

BIOL 416. MOLECULAR BIOLOGY (4)
An advanced level course on techniques and theory of modern genetics and biotechnology. The course is designed to expose students to modern biochemical genetics, gene regulation in prokaryotes and eukaryotes, and mechanisms for the rearrangement and exchange of genetic material. Prerequisite: BIOL 208, BIOL 209, BIOL 305, and BIOL 344.
BIOL 418. VIROLOGY (4)
A senior-level lecture and laboratory course in which the nature of viruses and their interactions with prokaryotic and eukaryotic cells and organisms are presented. The emphasis is on animal viruses but bacterial and plant viruses will be covered. The first section of the course treats viral structure, viral replication, and viral effects at the cellular and organismic level. The second section discusses viral virulence, the disease states produced by animal viruses in their hosts, antiviral therapies, mechanisms of viral immunity, and viral epidemiology. Laboratory exercises will be sequenced with lectures and include development of animal cell cultures, demonstration of viral cytopathic effect, determination of viral titer, viral neutralization assays, immunological detection of virus, and analysis of viral structural components. Laboratory exercises will employ bacterial, insect, plant, and animal cells as viral hosts. Prerequisites: BIOL 305, BIOL 344, CHEM 315, CHEM 316, CHEM 315L, and CHEM 316L and permission of instructor.

BIOL 420. GENERAL ECOLOGY (4)
This course emphasizes principles at the population, community, and ecosystem levels of organization. Representative topics include energy flow, biogeochemical cycles, population regulation, types of ecosystems. Consideration given to society’s relationship to its environment. Prerequisites: BIOL 208 and BIOL 209 or equivalent, BIOL 305, BIOL 344, BIOL 394.

BIOL 425. INTERNSHIP IN BIOLOGY (3-6)
This course awards academic credit for Department of Biology-approved research supervised externally in a field, laboratory, or other professional setting which enables a student to gain practical knowledge in pure or applied science. A student wishing to enroll in this course must submit a written proposal (following department and/or agency guidelines that can be obtained from the chair of the Department of Biology) to the chair of the Department of Biology or his/her appointed representative before the 12th week of the semester preceding the internship. All proposals must be approved by a majority of the faculty members of the Department of Biology. Prerequisite: BIOL 394.

BIOL 450. SPECIAL TOPICS IN ADVANCED BIOLOGY (1-4)
Elective for students who have had upper-division biology courses. Intended to diversify or specialize a student’s training beyond the regular curriculum, taking advantage of a local person’s particular interest or skill, or of a faculty member’s interest or skill. The course will be pursued in a less formal but no less intensive fashion than the regular courses. Interested students should present specific proposals to the department chair.

BUSINESS ADMINISTRATION
BADM 150. INTRODUCTION TO BUSINESS (3)
A survey designed to acquaint the student with administration, production, labor, control, distribution, finance, taxation, law, and ethics as applied to business. Includes a brief history of business and the organization of business. For associate degree students and non-majors. Does not carry business administration credit toward the B.S. in business administration or hotel-motel and restaurant management.

BADM 205. CALCULUS WITH APPLICATIONS (4)
See MATH 205

BADM 224. BUSINESS STATISTICS (3)
Methods of collecting, presenting, analyzing, and interpreting business data. Emphasis on the understanding of probability distributions such as the binomial, normal, exponential, and Poisson. Discussion of regression and correlation, hypothesis testing, chi-square analysis, and one way ANOVA. Students may not receive credit for both this course and MATH 314. Prerequisite: MATH 154.
BADM 280. BUSINESS AND SOCIETY (3)
This course reviews ethical and global issues; the influence of political, social, legal, regulatory, environmental, and technical issues; and the impact of demographic diversity on organizations in our local, state, and regional businesses and in international businesses located in our area.

BADM 292. INTERNSHIP IN BUSINESS (1-6)
Practical experience in local, regional, and Washington Gateway organizations such as government offices, museums, arts agencies, social action groups, research laboratories, and private corporations/companies. Interns learn how to translate classroom theory and methods into professional skills and opportunities. Usually offered every term. May be repeated. Prerequisite: Must have sophomore class standing with minimum 2.5 overall and 2.75 major GPA, approval of academic department, and placement by Career Center. May be repeated.

BADM 300. INTRODUCTION TO FINANCIAL MANAGEMENT (3)
An introduction to the methods of corporation finance with an emphasis on applied problem solutions. Particular attention is given to financial decision making and risk analysis. Prerequisites: ACCT 202 and BADM 224.

BADM 301. MONEY MARKETS AND FINANCIAL INSTITUTIONS (3)
An analysis of the U.S. financial system, its major participants, its role in the process of economic activity and development, and its procedures for assessing and pricing risk.

BADM 302. INTERMEDIATE FINANCIAL MANAGEMENT (3)
A continuation of the material in BADM 300. Emphasis on capital budgeting, risk, capital structure and dividend policy, working capital management, mergers and acquisitions, financial distress, and international corporate finance. Case studies and computer exercises are included. Prerequisite: BADM 300.

BADM 308. FINANCIAL PLANNING AND INSURANCE (3)
A beginning course that covers the financial planning process and insurance. The course will examine regulatory and ethical issues, develop the theory of risk tolerance, review time value of money, discuss the principles of risk management, review various types of insurance (including life, health care, disability, long term, property, and liability), and consider the ethical and legal issues in both the planning process and risk management. Prerequisite: BADM 300.

BADM 310. PRINCIPLES OF MANAGEMENT (3)
Concepts and analyses of the behavioral aspects of organizations. Expansion of integrative and human skills needed by managers. Lectures are supplemented by outside projects and simulated applications of management techniques. Prerequisite: ACCT 201 or ECON 206.

BADM 311. SMALL BUSINESS MANAGEMENT (3)
A survey of the various management/marketing principles and subject materials as they specifically relate to small business management. This includes topics such as entrepreneurship and small business in the U.S., small business start-up issues, the marketing of small business, contemporary issues, and the general operational management concerns associated with organizing, staffing, financing/cash flow, purchasing, inventory control, and total quality management.

BADM 312. BUSINESS LAW I (3)
A broad introduction to contemporary law as it relates to the business environment including contract, sales, employment law, antitrust law, torts, consumer protection, and business organization. Prerequisite: Sophomore standing.

BADM 313. BUSINESS LAW II (3)
A detailed study of the law of secured transactions, employment, insurance, negotiable instruments, estates, bankruptcy, and suretyship. The Uniform Commercial Code is discussed in detail. Recommended for students who plan to take the CPA examination. Prerequisite: BADM 312.
BADM 317. REAL ESTATE (3)
Basic study of the nature and importance of real estate in the economy; principles of land utilization and urban development; property rights and real estate; valuation of real property; real estate markets; and government regulation and programs.

BADM 318. REAL ESTATE LAW (3)
Sources of real estate law, both cases and statutes, including estates in land, conveyances, leases, mortgages, easements, zoning, brokers, contracts, taxes, foreclosures, and open occupancy.

BADM 320. EMPLOYMENT LAW (3)
A detailed study of employment law from the inception of the Sherman Act of 1890 through more definitive legislation such as the Wagner Act, Civil Rights Act, EEO Act, and Americans With Disabilities Act. Case studies will be used reflecting current employment case law practices and trends. Public policy as the heart of employment law is discussed in detail. Prerequisites: BADM 312 and BADM 310.

BADM 323. HUMAN RESOURCE MANAGEMENT (3)
A study of manpower planning, recruitment, selection, and development of employees. Examines compensation, employee appraisal, job analysis, collective bargaining, arbitration, and labor relations. Case studies.

BADM 324. LABOR PROBLEMS/COLLECTIVE BARGAINING (3)
An examination of the history of labor movements and social problems arising from relations between labor and management. A study of the collective bargaining process and a survey of management and union rights in collective bargaining are discussed. Case studies and readings in management and union philosophy also are included. Prerequisite: Junior standing in business.

BADM 338. BUSINESS INFORMATION SYSTEMS (3)
An analysis of where, when, and in what form information is captured in order to make business management decisions. A detailed study of the planning, operating, and reporting phases in obtaining information within a business enterprise. Does not apply as an elective in the minor in computer programming and information systems. Prerequisite: ACCT 202.

BADM 340. MARKETING (3)
An introduction to the marketing process. Including the selection of target markets, the development of product, pricing, promotion, and channel of distribution programs to effectively serve these markets. Specialized topics such as international marketing, consumerism, and ethical issues in marketing are also examined. Prerequisites: ACCT 201 or ECON 206.

BADM 345. BUSINESS COMMUNICATIONS (3)
The course examines the communications for business and develops an ability to utilize various communications techniques including memos and letter writing, report development and presentation, résumé and job search, listening, interviewing, and interpersonal and oral communications. Open to all concentrations. Prerequisite: Sophomore standing.

BADM 350. RETAILING (3)
A study of retail store operations and management including site selection, merchandise planning, developing store image, pricing, promotion, personnel, and control. Prerequisite: BADM 340.

BADM 359. INTERNATIONAL BUSINESS (3)
A study of global business from the perspective of marketing including cultural considerations, implementation of strategies, and management concerns including developing business alliances and hiring and training of foreign staff.
BADM 365. PROMOTIONAL STRATEGY (3)
Promotion as a tool for making decisions. Advertising, personal selling, publicity, and sales promotion for profit and nonprofit organizations. Both theory and application are stressed. Projects within the local communities will be assigned to students when available. Prerequisite: BADM 340.

BADM 375. STRATEGIC MARKETING (3)
Both a conceptual and a pragmatic approach to the strategic marketing planning process. The contributions of marketing concepts, philosophy, and methodology to strategic management and linkage between marketing and corporate strategy. Prerequisites: BADM 224 and BADM 340.

BADM 385. BUSINESS EXTERNSHIP (1-6)
Application of theoretical concepts to practical experience in business. Minimum of 50 hours of work experience for each credit is required. May be repeated for credit. Usually offered every session. Prerequisites: Approval of academic advisor and chair. May be repeated for credit.

BADM 392. COOPERATIVE EDUCATION IN BUSINESS (1-9)
May be repeated for credit, but not in the same term; topic must be different. Usually offered every term. Prerequisite: Must have junior level standing with minimum 2.5 overall and 2.75 major GPA, approval of academic department, and placement by the Career Center. May be repeated for credit.

BADM 395. CONSUMER BEHAVIOR (3)
Macro and micro consumer behavior. The influence of psychological, sociological, and cultural factors on behavior of consumers and industrial buyers. Shows how this knowledge is indispensable to the marketing manager when making decisions about product, price, and channels of distribution. Prerequisite: BADM 340.

BADM 401. FINANCIAL ANALYSIS (3)
An in-depth study of the theories and techniques of corporate financial management. An analysis of the procedures for extracting information from the corporate information system and modifying it for use in financial analysis. Prerequisite: BADM 340.

BADM 405. MARKETING RESEARCH (3)
Examines research as a decision tool for marketing management and the role of research in marketing, risk reduction, decision-making, problem definition, research design, sampling, data collection and analysis, and interpretation of results. Both theory and application are stressed. Projects within the local communities will be assigned to students when available. Prerequisites: BADM 340 and BADM 224.

BADM 407. BUSINESS STRATEGY AND POLICY (3)
Capstone course study in business management designed to integrate the basic disciplines of business through case analysis and other methods; oral and written reports, ETS Business Achievement Test administered. Prerequisites: BADM 300 or permission.

BADM 411. ENTREPRENEURSHIP AND NEW VENTURE FORMATION (3)
A comprehensive coverage of the various tools, documents, and subject materials utilized to start and maintain a small business. This includes the entrepreneurial perspective (challenges, characteristics, self-assessment), starting a new venture/developing the business idea, developing the business/marketing/financial organizational plans, financing the new venture, managing the new venture, and coverage of special issues such as legal, franchising, and international entrepreneurship. Prerequisites: ACCT 202, BADM 310, BADM 311, BADM 340.

BADM 413. QUANTITATIVE METHODS (3)
Continuation of BADM 224. This course examines simple regression and correlation, two sample inference, analysis of variance, multiple regression and correlation, chi-square tests, time series
forecasting, decision making under certainty and uncertainty, and subjective probability. Prerequisite: 3 hours of statistics. Same as MATH 413.

**BADM 415. OPERATIONS AND PRODUCTION MANAGEMENT (3)**
Analysis of operational problems and opportunities in service and manufacturing sectors, site location, facilities design, forecasting, work methods and measurement, inventory management, and operations decision making. Prerequisite: BADM 224 and BADM 310.

**BADM 425. INVESTMENTS (3)**
Examines basic theories and their application to major financial markets: risk and return; market efficiency; portfolio theory; and investment selection and timing decisions. Prerequisite or corequisite: BADM 300.

**CHEMISTRY**

**CHEM 100. CHEMICAL SCIENCE (3)**
This course is designed primarily for future elementary school teachers. It introduces the student to the basic concepts of chemistry including atoms, radioactivity, bonding, chemical equations, solutions, acids and bases, and some aspects of organic and biochemistry. The latter part of the course is devoted to the study of chemical science as it applies to the elementary school: mini lectures, demonstrations, experiments, games, textbook and journal reviews are presented by the students. Circumstances permitting, the course ends with practice teaching at an elementary school. Computers are used as aids to instruction and as laboratory tools. The course CHEM 100L must be taken concurrently with this course.

**CHEM 100L. CHEMICAL SCIENCE LABORATORY (1)**
The laboratory emphasizes learning by discovery and by student-designed (or modified) experiments. Current or prior enrollment in CHEM 100 is required.

**CHEM 101. CHEMISTRY IN SOCIETY I (3)**
A study of the fundamental principles of chemistry with particular emphasis on the role of chemistry in our culture and everyday affairs. Topics to be covered include the scientific method, atomic theory, redox chemistry, organic chemistry, and nuclear chemistry. The sequence CHEM 101 and 102 can be used to fulfill the general studies requirement of a year of laboratory science. This course must be taken before CHEM 102 Chemistry in Society II.

**CHEM 102. CHEMISTRY IN SOCIETY II (3)**
The further development of the topics covered in CHEM 101 with expansion of materials to include energy, natural resources, consumer products, ecological chemistry, toxicology, and drugs. Prerequisite: CHEM 101.

**CHEM 101L, 102L. CHEMISTRY IN SOCIETY LABORATORY (1 EACH)**
The laboratory emphasizes the learning by discovery and by student-designed (or modified) experiments. Current or prior enrollment in CHEM 101, CHEM 102 is required. Prerequisite for CHEM 102L is CHEM 101L.

**CHEM 120, CHEM 122. COLLEGE CHEMISTRY (3 EACH)**
An in-depth treatment of the fundamental principles of chemistry and their application to physiological, pharmaceutical, and biochemical processes. The courses CHEM 101L and CHEM 122L must be taken simultaneously with the appropriate semester of CHEM 120 and CHEM 122. Together with CHEM 120L and CHEM 122L, this course can be used to fulfill the general studies requirement of a year of laboratory science.
CHEM 120L, CHEM 122L. COLLEGE CHEMISTRY LABORATORY (1 EACH)
This course introduces the student to the isolation of natural products, the synthesis of drugs, biochemical reactions, and the use of modern instrumentation for the separation and the qualitative and quantitative analysis of chemicals. College Chemistry Laboratory must be taken simultaneously with the appropriate semester of College Chemistry (CHEM 120 and CHEM 122).

CHEM 207, CHEM 209. GENERAL CHEMISTRY (3 EACH)
A first-year chemistry course for students whose major area of study is biology, chemistry, mathematics, medical technology, pre-medicine, or pre-pharmacy. Studied are such fundamental concepts of chemistry as the structure of atoms and compounds; the nature of solids, liquids, and gases; the reactions of inorganic and organic compounds; the study of acids, bases, buffers, and salts; and kinetics, equilibrium, and electrochemistry. CHEM 207 is offered in the fall; CHEM 209 in the spring. CHEM 207L and CHEM 209L are to be taken with CHEM 207 and CHEM 209 respectively. Prerequisite: Background in chemistry and algebra.

CHEM 207L. GENERAL CHEMISTRY LABORATORY I (1)
A three-hour per week laboratory course in general chemistry. Topics are selected from qualitative inorganic analysis, spectroscopic analysis, gas laws, calorimetry, and chromatography. Should be taken concurrently with CHEM 207.

CHEM 209L. GENERAL CHEMISTRY LABORATORY II (1)
A three-hour per week laboratory course in general chemistry. Topics are selected from volumetric analysis, spectroscopic analysis, electrochemistry, synthesis, gas laws, and chromatography. Should be taken concurrently with CHEM 209.

CHEM 301. INORGANIC CHEMISTRY (3)
The theoretical principles of chemical bonding and molecular structure are correlated with the chemical and physical properties of inorganic compounds. Includes covalent and ionic bonding, periodic trends, systematic study of the representative, transition, inner-transition and inert gas elements, structure determination, and reaction mechanisms. Prerequisites: CHEM 207, CHEM 209.

CHEM 308. RADIOCHEMISTRY (3)
A study of the principles underlying the nature of radioactivity and of the various chemical, biological, and industrial applications of radioisotopes. Particular emphasis is placed on stellar nucleosynthesis, fission, fusion, reactor design, accelerators, and theories of the nucleus. Prerequisites: CHEM 207, CHEM 209.

CHEM 311. CHEMICAL PHARMACOLOGY (3)
This course is an introduction to the structure, mechanisms of action, and clinical application of drugs currently in use. The emphasis is on general pharmacological principles and on a survey of a wide spectrum of agents; chemical aspects of pharmacology are stressed where they contribute significantly to the understanding of drug action. Prerequisites: One semester of anatomy/physiology and one semester of chemistry; or, permission of the instructor.

CHEM 315, CHEM 316. ORGANIC CHEMISTRY (3 EACH)
This course is designed for students with an interest in chemistry, the life sciences, or in health-related fields. It surveys the classes of organic compounds from hydrocarbons to synthetic and natural macromolecules. Attention is focused on the applications of organic chemistry to biological, medical, and energy-related problems. Prerequisites: CHEM 207, CHEM 209. The courses CHEM 315L and CHEM 316L must be taken concurrently with CHEM 315 and CHEM 316, respectively.

CHEM 315L. ORGANIC CHEMISTRY I LABORATORY (1)
This laboratory features organic synthesis, mechanistic studies, and modern instrumental techniques for the separation (using TLC, GC, or HPLC) and characterization (using IR, NMR, MS, or polarimetry) of organic compounds. Current or prior enrollment in CHEM 315 is required.
CHEM 316L. ORGANIC CHEMISTRY II LABORATORY (1)
This course is a continuation of CHEM 315 and uses the same techniques. Current or prior enrollment in CHEM 316 is required.

CHEM 321. ANALYTICAL CHEMISTRY (3)
A one-semester course covering the theory of classical volumetric, gravimetric, and electrochemical techniques and the calculations associated with these techniques. Also covered are the statistical methods needed for the critical evaluation of data. Prerequisites: CHEM 207, CHEM 209. CHEM 321L should be taken concurrently.

CHEM 321L. ANALYTICAL CHEMISTRY LABORATORY (1)
A one-semester laboratory course covering the lab procedures for classical volumetric, gravimetric, and electrochemical analyses. Prerequisites: CHEM 207, CHEM 209, CHEM 207L, CHEM 209L. CHEM 321 should be taken concurrently.

CHEM 322. INSTRUMENTAL ANALYSIS (3)
A one-semester course covering the theory and practice of modern instrumental methods for chemical analysis. Methods covered include atomic and molecular spectroscopy, chromatography, mass spectroscopy, surface analysis, and electrochemistry. Instrument design, sampling techniques, and analytical strengths and weaknesses of the various methods are covered. Prerequisites: CHEM 321 and CHEM 321L. CHEM 322L should be taken concurrently.

CHEM 322L. INSTRUMENTAL ANALYSIS LABORATORY (1)
A one-semester laboratory course that provides experience with modern instrumental methods for chemical analysis. Techniques covered include atomic and molecular spectroscopy, chromatography, mass spectroscopy, and electrochemistry. CHEM 322 should be taken concurrently.

CHEM 325. COMPUTERS IN SCIENCE (3)
A one-semester course that serves as an introduction to the use of computers for data collection, data analysis, and data presentation. Topics covered include scientific calculations and plotting with spreadsheets, elementary programming, scientific report writing, and computer interfacing to scientific instrumentation.

CHEM 327. SOLUTION CHEMISTRY (3)
A one-semester course to be taken by the student in the sophomore or junior year. A study of the physical and chemical properties of the liquid state is pursued, with particular emphasis placed on aqueous solution. The preparation of solutions of various concentrations is reviewed. Thermodynamics is introduced. Other major areas are kinetics, equilibria between phases and electrochemistry. Prerequisites: CHEM 207, CHEM 209, MATH 105.

CHEM 327L. SOLUTION CHEMISTRY LABORATORY (1)
A three-hour per week laboratory course to be taken with Solution Chemistry CHEM 327. Aqueous and nonaqueous solutions will be prepared and their physical and chemical properties will be investigated. Corequisite or prerequisite: CHEM 327.

CHEM 329. BIOCHEMISTRY I (3)
Biochemical structure and function with initial emphasis placed on the properties of carbohydrates, lipids, and proteins and the relationship between structure and function. The special role of these biomolecules in the structure and function of biological membranes is then presented. This is followed by an introduction to enzymes and the mechanisms of enzyme action. Attention is then given to the nucleic acids and includes the genetic role, structure, and replication of DNA and the role of RNA in protein synthesis. Prerequisites: CHEM 315 and BIOL 305.

CHEM 329L. BIOCHEMISTRY I LABORATORY (1)
A three-hour per week laboratory course to be taken with CHEM 329 Biochemistry I. The course will comprise an overview and application of techniques associated with biochemical research, data
gathering, and analysis. The students will be introduced to various computer-based methodologies of data analysis molecular modelling and presentation. In addition, the course will involve development of experimental design, reproducible lab techniques, and record keeping. Corequisite or prerequisite: CHEM 329.

CHEM 330. BIOCHEMISTRY II (3)
Basic concepts of metabolism with initial emphasis placed on the broad aspects of metabolism and includes a discussion of the energy requirements for reactions in living systems. The degradation of carbohydrates and the biochemical role of glycolysis, citric acid cycle, oxidative phosphorylation, and related pathways are then presented. This is followed by an examination of fatty acid metabolism, nucleotide biochemistry, and selected topics in biosynthesis. Attention is then given to mechanisms of hormone action, transport across biological membranes, and related membrane activity. Prerequisites: CHEM 329.

CHEM 330L. BIOCHEMISTRY II LABORATORY (1)
A second three-hours per week laboratory to be taken with CHEM 330 Biochemistry II. The course involves the application of techniques developed in CHEM 329L to problems associated with characterization of carbohydrates, proteins, and nucleic acids. Included in the experiments performed is the development of purification techniques, enzyme kinetics, and spectroscopic analysis. Prerequisites: CHEM 329 and CHEM 329L.

CHEM 331, CHEM 332. SEMINAR (1 EACH)
This course may be taken more than once for credit. The selection, organization, and presentation of topics within one’s area of interest in chemistry. Topics are selected from among the current literature, review articles, and reports in scientific journals. Prerequisites: CHEM 207, CHEM 209.

CHEM 333. ENVIRONMENTAL CHEMISTRY (3)
The chemistry of environmental processes and problems. Topics include stratospheric chemistry, ground-level air chemistry and air pollution, the greenhouse effect and global warming, energy use and carbon dioxide emission, toxic organic and inorganic compounds, the chemistry of natural waters and water pollution, and waste management. Instrumentation for measuring pollutants is discussed. Prerequisite: One year of University-level chemistry.

CHEM 333L. ENVIRONMENTAL CHEMISTRY LAB (1)
The environmental chemistry laboratory will apply volumetric and instrumental techniques to the analysis of chemicals of environmental significance. Gas and liquid chromatography, mass spectroscopy, and atomic absorption, among other techniques, will be employed.

CHEM 392. COOPERATIVE EDUCATION IN CHEMISTRY (1-9)
Cooperative education is a form of education which integrates classroom study with paid, planned, and supervised work experiences in the public and private sectors. Cooperative education allows students to acquire essential, practical skills by being exposed to the reality of the work world beyond the boundaries of campus, enhancing their self-confidence and career direction. An agreement is signed by the employer supervisor, the faculty supervisor, and the student. The co-op may be repeated for credit. Prerequisite: Sophomore standing; minimum 2.3 GPA, 2.5 major GPA; approval of the Department of Chemistry; placement by the Career Center.

CHEM 415, CHEM 416. ADVANCED ORGANIC CHEMISTRY (1-3 EACH)
The content of the course is flexible and can be structured to meet the needs of the student. Possible orientations include: 1) a review and extension of the principles covered in Organic Chemistry, 2) a detailed treatment of the mechanisms of organic reactions, 3) a selective study of the synthesis of organic compounds, and 4) molecular orbital theory and rate processes as applied to organic chemistry. Prerequisites: CHEM 315, CHEM 316.

CHEM 427. SPECTROSCOPY (3)
A study of the classical and quantum theories of the interaction of radiation with matter, including
an introduction to the Schrödinger wave equation. The absorption and emission of radiation by atoms and molecules are treated, with particular emphasis being placed on ultraviolet, visible, and infrared spectroscopy and resonance phenomena. Prerequisites: CHEM 207, CHEM 209, PHYS 201, PHYS 202 and math through calculus.

CHEM 427L. ADVANCED PHYSICAL CHEMISTRY LAB (1)
A three hour per week laboratory course that covers advanced physical chemical laboratory methods. Techniques covered include spectroscopy (infrared, NMR UV-visible absorption), surface chemistry and electrochemistry. Prerequisites: CHEM 327 and CHEM 327L. CHEM 427 or should be taken concurrently.

CHEM 428. THERMODYNAMICS (2)
A study of the principles underlying the content and transfer of energy in physical and chemical reactions. The classical laws of thermodynamics are introduced, and the concepts of free energy, entropy, work, and enthalpy are defined and subjected to a careful quantitative treatment. Prerequisites: CHEM 207, CHEM 209, PHYS 201, PHYS 202 and math through calculus.

CHEM 436. ADVANCED PROTEIN CHEMISTRY (3)
The course is designed as an independent/directed study with a weekly seminar component. The material to be covered will be an in-depth review of the structure and function relationships of proteins. Computer modeling and structure analysis and review of the current primary research literature will be used. The course is divided into four major topics of discussion: Part 1, a review of secondary and tertiary structure; Part 2, folding patterns and analysis and prediction of structure; Part 3, specific enzymology and protein chemistry; and Part 4, analysis of protein function by protein engineering and biophysical methods.

CHEM 450. RESEARCH IN CHEMISTRY (1-3)
This course involves the student in research in chemistry. The course is given for 1-3 credits per semester and may be taken repeatedly. CHEM 392 Cooperative Education in Chemistry may be substituted for CHEM 450.

COMMUNICATIONS
COMM 202. FUNDAMENTALS OF SPEECH (3)
A required course for all students with focus upon the skills of sending and receiving clear messages. Audience analysis, the organization of the message, listening awareness, and the management of communication apprehension are foremost among the course objectives. Students participate in communication exercises and deliver a variety of speeches of different formats.

COMM 203. INTRODUCTION TO MASS COMMUNICATION (3)
A prerequisite for all courses in the mass communications major, mass communication minor, and journalism minor. The course is designed to provide students with a general background in all facets of communication and media. Topics include print, broadcast, electronic, and institutional communication, as well as advertising, public relations, and music.

COMM 222. VOICE AND DICTION (3)
This course is designed to improve speaking thorough the understanding and application of principles for proper breathing techniques, projection, articulation, inflection, and pronunciation. Through readings in dramatic literature, poetic and prose, as well as the application of theories in vocal production, the course improves voice quality as it develops the student's reading and speaking abilities. Prerequisite: COMM 202, 203.

COMM 302. WRITING FOR THE MASS MEDIA (3)
Differences between writing for the mass media and other forms of writing are explored through subject matter, purpose, audience, and circumstance. Students write for print, broadcast, and the Web in various style formats of news, features and sports. Prerequisites: COMM 202, 203.
COMM 320. PRESENTATIONS FOR MEDIA (3)
This course emphasizes improving the individual’s nonverbal communication and vocal skills for
the broadcast media. Students combine broadcast theory with practical skills to enhance under-
standing of and performance of all types of broadcast material. Prerequisite: COMM 202 and
COMM 203.

COMM 326. RADIO PRACTICUM (3)
A course in which the student, assigned a specific musical format, prepares and executes weekly
programs complete with musical selections, news headlines, announcements, and a program guest.
To qualify, the student must be capable of operating all studio equipment. Prerequisites: COMM
202, COMM 203. May be repeated once.

COMM 329. SOUND DESIGN (3)
A course in the creation and critique of audio productions for radio and video. The course explores
both the theory and practice of acoustic communication and sound design. It considers both the
aesthetics of electroacoustic communication and the social, cultural, and institutional contexts of
radio broadcasting. Prerequisites: COMM 202, COMM 203.

COMM 331. INTERCOLLEGIATE FORENSICS (2)
A course which insists that competition accelerates rhetorical competencies in debate and individual
events. In the former, students compete against teams from other colleges by debating topics which
have been chosen at the national level. In the latter, students display their understanding of literary
texts as well as current events by competing against other students in faculty-judged circumstances.
In both debate and individual events, overnight travel is likely and the course may be repeated.
Prerequisites: COMM 202.

COMM 339. PUBLIC RELATIONS WRITING AND DESIGN (3)
Collaboration with the graphic design program provides insight into the function of public rela-
tions. Effective communication strategies will include newsletters, pamphlets, brochures, and Web
pages as well as writing technique and style for print and broadcast. Prerequisites: COMM 202,
COMM 203, COMM 302.

COMM 342. MEDIA STUDIES (3)
A course that investigates the significance of contemporary media, cultural ideals, beliefs, and values.
The course considers the significance and impact of media on our experience of self, community,
culture, society, and world. The course will engage students in the critical practices of reading,
decoding, and interpreting cultural texts and practices. Prerequisites: COMM 202, COMM 203.

COMM 350. SINGLE CAMERA PRODUCTION (3)
A course in video production that investigates the theory and practice of single camera projects such
as the news piece, the documentary, the teleplay, the commercial, the music video, the industrial
video, and the public relations video. Prerequisites: COMM 202, COMM 203.

COMM 352. COMPUTER-MEDIATED COMMUNICATION (3)
A course that focuses on the study, practice, and criticism of computer-mediated communication.
Students will develop projects using the Internet, World Wide Web, Gopher, WAIS, e-mail, and
other emerging technologies. The course is designed to teach students to use effectively these tech-
nologies, to study the impact on society, and to think critically about that impact. Prerequisites:
COMM 202, COMM 203.

COMM 355. ADVERTISING AND IMAGERY (3)
A course that explores the significance and influence of advertising, public relations, and public
opinion on contemporary culture. Case studies in the history, institutional practice, and aesthetics
of advertising, public relations, and public opinion will be studied. The course will consider the
social, political, cultural, and personal dimensions of interpreting advertising, public relations, and public opinion. Course projects will include the creation and development of an advertising and public relations campaign. Prerequisites: COMM 202, COMM 203.

COMM 360. STUDIO PRODUCTION (3)
A course in video production that investigates the theory and practice of studio productions, such as news and talk shows. Attention will be given to directing and producing audio and camera for multi-camera production. Prerequisites: COMM 202, COMM 203.

COMM 392. COOPERATIVE EDUCATION IN COMMUNICATIONS (1-6)
A capstone course involving all that the student has learned during enrollment in the program. Working through the Office of Cooperative Education and coordinating plans with the communications faculty, the student engages in an intensive co-op with an appropriate agency. Prerequisite: COMM 202 and COMM 203 and written approval from the Department of Communications.

COMM 400. MEDIA LAW AND ETHICS (3)
An exploration of communication law intended to add to the student’s appreciation of the legal process and its historical underpinnings. This course provides information designed to help communications specialists make informed judgments in situations with ethical and legal consequences. Prerequisites: COMM 202, COMM 203.

COMM 402. SEMINAR IN COMMUNICATIONS (3)
A senior year alternative to COMM 450, this course focuses upon topics faculty believe are of interest to those who intend to continue advanced study in the field. Topics for the seminar are announced during early registration. Prerequisites: COMM 202, COMM 203.

COMM 405. ADVERTISING, WRITING, AND DESIGN (3)
Professional advertising copywriting and advertising design philosophy combine to give the student background in the creation of print and broadcast advertising. Collaboration with the graphic design program allows original advertising campaigns to be developed. Prerequisites: COMM 202, COMM 203, COMM 302.

COMM 435. MEDIA RESEARCH (3)
A course designed to provide students with a foundation in mass media research. The course will introduce students to a variety of methods including, but not limited to, content analysis, survey (with emphasis on demographic and ratings research), in-depth interview, and focus groups. Prerequisites: COMM 202, COMM 203.

COMM 450. INTERNSHIP IN COMMUNICATION (3)
A capstone course in experiential learning. The student engages in writing a résumé, interviewing, and participating in an intensive internship, externship, or cooperative with an appropriate agency. Students may elect to intern in Washington, D.C., in conjunction with the Washington Gateway program. Prerequisites: COMM 202, COMM 203, and written approval from the Department of Communications. May be repeated once.

COMM 461. SENIOR PROJECT (3)
A required course for all communication seniors that brings together communication theory and practical experience into a final project and presentation. Original projects may include, but are not limited to, videos, audio tapes, papers, Web pages, and multimedia, and will be presented before the communications faculty and students. Two faculty members, selected by the student, will serve as advisors for the project. The course will serve as a final assessment of communications skills. This course is to be offered in the spring semester; students are expected to register in their last year of study.
COMPUTER AND INFORMATION SCIENCES

CIS 102. MICROCOMPUTER APPLICATIONS (3)
An introduction to contemporary microcomputer application software and the Shepherd computing environment. Major emphasis on word processing, spreadsheets, and databases. Students learn to use e-mail and are introduced to the resources of the Internet.

CIS 104. INTRODUCTION TO COMPUTER AND INFORMATION SCIENCES (3)
Provides an overview of the wide range of topics in computer and information sciences. Topics include computer number systems and theory of computation, computer hardware and organization, computer languages, programming, compilation, systems analysis and design, decision support, artificial intelligence, as well as ethical, global, and social issues.

CIS 206. INTERNET APPLICATIONS (1)
Students learn the basic skills necessary to access the Internet via the World Wide Web. Students learn basic browser commands and the use of search engines for effective Web-based research. Students learn the basics of e-mail, HTML, and the creation of Web pages.

CIS 211. COMPUTER LANGUAGE CONCEPTS (4)
A first course in the fundamentals of computer programming using an object-oriented programming. Includes basic data types, problem solving and algorithm design methods, program design, coding, testing, and debugging. Students learn the programming characteristics of subprograms, parameter passing, and modularity. Includes formal laboratory session. Prerequisite: CIS 102 and CIS 104 recommended.

CIS 234. INTRODUCTION TO NETWORKING (3)
Students will learn the fundamental concepts of networking. Case studies and hands-on projects will consider networking topics including hardware, protocols, architecture, media, design, implementation, and troubleshooting, maintaining, and upgrading computer networks.

CIS 287. SYSTEMS ANALYSIS AND DESIGN (3)
The system life cycle, starting with the requirements statement and ending with system extinction/replacement. Primary emphasis on the logical design phase of an information system. Includes explanations of both the traditional design approach and prototyping. Advantages and disadvantages of both approaches are examined. Prerequisite: CIS 211.

CIS 292. INTERNSHIP IN PROGRAMMING (1-3)
A form of independent study which integrates classroom study with supervised work experiences. Internships generally last no longer than a semester, and interns are not employees of the sponsoring company.

CIS 302. WINDOWS PROGRAMMING (3)
An in-depth study of the Windows graphical user interface (GUI). Students create powerful, full-featured applications which utilize the key features of Microsoft Windows, including multiple-document interface (MDI), object linking and embedding (OLE), dynamic data exchange (DDE) graphics, and calling procedures in dynamic-link libraries (DLLs). Prerequisite CIS 211 or permission of instructor.

CIS 314. ADVANCED COMPUTER LANGUAGE CONCEPTS (4)
This course examines object-oriented programming and its use in software development. Topics include object-oriented design, classes and objects, code reusability, data hiding, polymorphism and inheritance. Prerequisite: CIS 211.

CIS 321. DATA AND FILE STRUCTURES (4)
The topics in this course include definitions and implementations of basic data structures including linked lists, stacks, queues, trees, and graphs and their applications; recursion as a algorithm design tool; and file organization and access techniques. Prerequisite: CIS 314.
CIS 324. INTRODUCTION TO ARTIFICIAL INTELLIGENCE (3)
An overview of artificial intelligence, its tools and techniques. Includes such subjects as fuzzy logic, nonprocedural programming, basic search techniques, automated reasoning, and expert systems. Programming in Prolog or LISP and the creation of knowledge-based systems using expert system software shells. Emphasis on the application of artificial intelligence techniques to business and industrial problems. Prerequisites: CIS 211.

CIS 331. PROGRAMMING LANGUAGES (3)
The syntax and semantics of programming languages. Topics include formal specification of syntax, declarations, binding, allocation, data structures and data types, control structures, control and data flow, the implementation and execution of programs, functional programming and imperative programming. Other possible topics include nonprocedural and logic programming, object-oriented programming, and program verification. Programming projects will provide experience in a number of languages. Prerequisite: CIS 321.

CIS 332. WEB PROGRAMMING I (3)
Many applications today are being converted to use the World Wide Web as the basis for the user’s interaction with the application. Creating this new form of client-server computing requires new skills, languages, and support programs. This is the first of the two-course sequence on this topic, and focuses on client-side application programming (JavaScript, Java, VBScript, ActiveX). Prerequisite: CIS 211 or permission of instructor.

CIS 334. WEB PROGRAMMING II (3)
The second course in the Web programming sequence focuses on the server-side application programming in general and database in particular. Perl, server-side includes (SSIs), and proprietary software such as Oracle Web Application Server are studied. Prerequisite: CIS 332 or permission of the instructor.

CIS 386. COMPUTER ORGANIZATION (4)
Students will learn the principles of computer organization. Topics include the functional components of a computer, memory organization, auxiliary storage, system interconnection, digital logic, assembly language programming, and evolution and future trends of computer organization. Weekly laboratories will illustrate computer organization concepts and techniques. Prerequisites: CIS 234.

CIS 388. DATABASE MANAGEMENT SYSTEMS (4)
The design and maintenance of a computerized database management system. Includes all operations such as design, creation, searching, sorting, and editing that must be performed on both sequential and direct access files and sets of files. Examines advantages and disadvantages of tree, network, and relational data structures. Coverage of query languages, data dictionaries, and security and privacy considerations. Prerequisite: CIS 211.

CIS 390. OPERATING SYSTEMS (3)
An introduction to the fundamentals of operating systems across computing platforms. Topics include process and storage management, protection and security, and distributed systems. Format principles are complemented with surveys of contemporary operating systems (including UNIX). Prerequisite: CIS 386.

CIS 392. COOPERATIVE WORK EXPERIENCE IN PROGRAMMING (1-3)
A supervised work experience in which the student is placed for temporary employment with a local firm or government agency which has a cooperative agreement with the School of Natural Sciences and Mathematics. Prerequisites: 3.0 GPA in the major; 2.3 GPA overall; full-time student who has completed at least 64 hours; and the recommendation of the student’s advisor. May be repeated for a maximum of 6 credits.
CIS 417. ADVANCED APPLICATIONS PROGRAMMING (3)
A comprehensive programming course devoted to designing and implementing complete computerized software systems. Emphasis on developing large, complex software systems. Prerequisite: CIS 321.

CIS 418. MANAGEMENT INFORMATION SYSTEMS (3)
An integration of the material covered in previous programming and systems courses. An examination of modern management information systems in a business setting. Topics include structured decision systems, decision support systems, information systems acquisition and management, database management systems, and the role of information processing systems in business decisions. Prerequisite: CIS 287.

CIS 419. DATA COMMUNICATIONS AND LOCAL AREA NETWORKS (3)
An introduction to the role of data communications and local area networks in a business environment. Management of data communications systems and local area networks. Special topics to be covered include fundamental communications concepts, data communications hardware, network configurations, protocols and software, microcomputers and communications, and local area networks (LANs). Prerequisite: CIS 234.

CIS 421. COMPUTER ARCHITECTURE (3)
Topics include information representation, tags, check bits, floating-point arithmetic, instruction sets, RISC vs CISC, ALU design, bit slicing, microprogrammed control, microinstruction types, microprogram optimization, cache memories, interleaved memories, communication methods, bus control and timing, input-output, programmed I/O, interrupts and DMA, parallel and vector processors, pipelines, shared vs distributed memory, interconnection networks, and hypercube computers. Prerequisite: CIS 385.

CIS 423. SERVER OPERATING SYSTEMS (3)
Students will learn the principles of current server operating systems. The role of servers in enterprise networks will be considered. Students will study the design of client/server networks, the services provided by server computers, and the management of services. Attention will be given to proper system administration, security, and error recovery. Various operating system configuration options will be studied including Internet access, network protocols, and fault-tolerant options. Prerequisites: CIS 234 or CIS 390 or permission of instructor.

CIS 431. ALGORITHMS AND DATA STRUCTURES (3)
The topics of this course include basic tools for algorithm analysis including asymptotic notations, lower and upper bounds, and recursive relations; advanced data structures; analysis of recursive algorithms; analysis of algorithms for searching and sorting; analysis of graph and geometric algorithms; analysis of numerical algorithms; study of NP-complete problems; and study of parallel algorithms. Prerequisite: CIS 321.

CIS 434. INTER/INTRA NETWORKING (3)
Students will learn how to design, build, and troubleshoot an inter/intra network. Topics to be considered include LAN/WAN interconnectivity issues, physical transmission options, integration of voice and data, transport methods, and network protocol architectures. Prerequisites: CIS 234 and CIS 332 or permission of instructor.

CIS 441. AUTOMATA THEORY (3)
Topics include regular grammars, finite automata, context-free grammars, pushdown automata, and Turing machines; introductory treatment of computable and non-computable functions; and halting problems. Prerequisite: CIS 331.

CIS 481. TOPICS IN COMPUTER AND INFORMATION SCIENCES (3)
Examines various topics in different aspects of computer and information sciences. Such topics may include microprocessor systems, performance analysis of computer systems, computer graphics,
compiler design, parallel and distributed processing, computer security, expert systems, natural language processing, neural networks, or intelligent tutoring systems. Prerequisite; Consent of instructor.

CIS 485. DIRECTED RESEARCH IN COMPUTER AND INFORMATION SCIENCES (3)
Design and development of a project in some area of computer and information sciences. Each student enrolling in this course must select a computer and information sciences faculty advisor who will be responsible for approving, guiding, and evaluating the project. Prerequisite: Consent of instructor.

CIS 486. NETWORK SECURITY (4)
Students will learn how to protect computer networks from internal and external digital threats by studying security concepts and techniques. Topics include encryption technology, security administration, workgroup and shared-level security, domain security and trust relationships, fault tolerance, virus protection, firewalls, proxies, filters, and network and data link security. Weekly hands-on laboratories will investigate computer network security techniques. Prerequisite: CIS 423.

CIS 487. SOFTWARE ENGINEERING (3)
Introduces the Unified Modeling Language (UML) for object-oriented analysis and design, object-oriented life cycle models, testing, maintenance, and performance measurement of object-oriented software projects. Students will work in teams to develop object-oriented software projects. Prerequisite: CIS 321.

CRIMINAL JUSTICE
CRIM 200. INTRODUCTION TO CRIMINAL JUSTICE (3)
This course will provide an overview of the criminal justice system, its history, its philosophical development, and its contemporary configurations. Issues of law enforcement, adjudication, and corrections will be covered. Students will examine career opportunities and requirements in the criminal justice field and will become familiar with local, state, and national criminal justice systems.

CRIM 310. PRINCIPLES OF CRIMINAL LAW (3)
This course explores the nature, origins, and general principles of criminal law. It examines pertinent aspects of federal and state criminal law, and concentrates on specific issues of interest to law enforcement including an examination of procedural law. Recent court decisions will be discussed and selected criminal offenses will be analyzed.

CRIM 311. CRIMINAL JUSTICE PROCEDURES (3)
Constitutional analysis of criminal procedure that focuses primarily on the Fourth, Fifth, and Sixth Amendments; the right to be free from unreasonable search and seizure, the privilege against self-incrimination, and the right to counsel. The course examines the need to protect the public and enhance law enforcement efficiency and the need to protect individual defendants from abuse at the hands of the state.

CRIM 320. CRIMINAL COURT SYSTEM (3)
This course will focus on the jurisdiction policies and procedures of criminal courts in the administration of justice. The role of the courts is pursued in determining social policy as it relates to criminology. Also, a complete survey of the criminal court system from local to state to federal jurisdiction will be taken.

CRIM 325. PENOLOGY (3)
This survey will cover the American correctional institution's historical background and the social requirements. An in-depth survey will be conducted into how the different types of institutions evolved and how each is applied to given situations in the criminal justice system, i.e., jails, detention centers, prisons.
CRIM 330. JUVENILE JUSTICE PROCEDURES (3)
Historical, philosophical, and legal examination of the separate system and procedures created in our society. This course will survey the development of the juvenile justice system in the country and examines the various stages of the juvenile justice processes and critical issues currently facing the system.

CRIM 340. CORRECTIONAL PROCEDURE (3)
This course will examine the roles and procedures of legal and other social agencies in the treatment of the offender. Also, an overview of treatment theories which influence and alter the attitudes, values, and behaviors of inmates will be given.

CRIM 410. PROSECUTION AND DEFENSE (3)
Behavioral and legal analysis of the stages and procedures of a criminal case including initial appearance, bail, preliminary hearing, grand jury, arraignment, suppression hearings, trial, and sentencing. Emphasis is on bail reform, plea bargaining, screening, diversion, speedy trial, insanity defense, discovery, and the role of the defense attorney, prosecutor, and judge. Included is an examination of the court system as a social institution of human actors who exercise extensive discretion within the boundaries of the law.

CRIM 420. VICTIMOLOGY (3)
This course will provide an overview of the programs within the criminal justice system which work with victims of crime and their families. Programs for the families of the offenders also will be studied. This overview will discuss the interrelationships between the various parts of the system concerning victims, legislators, lawyers, courts, jails, and prisons. The reporting of crimes of victims also is included.

CRIM 425. POLICE AND COMMUNITY RELATIONS (3)
An introduction to concepts of organizational behavior and the principles of organization and management as applied to law enforcement agencies. Topics include line activities of law enforcement agencies, with emphasis on the patrol function and the prevention of crime, and traffic, investigative, juvenile, vice, and other specialized operational units.

CRIM 440. PROBATION AND PAROLE (3)
This course examines the history, objectives, performance, and future of the full range of probation, parole, intermediate sanctions, and community corrections services viewed as integral parts of the formal criminal justice process. Research and policy developments, training and personnel issues, what works with different classes of offenders (including juveniles), the presentence investigation/reporting system, sentencing and incarceration, recidivism rates, legal issues, public perceptions, and trends within the system are among the topics covered.

ECONOMICS
ECON 123. CONTEMPORARY ECONOMICS (3)
Introductory survey of modern economic issues. Economic theory is employed in the analysis of inflation, unemployment, pollution, regulation, market structure, and related topics. Economic institutions such as corporations, banking, and government are also studied. Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

ECON 205. PRINCIPLES OF MACROECONOMICS (3)
Introduction to fundamental economic concepts including production possibilities and economic growth, market supply and demand analysis, money, banking, and government fiscal and monetary policies. Emphasis is placed upon fluctuations in national income, employment, and the price level.
ECON 206. PRINCIPLES OF MICROECONOMICS (3)
Continuation of ECON 205. Topics include extension of supply and demand analysis, production costs and revenue analysis of firms under perfect and imperfect competition, resource markets, and international trade and finance. Selected economic problems. Prerequisite: ECON 205.

ECON 292. INTERNSHIP IN ECONOMICS (1-6)
Practical experience in local, regional, and Washington Gateway organizations such as government offices, social actions groups, and private corporations/companies. Interns learn how to translate classroom theory and methods into professional skills and opportunities. Usually offered every term. May be repeated. Prerequisite: Must have sophomore class standing with minimum 2.5 overall GPA, approval of academic department, and placement by Career Center.

ECON 301. INTERMEDIATE MICROECONOMICS (3)
An intermediate-level study of the behavior of consumers, firms, and resource owners. Input and output markets under perfect and imperfect competition. General equilibrium analysis and welfare economics. Prerequisite: ECON 206.

ECON 302. INTERMEDIATE MACROECONOMICS (3)
An examination of classical, Keynesian, and monetarist theories and their application for determining the level of and changes in national income, aggregate employment, and the average price level. Prerequisite: ECON 206.

ECON 303. MANAGERIAL ECONOMICS (3)
The application of economic tools and techniques to management decision-making. Topics include demand, cost, and profit analysis; price and output decisions; budgeting and benefit/cost analysis; and the impact of government regulation. Case studies. Prerequisites: ECON 206 and BADM 224.

ECON 304. HISTORY OF ECONOMIC THOUGHT (3)
A study of the development of economic thought from mercantilism to the present day. Contributions of great economists to economic analysis and their bearing on current theory and policy issues are emphasized. Prerequisite: ECON 206 or ECON 123.

ECON 305. MONEY AND BANKING (3)
Within a theoretical structure, an examination concerning the changing nature and dynamics of money and credit structures of American depository institutions, including their regulatory bodies. Application to monetary policies and their implications for stabilization and growth objectives. Prerequisite: ECON 206 or ECON 123.

ECON 310. PUBLIC FINANCE (3)
A study of government expenditures, sources and methods of taxation, economic effects of expenditures and taxes, and government debt policies. Prerequisite: ECON 206.

ECON 320. URBAN ECONOMICS (3)
An examination of the interactions between the spatial environment and economic activity. Focus is placed on the spatial location of economic activity, the pattern of land use within an area, and urban problems. Prerequisite: ECON 206.

ECON 325. INTERNATIONAL FINANCE (3)
Basic theories, problems, and policies of international finance, such as the international currency system, national income determination in an open economy, exchange rates theory, and balance of payments. Prerequisite: ECON 206.

ECON 326. INTERNATIONAL TRADE (3)
The study of basic theories, problems, and policies of international trade, such as comparative advantage, tariff and non-tariff, “protectionism,” barriers to trade, and factor mobility. Prerequisite: ECON 206.
ECON 330. ECONOMICS OF DEVELOPING COUNTRIES (3)
An examination of the prospects and problems of developing countries. The major theories of economic growth are explored. Issues and policies related to urbanization, agriculture, education, the environment, poverty, and international trade are analyzed from the perspective of the developing countries. Prerequisite: ECON 206 or permission of instructor.

ECON 350. GOVERNMENT AND BUSINESS (3)
Government control of business in the United States will be examined, including the roles and responsibilities of business firms and governments in a market economy; industrial concentration; antitrust; multinational corporations; regulated industries; government promotion of business; consumer protection; and environmental regulations. Prerequisite: ECON 206 or ECON 123.

ECON 392. COOPERATIVE EDUCATION IN ECONOMICS (3-9)
May be repeated for credit, but not in the same term; topic must be different. Usually offered every term. Prerequisite: Must have junior level standing with minimum 2.5 overall GPA, approval of academic department, and placement by the Career Center. Maximum of three credit hours may be used as economic elective credit by majors only.

ECON 450. SEMINAR IN ECONOMICS (3)
A summation of the major themes of economic theory along with application of certain of these theories within a policy context. Prerequisites or corequisites: ECON 301 and ECON 302.

EDUCATION
EDUC 150. SEMINAR IN EDUCATION (1)
Introduces the prospective teacher to the study of education. Focuses on the self as learner, the nature of education, and the practical issues in the work of teaching. Based on readings and field experiences the student will develop a philosophical, historical, and practical understanding of learning and teaching. Also introduces the student to the characteristics of the teacher education program's philosophy and theme: Teacher as Reflective Problem Solver. Prerequisite to all education courses.

EDUC 200. FOUNDATIONS OF AMERICAN EDUCATION (3)
An examination of the relationship between the school as a social institution and the larger society. This is accomplished through a variety of ways, but mainly through a combination of philosophical, historical, and problem-oriented inquiry into that relationship. The assumption is that a teacher who has developed an understanding of the vital relationships between school and society is in a position to see his or her professional roles beyond the narrow confines of the classroom, and, out of such a perspective, will emerge a more sensitive and effective teacher. Prerequisite: EDUC 150 or department chair approval.

EDUC 204. HISTORY AND PHILOSOPHY OF THE MIDDLE SCHOOL (3)
A historical and philosophical analysis of American educational thought and practice relevant to the development of the middle school. The themes of the course will center on the historical development of an educational structure and curriculum having as its focus the psychological, educational, and social needs of the emerging adolescent. The course will also examine the philosophical foundation of the middle school.

EDUC 209. TECHNOLOGY FOR TEACHING I (3)
An introductory course on the use of computer-based technology for teaching in grades K-12. Projects will be designed for teacher education students to fulfill the required computer competence component of the teacher education program.

EDUC 300. HUMAN GROWTH AND DEVELOPMENT (3)
A course required of nursing students exploring the physical, social, and cognitive variables which affect the quality of professional interaction with the developing person.
EDUC 304. PSYCHOLOGY OF THE MIDDLE SCHOOL CHILD (3)
Designed to acquaint the in-service and pre-service teacher with the unique physiological, cognitive, and psychological nature of the middle school child. Using this information base, implications for appropriate teacher behavior, consistent with relevant learning and motivational theory, are examined. Permission of instructor.

EDUC 305. AUDIOVISUAL TECHNOLOGY (3)
A foundation course designed to acquaint the student with the use of audiovisual technology for instruction and communication. The course content will consist of: 1) the historical, philosophical, and psychological reasons for the use of audiovisual technology; 2) production and use of audiovisual technology; and 3) students will obtain experience operating various audiovisual and related computer hardware and software.

EDUC 306. K-6 FIELD EXPERIENCE (2)
An independently arranged field experience in a K-6 classroom.

EDUC 307. 5-9 FIELD EXPERIENCE (2)
An independently arranged field experience in a 5-9 classroom.

EDUC 308. 9-12 FIELD EXPERIENCE (2)
An independently arranged field experience in a 9-12 classroom.

EDUC 310. EDUCATIONAL SOCIOLOGY (3)
Designed to acquaint the student with education as a distinctly social phenomenon subject to objective scientific analysis. A sociological perspective on education requires that the student step back from that which he or she is examining, set aside his or her personal and cultural biases, and take a long, hard look at the phenomenon of education.

EDUC 314. FOUNDATIONS OF EARLY EDUCATION (3)
A course designed to acquaint students with historic background and modern-day trends relative to the aims and content of curriculum in early education.

EDUC 319. MIDDLE SCHOOL CURRICULUM (3)
A course designed to acquaint the student with the relationship between the unique needs of the transescent child and the schooling process. Included are such variables as the nature of knowledge, of the learner, and of the schooling process. Other variables included are related to content learning. Prerequisite: Admission to teacher education program.

EDUC 320. THE SOCIAL AND PSYCHOLOGICAL CONDITIONS OF LEARNING (5)
A reflective exploration of the knower (the learner), knowing (learning), the known (knowledge), and the contexts in which knowledge is constructed through teaching/learning. Includes a field component in a public school classroom. Prerequisites: EDUC 150 and EDUC 200.

EDUC 334. INSTRUCTIONAL STRATEGIES IN EARLY EDUCATION (3)
A course designed to provide students with instructional strategies and materials appropriate to instruction in a variety of early education environments.

EDUC 336. CLINICAL EXPERIENCES IN EARLY EDUCATION (3)
Clinical experiences necessary to the practical application of those approaches unique to early education. Prerequisites: FACS 304, EDUC 314, EDUC 334 or permission.

EDUC 351. INTEGRATED PEDAGOGY I (9)
Integrated Pedagogy I is the first semester of a two semester course/experience designed to promote the development of teachers who have a philosophical and principled understanding and commitment to an integrated curriculum and the practical strategies to implement such an educational program for children. This course experience occurs in the context of Shepherd University’s teacher
education program which is founded on the philosophy and theme Teacher as Reflective Problem Solver. Integrated Pedagogy I has both a classroom and field component. Prerequisite: Admission to teacher education program.

EDUC 352. INTEGRATED PEDAGOGY II (9)
Integrated Pedagogy II is the second semester of a two-semester sequence designed to promote the development of teachers who have a philosophical and principled understanding and commitment to an integrated curriculum and the practical strategies to implement such an educational program for children. This course experience occurs in the context of Shepherd University’s teacher education program which is founded on the philosophy and theme Teacher as Reflective Problem Solver. Integrated Pedagogy II has both a classroom and field component. Prerequisite: EDUC 351.

EDUC 360. SURVEY OF EXCEPTIONAL CHILDREN (3)
A course to familiarize the student with the nature, etiology, specific characteristics, and needs of the exceptional child. The course is designed to meet basic certification requirements in those states that require a minimum of three hours of course work in special education in order to be certified. It is equally relevant to early education, elementary education, secondary education, therapeutic recreation, psychology, and nursing.

EDUC 370. CREATING LEARNING ENVIRONMENTS (4)
This is a secondary methods course designed to implement educational theory into practice. The purpose is to provide knowledge and appreciation of variables affecting positive and negative learning environments, including but not limited to the following: goals and stated expectations, decisions regarding appropriate content, planning methods, understanding of developmental characteristics of students, consideration of learning styles and various ability levels, controls of classroom climate, selection of teaching strategies, selection and creation of instructional resources, adaptation to changes in the school programs and school personnel, collaboration with colleagues, programming for exceptional children, multicultural education and issues of equity, and meaningfulness in assessment. Includes a field component. Prerequisite: Admission to teacher education program.

EDUC 390. EXPERIENTIAL LEARNING (1-6)
The student is involved with various service learning activities. Related to the student’s professional development, this experience can include peer tutoring, volunteerism, laboratory assistant, independent research, and community program. Proposal must be approved by specialization coordinator. Course is offered on a pass/fail basis. Offered every term. Minimum 50 hours of contact for each credit is required. Student can take 1 to 3 credit hours per semester not to exceed 6 credits total.

EDUC 392. COOPERATIVE EDUCATION (1-9)
Cooperative education allows students to acquire practical experience in education settings beyond the boundaries of the campus. May be repeated for credit, but not in same semester. Offered every semester. Prerequisite: Minimum 2.3 overall GPA, 2.5 in major, approval of Department of Education, and placement by Cooperative Education Office.

EDUC 400. STUDENT TEACHING SEMINAR (3)
A weekly seminar taken concurrently with student teaching. Promotes the reflective analysis of the practice of teaching in grades K-6, 5-9, K-12, 5-12, 9-12.

EDUC 407. GENERAL METHODS: MIDDLE SCHOOL (3)
Taken concurrently with Student Teaching as part of the professional block. It is taught intensively during the first 11 to 12 days of each semester and continues through weekly seminars that are part of the Student Teaching experience. Prerequisite: Fulfillment of all requirements for student teaching.

EDUC 418. A COMPARATIVE HISTORY OF CHILDHOOD AND ADOLESCENCE SINCE 1500 (3)
The course will provide an intellectual appreciation of the evolvement of concepts of childhood and
adolescence in a historical context and serve to help students understand children and adolescents in contemporary American society.

EDUC 420. SPECIAL METHODS OF TEACHING MATHEMATICS (3)
A special methods course for secondary education majors in mathematics. An in-depth study of special methods, curriculum, problems, and techniques involved in mathematics instruction. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 421. SPECIAL METHODS OF TEACHING ENGLISH (3)
Current approaches in the teaching of English in the secondary school. Topics include basic teaching procedures and approaches in composition, literature, and grammar; the secondary reading program; critical examination of recent texts; educational media in the field of language arts instruction; materials of instruction. This course is not taught every semester. Students should check in advance with department chair. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 422. SPECIAL METHODS OF TEACHING SOCIAL STUDIES (3)
Designed to acquaint the student with the philosophy, aims, and methods of teaching social studies in the secondary school. This course is not taught every semester. Students should check in advance with department chair. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 423. SPECIAL METHODS OF TEACHING SCIENCE (3)
Reflective problem solving in science and science teaching is the major thrust of this course. The student is introduced to or reacquainted with the goals and objectives of modern science education, including scientific literacy for all students. The constructivist approach to learn science is emphasized as students investigate, consider, select, develop, employ, and evaluate a variety of instructional methods, resources, and assessment techniques. Educational technologies currently impacting science teaching/learning are considered, as are the issues of safety and classroom and laboratory management. This course is not taught every semester. Students should check in advance with the natural sciences teaching specializations coordinator. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 426. SPECIAL METHODS OF TEACHING MUSIC (3)
A course designed to aid the participants in constructing a working philosophy of music in the schools in which all music activities and courses can be viewed in proper perspective. In addition, emphasis is placed on the refining of known skills as applicable to the means by which music objectives can be realized; developing and administering the band and choral programs along with instrumental and vocal techniques; conducting such specialized music courses as music theory, history, and introduction to music; and examining appropriate teaching materials. This course is not taught every semester. Students should check in advance with department chair. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 427. SPECIAL METHODS FOR TEACHING ART (3)
This course is designed to provide a synthesis of course work in art, education, and art education for advanced art education majors. Students will explore the nature of teaching visual art in contemporary K-12 grade classrooms including, for example, methods to teach art studio, art criticism, aesthetics, and art history; devices to evaluate student progress; inclusive instructional practices; and instruction in the use of technology. In addition, students will construct and critique a complete nine-month art curriculum useful for teaching in a West Virginia or nearby local public school system. This course is not taught every semester. Students should check in advance with department chair. Prerequisites: ART 104, ART 170, ARED 345, ARED 365, ART 403, and admission to Teacher Education Program. Corequisite: EDUC 370 or 435.
EDUC 428. SPECIAL METHODS OF TEACHING FAMILY AND CONSUMER SCIENCES (4)
Current approaches to solving problems directly related to teaching: writing a philosophy, determining objectives, planning teaching strategies, and evaluating learning. This course is not taught every semester. Students should check in advance with department chair. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 429. ADULT EDUCATION MODELS AND PRACTICES (2)
A study of the philosophy, promotion, organization, and strategies of working with out-of-school groups. Each student will participate in teaching an adult group. This course is not taught every semester. Students should check in advance with department chair.

EDUC 431. SPECIAL METHODS OF TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY AND SECONDARY SCHOOLS (3)
Designed to enable the student to apply the fundamental principles of learning and teaching in the area of physical education at the elementary and secondary levels. A field experience in an area public school is required. This course is offered every fall and must be taken prior to student teaching. Prerequisites: Minimum of 20 hours credit from courses required in teaching field. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 432. SPECIAL METHODS OF TEACHING HEALTH EDUCATION IN THE ELEMENTARY AND SECONDARY SCHOOLS (3)
Designed to develop effective and current instructional strategies for elementary and secondary health education teachers. This course must be taken prior to student teaching. Prerequisites: Minimum of 20 hours credit from courses required in teaching field, HLTH 103, HLTH 360, HLTH 370. Prerequisite: Admission to Teacher Education Program. Corequisite: EDUC 370 or 435.

EDUC 435. SPECIAL METHODS PRACTICUM (2)
This is a field experience course for all students seeking certification in a secondary teacher education program. A weekly University seminar accompanies the field work. Students will arrange their field work schedules so that they may meet their individual professional development needs. A minimum of 30 hours in a public school is required. Seminar content and field tasks are coordinated with special methods course instructors. This course must be taken concurrently with a special methods course. Prerequisites: Admission to teacher education program and EDUC 319 or EDUC 370.

EDUC 442. READING AND LANGUAGE ARTS (3)
Methods, materials, and techniques for teaching reading and language arts in the classroom.

EDUC 443. READING IN CONTENT AREAS (3)
A course concentrating on reading instruction in the content areas of the curriculum. Attention is given to the identification of the special reading abilities required in subject matter areas. Prerequisite: Permission of instructor.

EDUC 450. STUDENT TEACHING, ELEMENTARY SCHOOL GRADES K-6 (9)
Provides an in-depth clinical experience in the public school, at the appropriate grade level, under the supervision of experienced personnel. Prerequisite: Fulfillment of all requirements for student teaching.

EDUC 453. STUDENT TEACHING, GRADES 5-9 (9)
Provides an in-depth clinical experience in the public school, at the appropriate grade level, under the supervision of experienced personnel. The extended immersion in the program of the middle school provides the student opportunities to test knowledge of the subject areas chosen and to gain competence in the teaching skills. Prerequisite: Fulfillment of West Virginia requirements for a teaching license.

EDUC 455. STUDENT TEACHING, GRADES K-12 (9)
Limited to those students in the K-12 programs of physical education, art, and music. Gives insight,
through study and observation, and provides skill through planning and teaching to enable the graduates to handle successfully all types of teaching situations in secondary, middle, and elementary schools. Prerequisite: Fulfillment of West Virginia requirements for a teaching license.

EDUC 456. STUDENT TEACHING, GRADES 5-12 (9)
Gives insight, through study and observation, and provides skill through planning and teaching to enable the graduates to handle successfully all types of teaching situations in middle and secondary schools. Prerequisite: Fulfillment of West Virginia requirements for a teaching license.

EDUC 457. STUDENT TEACHING, GRADES 9-12 (9)
Gives insight, through study and observation, and provides skill through planning and teaching to enable the graduates to handle successfully all types of teaching situations in secondary schools. Prerequisite: Fulfillment of West Virginia requirements for a teaching license.

EDUC 460. SENIOR CAPSTONE SEMINAR (3)
Reflectively reviews the professional education experience through readings, study, and the development of a senior project in collaboration with one or more of the following: advisor, seminar instructor, other faculty, classroom teacher, or other appropriately designated person(s). Taken during the final semester after student teaching. Prerequisites: EDUC 400 and EDUC 450.

ENGINEERING
Engineering courses are open only to students admitted to the Engineering Transfer Program, unless permission is obtained from the director of engineering.

ENGR 101. ENGINEERING I (3)
Topics include developing engineering design and problem-solving techniques including group projects, basic engineering design concepts; basic computer-aided design (CAD) including practical engineering drawings; mathcad; spreadsheet programming; time management including learning and study skills; professional and ethical responsibilities; and technical library and Internet research.

ENGR 102. ENGINEERING II (3)
Topics include an introduction to computing environments for solving engineering problems including computer-aided engineering (CAE), mathematical packages, and structured programming processes including algorithms, pseudo code, and editing and debugging with the C++ programming language. Applications include topics from numerical analysis and graphical representations. Corequisite: MATH 207.

ENGR 221. INTRODUCTION TO ELECTRICAL ENGINEERING (3)
Topics include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, energy storage elements, RC and RL circuits, unit step response, and second order circuits. Prerequisites: ENGR 102 and MATH 207.

ENGR 222. ELECTRICAL ENGINEERING LABORATORY (1)
A laboratory course in electrical engineering, 3 hours per week, to be taken simultaneously with ENGR 221.

ENGR 224. ELECTRICAL CIRCUITS (3)
Introduction to network analysis including sinusoidal (AC) steady state, average and RMS values, phasors, polyphase systems, complex frequency, network frequency response, two port networks and transformers, Fourier methods, and Laplace Transforms. Prerequisites: ENGR 221 and MATH 208.

ENGR 225. ELECTRICAL CIRCUITS LABORATORY (1)
A laboratory course in electrical circuits, 3 hours per week, to be taken simultaneously with ENGR 224.
ENGR 241. ENGINEERING STATICS (3)
Examines engineering applications of equilibrium of forces, vector operations, couple and moment of force, resultants (2 and 3 dimensions), center of gravity and center of pressure, static friction, freebody diagrams, equilibrium trusses and frames. Prerequisite: ENGR 101. Corequisite: MATH 207.

ENGR 242. ENGINEERING DYNAMICS (3)
A course examining Newtonian dynamics of particles and rigid bodies: engineering applications of equations of motion, work and energy, conservative forces, impulse and momentum, impulsive forces, acceleration in several coordinate systems, and relative motion. Prerequisites: ENGR 241, MATH 207, and PHYS 221.

ENGR 243. ENGINEERING MECHANICS OF MATERIALS (3)
Analysis of stress, deformation, and failure of solid bodies under the action of forces including internal force resultants, stress, strain, Mohr’s Circle, mechanical properties of engineering materials, generalized Hooke’s Law, analysis of axial, bending and buckling loads, and combinations. Prerequisites: ENGR 241 and MATH 207.

ENGR 301. ENGINEERING THERMODYNAMICS (3)
Basic thermodynamic concepts, properties of pure substances, First and Second Law analysis of systems and control volumes are examined. Prerequisites: MATH 207 and PHYS 221.

ENGR 305. DIGITAL LOGIC DESIGN (4)
This course will focus on design of Boolean logic and finite state machines; standard SSI, MSI, and LSI parts; drawing standards and dependency notation; implementation with different logic families mainly TTL and MOS sticks; synchronous system design, ALU, memory, tri-state, and open-collector busses; functional blocks in microprocessors; discussion of a typical example of a microcomputer; and simple I/O, switches, and LED displays. Prerequisites: ENGR 102 or MATH 254 or CIS 211.

ENGR 306. ANALOG ELECTRONICS AND LAB (4)
Semiconductors, p-n junction diodes, theory and application, bipolar junction transistors, operation biasing and BJT as an amplifier, JFETs and MOSFETs theory operation band applications, class A and C power amplifier, small-signal, low-frequency analysis and design. (Laboratory to reinforce the application of various devices.) Prerequisite: ENGR 224.

ENGR 307. DIGITAL ELECTRONICS DESIGN AND LAB (4)
The design of combinational and sequential digital circuits, logic families, Boolean algebra, K-maps, VEM, MSI circuitry, state machines, ASM, timing diagrams, and CAD design. A laboratory design project is required. Prerequisite: ENGR 221.

ENGR 320. ELECTROMAGNETIC FIELDS I (3)
Vector analysis, including gradient, divergence, divergence theorem curl, and Stokes’s Theorem. A study of static electric field including Coulomb’s Law, Gauss’s Law, electric potential, convection and conduction current, electric energy density, Poisson’s and Laplace’s equations, resistance, capacitance. Prerequisites: ENGR 221, PHYS 222, MATH 309.

ENGR 326. LINEAR SYSTEMS (3)
Signal types, linearity, causality, linear differential and difference equations, zero state response, zero input response, discrete time, continuous time, convolution, correlation, Laplace transforms, transfer functions, pole-zero placement, initial value theorem, final value theorem, Z-transforms, sampling, frequency domain analysis. Prerequisites: ENGR 224, MATH 310.

ENGR 351. INTRODUCTION TO FLUID MECHANICS (3)
This course will examine fluid statics, laminar and turbulent flow of compressible and incompressible fluids, and heat transfer. Prerequisite: MATH 207.
ible fluids, flow measurements, open channel flow, and kinetics of fluids. Prerequisites: MATH 310 and ENGR 242.

**ENGLISH**

**ENGL 101. WRITTEN ENGLISH (3)**
A course designed to enhance critical thinking, reading, and writing skills through exposure to a diverse range of great ideas. Students will also study the major types of expository writing, both Eastern and Western. Prerequisite: Satisfactory score on the ACT, SAT, ASSET, or ACCUPLACER tests or satisfactory grade in Introduction to Critical Composition, ACFN 010. Prerequisite to all other English courses.

**ENGL 102. WRITING FOR THE ARTS AND HUMANITIES (3)**
A continuation of ENGL 101 for students in the arts and humanities. The course features an introduction to literary types reflecting a diversity of genres (poetry, fiction, and drama) and writers; extensive practice in various kinds of expository and critical writing, with emphasis on the research paper. Prerequisite: ENGL 101.

**ENGL 103. WRITING FOR SOCIAL SCIENCES (3)**
A continuation of ENGL 101 for students with an interest or a major in education or one of the social sciences. The course focuses on critical reading, writing, and thinking using education and social science texts as a basis for writing assignments and class discussion. The course also emphasizes APA-based research and field work. Prerequisite: ENGL 101.

**ENGL 104. SCIENCE AND TECHNICAL WRITING (3)**
A continuation of ENGL 101 for students with an interest or major in the physical or natural sciences or technical disciplines. The course focuses on critical reading, thinking, and writing using science and technical texts as a basis for writing assignments and class discussion. The course also emphasizes computer skills, collaborative writing, and research and presentation methods for the scientific and technical communities. Prerequisite: ENGL 101.

**ENGL 202. BACKGROUNDS OF LITERATURE (3)**
A study of all forms of children’s literature, with emphasis on laying foundations for lifelong enjoyment of literature, giving instruction and practice in storytelling, and establishing criteria and resources for book selection. Only candidates for the degree of bachelor of arts in elementary education and students with a minor or teaching field in library science may enroll in this course. Students in secondary education may, with the permission of the department chair, take this course as an elective.

**ENGL 204. SURVEY OF AMERICAN LITERATURE (3)**
A critical study of representative writers and works from Native American oral traditions to the present, reflecting a broad range of literary and philosophic ideas and the cultural and ethnic diversity of the American experience. Prerequisite: ENGL 102, 103, or 104.

**ENGL 208. SURVEY OF WORLD LITERATURE I (3)**
A survey of world literature, including Ancient, Medieval, Renaissance, and chronologically comparable non-Western works. Prerequisite: ENGL 102, 103, or 104.

**ENGL 209. SURVEY OF WORLD LITERATURE II (3)**
A survey of world literature, including Neoclassical, Romantic, Realistic, Modern, and chronologically comparable non-Western works. Prerequisite: ENGL 102, 103, or 104.

**ENGL 280. INTRODUCTION TO TECHNICAL COMMUNICATION (3)**
This course will introduce students to the field of technical communication through instruction in how to prepare and communicate information. It will also develop proficiency in electronic communication such as e-mail and the World Wide Web. Prerequisite: Either CIS 102 or permission of instructor.
ENGL 300. GREEK MYTHOLOGY (3)
An in-depth study of Greek mythology through discussion of significant Greek and Roman texts read in translation, with emphasis on the historical, cultural, and literary influence that Greek myths have exerted on the thinking and writing of the Western world. Prerequisite: ENGL 208 or ENGL 209.

ENGL 302. THE BIBLE AS LITERATURE (3)
A study of the various types of literature found in the Bible. Prerequisite: ENGL 208 or ENGL 209.

ENGL 307. TEACHING READING AND ADOLESCENT LITERATURE (3)
Students will be exposed to reading pedagogy and the methods of teaching reading, as well as the adolescent literary canon and the reading and oral interpretation of adolescent literature.

ENGL 310. SURVEY OF BRITISH LITERATURE I (3)
A survey of the major works of poetry and prose of British literature from Beowulf through the Renaissance. Prerequisite: ENGL 208 or ENGL 209.

ENGL 311. SURVEY OF BRITISH LITERATURE II (3)
A survey of major works of poetry and prose of British literature from the Neoclassical through the Modern periods. Prerequisite: ENGL 208 or ENGL 209.

ENGL 315. MEDIEVAL LITERATURE (3)
A study of representative works from the major medieval genres—epic, romance, dreamvision, and drama—with special emphasis on medieval English literature. Prerequisite: ENGL 208 or ENGL 209.

ENGL 316. MEDIEVAL DRAMA (3)
An in-depth study of medieval drama, from its beginnings in 10th-century liturgical dramatizations through the late 15th century, with an emphasis on Middle English Corpus Christi cycles, saints’ plays, and morality plays. Prerequisite: ENGL 208 or ENGL 209.

ENGL 320. RENAISSANCE PROSE AND POETRY (3)
A study of the major non-dramatic poetry and prose of the English Renaissance, including works by Spenser, More, Donne, and Herbert. Prerequisite: ENGL 208 or ENGL 209.

ENGL 321. RENAISSANCE DRAMA (3)
A study of the major playwrights of the English Renaissance, excluding Shakespeare. Prerequisite: ENGL 208 or ENGL 209.

ENGL 322. HAMLET IN CONTEXT (3)
A rereading of the received text of Hamlet in terms of the theatrical, historical, and cultural contexts of Shakespeare’s tragic vision. The class will consider the popular tradition of Elizabethan and Jacobean revenge drama, ranging from Kyd’s The Spanish Tragedy to Webster’s The White Devil and the apparent source materials of the Hamlet story; the political background and the crisis of authority in Tudor England; four centuries of Hamlet criticism, including romantic, idealistic, Freudian, formalist, feminist, pacifist, and complementarian interpretations of the play. Prerequisite: ENGL 208 or ENGL 209.

ENGL 330. RESTORATION AND EIGHTEENTH-CENTURY BRITISH LITERATURE (3)
A study of the intellectual ideas and the principal writers of the period, including Dryden, Behn, Pope, Swift, Johnson, Wollstonecraft, Gray, Burns, and Austen. Prerequisite: ENGL 208 or ENGL 209.
ENGL 331. RESTORATION AND EIGHTEENTH-CENTURY DRAMA (3)
A survey of the major works of British drama (both tragedy and comedy) from the Restoration through the 18th century. Prerequisite: ENGL 208 or ENGL 209.

ENGL 332. THE BRITISH NOVEL (3)
A study of the development of the British novel through the works of major novelists of the 18th and 19th centuries. Prerequisite: ENGL 208 or ENGL 209.

ENGL 333. SATIRE (3)
A study of Enlightenment satire in a classical context. May include works by Aristophanes, Horace, Juvenal, Cervantes, Rabelais, Swift, Pope, Gay, Lennox, and Austen. Prerequisite: ENGL 208 or ENGL 209.

ENGL 340. BRITISH ROMANTIC LITERATURE (3)
A study of the significant writers of British Romanticism, with emphasis on the social and intellectual background from which they evolved. Prerequisite: ENGL 208 or ENGL 209.

ENGL 341. NINETEENTH-CENTURY BRITISH LITERATURE (1837-1900) (3)
A study of representative selections from the significant poets and prose writers of the period. The thought, content, and literary form of the selections are emphasized. Attention is given to works which reflect the chief cultural and intellectual currents of the political, social, and cultural history of the era. Prerequisite: ENGL 208.

ENGL 346. AMERICAN FICTION (3)
Primarily a study of the American novel to the First World War, although key shorter works also may be included. The fiction of major 19th- and early 20th-century writers is discussed in its artistic, intellectual, and social significance. Prerequisite: ENGL 204.

ENGL 347. AMERICAN POETRY (3)
An in-depth critical study of selected American poets from the 19th and early 20th centuries with primary emphasis on the artistic achievements of each figure and on the position each holds as representative of the major literary movements in American poetry from the Romantic through the Modernist periods. Prerequisite: ENGL 204.

ENGL 355. AMERICAN ETHNIC LITERATURE (3)
A study of the literatures of various American ethnic groups, including African American, Native American, Hispanic United States, Asian American, and Appalachian literatures. Emphasis will be placed on the oral tradition of the ethnic groups and the development of written literatures, with primary emphasis on twentieth-century written texts. Prerequisite: ENGL 204.

ENGL 356. APPALACHIAN CULTURE (3)
Appalachian Culture will introduce students to a wide variety of creative expression from those states which constitute southern Appalachia, particularly West Virginia, Virginia, Tennessee, North Carolina, and Kentucky. Students will study cultural stereotypes about Appalachia, unique historical and cultural forces at work in Appalachia, and the rich expression of creativity in Appalachia (including oral and written literatures, visual arts and crafts, and singing and songwriting). Prerequisite: Permission of instructor.

ENGL 357. CONTEMPORARY AMERICAN POETRY (3)
A study of themes in contemporary American Poetry from World War II to present. Discussion will include the influence of postmodernism, postcolonialism, and emergence of ethnic literatures on contemporary American Poetry. The course will also explore experimental poetry.
ENGL 360. LITERATURE AND THE SEXES (3)
A study of American, British, and Continental literature by or about women, with particular emphasis on the relationship between the sexes. The course includes works by Lanyer, Finch, Pope, Montagu, Austen, Wollstonecraft, Brontë, Chopin, Dickinson, Ibsen, Shaw, and others. Gynocritical, deconstructive, and traditional critical approaches to the works are investigated. Prerequisite: ENGL 204 or 208 or 209.

ENGL 361. SHORT STORY (3)
A careful reading and discussion of selected short stories with the dual purpose of developing students' critical appreciation and acquainting them with the nature and development of the short story form. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 362. MODERN NOVEL (3)
A study of representative American, British, and European novelists of the 20th century, designed to acquaint the students with the themes, techniques, and artistic problems of the modern novel and the relationship of the latter to the basic issues and concerns of modern people. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 363. MODERN DRAMATIC LITERATURE (3)
A study of the drama from Ibsen to the present day. Representative plays from Europe, Britain, and America will be read and critically interpreted. The cultural and intellectual background of modern American theater will be studied. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 364. LITERARY CRITICISM (3)
A historical survey of major critical trends from the Classical period through the 20th century and a study of contemporary critical theories through practical application to specific literary works. Prerequisite: ENGL 204 or ENGL 310 or ENGL 311.

ENGL 365. CONTEMPORARY LITERATURE (3)
A study of world literature from the 1950s to the present. Representative texts from Europe, Britain, North America, Latin America, and Africa will be read. Emphasis will be placed on postmodernism, postcolonialism, and the emergence of ethnic literatures. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 366. WOMEN IN THE ARTS AND LITERATURE (3)
A course dealing with issues of creativity and the creative process as explored in the literary, visual, and performing art of women. Class discussion proceeds from a core of literary works dealing with women and creativity: works by Austen, Rossetti, D. Wordsworth, Barrett Browning, Dickinson, Gilman, Rich, Plath, Sexton, Woolf, Drabbe, Dinesen, Zelda Fitzgerald, and Walker. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 370. STRUCTURE AND EVOLUTION OF ENGLISH (3)
Both a diachronic and synchronic survey of the English language, its history and structure, the course utilizes traditional grammar, structural linguistics, and transformational grammar as a basis for a comprehensive understanding of how language functions—both written and oral. Prerequisite: ENGL 102 or ENGL 103 or ENGL 104.

ENGL 372. ADVANCED COMPOSITION (3)
A study of techniques and extensive practice in informative, argumentative, journalistic, and contemplative writing. Prerequisite: ENGL 102 or ENGL 103 or ENGL 104.

ENGL 373. CREATIVE WRITING (3)
An applied study of basic stylistic and structural techniques characteristic of various forms of imaginative writing, analyzed in selected models, with particular emphasis given to a guided, constructive criticism of student writing submitted for class discussion. Consent of the instructor necessary for admission. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.
ENGL 375. HISTORY OF THE ENGLISH LANGUAGE (3)
A diachronic study of the English language and its linguistic heritage. Prerequisite: ENGL 310 or ENGL 311.

ENGL 377. PEER TUTORING AND COMPOSITION THEORY (3)
The course will provide a solid theoretical foundation in composition in order to enable students to improve their own writing as well as that of their peers. Students will receive practice in reading, commenting on, and assessing written work from many disciplines. Prerequisite: ENGL 102 or ENGL 103 or ENGL 104.

ENGL 380. ADVANCED TECHNICAL COMMUNICATION (3)
Building on what students learned in ENGL 280 Introduction to Technical Communication, this course will provide intensive practice in technical communication through scenarios and workshops. Students will work collaboratively on one long project that involves research. Prerequisite: ENGL 280 or permission of instructor.

ENGL 382. TECHNICAL EDITING (3)
This course provides an in-depth study of the types of technical editing found in professional settings and will include exercises in copy editing, collaborative projects, and preparing documents for a specified audience. Prerequisite: ENGL 280 or permission of instructor.

ENGL 385. WEB CONTENT DEVELOPMENT (3)
This course focuses on the non-programming aspects of Web design. Students learn to create an overall concept for a Web project, develop site maps, design an internal structure and logic for the project, choose appropriate technologies, and implement effective outreach. The course also addresses effective online research, writing for the Web, and basic page layout considerations. Prerequisite: ENGL 280 or permission of instructor.

ENGL 405. SEMINAR IN LITERATURE I (3)
A seminar course focusing on a literary genre, movement, period, or figure chosen by the instructor and approved by the department chair. The student is expected to attend regular meetings of the seminar, participate in open discussions, and present a series of short written or oral reports related to the topic chosen for study. In addition, the student is expected to submit a major documented paper which individually investigates some aspect of the subject matter of the course as a whole. In addition to ENGL 405, students also may take ENGL 406 and/or ENGL 407 and receive three hours credit for each course successfully completed. No one of this group of courses is a prerequisite for the other two, but permission of the instructor is necessary for admission. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 406. SEMINAR IN LITERATURE II (3)
A seminar course with the same format and requirements as ENGL 405 but focusing on a different genre, movement, period, or figure chosen by the instructor and approved by the department chair. In addition to ENGL 406, students also may take ENGL 405 and/or ENGL 407 and receive three hours credit for each course successfully completed. No one of this group of courses is a prerequisite for the other two, but permission of the instructor is necessary for admission. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.

ENGL 407. SEMINAR IN LITERATURE III (3)
A seminar course with the same format and requirements as ENGL 405 but focusing on a different genre, movement, period, or figure chosen by the instructor and approved by the department chair. In addition to ENGL 407, students also may take ENGL 405 and/or ENGL 406 and receive three hours credit for each course successfully completed. No one of this group of courses is a prerequisite for the other two, but permission of the instructor is necessary for admission. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209.
ENGL 418. STUDIES IN CHAUCER AND MILTON (3)
A study of the language and art and a detailed critical reading of the masterworks of two major figures in English literature: Chaucer’s *The Canterbury Tales* and Milton’s *Paradise Lost*. Prerequisite: ENGL 208, ENGL 209, or ENGL 310.

ENGL 421. SHAKESPEARE (3)
A study of selected plays and the sonnets. Minor emphasis on Shakespeare’s biography and Elizabethan background. Prerequisite: ENGL 208 or ENGL 209 or ENGL 310.

ENGL 430. BRITISH LITERATURE AND THE PROMINENCE OF PLACE (3)
A cornerstone experience for any English major, minor, or individual interested in British culture or literature, the course is designed to focus on British writers whose work or renown is framed largely by the prominence of place. A travel experience to Britain will accompany the course. Prerequisites: ENGL 102 or ENGL 103 or ENGL 104 and permission of instructor. Repeatable.

ENGL 431. BRITISH LITERATURE TRAVEL PRACTICUM (3)
The course is designed to accompany British Literature and the Prominence of Place. Electronic Web project, formal papers, and a travel journal relating the literature course to the study tour practicum are required for the practicum. Prerequisites: ENGL 102 or ENGL 103 or ENGL 104 and permission of instructor. Repeatable.

ENGL 445. STUDIES IN AMERICAN LITERATURE (3)
An in-depth study of major American writers of the 19th century with primary emphasis on the artistic achievements of each figure. Some attention also is given to the development of characteristically American philosophical and social concepts as these are evidenced in the works being discussed. Prerequisite: ENGL 204.

ENGL 446. AMERICAN LITERATURE AND THE PROMINENCE OF PLACE (3)
Geography and region play major roles in shaping the literature called “American.” In this course, students will explore the richness of region as it informs literary periods, particular literary movements or philosophies, and themes associated with nature or place. Prerequisites: ENGL 204 and permission of instructor. Repeatable.

ENGL 447. AMERICAN LITERATURE TRAVEL PRACTICUM (3)
This travel component is designed to accompany American Literature and the Prominence of Place. Course requirements include travel journal entries and other assignments that will contribute to the travel experience. Prerequisites: ENGL 204 and permission of instructor. Repeatable.

ENGL 460. PRACTICUM IN APPALACHIAN CULTURE I (1)
The student serves as assistant and/or researcher for the Appalachian Studies Festival or he/she will further explore a research or practicum project which grows out of the Appalachian Culture course. Prerequisite: Permission of instructor.

ENGL 461. PRACTICUM IN APPALACHIAN CULTURE II (2)
The student serves in more significant role as assistant and/or researcher for the Appalachian Studies Festival or he/she will further explore, in a more profound and exhaustive degree than in the first practicum course, a research or practicum project associated with the Appalachian studies program. Prerequisite: Permission of instructor.

ENGL 470. MEDIEVAL DRAMA PRACTICUM (3)
The student will serve as assistant directors, actors, stage managers, costume or set designers, dramaturges, or will assist in some other capacity for a production of medieval drama under the supervision of a faculty member. The student will research relevant areas in medieval drama. This course may be repeated.
ENGL 476. PRACTICUM IN ENGLISH I (1-3)
The student serves as a writing tutor, proofreader for *The Picket*, apprentice in a freshman composition or other general studies class, or any other departmentally approved activity. This course may be repeated. Prerequisites: ENGL 370 or ENGL 372 or ENGL 377 and/or permission of instructor.

ENGL 480. LEAD TUTOR PRACTICUM (1)
The student assists the coordinator of the Writing Center in developing instructional materials and resources for Writing Center tutors. This course may be repeated. Prerequisites: ENGL 377 and permission of Writing Center director.

ENGL 481. STUDENT TUTOR PRACTICUM IN THE WRITING CENTER (1)
The student tutor, trained in composition theory and instruction, will serve as a tutor in the Writing Center. This course may be repeated. Prerequisites: ENGL 377 and permission of Writing Center director.

ENGL 483. INTERNSHIP IN TECHNICAL COMMUNICATION (3)
The apex of the minor degree, internships—sponsored locally or in the Washington, D.C., area—will allow students to enhance career preparation while fulfilling course requirements by completing an internship report and submitting a portfolio of work accomplished. Prerequisite: ENGL 280 or permission of instructor.

ENGL 484. PRACTICUM IN EDITING (1)
The student serves on the staff of *Sans Merci*, the Shepherd University literary magazine, as proofreader, copy editor, student editor, art director, or any other capacity approved by the *Sans Merci* faculty editors. Prerequisite: Permission of instructor. This course may be repeated.

ENGL 485. SENIOR CAPSTONE PRACTICUM IN ENGLISH (1)
Under the supervision of a faculty mentor of the student’s choice, the student will propose a project, have the proposal approved, and execute the project. Students will concentrate on experiences they have had at Shepherd that would be useful in graduate school or career choices. Projects may include, but are not limited to, preparation and presentation of a conference paper; development of a substantial Web site; creation of a special workshop for other students in English; and participation in a dramatic performance. Prerequisite: Permission of department chair.

ENGL 490. INDEPENDENT STUDY IN ENGLISH (3)
See Independent Study Program. All plans of study and syllabi must be approved by the Department of English. Prerequisite: Six hours of advanced work in English.

ENGL 486. ENGLISH EDUCATION CAPSTONE PRESENTATION (1)
This English education capstone serves as a complementary component for the student teaching experience. Working under the supervision of the English specialization coordinator and drawing from experiences in the student teaching assignment, the apprentice teacher will participate in end-of-semester Department of English capstone presentations, sharing the teaching experience, a particular unit, lesson series, or project created during the final field experience. The apprentice teacher will also finish and polish the English education portfolio, which will be presented to the Department of English. Permission of department chair required.

ENVIRONMENTAL STUDIES
ENVS 201. DIMENSIONS OF ENVIRONMENTAL SCIENCE I (3)
The physical nature of ecosystems and the environmental changes resulting from human impact of planet Earth will be explored in this course. An overview of the dynamic interaction with Earth’s ecosystems will be emphasized, as well as the conflicts between our resource needs and our planet’s ecological balance. This course provides the student with an awareness of the ecological balance in nature and our impact on earth’s resources.
ENVS 202. DIMENSIONS OF ENVIRONMENTAL SCIENCE II (3)
This course will explore the cultural dimensions of environmental change. Infrastructural changes
such as demographic shifts and changing economic patterns of consumption as well as such topics
as environmental justice, social impact strategies, and environmental epidemiology will be explored.
This core course will provide a broad overview of people who both contribute to and react to a
changing environmental landscape.

ENVS 210. INTRODUCTION TO PARK ADMINISTRATION (3)
An introductory survey of the broad spectrum of the park administration field, including the phi-
losophies of administration; the role of parks in modern society, and their impact upon surrounding
areas; and the interrelationship of parks, tourism, natural and historic environments, and leisure
time. Current developments in the field will be examined. This course is essential for all students
with an interest in state and federal land management agencies.

ENVS 301. WILDLIFE MANAGEMENT (3)
An overview of the history of human’s relationship to wild animal life. Examines the principles
underlying present scientific management practices; objectives of management of game, non-game,
and threatened species; and the roles of individuals and private and governmental organizations
related to wild animals. Prerequisite: One year of biology.

ENVS 302. FORESTRY (3)
The historic and present day relationship of humans to plants on wild lands. Examines the scien-
tific principles underlying proper use of forest and range lands; wood, forage, and water produc-
tion; fire, pests, and forest management; recreation and wild land management; and the roles of
individuals and private and governmental organizations related to wild lands. Prerequisite: One
year of biology.

ENVS 305. ENVIRONMENTAL LAW AND REGULATION (3)
A survey of the legal basis for environmental actions including federal legislation, the congressional
rule-making process, and interpretations by the judicial system. Such areas as wildlife protec-
tion, water quality, air quality, environmental impact analysis, and land use management will be
discussed. This course will provide the basis for understanding the specific legal issues associated
with and management process of natural and cultural resources.

ENVS 306. ENVIRONMENTAL POLICY (4)
This course will examine historical and contemporary governmental actions which shape the
management of material and cultural resources. Changing philosophies, ideologies, budgets, and
leaders and their impacts upon both the public and private sector will be discussed. Students in
environmental studies require a sound understanding of the nature and dynamics of environmental
policy, with this course supporting the core of the environmental studies program.

ENVS 307. INTRODUCTION TO HISTORIC PRESERVATION (3)
This course explores the investigation, recordation, analysis, and protection of cultural resources.
Archeological sites, historical parks and places, archival collection, conservation and use of museum
collections, architectural resources, and historical engineering works will be discussed in their rela-
tionship to protection schemes and environmental impact analysis. This core course will introduce
students to the wide diversity of cultural resources relevant to environmental science. Crosslisted
as HPRE 101.

ENVS 308. PHYSICAL RESOURCE MANAGEMENT (3)
An introduction to the physical resources encompassed within environmental studies, including
but not restricted to the resources of air, water, energy, minerals, and land use. Impact analysis of
resource exploitation will be a major focus, examining how our need for these resources has modi-
fied our planet. This course will be critical in developing students’ understanding and appreciation
of the environmental impact resulting from resource exploitation.
ENVS 309. REGIONAL GEOLOGY AND GEOMORPHOLOGY (3)
Introduction to Appalachian and Atlantic Coastal Plain geology, emphasizing the geologic history of the region, rock formations and their attendant fossil content, regional structural geology, and overall regional geomorphology. This course provides the student the opportunity to become acquainted with the geology, geomorphology, and geologic history of our region. The interplay between geology and the environment is significant and will be a major focus of the course.

ENVS 310. PARK MANAGEMENT (3)
An investigation of the theories, practices, economics, and problems fundamental to the use of land and related resources for park purposes. Also, the organization, administration, and policy of different types of parks will be examined with emphasis upon program development, park management practices, and park operation plans. This course is essential for students interested in careers with state and federal land management agencies.

ENVS 311. RESOURCE MANAGEMENT (3)
This course will focus on specific management techniques related to natural and cultural resource use and protection. Techniques related to ecosystem management including soils, waste, forests, range lands, wildlife, fisheries, coastal zones, air, toxic wastes, energy, and cultural sites will be discussed. A significant field component will be associated with this course, exposing students to real world applications and techniques in the field. This course supports electives in the resource management track.

ENVS 319. LAND USE PLANNING (3)
An introduction to urban and regional planning with a focus on land use practices implemented to protect natural and cultural resources and to create livable communities. The course will include a history of planning during the 20th century as well as current policies and practices used by state and local governments to manage growth and stimulate activities in a resource-sensitive manner. An orientation to planning for students interested in resource management or park administration is provided by this course.

ENVS 320. COMMUNICATION STRATEGIES IN ENVIRONMENTAL STUDIES (3)
An introduction of theories, practices, and history of communication and assessment focused on strategies for building environmental awareness, understanding, and responsible action. This course provides the student opportunities within the classroom and through laboratory and field experiences.

ENVS 321. AMERICAN DECORATIVE ARTS (3)
This course will focus on the theoretical and historical foundations of understanding changes in material culture. Special focus will be on changes in the design, lighting, furnishing, and uses of historic house interiors.

ENVS 322. ENVIRONMENTAL HISTORY (3)
This course examines the development of the environmental field, emphasizing the persons and events that led the environmental movement of today.

ENVS 325. ORAL HISTORY (3)
This course provides an introduction to the theory and methodology of oral history interviewing and ethnography. Students will learn the process of working with informants, recordation of oral history, transcription of interviews, and analysis of documentary material.

ENVS 340. SUSTAINABLE AGRICULTURE AND LAB (4)
Factors such as decreasing soil fertility, soil erosion, pesticide resistance, increasing input costs, ground water contamination, and demand for chemical-free food and livestock have convinced the agriculture community of the need for new approaches to food and fiber production. This course
examines basic design principles and examples of environmentally and economically sustainable agriculture systems. The course examines the application of ecological principles to sustainable management practices that biologically improve the fertility, organic matter content, and soil structure while minimizing or even eliminating the need for chemical applications for control of pathogens, insect pests, and weeds.

**ENVS 341. SUSTAINABLE ENERGY AND DEVELOPMENT (4)**

Energy use and management are inextricably intertwined with many societal issues and numbers aspects of development. These issues and aspects include population growth, health impacts due to deterioration of air quality and effects of acidification on aquatic and terrestrial systems, economics, and national security concerns about availability of energy sources. This course introduces concepts of energy conservation and management and explores different energy sources for sustainable growth. Prerequisites: BIOL 101 and 102 or BIOL 208 and 209 or equivalent; ENVS 201 and 202.

**ENVS 342. LIMNOLOGY (4)**

This course is a comprehensive introduction to the biological, chemical, and physical conditions affecting life in fresh water, particularly lakes, ponds, and reservoirs. Topics include the linkages between terrestrial and aquatic ecosystems, limnological techniques and equipment, productivity, pollution, fisheries management, and aquaculture. Major biological components such as the benthos, zooplankton, phytoplankton, macroinvertebrates, vertebrates, and aquatic vegetation will be examined.

**ENVS 343. AQUATIC ENTOMOLOGY (4)**

This course introduces the taxonomy and ecology of the insects most commonly found in freshwater environments. Topics covered include insect diversity, behavioral, morphological, and physiological adaptations to specific habitats, population and community level ecology, and ecological relationships with physical and biotic environments. The laboratory will emphasize methods of sampling for aquatic invertebrates, recognition of all orders and major families of aquatic insects, and use of keys for identification of specific aquatic insects to lower taxonomic form.

**ENVS 344. ICHTHYOLOGY (4)**

This is an introductory course dealing with the classification, ecology, behavior, and physiology of marine and freshwater fishes. The course deals with a variety of topics such as the diversity of fishes, form and function, reproduction and early ontogeny, quantitative fisheries resource management, behavior, fisheries ecology, and conservation. Laboratory topics include collection, ichthyological methods, aging, classification, and identification of worldwide fishes.

**ENVS 360. SEDIMENTOLOGY AND STRATIGRAPHY (3)**

The course focuses on modern and ancient sedimentary environments, relating these environments to the composition and genesis of sediments and sedimentary rocks. Principles of stratigraphy applied in the study of sedimentary rocks and stratigraphic theory are also considered. Three hours of lecture and two hours of lab per week. Prerequisites: GSCI 301; ENVS 308.

**ENVS 362. SOIL SCIENCE AND LAB (4)**

This course examines physical structure and composition of soil in conjunction with the dynamics of organisms including the microbes and macrobiota within the physical and chemical environment of the soil. The soil classification as well as the role of soils and their biota in food webs and ecosystem processes will be emphasized. The laboratory will provide field and lab techniques used in the study of soil ecology. Prerequisites: BIOL 101 and 102 or BIOL 208 and 209 or equivalent; ENVS 202 and 202, GSCI 301.

**ENVS 368. GEOLOGY OF NATIONAL PARKS (3)**

This course provides an overview of the geology, geomorphology, and historical development of selected national parks. Special emphasis will be placed on regional parks through field trips, visits with park officials and resource managers, and discussions of environmental problems singular
to parks. An application of geological method and techniques will enhance students’ knowledge base, providing useful background for student interested in careers in resource management and park administration.

ENVS 371. DOCUMENTATION OF HISTORIC PROPERTIES (3)
Students will learn the methodology for locating, researching, and field recording historic cultural resources. The course will cover photographing, describing, and assessing sites, buildings, and structures and then researching their history as well as mapping and producing site plans, floor plans, and elevations. GIS systems will be introduced. Prerequisites: ENVS 307 and ANTH 370. Crosslisted as HPRE 202.

ENVS 372. PRESERVATION TECHNOLOGY (3)
Students will learn the history of architectural technology as applied to the construction of old building structures. The course will focus on components of historic buildings and structures, materials and fabric used in the past, as well as approved modern replacement components and compatibility with historic materials. Prerequisite: ENVS 307 or ANTH 370. Crosslisted as HPRE 201.

ENVS 401. CONSERVATION ECOLOGY (4)
An environmentally focused course emphasizing the varied aspects of the structure, function, and perpetuation of ecosystems. Societal impact on ecosystem structure will be considered through discussion and laboratory analysis, with the recognition of ecosystem disruption a major course focus. Representative topic areas include analysis of aquatic marine populations, types of ecosystems, population regulation, and energy flow. Prerequisites: BIOL 101 and 102 or BIOL 208 and 209 or equivalent; ENVS 201, ENVS 202.

ENVS 422. STREAM ECOLOGY (4)
This course examines the physical, chemical, and biological processes in steam ecosystems. The emphasis is to understand ecological structure and function and to assess anthropological and natural impacts on ecological function. Students in the course will conduct basic aquatic field sampling and laboratory analysis of physical, chemical, and biological components and test hypotheses related to environmental assessment.

ENVS 440. SOLID WASTE/AIR QUALITY MANAGEMENT AND LAB (4)
An applied course focusing on solid waste standards, regulations, and the nature of solid waste and the management, monitoring, and placement criteria employed in landfill siting. Air quality standards and regulations, pollutant composition, and monitoring of pollution sources will constitute the second aspect of the course. Non-point source pollutants for air and solid waste will be considered as well as the more traditional isolated point sources. The course will include site visits and presentations by experts in specific areas of solid waste and air quality management. This course provides the student with an awareness of criteria employed in management of solid waste and air pollution, two critical areas of waste management.

ENVS 441. HYDROLOGY AND LAB (4)
This course will focus on the dynamic nature of earth’s surface and subsurface waters and the impact of human exploitation of these water resources. Techniques for monitoring and analyzing both surface and subsurface waters will be presented and practically applied as part of the laboratory component. Water quality standards and the criteria on which these standards are based will also be addressed in this course.

ENVS 450. ENVIRONMENTAL INTERNSHIP (3-6)
A 400-hour internship with students placed within an environmental organization or industry in which they can apply their environmental background in a practical forum. Although flexible arrangements can be formulated for placement, it is preferred that the experience be completed during one summer or a semester after completion of the junior year. This will provide the student with practical experience within the field, enhancing his or her awareness of practical applications of environmental studies and will increase the student's employability.
ENVS 451. SENIOR RESEARCH SEMINAR (3)
Independent research-based course designed as a capstone for seniors. Research on a selected topic will be synthesized as a senior thesis presentation. Students will refine written and oral communication skills as well as focus on the analytical skills gained from the program as a whole. This potentially serves as a mini-internship since data may be generated from the student’s association with off-campus agencies.

ENVS 490. APPLIED REMOTE SENSING (4)
An introductory course into the many varieties of remote sensing employed within the environmental sciences and applications of these techniques to field analysis. The course will focus on application of Geographic Information Systems (GIS) to the environmental sciences. These systems employ computers to store, retrieve, transform, and display spatial environmentally oriented data and have a myriad of applications in environmental studies. Remote sensing is typically employed in environmental analyses, ranging from land use to wetlands characterization, requiring the environmental studies student’s awareness of these frequently applied techniques.

FAMILY AND CONSUMER SCIENCES
FACS 101. TEXTILES (3)
A study of textile fibers, yarns, and construction techniques as a basis for selecting fabrics for clothing and the home.

FACS 102. CLOTHING (4)
A course designed to develop visual identity, to apply the principles and elements of design to enhance physical assets, and to make clothing purchase decisions using available consumer information. Basic clothing construction skills are applied to projects suitable for the student’s needs.

FACS 202. FOOD AND MEAL MANAGEMENT (4)
A course designed to provide proficiency in the selection and preparation of basic foods and in the planning, preparing, and serving of nutritionally adequate meals.

FACS 215. FASHION ANALYSIS (3)
A study of fashion concepts and an exploration of identified fashion variables as they relate to the fashion industry.

FACS 300. MARRIAGE RELATIONS (3)
The process of marital adjustment, including the problems of dating, courtship, engagement, marriage, pregnancy, and aging.

FACS 304. CHILD DEVELOPMENT (3)
A study of the physical, emotional, social, and intellectual development of the individual from the prenatal period through the preschool years. A two-hour laboratory experience in the University nursery school is required.

FACS 306. INTERIOR DESIGN (3)
The use of basic art principles in creating beauty, expressiveness, and functionalism in interior environments.

FACS 307. FAMILY AND CONSUMER SCIENCES MANAGEMENT (3)
A study of the application of the principles of management to human and nonhuman resources in developing values and achieving individual and/or family goals.

FACS 308. HOUSING (3)
A course designed to help individuals plan for housing needs at all stages of the life cycle and at a variety of socioeconomic levels.
FACS 310. PARENTS AND CHILDREN THROUGH THE LIFESPAN (3)
A study of the relationships between parents and children from the prenatal period throughout the life cycle.

FACS 315. CULTURAL INFLUENCES ON CLOTHING (3)
An integrated approach to the study of the diverse meanings, symbolism, and significance which people attach to clothing and appearance.

FACS 318. NUTRITION (3)
A study of the functions, sources, and requirements of nutrients. Emphasis is placed on meeting the nutritional needs of individuals of all ages in a variety of situations.

FACS 403. CONSUMER ECONOMICS (3)
A study of the opportunities and responsibilities of the consumer in choosing goods and services for use in promoting individual and/or family goals. Emphasis is placed on financial planning throughout the life span.

FACS 410. SPECIAL STUDIES (1-4)
Opportunity is provided for students to do individual library or laboratory work on special problems in family and consumer sciences not included in present courses. Approval of instructor and advisor. This course may be repeated for credit.

FACS 430. SEMINAR (2)
Survey of recent research in the field of family and consumer sciences and selection of a problem for experimentation and evaluation. Senior standing.

**FIRST-YEAR EXPERIENCE**

**FYEX 100. FIRST-YEAR ORIENTATION (2)**
This two-credit course introduces students to campus life, with discussions of survival skills for entering students, as well as ways to acclimate to personal, academic, career, social, and recreational activities at Shepherd University. Through class discussions students will develop positive lifelong learning skills and will learn to cope successfully with the demands of the first year of university life. Opportunities for interaction with faculty and classmates will occur both in and outside of the classroom.

**FYEX 101. FIRST-YEAR ORIENTATION FOR ATHLETES (1)**
This one-credit course provides student-athletes with information concerning policies at Shepherd University, the Shepherd University Department of Athletics, and the NCAA. In addition, this course introduces students to campus life, with discussions of survival skills for entering students, as well as ways to acclimate to personal, academic, career, social, and recreational activities at Shepherd University. Through class discussions students will develop positive lifelong learning skills and will learn to cope successfully with the demands of the first year of university life as a student-athlete. Opportunities for interaction with faculty and classmates will occur both in and outside of the classroom. Student-athletes only.

**FYEX 102. FIRST-YEAR INTEREST GROUP (1)**
This one-credit course is centered on a common interest shared by a faculty or staff person and the students enrolled in the course. Students will sign up for an interest of their choice; together the students and faculty/staff mentor will explore the interest as well as discuss survival skills for incoming students. The course will consist of several small group meetings with the mentor as well as three large-group sessions. The larger sessions will focus on acclimating students to the University, wellness, and diversity.
FRENCH

FREN 101. ELEMENTARY FRENCH I (3)
A basic, culturally-oriented course in conversational French designed for beginning students who wish to develop skills in speaking, reading, writing, and comprehending French. Emphasis is placed on oral communication through dialogue and guided compositions. An online workbook provides additional practice in writing and listening.

FREN 102. ELEMENTARY FRENCH II (3)
A continuation of FREN 101, this course allows students to strengthen their comprehension and speaking proficiency in French by providing extensive practice in oral and written communication and self-expression and through discussions of French texts. An online workbook provides additional practice in writing and listening. Prerequisite: FREN 101.

FREN 203. INTERMEDIATE FRENCH I (3)
A review of the basic structures and phonetics of the French language studied through readings and discussions of French cultural and literary selections and enhanced through further oral communication practices, brief compositions, and oral reports. Prerequisites: FREN 101 and FREN 102.

FREN 204. INTERMEDIATE FRENCH II (3)
A continuation of FREN 203, this course is designed for more advanced students and allows them to strengthen their proficiency in French through advanced structural and oral exercises and several different kinds of writing assignments. Prerequisites: FREN 101, FREN 102, and FREN 203.

FREN 303. SURVEY OF FRENCH LITERATURE (3)
The chief periods, authors, and works of French literature from the Serments de Strasbourg to 1700 taught in French. Prerequisites: FREN 101 and FREN 102 and consent of instructor.

FREN 304. SURVEY OF FRENCH LITERATURE (3)
A continuation of FREN 303 with an emphasis on the major writers and literary movements from 1700 to the present day taught in French. Prerequisites: FREN 101 and FREN 102 and consent of instructor.

FREN 401. ADVANCED GRAMMAR AND COMPOSITION (3)
An analytical study of the essential modern French forms of expression. Much emphasis is put on French syntax and its usage. The techniques of the best French writers are examined. Many themes on various topics will be written. Prerequisites: FREN 101, FREN 102, FREN 203, and FREN 204.

FREN 402. APPLIED LINGUISTICS IN ORAL FRENCH (3)
The pronunciation of French vowels, diphthongs, consonants, words, and word groups. Selections of prose and poetry are read to perfect articulation and intonation. Prerequisites: FREN 101, FREN 102, FREN 203, and FREN 204.

FREN 403. ADVANCED FRENCH CONVERSATION (3)
Organized practice in oral French. Intensive study of idiomatic expressions. Oral reports on everyday topics and on selected readings. Laboratory work. Prerequisites: FREN 101, FREN 102, FREN 203, and FREN 204.

FREN 404. FRENCH CIVILIZATION AND CULTURE (3)
The formation of the French nationality examines the geography, architecture, literature, music, science, education, and political administration of France taught in French. Prerequisites: FREN 101 and FREN 102.

FREN 419. INDEPENDENT STUDY IN FRENCH (1-3)
See Independent Study Program. All plans of study and syllabi must be approved by the department.
GENERAL SCIENCE

GSCI 101. ASTRONOMY I (4)
An introductory survey course in astronomy covering aspects of observational astronomy and the solar system. Historical developments, discoveries, and advances also will be discussed, compared, and contrasted. Three one-hour lectures and one two-hour lab per week.

GSCI 102. ASTRONOMY II (4)
This course will cover aspects of astronomy such as stellar formation and evolution, galaxies, and cosmology. Recent discoveries with fundamental implications for modern astronomy also will be explored. Three one-hour lectures and one two-hour lab per week.

GSCI 103. GENERAL PHYSICAL SCIENCE (4)
A survey course designed to explore the major physical phenomena in the natural sciences, encompassing a study of motion, energy, electromagnetism, waves (light and sound), and atomic and nuclear physics. The course will meet in three one-hour lectures and one two-hour laboratory session.

GSCI 104. GENERAL PHYSICAL SCIENCE (4)
A survey course in physical science encompassing astronomy, meteorology, and geology. The principles and applications presented are characteristic of introductory courses in those separate areas. Scientific approaches to problem-solving and the interdependency of the areas of science are emphasized. This course will meet in three one-hour lectures and one two-hour laboratory session.

GSCI 300. HISTORY OF SCIENCE (3)
A general survey of the progress of science from earliest times to the present. The main scientific discoveries and theories are considered in their historical perspective.

GSCI 301. PHYSICAL GEOLOGY (4)
A combined course in physical and historical geology dealing with the composition, structure and history of planet Earth. Minerals, rocks, tectonic processes, and physical characteristics of the earth’s surface will be emphasized in the physical component. Evolution, fossils, and the changing conditions and organisms throughout geologic time constitute the historical component. Three hours lecture and two hours lab per week.

GSCI 302. GENERAL ASTRONOMY (4)
A descriptive course dealing with the physical nature of the planets and stars as seen through modern astronomy. The history of astronomical observation and development of modern principles along with properties of electromagnetic radiation and gravitation are included in the course. Three hours lecture and two hours lab per week.

GSCI 303. METEOROLOGY (4)
A course dealing with the composition and structure of the atmosphere, the energy which drives it, and the physical processes involved in weather phenomena. The gathering and analysis of pertinent data are emphasized. Weather forecasting and climatology are also considered. Three hours lecture and two hours lab per week.

GSCI 306. INTRODUCTION TO OCEANOGRAPHY (3)
A survey of oceanography at an introductory level, involving the properties of sea water and its movement; the chemistry, physics, and biology of the ocean; bathymetric features and submarine geology; and oceanographic instruments and methods of collecting data.

GSCI 307. OCEANOGRAPHY LAB (1)
Assessing the current health and potential resources of marine environments requires knowledge of basic chemistry, physics, and biology. Oceanography laboratory includes exercises of these components as they pertain to marine systems. The laboratory will include a field trip to the Atlantic shore. Prerequisites: BIOL 101 and 102 or BIOL 208 and 209 or equivalent; ENVS 201 and 202.
GSCI 312. HISTORICAL GEOLOGY (4)
A course dealing with the history of planet earth focusing on the interplay between plate tectonics and life. Plate boundary positions throughout geologic time will be covered as will life on the planet over the last 3.7 billion years. Evolution, fossils, and the changing conditions and organisms throughout geologic time will be emphasized. Three hours lecture and two hours lab per week.

GSCI 320. SPECIAL STUDIES IN GENERAL SCIENCE (1-3)
The study of special topics in general science of special interest to students and faculty, including those topics which may be the subjects of selected television series or other media presentations.

GSCI 350. NATURAL SCIENCE INTERPRETATION (3)
A study of the general principles of science interpretation for the lay public. Individual preparation of programs in various formats, e.g. nature walk, fireside talk, museum presentation is expected. Extensive use is made of interpretive centers in the region.

GENERAL STUDIES PHYSICAL EDUCATION (GSPE)
The general studies physical education program is part of the University-wide program of general studies. The GSPE program provides students with information to help them maintain healthy lifestyles, understand the elements of fitness, and develop a commitment to lifetime fitness and wellness. All students are required to complete GSPE 210 Fitness for Life for two credit hours.

GSPE 210. FITNESS FOR LIFE (2)
This course covers the dimensions of fitness and wellness including the components of physical fitness, nutrition, weight management, stress management, preventable disease, STD prevention, and developing a personal fitness wellness program for each individual. Academic and physical activities are both part of this course. This course meets the GSPE requirement.

Additional General Studies Physical Education Courses for Elective Credit
GSPE 100. Adapted PE I (may be repeated once)
GSPE 104. Low Impact Aerobics
GSPE 105. Aerobics
GSPE 106. Step Aerobics
GSPE 107. Water Aerobics
GSPE 108. Body Sculpture I
GSPE 109. Body Sculpture II
GSPE 110. Step Sculpture
GSPE 111. Aerobic Boxing/Coed
GSPE 112. Jazz Dance
GSPE 113. Jazzercise I
GSPE 114. Jazzercise II
GSPE 115. Modern Dance I
GSPE 116. Modern Dance II
GSPE 117. East Coast Swing Dance/Men
GSPE 118. East Coast Swing Dance/Women
GSPE 120. Archery
GSPE 121. Billiards I
GSPE 122. Billiards II
GSPE 123. Bowling
GSPE 125. Camping
GSPE 126. Backpacking
GSPE 127. Orienteering
GSPE 128. Rock Climbing/Rappelling
GSPE 130. Canoeing
GSPE 131. Ice Skating
GSPE 132. Ice Hockey
GSPE 133. Cycling
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GSPE 135. Fencing
GSPE 136. Golf
GSPE 137. Hiking
GSPE 138. Winter Hiking
GSPE 139. Jogging
GSPE 140. Horseback Riding I
GSPE 141. Horseback Riding II
GSPE 143. Marching Band
GSPE 144. Korean Martial Arts
GSPE 145. Karate I
GSPE 146. Karate II
GSPE 147. Self Defense for Women
GSPE 148. Advanced Self Defense for Women
GSPE 149. Self-Defense/Coed
GSPE 150. Tennis/Badminton
GSPE 151. Intermediate Tennis
GSPE 154. Racquetball
GSPE 156. Softball
GSPE 160. Swimming
GSPE 161. Fitness Swimming
GSPE 162. Springboard Diving
GSPE 165. Lifeguard Instructor
GSPE 169. Fly Fishing
GSPE 170. Volleyball
GSPE 171. Advanced Volleyball
GSPE 173. Walleyball
GSPE 175. Weight Training for Men
GSPE 176. Weight Training for Women
GSPE 179. Wrestling
GSPE 180. Snow Skiing I
GSPE 181. Snow Skiing II
GSPE 182. Snow Skiing III
GSPE 200. Exploring Leisure (PE Majors Only)
GSPE 201. Wellness/Fitness (PE Majors Only)
GSPE 205. The Weight Loss Program
GSPE 250. Adult Fitness

GEOGRAPHY

GEOG 100. WORLD REGIONS (3)
Looks in-depth at the major cultural regions of the world today, early cultural influences, and limitations imposed by the physical environment. Intended for the nonspecialist, the course is an introduction to University geography. It is especially recommended for students lacking prior preparation in geography.

GEOG 101. PRINCIPLES OF WORLD GEOGRAPHY (3)
Fundamental course concentrates upon the study of humans in the different physical environments on earth. The rich diversity of human culture is outlined and emphasized. Students with a weak background in geography are strongly encouraged to take GEOG 100 before attempting this course.

GEOG 201. PHYSICAL GEOGRAPHY (3)
Focuses on the Earth’s place in the solar system; continental drift theory; global energy-flow patterns; the causes and characteristics of climate, including atmospheric pressure, air and water circulation, air masses, and storms; landforms; biogeography; and climatic-biotic soil-forming processes.
GEOG 301. WORLD ECONOMIC GEOGRAPHY (3)
Involves the systems of livelihood of the industrial nations and of the Third World peasant economies. Forsaking the traditional commodities approach, this course employs the life-systems method. The geographical aspects of world food and population dynamics and of economic systems are investigated.

GEOG 400. GEOGRAPHY OF LATIN AMERICA (3)
Focuses upon pre-colonial Latin America, the colonial impact, and modern Latin America, with its multitude of cultures, environments, and civilizations. The geographical context of current social, economic, and ecological problems will be viewed.

GEOG 401. GEOGRAPHY OF EUROPE (3)
Will explore the continent of Europe and its people, with emphasis upon the rich ethnic diversity of European people and their environment. The effect of environmental changes since the Pleistocene Age upon human patterns of livelihood is examined. Folk ethnographies and informal reports will familiarize students with local regions and with topics of individual interest.

GEOG 402. GEOGRAPHY OF ANGLO-AMERICA (3)
A conventional approach to the study of the cultural and physiographic provinces of Canada and the United States. Special topics involved will include agglomeration, development of megalopolis, and matters of interregional circulation and interaction.

GEOG 403. GEOGRAPHY OF THE FORMER UNION OF SOVIET SOCIALIST REPUBLICS (3)
A study of the diverse Russian people and their state-planned economy within a geographical context. Concentration will be upon the economic planning regions, agriculture, industry, and transportation development.

GEOG 407. GEOGRAPHY OF ASIA (3)
A survey of Asia, excluding the Soviet Union, the East and South Asian cultures, and the Arab states. The physical environment, cultures, and nations’ problems and potential are given balanced emphasis.

GEOG 408. GEOGRAPHY OF AFRICA (3)
A survey of the more than 40 nations of Africa, their environment, cultures, problems, and prospects.

GERMAN
GERM 101. ELEMENTARY GERMAN I (3)
The study of fundamentals of the German language, with emphasis on pattern exercises, questions and answers, reading and discussion of stories and German dialogue; also pronunciation during classes and listening during required laboratory hours to CDs, videos, and tapes in German.

GERM 102. ELEMENTARY GERMAN II (3)
A continuation of GERM 101. Discussion and conversation in German, also extensive study of regular and irregular verbs, idioms, and readings in German prose and poetry. Prerequisite: GERM 101.

GERM 203. INTERMEDIATE GERMAN I (3)
A concentration of German grammar, verbs, and idioms, stressing pattern exercises in German, conversation, reading, and discussion of German literature, culture, and history. Prerequisites: GERM 101 and GERM 102.

GERM 204. INTERMEDIATE GERMAN (3)
A continuation of GERM 203. Grammar review and study of literature, supplemented with translations, reading, and conversation in German. Prerequisites: GERM 101, GERM 102, and GERM 203.
GERM 419. INDEPENDENT STUDY IN GERMAN (1-3)
See Independent Study Program. All plans of study and syllabi must be approved by the department.

GRAPHIC DESIGN
(Also see Art and Photography/Computer Imagery)
GRDS 171. GRAPHIC DESIGN I (3)
Introductory course designed to provide students with the basic concepts and techniques of graphic design. A variety of traditional tools and techniques are explored through numerous projects, along with an overview of the major historical developments in graphic design. Emphasis is placed on developing production skills, critical and visual aesthetics, and design strategies.

GRDS 276. INTRODUCTION TO COMPUTER APPLICATIONS (3)
Introduction to understanding and using a computer as a major tool in the development of visual information. The Macintosh computer will be used, focusing on general system operations/utilities as well as illustration and paint software programs. Emphasis is placed on developing an understanding of the selected software programs enabling the student to work productively with them. Prerequisite: GRDS 340, PHOT 282, or permission of the instructor.

GRDS 320. DIGITAL STUDIO (3)
Digital Studio I introduces the student to using the Macintosh computer as a tool for image creation and manipulation. Both vector and raster-based software are explored, with a focus on digital drawing tools, scanning software, and the preparation of files for successful use in both print and multimedia applications. Technical proficiency and aesthetic judgment are emphasized. Naming, saving, printing, organizing, e-mailing, and archiving digital files are addressed. Prerequisite: GRDS 200; corequisite for majors: GRDS 300.

GRDS 340. GRAPHIC DESIGN II (3)
This course introduces students to the communication challenges of a client-driven profession through projects that demand conceptual thinking and visual problem-solving skills, and which require strict adherence to specifications, deadlines, and presentation standards. Topics covered include interdependency of form and content; information hierarchy and visual unity; and economic, social, and cultural impact of design. The importance of research, ideation, process, documentation, and craft are stressed. Prerequisites: GRDS 300, 320; corequisite for majors: GRDS 360.

GRDS 370. ADVANCED DESIGN (3)
In-depth study of the elements and principles of design. Problems, research, and field trips are taken to reinforce understanding. Prerequisite: GRDS 276. May be repeated for credit.

GRDS 374. TYPOGRAPHY (3)
The course will focus on type—its legibility, readability, and use as a visual element. Type will be investigated in terms of its aesthetic possibilities and as a form of visual communication. Contemporary type structure, type usage in varied formats, and its historical influence will be topics of emphasis. Prerequisite: GRDS 276.

GRDS 380. HISTORY OF GRAPHIC DESIGN (3)
This course provides students a survey of the field of graphic design from its prehistoric origins to contemporary practice, focusing on pivotal events and achievements that have shaped the evolution of visual communication. Students explore the relationship between design and its audience, analyze the evolution of formal attributes, and study the social and economic impact of design activities. Significant stages in graphic design are explored in relation to both technological advances in the field as well as change and innovation in related disciplines. Prerequisite: GRDS 360.
GRDS 400. SPECIAL TOPICS IN GRAPHIC DESIGN (3)
A variety of design approaches will be presented. Individually offered courses will focus on a select area of design and work toward developing the student's understanding of it. Specific projects related to topic offered. May include field trips and/or work done at a site other that Shepherd University. Prerequisites: ART 208 and GRDS 373. May be repeated for credit up to maximum of 6.

GRDS 410. TYPOGRAPHY II (3)
This course expands the fundamentals of typography and challenges the student to organize and produce complex typographic designs and layouts. Students learn to analyze, edit, and organize information and to create dynamic, clear communication for business, literary, and instructional purposes. Legibility, readability, hierarchy, structure, pacing, and sequencing are covered. Students are encouraged to consider content, interpretation, audience, and appropriateness when approaching assignments. Prerequisite: GRDS 380.

GRDS 420. ADVERTISING DESIGN AND PHOTOGRAPHY (3)
This interdisciplinary course introduces students to the art and business of advertising. Working in tandem to complete various print advertising assignments, students develop an awareness of the relationship between form and content and discover the impact that color, shape, image, and typography have on communicating messages and influencing consumers. Legal, ethical, and economic considerations involved in the business of advertising are covered, as well as basic business practices such as pitching ideas, strategic planning, and implementing campaigns. Emphasis is placed on creativity, resourcefulness, teamwork, project management, and production skills. Prerequisites: GRDS 410 for graphic design majors; PHOT 381 and 383 for photography majors.

GRDS 440. INTERACTIVE DESIGN (3)
Along with print, Web sites and multimedia presentations have not only become standard marketing tools for business, but are also important components of a designer's promotional efforts. In this course students learn the latest software and techniques to design, develop, and publish a self-promotional Web site and multimedia presentation. Content, structure, nomenclature, navigation, and usability are covered in-depth. This course requires intermediate knowledge of Photoshop. Prerequisite: 18 credits in graphic design.

GRDS 450. ANNUAL REPORT STUDIO (3)
This two-semester course challenges a student team with the design, photography, and production of a highly visible publication for the National Capital Region of the U.S. National Park Service. Collaborating with a client communications director, design students learn to generate imaginative creative concepts from editorial content and to communicate those concepts through effective art direction. Student photographers travel extensively throughout the greater Washington, D.C., area to capture images that satisfy specific content, format, and technical requirements. Client contact, project management, team-building, and presentation skills are sharpened in this unique real world experience. Prerequisites: 18 credits in graphic design or photography; a minimum 3.0 GPA; interview and portfolio review; and permission of instructor. Must be taken twice in consecutive semesters.

GRDS 470. INTERNSHIP IN GRAPHIC DESIGN (3)
Offered as an extension of the student’s classroom experience; students are encouraged to explore a working experience in the area of design they hope to pursue. Prerequisites: 12 hours of graphic design and a 3.0 GPA. May be repeated for credit, up to a maximum of 6 credits.

GRDS 481. COMPUTER APPLICATIONS IN GRAPHIC DESIGN /PHOTOGRAPHY (3)
A professional approach to the usage of design skills in the production of high profile work. Collaborations with individuals from related professions stressed. Real world jobs worked on and produced. Prerequisite: GRDS 373.
HEALTH EDUCATION

HLTH 103. PERSONAL HEALTH (3)
A study of modern health problems and their solutions. Mental health and stress, drug use and abuse, fitness and nutrition, human sexuality, cancer, cardiovascular disease, environmental health, and the aging process will be discussed.

HLTH 110. WELLNESS IN THE WORKPLACE (3)
This introductory course examines the effects of Workplace Health Promotion (WHP) programs, including chemical dependency, exercise, heart disease, stress management, smoking cessation, nutrition and cancer screening on absenteeism, worker productivity and peak performance, worker satisfaction and morale, worker injury and illness, and employer costs.

HLTH 200. HEALTH AND WELLNESS (3)
Examination of activities that help individuals recognize components of lifestyles detrimental to good health, and development of principles and programs to improve quality of life.

HLTH 225. FIRST AID/CPR (3)
Provides training to enable laypersons to respond appropriately to emergency situations and teaches skills needed to manage emergency situations until professional personnel arrive. Students will learn to recognize emergencies, make first aid decisions, and provide care with little or no first aid supplies or equipment.

HLTH 300. SUBSTANCE USE AND ABUSE (3)
This course analyzes the psychological, sociological, and pharmacological aspects of drug use, misuse, and abuse.

HLTH 301. HEALTH AND SAFETY IN THE ELEMENTARY SCHOOL (3)
Prepares elementary education majors to teach health and safety in an elementary school. Students will study the teacher’s role, nature of children in grades K-6, planning and demonstration of teaching methods.

HLTH 360. SCHOOL HEALTH PROBLEMS (3)
Enables students to recognize health problems in the home, community, and school. Strategies to help students deal with and resolve health problems are stressed. Prerequisites: HLTH 103 and at least junior class standing. Offered every third semester.

HLTH 370. COMMUNITY HEALTH EDUCATION (3)
An overview of institutional health agencies and organizations, both official and nonofficial, at local, state, and national levels. Exploration of both purpose and function of agencies and institutions for promoting, maintaining, and meeting the health needs of community members. Emphasis on health care, environmental concerns, health legislation, and health insurance. Consumer health choices, advertising, and watchdog agencies will be discussed. Prerequisite: HLTH 103.

HLTH 390. EXERCISE PRESCRIPTION (3)
Provides basic skills and knowledge necessary in assessment of an individual’s health status and teaches students to prescribe fitness programs for lifestyle enhancement. Permission of instructor.

HLTH 420. ISSUES IN DRUG ADDICTION (3)
This course is designed to increase knowledge of substance abuse issues. It should be of special interest to law enforcement personnel, probation officers, teachers, counselors working in this field, and University students.
HLTH 468. PRINCIPLES OF SPORTS NUTRITION (3)
Basic scientific principles as they apply to sports nutrition to maintain health and human performance will be reviewed. Concentration will be on the nutrient requirement of the athlete through the training, competitive, and rehabilitative phases. Biochemical functions and interrelationships of nutrients are examined. Current nutritional trends are evaluated. Special application is made for the age, gender, and type of training of the athlete. Prerequisites: GSPE 210, HLTH 300, or permission of the instructor.

HISTORIC PRESERVATION
HPRE 101. HISTORIC PRESERVATION (4)
This course explores the investigation, recordation, analysis, and protection of cultural resources. Archeological sites, historical parks and places, archival collection, conservation and use of museum collections, architectural resources, and history engineering works will be discussed in their relationship to protection schemes and environmental impact analysis. This core course will introduce students to the wide diversity of culture resources relevant to environmental science. Crosslisted as ENVS 307.

HPRE 102. HISTORIC ARCHITECTURE IN THE U.S. (3)
The role of American architecture as a culture resource worthy of study and preservation is the focus of this course. Styles and periods of architecture, the consideration of architectural resources in planning and environmental education, and the reflection of American culture in the built environment will be discussed. This course will serve as an elective in cultural resource management and will be essential for students with an interest in urban planning or park administration. Crosslisted as ANTH 370.

HPRE 111. HISTORIC PRESERVATION LAW (3)
This course will offer an overview of the development of local, state, and federal historic preservation laws, with a special emphasis on the importance of the National Historic Preservation Act of 1966. Important case studies nationally and in the region will be explored, and students will be encouraged to study the practical side of preservation law as it applies to agencies and communities in the tri-state region and how those laws are enforced. Prerequisites: HPRE 101 and HPRE 102 or permission of the program coordinator.

HPRE 112. INTERNSHIP IN HISTORIC PRESERVATION (3)
An independent study that integrates the lessons learned in the classroom with supervised practical work experiences in historic preservation. Students may satisfy this requirement by working for local, state, or federal agencies (such as the National Park Service), historic preservation firms or nonprofit agencies, and architects or building contractors. A final written report is required. Prerequisites: HPRE 101, HPRE 102, HPRE 201 and permission of historic preservation program coordinator.

HPRE 113. BATTLEFIELD PRESERVATION (3)
This course will survey the development of battlefield preservation in the United States, from the formation of the Gettysburg Battlefield Memorial Association in 1864 to recent efforts to expand the definition of threatened battlefields by the American Battlefield Protection program of the National Park Service. Sites from the French and Indian War to World War II will be featured, with special focus on Civil War battlefield preservation efforts since the Civil War Centennial. Crosslisted as ENVS 220.

HPRE 201. PRESERVATION TECHNOLOGY AND HISTORY MATERIALS (3)
Students will learn the history of architecture technology as applied to the construction of old building structures. The course will focus on components of historic buildings and structures, materials and fabric used in the past, as well as approved modern replacement components and compatibility with historic materials. Prerequisite: HPRE 101. Crosslisted as ENVS 372.
HPRE 202. DOCUMENTATION OF HISTORIC PROPERTIES (3)
Students will learn the methodology for locating, researching, and field recording historic cultural resources. The course will cover photographing, describing, and assessing sites, buildings, and structures and then researching their history as well as mapping and producing site plans, floor plans, and elevations. GIS systems will be introduced. Prerequisite: HPRE 101. Crosslisted as ENVS 371.

HISTORY
HIST 100. HISTORY OF CIVILIZATION: ASIAN TRADITIONS (3)
The course covers the histories of East, Southeast, and South Asia from the inception of civilizations to approximately 1700 AD. It focuses on both political and cultural development within these regions. Cannot be taken together with HIST 101 to fulfill general studies requirement.

HIST 101. HISTORY OF CIVILIZATION: THE ANCIENT AND MEDIEVAL WORLDS (3)
A survey of ancient and medieval world civilizations. Emphasis is placed on basic similarities and differences in government, religion, economics, society, culture, and intellectual development. Cannot be taken together with HIST 100 to fulfill general studies requirement.

HIST 102. HISTORY OF CIVILIZATION: CHANGE AND GLOBAL CONNECTIONS IN THE EARLY MODERN WORLD (3)
A survey of civilization between roughly 1200 and 1800. Topics may include the Mongol conquests, the rise of West African kingdoms, the expansion of Islam, the Renaissance and Reformation, the rise of the modern state, the European Age of Exploration, the conquest of the Americas, the slave trade, the scientific revolution, and the French Enlightenment.

HIST 103. HISTORY OF CIVILIZATION: THE MODERN WORLD (3)
A survey of the French Revolution and its aftermath, of liberalism, nationalism, industrialization, materialism, and imperialism. The student will investigate 20th-century wars, international organizations, and global interactions in the post-colonial world.

HIST 175. WWI TRAVEL PRACTICUM (3)
The practicum provides on-site study of the European battlefield and other historic sites of World War I. Prerequisite: Concurrent enrollment in HIST 375 or permission of instructor.

HIST 201. HISTORY OF THE UNITED STATES TO 1865 (3)
Survey course examines the basic political, economic, and social forces in the formation and development of the American nation from the Colonial Period through the Civil War.

HIST 202. HISTORY OF THE UNITED STATES, 1865 TO PRESENT (3)
Course surveys the basic political, economic, and social forces in the rise of the republic from sectional conflict to a major international role. Moving from Reconstruction to the recent decade, it covers the evolution of the nation from an agrarian to an industrial society.

HIST 300. HISTORIC PRESERVATION AND INTERPRETATION (3)
Course will familiarize the student with the historic preservation policies and procedures of local, state, and national governments and of the outstanding private efforts in the field. A study of the general principles and methods of interpretation of historic phenomena to the general public will be involved. Extensive out-of-classroom use will be made of the historical resources in the local area for interpretive practice and preservation examples. Prerequisite: HIST 201/202 or consent.

HIST 302. AMERICAN COLONIAL HISTORY AND REVOLUTIONARY EXPERIENCE (3)
Course will examine the motivations and background of European exploration and settlement; the political, social, and intellectual development of the English colonies in America; the imperial role and reaction; the ideological and legal basis of revolution; and the American Revolution and its result.
HIST 303. THE EARLY REPUBLIC, 1781-1850 (3)
Emphasis will be on the growth and development of the American Republic in the Confederation Period, the early National Era, the so-called Era of Good Feelings, and the Jacksonian Era.

HIST 304. THE AMERICAN CIVIL WAR, 1850-1865 (3)
A study of the causes of the Civil War and of the war itself, with emphasis on the military conflict and the societies which waged it. The course will examine the economic, social, cultural, and political causes of the war; Union and Confederate political and military leadership; the conduct of military and naval operations; and the relationship between war and society.

HIST 305. HISTORY OF THE LOWER SHENANDOAH VALLEY (3)
This regional course investigates historical development within the national context. It examines geographical features; early explorations and settlement; the colonial influences in migration, politics, and economy; antebellum matters such as slavery, transportation, and cultural manifestations; the American Civil War; Reconstruction, the farmer's revolt, and industrialization; the limestone and orchard industry; and the 20th-century impact. Some attention is devoted to regional literature as it reflects historical character and biography of major personalities.

HIST 307. RECONSTRUCTION ERA, 1865-1877 (3)
This course will detail the immediate effects and the enduring impact of the American Civil War upon the modern United States in the areas of race, constitutional development, national and state politics, and economy. It will explore postwar adjustments in all sections, the evolution of national policies on major issues, and the various interpretations of national reconciliation that culminate in the disputed presidential election of 1876.

HIST 308. THE OLD SOUTH (3)
This course examines the development of the American South from the Colonial period to 1850 as a distinctive section. It traces the origins of the plantation system; the rise of democracy, slavery, and the common man; the westward movement; and the Southern position on national political issues. It also appraises societal, intellectual, and political conflicts within the section.

HIST 309. WEST VIRGINIA AND THE APPALACHIAN REGION (3)
Emphasis upon the development of western Virginia and the state of West Virginia. This course will examine the general geographical, political, and economic aspects of the southern Appalachian region. The impact upon the Mountain State of the patterns of settlement, the heritage of sectional conflict, the statehood movement, legal and political developments accompanying the assimilation of the area into the national economy, and national events will be considered. The student will view the current problems of the area and contemporary Appalachian society.

HIST 310. THE GILDED AGE AND PROGRESSIVE ERA (3)
Course will encompass the domestic development of modern America from the end of Reconstruction through the New Freedom program of Woodrow Wilson.

HIST 311. ECONOMIC HISTORY OF THE UNITED STATES (3)
This survey course traces the historical development of the American economy from the Colonial Period to the 20th century. Based on the broad social, cultural, and legal context of economic growth, it devotes attention to the major historiographical debates about various phases of United States economic history.

HIST 312. AMERICAN SOCIETY IN AN ERA OF CRISES, 1917-1945 (3)
A survey of important social, cultural, economic, and political trends and events in the United States from World War I to the end of World War II.

HIST 314. RECENT UNITED STATES HISTORY, 1945 TO PRESENT (3)
A survey of important social cultural, economic, and political trends and events in the United States since the end of World War II.
HIST 315. HISTORY OF AMERICAN WOMEN (3)
The study of women in America from the 1600s to the present analyzes the diverse experience of women from different ethnic, racial, socio-economic, and regional backgrounds. Emphasis is placed upon the agency women created for themselves within patriarchal restraints.

HIST 318. UNITED STATES AND WORLD WAR II (3)
Covers the event leading to the war, the major campaign, and the effects of the war on the home front. Major emphasis is upon military strategy and the campaigns.

HIST 320. SUB-SAHARAN AFRICA (3)
An interdisciplinary examination of Sub-Saharan Africa, including the great migrations, the genesis of modern Africa in the nineteenth century, the impact of imperialism, and the rise and consequences of nationalism.

HIST 329. THE RENAISSANCE AND REFORMATION (3)
A study of Renaissance politics, literary and intellectual contributions, and the conditions of social and religious unrest which led to the successes and failures of the Reformation.

HIST 331. ANCIENT CIVILIZATION (3)
The process by which civilizations develop and the application of this process to the ancient civilizations of the Mediterranean with special emphasis on the Hebrew and the classical civilizations of Greece and Rome. Prerequisite: HIST 101 or its equivalent.

HIST 332. MEDIEVAL HISTORY (3)
Concerns the development of Western traditions during this formative period of history from the fall of Rome to the Renaissance. Emphasis is placed on the development of the Christian Church and philosophy, the barbarian invasions, the crusade, and the formative beginnings of nation-states. Prerequisite: HIST 101 or its equivalent.

HIST 333. MODERN EUROPEAN HISTORY (3)
The political, economic, and intellectual achievements and failures of Europe from the time of the French Revolution to the coming of World War I, including the impact of European contact with the non-European world. Prerequisite: HIST 102 or its equivalent.

HIST 338. EUROPEAN WOMEN TO 1500 (3)
The course is an introduction to the history of women from Antiquity through the Renaissance. It explores the role of gender in historical experience and evaluates that experience for women. The course will also examine women’s participation and status in the political and economic realm and their role in the private sphere.

HIST 339. EUROPEAN WOMEN SINCE 1500 (3)
An examination of issues in the political, intellectual, social, and economic history of European women since the Reformation.

HIST 345. INTRODUCTION TO PUBLIC HISTORY (3)
This course examines how academic history reaches wider audiences and the way in which history and memory shape culture, politics, and collective identity. The course, which includes field trips to historic sites, also introduces students to potential sources of employment for historians in non-academic settings.

HIST 360. EVOLUTION OF EUROPEAN GOVERNMENT (3)
An experiential study abroad course tracing the evolution of European political philosophy, governmental institutions, society, and culture from the ancient Greeks through the Roman Empire,
the Medieval and Renaissance states to the European Union. The course will include visits to major European cities where students will visit historic and cultural sites, attend lectures, and meet with representatives for European governments.

**HIST 375. FIRST WORLD WAR (3)**
A study of the causes, conduct, and impact of the First World War. The course examines the war from global military, diplomatic, social, economic, and cultural perspectives.

**HIST 402. DIPLOMATIC HISTORY OF THE UNITED STATES (3)**
A survey of the development of the foreign policy of the United States from Colonial times to the present.

**HIST 404. THE CONTEMPORARY WORLD SINCE 1929 (3)**
Concerns political and intellectual events since the Great Depression and their impact on the contemporary scene.

**HIST 405. INTRODUCTION TO AFRICAN-AMERICAN HISTORY (3)**
An examination of the African and West Indian background of slave trade; the institution of slavery in antebellum United States; the effects of Civil War and Reconstruction; the pursuit of self-help and democracy and repression; and the black renaissance and revolution. Attention will be devoted to historical development of the African in American cultures other than the United States. Prerequisite: HIST 201 or 202 or their equivalent.

**HIST 407. HISTORY OF ENGLAND TO 1603 (3)**
A survey of British civilization from the Roman Conquest through the Tudor Age with emphasis on political, economic, social, and cultural developments.

**HIST 408. HISTORY OF ENGLAND SINCE 1603 (3)**
A survey of British civilization from the Stuarts to the present, continuing the political economic, social, and cultural developments. Emphasis will be placed on Britain’s emerging role in world affairs.

**HIST 410. HISTORY OF RUSSIA TO 1855 (3)**
A survey of medieval and early imperial Russia with special emphasis on political, social, economic, and cultural developments.

**HIST 411. LATIN AMERICAN HISTORY (3)**
The colonial period, the independence movement, rise of national states, national and international developments to the present.

**HIST 412. HISTORY OF RUSSIA SINCE 1855 (3)**
A survey of late imperial and Soviet Russian history with special emphasis on political, social, economic, and cultural developments.

**HIST 413. TECHNIQUES OF RESEARCH (3)**
An opportunity for independent study and preparation for graduate work. Included are methodology, historiography, and extensive work with source materials. This course is recommended for both history and political science majors. By permission of the instructor.

**HIST 416. ITALIAN CITY STATES (3)**
This course examines the evolution of the city states of northern and central Italy from the 9th to the 16th centuries. It explores how this region experienced various forms of republican government, produced merchant empires, created an influential artistic movement, and dominated European politics for centuries.
HIST 419. HISTORY OF EAST ASIA TO 1800 (3)
This course examines the histories of China, Japan, and Korea, from their beginnings to the commencement of their intensive contact with Western nations. The course will balance the historical primacy of China in the region with the political and cultural independence of neighboring states.

HIST 420. MODERN EAST ASIA SINCE 1800 (3)
The response of China, Japan, and Korea to the challenge of the West during the nineteenth and twentieth centuries.

HIST 421. THE HISTORY OF MODERN JAPAN (3)
The course will familiarize students with the main events and trends of early modern (1600–1867) and modern (1868–present) Japanese history. Emphasis will be placed on the political, social, and intellectual dimensions of Japan’s experience of modernity.

HIST 425, HIST 426. READINGS IN AMERICAN AND WESTERN HEMISPHERIC HISTORY (3)
Course will be devoted to the extensive reading of standard and classic monographs, biographies, or articles on selected American or Western Hemispheric topics. The specific topics and presiding professor will be announced prior to registration periods.

HIST 427, HIST 428. READINGS IN EUROPEAN AND WORLD HISTORY (3)
Devoted to the extensive reading of standard and classic monographs, biographies, or articles on selected European and World topics. The specific topics and presiding professor will be announced prior to registration periods.

HIST 430. CIVIL WAR SEMINAR (3)
A special topics seminar which will investigate some aspect of the Civil War, e.g., Europe and the American Civil War, Abolitionism. The topic will vary from year to year. Each student, in consultation with the seminar director, will write a research paper related to the topic.

HIST 432. PUBLIC HISTORY INTERNSHIP (3)
This course offers practical learning experience at a historic site, museum, archive, government agency, or similar setting. Students will work at least 40 hours at tasks assigned by the cooperating site supervisor and the course instructor. A research paper related to the site will be written by the student in consultation with the instructor.

HIST 435. PRACTICUM IN CIVIL WAR STUDIES (3)
This course provides practical learning experience in a Civil War or 19th-century related park, museum, library, or similar setting. Possible sites are the national parks in Antietam and Harpers Ferry, Shepherd’s George Tyler Moore Center for the Study of the Civil War, or the Museum of Civil War Medicine. Students will work at least 40 hours in tasks assigned by the cooperating site supervisor and the instructor and, in consultation with the instructor and the site supervisor, will produce a research paper related to some aspect of the site.

HIST 438. SOLDIERS AND AMERICAN SOCIETY (3)
An intensive research and writing course that examines the life of the common soldier of the Civil War and the society of which he was a part. It includes a research trip to the National Archives and participation in the annual summer seminar hosted by the George Tyler Moore Center for the Study of the Civil War.

HIST 440. IDEAS IN THE MODERN WEST (3)
The course will familiarize students with major thinkers and intellectual movements in the Western world from approximately 1750 to the later 20th century. It will treat the French Enlightenment as the impetus for a variety of conflicting efforts to understand human nature, society, and the cosmos.
HNRS 399. SPECIAL TOPICS (1-3)  
Varies.

HNRS 488. HONORS DIRECTED READINGS (3)  
In this course, honors students begin research toward a major thesis to be completed as a graduation requirement. Each student will choose a mentor from the faculty. In collaboration with the faculty mentor, the student will develop an original idea about the chosen topic and will formulate a reading list that will contribute to a thesis proposal. The thesis proposal, which is the final product of this class, should be a plan for a substantial piece of work in the student's chosen field and should contribute substantially to the student's professional development.

HNRS 489. HONORS SENIOR THESIS (3)  
After completing a proposal in the Directed Readings course, a candidate in honors shall have one semester to complete the honors thesis, the final requirement for graduation from the honors program. The thesis topic should be chosen within the candidate's major or minor field of study. The document must include a carefully prepared argument in support of the thesis statement. Rather than a document, certain students in certain fields of study (e.g. graphic design) may choose to design a project. Such a project must also include an initial proposal that will support the design of that project. The thesis or project shall culminate in a formal presentation to an audience consisting of faculty, students, friends, and family. Prerequisite: HNRS 488.

JOURNALISM  
Also see COMM 203 and 400 and ENGL 280, 370, 372 and 382.

JOUR 204. INTRODUCTION TO PRINT JOURNALISM (3)  
A foundations-level course in the journalism minor which is intended to emphasize accurate, balanced reporting and effective news writing style. Assignments include hard news, interviews, columns, public relations, and feature stories. The basics of libel law and journalistic ethics will also be considered. Prerequisite: ENGL 101.

JOUR 316. MAGAZINE WRITING (3)  
A survey of the world of magazine writing, which helps students learn how to generate story ideas, aim query letters at specific publications, deal with issues of the writer-editor relationship, and carry out the research, drafting, and marketing of full-length feature stories. Prerequisite: ENGL 101.

JOUR 444. PRACTICUM IN THE PICKET (3)  
The purpose of this course is to provide supervised experience in all phases of reporting and writing for the student newspaper, The Picket. Each student may select a particular area of interest involving writing, editing, or layout of the paper. The focus will be on the basic skills required of a professional journalist, including developing a personal portfolio. Prerequisite: Permission of coordinator of the print journalism minor. This course may be repeated for credit, and is required of the journalism minor.

JOUR 445. PRACTICUM IN PRINT JOURNALISM I (1)  
The student serves on The Picket staff for one semester, fulfilling a variety of administrative tasks. Prerequisite: Permission of coordinator of print journalism minor. This course may be repeated for credit, but is not required of the journalism minor.

JOUR 451. INTERNSHIP IN PRINT JOURNALISM (3)  
A capstone course involving all that the student has learned during enrollment in the program. Working through the Washington Semester program or with a local newspaper, the student engages in an internship with a professional newspaper. Prerequisite: Prior written approval from the coordinator of print journalism minor.
LIBRARY SCIENCE
LBSC 100. RESEARCH METHODS AND INFORMATION RETRIEVAL (1)
A hands-on introduction to research designed to engage the student with resources, methods, and procedures common to libraries, electronic resource centers, and the World Wide Web. Course content will be coordinated with majors and subjects of academic interest.

MASS COMMUNICATION
(See Communications)

MATHEMATICS
MATH 101. INTRODUCTION TO MATHEMATICS (3)
A systematic approach to organized reasoning by study of the rudiments of logic. Study of the structure of various mathematical systems and operations defined on these systems. An analysis and discussion of the uses of such systems. The counting techniques of permutations and combinations may be considered. Prerequisites: ACFN 070 and ACFN 080, or ACFN 090 or satisfactory placement score.

MATH 105. ALGEBRA (3)
Topics in University algebra include properties of the real numbers; radicals and rational exponents; operations on polynomials and rational expressions; solution of linear and quadratic equations and inequalities; functions, including graphs and composite functions; properties of linear functions; and systems of two linear equations and inequalities. This course does not fulfill the general studies requirement in mathematics. Prerequisites: ACFN 070 and 080, or ACFN 090 or satisfactory placement score.

MATH 106. TRIGONOMETRY (3)
A study of the trigonometric functions and identities, multiple angle formulas, inverse trigonometric functions, deMoivre’s theorem and complex numbers, applications. Prerequisite: MATH 105 or satisfactory placement score.

MATH 108. PRECALCULUS (3)
Topics in algebra which will prepare students for the study of calculus, including complex numbers, graphs of nonlinear functions and relations, conic sections, graphical and algebraic solutions of nonlinear equations, solutions of exponential and logarithmic equations, introduction to analytic geometry, sequences, series, summations, and mathematical induction. Prerequisite: MATH 105 or satisfactory placement score.

MATH 111. MATHEMATICS OF FINANCE (3)
This course examines principles of interest and discount, annuities and insurance, amortization, bonds and similar topics. This course does not fulfill the general studies requirement in mathematics. Prerequisite: Satisfactory placement score.

MATH 154. FINITE MATHEMATICS (3)
Mathematical models for the analysis of decision-making problems are examined. Topics include the echelon method for solving linear equations, matrix manipulations, optimization by linear programming including the simplex method, risk decisions using probability, expected value, and statistics. Additional topics may be chosen from network models or game theory. Prerequisites: ACFN 070 and ACFN 080, or ACFN 090 or MATH 105 or satisfactory placement score.

MATH 200. UNIVERSITY GEOMETRY (2)
The course offers a survey of classical Euclidean geometry with reference to non-Euclidean geometry. Both informal and formal geometry are introduced emphasizing the use of algebra. Constructions and curve tracing are integrated throughout various topics. Deductive logic and use of truth tables are examined in applied situations. Prerequisites: MATH 108 and one year of high school geometry or consent of the instructor. Required for all mathematics teaching programs.
MATH 205. CALCULUS WITH APPLICATIONS (4)
Topics in differential and integral calculus, with stress on their applications in business, biology, social, and behavioral sciences. Prerequisite: MATH 105 or MATH 154 or consent of the instructor.

MATH 207. CALCULUS I (4)
Fundamental concepts of calculus, using analytic geometry. After preliminaries about the real number system, intervals, and functions, properties of limits are carefully stated. These are used to develop standard differentiation formulas. Applications of the derivative (as a rate of change) are stressed in a wide variety of problems. Introduction to integration via anti-differentiation and area and the fundamental theorem. Applications of the integral (volumes, arc length, surface area, etc.) Prerequisite: MATH 108; prerequisite or corequisite: MATH 106 or satisfactory placement score.

MATH 208. CALCULUS II (4)
Continuation of MATH 207. Calculus of exponential, logarithmic, and trigonometric functions; techniques of integration. Review of conic sections in standard form and in rotation. Polar coordinates, l'Hôpital's rule, improper integrals, infinite series, and Taylor series. Prerequisite: MATH 207.

MATH 254. DISCRETE MATHEMATICS (3)
Topics from modern mathematics with particular emphasis on those with applications to computer science. Logic, sets, number systems and number theory, enumeration, graphs and trees, matrices, finite algebraic systems, and analysis of algorithms are examined. Prerequisite: MATH 108 or MATH 154.

MATH 280. SYMBOLIC LOGIC (2)
Classical introduction to Aristotelian logic using truth tables or Venn diagrams. Application to Boolean arithmetic and algebra. Positive and negative logic as in gate structures for digital circuits. Prerequisite: MATH 105, MATH 154, or MATH 101.

MATH 290, 291. PRACTICUM IN MATHEMATICS TEACHING (1)
Practical experience in teaching mathematics will be provided in a tutorial setting, under the guidance and supervision of a faculty member. Two or three hours of student-tutor interaction will be arranged each week. Prerequisite: MATH 207.

MATH 300. MATHEMATICS FOR ELEMENTARY TEACHERS (3)
An in-depth study of the elementary curriculum content examining methods, problems, and techniques involved in mathematics instruction. Prerequisite: MATH 101.

MATH 307. INTRODUCTION TO LINEAR ALGEBRA (3)
The course begins with a study of linear systems, using matrices and determinants to solve them. Vector spaces are treated axiomatically and discussed geometrically. Linear transformation of vector spaces and their matrix representations are considered. Finally eigenvectors and eigenvalues are considered with applications. Prerequisites: MATH 154 or MATH 254, and MATH 207 or MATH 205.

MATH 309. CALCULUS III (4)
Continuation of MATH 208. Vectors in the plane and in space, parametric equations, solid analytic geometry. Calculus of functions of several variables including partial derivatives, multiple integrals, and their applications. Prerequisite: MATH 208.

MATH 310. DIFFERENTIAL EQUATIONS (4)
Examines first order ordinary differential equations (e.g. exact, separable, Bernoulli, homogeneous), direction field, numerical solution; higher order equations including the methods of Lagrange and undetermined coefficients; Laplace transforms; systems of first order equations; introduction to Fourier series; and applications in the physical and biological sciences. Prerequisite: MATH 208.
MATH 312. INTRODUCTION TO ABSTRACT ALGEBRA (3)
Introduction to algebraic structures such as groups, rings, and fields. Formal development of their properties, complemented by examples and applications. Prerequisites: MATH 208 and MATH 254.

MATH 314. STATISTICS (3)
This is a first course in statistics, primarily for those needing knowledge of statistical methods and the interpretation of statistical data. It discusses basic probability ideas, then deals with frequency distributions, measures of central tendency and dispersion; hypothesis testing using z, t, and chi-square tests; correlation, linear regression, and one-way ANOVA. For reinforcement, students must complete several laboratory assignments using statistical software. Students may not receive credit for both this course and BADM 224. Prerequisite: MATH 154 or MATH 108 or permission of chair.

MATH 317. COMPUTATIONAL MATHEMATICS (3)
A laboratory-based course treating topics in mathematics using a “computer algebra” system. A study of the fundamentals of a symbolic manipulator system, such as Mathematica and Maple, which can display factoring as well as derivative and integral formulas. Applications include solution of problems arising in calculus, graph theory, number theory, statistics, and sciences. Prerequisite: MATH 207 or 205.

MATH 318. NUMERICAL ANALYSIS (3)
A study of numerical methods applied to such problems as the solutions of equations, interpolation, differentiation, integration, and solution of differential equations. Emphasis on obtaining solutions with computer programs. Prerequisite: MATH 208.

MATH 321. PROBABILITY AND STATISTICS (3)
Topics include axioms for probability; random variables, discrete and continuous probability distributions; expected value; functions of random variables; covariance; conditional probability; independence; confidence intervals; tests of hypotheses: normal, t, signed-rank, chi-square tests; linear regression and correlation. Prerequisite: MATH 207 or MATH 205. Recommended additional preparation MATH 208.

MATH 329. MATHEMATICAL MODELING (3)
Aimed at applications, primarily from the environmental sciences, this course is designed to explicitly demonstrate the ways mathematics is used to solve problems arising in the natural sciences and in other walks of life as well. A wide variety of phenomena in nature can be described by what one calls a mathematical model. This may involve statistics, differential equations, computer simulation, algebraic and combinatorial structures. River and lake pollution, spread of an epidemic, population growth, solar energy, and vibration, as well as several economics, chemistry, and political science models will be studied. Prerequisites: MATH 205 or MATH 207 and MATH 154 or MATH 254 or permission of instructor.

MATH 354. OPERATIONS RESEARCH (3)
An introduction to main topics of operations research: linear programming, network optimization, dynamic programming, and queuing theory. The simplex algorithm will be studied in detail, including duality theory and sensitivity analysis. In network optimization the OSPF algorithm, PERT, and CPM will be considered. Examples of applications from industry, notably some queuing algorithms. Additional topics may be chosen from Markov chains, integer programming, nonlinear programming, game theory and decision analysis, and simulation. Prerequisite: MATH 154 and MATH 207 or MATH 254.

MATH 392. COOPERATIVE EDUCATION IN MATHEMATICS (3-9)
Cooperative Education is a form of education which integrates classroom study with paid, planned, and supervised work experiences in the public and private sectors. Cooperative education allows students to acquire essential, practical skills by being exposed to the reality of the work world beyond the boundaries of campus, enhancing their self-confidence and career direction. Co-ops
may extend beyond the semester and may be paid positions. A co-op must have an academic component. A cooperative education agreement is signed by the employer supervisor, the faculty supervisor, and the student. The co-op may be repeated for credit, but not in the same term; the topic must be different. Prerequisites: Sophomore standing; minimum 2.5 overall GPA; approval of Mathematics and Engineering Department; placement by Career Center.

MATH 404. NUMBER THEORY (3)
An introductory course in number theory with emphasis on the classical theorems and problems. Prerequisite: MATH 307 or MATH 312.

MATH 405. TOPICS IN MODERN MATHEMATICS (3)
A course designed to acquaint the advanced student with certain topics outside the traditional course in mathematics. Prerequisite: Consent of instructor.

MATH 409. INTRODUCTION TO COMPLEX VARIABLES (3)
The course begins with the arithmetic of complex numbers, including powers, roots, and polar representation, with special emphasis on the geometric view. Several function classes are studied in the setting of the complex plane, especially linear, linear fractional, exponential, logarithmic, and trigonometric. Includes basic notions from calculus, particularly limits, continuity, and the derivative, are reexamined in the complex setting. Special attention is given to the properties of analytic functions, harmonic functions, and the Cauchy-Riemann equations. Applications are considered in areas such as steady state temperature patterns and electrostatic potentials. The latter part of the course deals with contour integration techniques, power series representation, and the classic theorems on analytic functions of a complex variable. Prerequisite: MATH 309 or permission of instructor.

MATH 410. ADVANCED CALCULUS (3)
A thorough examination of the fundamentals of elementary calculus and its extensions, with emphasis on interrelation with other areas of mathematics, and upon various applications. Prerequisites: MATH 309; MATH 307 or MATH 312.

MATH 413. QUANTITATIVE METHODS (3)
See BADM 413 in Business Administration course listings.

MATH 414. HISTORY AND DEVELOPMENT OF MATHEMATICS (3)
A capstone course requiring mathematical maturity. A survey of mathematical topics dating from ancient times, with emphasis on the development of numbers, algebra, theory of planetary motion, and non-Euclidean geometry. In preparation for a comprehensive test, a structured review of core mathematical ideas and techniques will be included. Prerequisites: MATH 208, (309 or 312), and permission of instructor.

MATH 415. INTRODUCTION TO TOPOLOGY (3)
Study of the properties of regions unaffected by continuous mappings. Includes consideration of open and closed sets, interior and boundary of a set, and neighborhood systems; motivation for concrete applications of the idea of a topological space and its separation properties. Other topics may include various applications of the notions of convergence and compactness. Prerequisites: MATH 207; MATH 307 or MATH 312.

MATH 424. FOUNDATIONS OF GEOMETRY (3)
A careful axiomatic development of certain parts of elementary Euclidean and non-Euclidean geometry. The examination of the axiomatic method as an important pattern of thought. Prerequisite: MATH 207 or MATH 254.

MATH 425. PROJECTIVE GEOMETRY (3)
Homogenous coordinates, higher dimensional spaces, conics, linear transformations and quadric surfaces, and similar topics are examined. Prerequisites: MATH 200 or MATH 424; MATH 307 or MATH 312.
MATH 430. INDEPENDENT STUDY (1-3)
Under certain conditions, advanced students may be admitted to independent study in mathematics. See detailed requirements elsewhere in the Catalog.

MATH 434. SENIOR CAPSTONE PRACTICUM (1)
A seminar course focusing on mathematical research and developments. The student is required to attend scheduled meetings, work under the guidance of a mentor on a research topic approved by the department chair, present an oral report at the end of the semester to department members and any interested audience from the campus community, and take the major field achievement test in mathematics. The date of the meetings and the achievement test will be established and posted before the start of the semester.

MUSIC
Private Applied Music Lessons: Private instruction is offered on eight levels for the following instruments and aims to develop individual proficiency in technique and interpretation through the study and performance of the various styles found in the literature appropriate to the instrument studied. Students receive one-half credit for a weekly 25-minute lesson, one credit for a weekly 50-minute lesson. All MUAP courses may be repeated for credit. Prerequisite: Permission of Music Department. Music fee required.

MUAP 339. HARPSICHORD (.5-1)
MUAP 340. PIANO (.5-1)
MUAP 341. ORGAN (.5-1)
MUAP 342. GUITAR (.5-1)
MUAP 343. BASS GUITAR (.5-1)
MUAP 344. VOICE (.5-1)
MUAP 345. FLUTE (.5-1)
MUAP 346. OBOE (.5-1)
MUAP 347. CLARINET (.5-1)
MUAP 348. BASSOON (.5-1)
MUAP 349. SAXOPHONE (.5-1)
MUAP 350. TRUMPET (.5-1)
MUAP 351. FRENCH HORN (.5-1)
MUAP 352. TROMBONE (.5-1)
MUAP 353. EUPHONIUM (.5-1)
MUAP 354. TUBA (.5-1)
MUAP 355. PERCUSSION-DRUM SET (.5-1)
MUAP 356. PERCUSSION-ORCHESTRA (.5-1)
MUAP 357. STRINGS (.5-1)
MUAP 358. IMPROVISATION (.5-1)
MUAP 359. HARP (.5-1)
MUAP 397. JUNIOR RECITAL (.5-1)
During the junior year students pursuing a bachelor of arts degree in music with a concentration in performance or piano pedagogy are required to present a recital on their major instrument. Students pursuing a bachelor of arts degree in music with a concentration in composition are required to present a program of original compositions. Music fee required.

MUAP 427. ADVANCED CONDUCTING - CHORAL (.5-1)
Further refinement of choral music conducting skills through private study. This course may be repeated for credit. Prerequisite: MUSC 327. Music fee required.

MUAP 428. ADVANCED CONDUCTING - INSTRUMENTAL (.5-1)
Further refinement of instrumental music conducting skills through private study. This course may be repeated for credit. Prerequisite: MUSC 328. Music fee required.
MUAP 430. COMPOSITION (.5-3)
Creative writing for a variety of media with an emphasis on developing skill and expertise in a variety of styles. This course may be repeated for credit. Prerequisite: MUSC 203. Music fee required.

MUAP 450. ORCHESTRATION/ARRANGING (.5-1)
A study of the art of scoring for the orchestra, wind ensemble, and other instrumental ensembles. Original compositions and arrangements for these groups are written. Prerequisite: MUSC 205. This course may be repeated for credit. Music fee required.

MUAP 497. SENIOR MUSIC ACTIVITY (.5-1)
All music majors are required to complete a senior music activity during the final year. Prior to the middle of the second semester of junior standing, a determination as to the nature of the activity is made by the student's advisor after consultation with the other music staff members. The Senior Music Activity will assume the form of a recital, lecture-recital, project, or recital-project. Details are on file in the office of the department chair. Music fee required.

Music Ensembles
All MUEN courses may be repeated for credit.

MUEN 360. BAND (1-3)
The reading and performance of band literature and the participation in campus and off-campus concerts and programs. Activities include marching band, wind symphony, and wind ensemble. Variable credit as to the student’s responsibilities in the band.

MUEN 361. EURYTHMICS IN MUSIC ENSEMBLE PERFORMANCE (1)
Designed to provide a means through which students may learn to perform eurythmics and closely related movement activities with music ensembles. Permission of the band director.

MUEN 362. JAZZ ENSEMBLE (1)
The study and performance of jazz music for the large ensemble. Idiomatic phrasing, interpretation, and improvisation are emphasized. Audition required.

MUEN 363. JAZZ COMBO (1)
Improvisational performance in the small combo setting and the development of a jazz and standard tune repertoire for both instrumentalists and vocalists is the focus of this course. Audition required.

MUEN 364. WOODWIND ENSEMBLE (1)
The study of woodwind chamber music through performance. Permission of the instructor.

MUEN 365. FLUTE ENSEMBLE (1)
The study of flute ensemble music through performance. Permission of the instructor.

MUEN 366. SAXOPHONE QUARTET (1)
The study of saxophone quartet ensemble music through performance. Permission of the instructor.

MUEN 367. BRASS ENSEMBLE (1)
A study of contemporary and earlier periods of brass literature. For two or more members. Permission of the instructor.

MUEN 368. TRUMPET ENSEMBLE (1)
The study of trumpet ensemble music through performance. Permission of the instructor.

MUEN 369. TROMBONE ENSEMBLE (1)
The study of trombone ensemble music through performance. Permission of the instructor.
MUEN 370. TUBA ENSEMBLE (1)
The study of tuba ensemble music through performance. Permission of the instructor.

MUEN 371. PERCUSSION ENSEMBLE (1)
Emphasis is placed on multiple-percussive techniques and literature. Permission of the instructor.

MUEN 372. GUITAR ENSEMBLE (1)
Designed to provide the guitarist with the opportunity to perform the literature for guitar ensemble, this course will also emphasize the rearranging of literature and adaptation of music for other media. Permission of the instructor.

MUEN 373. PIANO ENSEMBLE AND ACCOMPANYING (1)
This course is designed to teach the art of collaborative music making. Pianists, singers, and instrumentalists, whether majors or non-majors, are welcome to sign up for this class. The focus (i.e., art song literature, four-hand piano music, or musical theater) is announced prior to the beginning of each semester. Students are assigned to ensemble teams that work in the class and in independent practice sessions to develop their sight-reading, accompanying, diction, and performance-practice skills. This course may be repeated for credit. Permission of the instructor is required to register for this class.

MUEN 374. CONCERT CHOIR (1)
Choral ensemble of 40 to 50 singers covering literature from all periods of music history. Active performance schedule including local, regional, national, and international venues. Open to major and non-majors. Audition required.

MUEN 375. MASTERWORKS CHORALE (1)
Mass choir performing large choral works often with orchestra. One performance per semester. Open to all campus and community singers. No audition required.

MUEN 376. CHAMBER SINGERS (1)
Choral ensemble of 20 to 30 singers. Specializing in literature from all periods of music history. Performance schedule includes campus and local performances. Generally one or two performances per semester. Audition required.

MUEN 377. CONTEMPORARY VOCAL ENSEMBLE (1)
Ensemble of 8 to 16 covering all areas of contemporary music including jazz, blues, and Broadway. Emphasis is placed on the correct vocal style for each genre and public performance. Solo singing is highly encouraged. Active performance schedule includes on-campus performance and recruiting tours throughout the region. Rhythm section players are included as part of the group. Audition required.

MUEN 378. ORCHESTRA (1)
The reading and performance of orchestral literature and the participation in campus and off-campus concerts and programs. Audition required.

MUEN 379. STRING ENSEMBLE (1)
The study of string chamber music through performance. Emphasis will be placed on the study of string quartet literature, but will also include other music for small string ensembles including duos, trios, and quintets. Permission of the instructor required.

MUEN 380. MUSICAL THEATER/OPERA WORKSHOP (1)
The study of major works in the musical theater and operatic repertoire through staged productions, scene studies, and workshops. Prerequisite: Audition. This course may be repeated for credit.
MUEN 381. CHAMBER ORCHESTRA (1)
The reading and performance of orchestral literature and the participation in campus and off-campus concerts and programs. Audition required.

Music Courses
MUSC 100. FIRST YEAR SEMINAR FOR MUSIC MAJORS (1)
First year music majors will explore a variety of topics in this seminar, including a survey of music literature, effective music performance skills, practice techniques, careers in music, as well as presentations and discussions by the music faculty in areas of their expertise. This course will include general University survival skills for music majors to assist students in their transition from high school to University.

MUSC 101. FOUNDATIONS OF MUSIC THEORY (2)
An introduction to the fundamentals of music theory, this class teaches students to read music, clefs, key signatures, and musical intervals. It will also teach students the basics of solfège and aural dictation. This course cannot be used to fulfill degree requirements for the music major or minor. Prerequisite: Music entrance exam. [Previously numbered MUSC 110.]

MUSC 102. MUSIC AS AN ART AND SCIENCE (2)
This is the basic music theory course required of all elementary education majors. Reading, writing, and playing music are the basic activities. Rhythmic notation, scales, triads, seventh chords, non-harmonic tones, and modulation are presented through programmed instruction and lecture. Individual projects in writing and performing music are required.

MUSC 103. MUSIC THEORY I (3)
This four-semester sequence of courses (MUSC 103, 105, 203, 205) is designed to provide the student with a fundamental grounding in the theoretical, analytical, and stylistic aspects of Western music. The focus of this course is upon the acquisition of skills in the notation, analysis, and construction of music as it developed from the 17th through the 20th centuries. Prerequisite: Basic piano skills or concurrent enrollment in MUSC 141.

MUSC 104. AURAL SKILLS I (1)
This four-semester sequence of courses (MUSC 104, 106, 204, 206) is designed to develop the aural perception skills of the music student in the identification and performance of intervals, chords, rhythms, and harmonic sequences. Majors and minors only. Concurrent enrollment in MUSC 103 is recommended.

MUSC 105. THEORY II (3)
See MUSC 103. Prerequisite: MUSC 103.

MUSC 106. AURAL SKILLS II (1)
See MUSC 104. Prerequisite: MUSC 104. Concurrent enrollment in MUSC 105 is recommended.

MUSC 111. INTRODUCTION TO MUSIC (2)
A general studies requirement, this course provides training and experiences which will enable the student to acquire a historical-social-aesthetic perspective, to comprehend musical concepts, to discriminate quality levels, to select satisfying and stimulating musical experiences, and to empathize with the creators and performers of music.

MUSC 138. BASIC KEYBOARD SKILLS (1)
This course will focus on keyboard skills for students with little or no keyboard experience. Students will work on mastering the basic rudiments of reading music, keyboard technique, sight reading, and harmonization, as well as learn to perform early-level solo and ensemble literature. Upon successful completion of this course with a grade of C or above, students may enroll in MUSC 140 Class Piano I.
MUSC 140. CLASS PIANO I (1)
The Class Piano sequence (MUSC 138, 140, 141) is designed to help students acquire skills that will be essential in their careers as classroom or private music teachers. These skills include basic keyboard technique; harmonization of melodies, scales and arpeggios; solo and ensemble literature; and accompanying. Prerequisites: Completion of MUSC 138 with a grade of C or above (student must be able to read music and have some keyboard experience) or by permission of the instructor through audition.

MUSC 141. CLASS PIANO II (1)
This class allows the student to refine skills acquired in MUSC 140. Special attention will be given to the requirements for the piano proficiency exam and to prepare the song accompaniments most frequently used in the K-12 music curriculum. Students will build upon their harmonization skills by employing secondary chords in melodic harmonizations and improvisations. Prerequisite: MUSC 140 or by permission of the instructor through audition.

MUSC 142. CLASS GUITAR I (2)
This purely introductory course will provide the student with techniques of tuning, maintenance, and care of the instrument as well as fundamental strumming, picking, and bar-chording techniques. Basic chord patterns and melodic devices are also included.

MUSC 143. CLASS GUITAR II (2)
Designed for the student who possesses some knowledge but limited skills related to the guitar, this course will develop skills in chording, melodic picking, strumming moderately intricate rhythms, transposition with and without the use of the capo, and some limited music and chart reading. Permission of instructor or MUSC 142.

MUSC 144. VOICE CLASS (1)
Designed for the beginning student of voice. Voice placement, breathing, tone, diction, phrasing, and other vocal skills are stressed through use of correlated group vocalization and song literature. Permission of the instructor.

MUSC 203. MUSIC THEORY III (3)
This is a continuation of the four-semester sequence of courses (MUSC 103, 105, 203, 205) which is designed to provide the student with a fundamental grounding in the theoretical, analytical, and stylistic aspects of Western music. The focus of the course is upon the acquisition of skills in the notation, analysis, and construction of traditional music as it has developed since 1600. Prerequisite: MUSC 105.

MUSC 204. AURAL SKILLS III (1)
This four-semester sequence of courses (MUSC 104, 106, 204, 206) is designed to develop the aural perception skills of the music student in the identification and performance of intervals, chords, rhythms, and harmonic sequences. Majors and minors only. Prerequisite: MUSC 106. MUSC 203 concurrent is recommended.

MUSC 205. MUSIC THEORY IV (2)
See MUSC 203. Prerequisite: MUSC 203.

MUSC 206. AURAL SKILLS IV (1)
See MUSC 204. Prerequisite: MUSC 204. Concurrent enrollment in MUSC 205 is recommended.

MUSC 207. BASIC IMPROVISATION (2)
Designed to cover the fundamental aspects of improvising against non-changing and simple chordal structures. Appropriate scales, triads, and melodic sequencing are presented together with the development of the self-confidence necessary for self-expression. This course may be repeated for credit.
MUSC 226. MUSIC MATERIALS AND PROCEDURES (3)
This course is required of all elementary education majors and is a study of the music program of the elementary schools. Music and teaching methods are presented for the areas of singing, listening, rhythmic responses, use of recordings, melody instruments, tuned and non-tuned rhythm instruments, and for creative experiences. Prerequisite: MUSC 102 or permission of instructor.

MUSC 227. INTRODUCTION TO CONDUCTING (1)
An introduction to conducting covering the basic technique and time-beating patterns. Conducting with and without the baton is introduced. Basic independence and left-hand development are covered.

MUSC 230. WOODWIND TECHNIQUES I (1)
This two-course sequence (MUSC 230, 231) is designed for music majors to acquaint them with the pedagogical principles of woodwind performance. The student performs on the woodwind instruments with emphasis upon the four basic members of the family (clarinet, flute, oboe, bassoon). The method of organization involves two tracks: the development of the manipulative skills and the study of teaching techniques associated with instrumental music as related uniquely to the woodwinds. Public ensemble performance is expected. Prerequisite: Music major.

MUSC 231. WOODWIND TECHNIQUES II (1)
See MUSC 230. Prerequisite: MUSC 230 or permission of instructor.

MUSC 232. BRASS TECHNIQUES (1)
Designed for music majors to acquaint them with the pedagogical principles of brass performance. The student performs on all the brass instruments during the semester. The method of organization involves two tracks: the development of the manipulative skills and the study of teaching techniques associated with instrumental music as related uniquely to the brasses. Public ensemble performance is expected. Prerequisite: Music major.

MUSC 233. STRING TECHNIQUES (1)
Designed for music majors to acquaint them with the pedagogical principles of string performance. The student performs on all the stringed instruments during the semester. The method of organization involves two tracks: the development of the manipulative skills and the study of teaching techniques associated with instrumental music as related uniquely to the strings. Public ensemble performance is expected. Prerequisite: Music major.

MUSC 234. PERCUSSION TECHNIQUES (1)
Designed for music majors to acquaint them with the pedagogical principles of percussion performance. The student performs on all the percussion instruments during the semester. The method of organization involves two tracks: the development of the manipulative skills and the study of teaching techniques associated with instrumental music as related uniquely to percussion. Public ensemble performance is expected. Prerequisite: Music major.

MUSC 237. DICTION I (3)
This course is designed for vocal performance and choral music education majors and covers instruction in and application of the International Phonetic Alphabet (IPA) in the four basic singing languages, Italian, English, German, and French.

MUSC 238. VOCAL PERFORMANCE TECHNIQUE (1)
Detailed study of vocal performance technique. Topics covered will include preparation, stage presence, and stylistic considerations for a wide variety of solo vocal repertoire. Permission of instructor. This course may be repeated for credit.

MUSC 280. PERFORMANCE FORUM (1)
A comprehensive survey of performance history, literature, and practice. The course will include group discussion, field trips, guest artists, and mandatory concert attendance. A portfolio will be required for successful completion of this course. This course may be repeated for credit.
MUSC 299. SPECIAL STUDIES IN MUSIC (1-4)
Topics for special studies will be created as needed by the Music Department. This course may be repeated without limit with different topics. Prerequisite: Music major.

MUSC 303. FORMS AND ANALYSIS (3)
The analysis of the structural forms of music from the simple phrase and period through the single-movement forms of both instrumental and vocal media provides the basis of this course. The approach utilizes analysis of existing music and the composition of representative examples. A survey of multi-movement forms and larger musical structures is included. Prerequisite: MUSC 203.

MUSC 307. ADVANCED IMPROVISATION (2)
This course is intended as a continuation of MUSC 207 Basic Improvisation with increased emphasis upon the development of a personal style as well as upon more complex harmonic sequences, scales, and rhythmic-metric considerations. This course may be repeated for credit. Prerequisites: MUSC 141 or the equivalent keyboard skill and MUSC 207.

MUSC 308. JAZZ PEDAGOGY (2)
Jazz history, ensembles, combos, rehearsal technique, and improvisation technique are covered in this course. This course is designed to give education majors an overview of jazz program curriculum and ensemble methods. Each student will run at least one rehearsal of either a combo or jazz ensemble as a requisite for course completion. Prerequisite: MUSC 103.

MUSC 310. MUSIC HISTORY I ANTIQUITY TO EARLY BAROQUE (3)
This course presents a survey of music literature, musical styles and genres, and theoretical concepts from antiquity through the works of Monteverdi. Prerequisite: Sophomore standing in music.

MUSC 311. MUSIC HISTORY II EARLY BAROQUE TO 1890 (3)
This course presents a survey of music literature, musical styles and genres, and theoretical concepts from the early Baroque to 1890. Prerequisite: Sophomore standing in music.

MUSC 312. MUSIC HISTORY III 20TH-CENTURY AND WORLD MUSICS (3)
This course presents a survey of music literature, musical styles and genres, and theoretical concepts from ca. 1890 to the present day with special attention to the musics of non-Western cultures. Prerequisite: Sophomore standing in music.

MUSC 313. WOMEN IN MUSIC (3)
An overview of the accomplishments of women in music from the Middle Ages to the present day. The class will investigate ways in which gender, race, and class have influenced the lives of musical women in the past and will explore the developments in the 20th century which have affected the current status of women in music. The survey will incorporate music listening assignments, paper presentations, a class lecture-recital, and visits to concerts featuring women composers and performers. Prerequisites: Music major or minor; MUSC 111.

MUSC 314. KEYBOARD LITERATURE (3)
A survey of the standard piano, organ, and harpsichord literature from the Renaissance to the present day, with special attention given to teaching literature of the major composers. The survey will incorporate listening assignments, in-class performance, and a field trip to the International Piano Archives at the University of Maryland. Prerequisite: MUSC 310 or MUSC 311.

MUSC 315. HISTORY OF JAZZ STYLES (3)
The study of what jazz is, how to listen to jazz, and jazz heritage are examined. Jazz interpretation, improvisation, listening techniques, musical concepts of jazz, and influences of jazz styles are central points of this course. Historical and stylistic aspects of jazz are also considered.
MUSC 316. VOCAL LITERATURE (3)
A survey of the standard art song literature for solo voice, both sacred and secular, ranging from the Renaissance through the 20th century.

MUSC 317. OPERA AND ORATORIO LITERATURE (3)
The study of the evolution of the standard types of opera and oratorio. Appropriate literature for specific voice types is also studied for future teaching purposes. Attendance of opera productions in Baltimore and Washington, D.C., are scheduled for the class.

MUSC 318. MUSIC THEATER LITERATURE (2)
A study of the music theater literature, beginning with the 19th century influences on the genre through present day repertoire.

MUSC 319. WORKSHOP IN FOREIGN CULTURES (1-6)
An exposure to the artistic heritage of foreign countries is provided through a supervised study tour which also involves directed field study and an integrated series of pre-tour and post-tour lectures. Prerequisite: Permission of the instructor. One to six hours credit, depending on the length and academic content of the tour. Further details may be obtained from the department chair.

MUSC 320. GUITAR PEDAGOGY (2)
This course compares ways to provide guitar instruction in the public school as well as in the private studio. Participants will be introduced to a wide spectrum of method books and repertoire pertaining to all performance levels. They will audit private lessons given by practicing teachers.

MUSC 321. PIANO PEDAGOGY (2)
The history of piano teaching, as well as the basic skills required of today’s private piano teacher, form the basis for this course. In addition to basic keyboard technique and literature, students will work with such diverse topics as business policies, technology issues, public relations, comprehensive survey of methods for group and on-on-one instruction, and performing opportunities in the private studio. Students will perform an internship that will require them to teach another student for part of the semester. Special events in this class include a student recital, visit by a piano technician, videotaping student lessons, and presentations by guest speakers. Prerequisites: Completion of the piano proficiency exam and/or permission of instructor.

MUSC 322. INSTRUMENTAL PEDAGOGY (2)
This course is designed to acquaint the music education student with the various aspects of managing a public school instrumental music program. Philosophy, teaching methods, administration, grading, and scheduling are included. All instrumental tech classes are reviewed; therefore, it is preferable that the student have completed all instrumental tech classes prior to enrollment. Prerequisite: MUSC 203.

MUSC 323. VOCAL PEDAGOGY (2)
This course is designed to give the student an understanding of the singing process, including the anatomy and physiology of the vocal instrument. It also encompasses comparative teaching methodologies and basic diagnosis and correction of vocal faults. The recent advances in voice medicine are covered. Permission of instructor.

MUSC 324. MARCHING BAND PEDAGOGY (2)
This course includes the organization, rehearsal procedures, street marching, field shows of all types, formation charting, and precision-drill charting for the marching band. Prerequisite: Two semesters of University marching band.

MUSC 325. CHORAL METHODS AND MATERIALS (3)
This course is designed to acquaint the music education student with the various aspects of managing a public school choral music program. Also included is the construction of skill-building
exercise materials for singers of differing ages and abilities. Applications of modern learning theory are emphasized. The basics of choral diction encompassing English, Latin, Italian, German, and French are covered as well as fundamental choral literature.

**MUSC 326. TEACHING ELEMENTARY MUSIC (2)**
This course is required of all music education majors and is a study of the music program in the public schools. Music and teaching methods are presented for the areas of singing, listening, rhythmic responses, use of recordings, melody instruments, tuned and non-tuned rhythm instruments, and for creative experience. While emphasis is placed upon learning theories for the elementary school child, methodologies applicable to middle school and high school aged students are also included. Basic choral arranging is also introduced. Prerequisites: MUSC 105, EDUC 320.

**MUSC 327. CONDUCTING II - CHORAL (3)**
A study of the art, technique, and problems relative to conducting and administering choral performing organizations. While public school choral ensembles receive the majority of attention, all other choral organizations are considered. Opportunities are available for practical experiences in conducting and related field observations of area performing ensembles. Prerequisites: MUSC 203 and MUSC 227.

**MUSC 328. CONDUCTING II - INSTRUMENTAL (3)**
A study of the art, techniques, and challenges of conducting instrumental ensembles. Score study and preparation, stylistic considerations, and development of refined techniques are central elements of this course. Opportunities are available for practical experienced in conducting University ensembles and for observing area performing ensembles. Prerequisites: MUSC 203 and MUSC 227.

**MUSC 329. ELECTRONIC MUSIC MEDIA (2)**
This course is an introduction to the wide variety of electronic and computer music tools available to the musician. It includes an introduction to MIDI, synthesizers, sequencing, notation, and sound reinforcement tools and techniques. Analog and digital recording techniques are also covered. Prerequisite: MUSC 203.

**MUSC 330. RECORDING TECHNIQUES (2)**
This is a hands-on recording techniques course. Topics include mike placement strategies, mixing methods, and analog, digital, and CD recording.

**MUSC 331. INSTRUMENT CARE AND REPAIR (2)**
Designed for the instrumental student who intends to teach. Laboratory experience in the maintenance and repair of band instruments is coupled with a general review of the performance basics. Permission of instructor.

**MUSC 332. BRASS REPERTOIRE (1)**
The study of the evolution of brass music; designed for music majors to acquaint them with the literature for brass instruments.

**MUSC 333. WOODWIND REPERTOIRE (1)**
The study of the evolution of woodwind music; designed for music majors to acquaint them with the literature for woodwind instruments.

**MUSC 334. PERCUSSION REPERTOIRE (1)**
The study of the evolution of percussion music; designed for music majors to acquaint them with the literature for percussion instruments.

**MUSC 336. STRING REPERTOIRE (1)**
The study of the evolution of string music; designed for music majors to acquaint them with the literature for strings.
MUSC 337. VOCAL REPERTOIRE (1)
The study of the evolution of vocal music; designed for music majors to acquaint them with the literature for vocal music.

MUSC 338. PIANO REPERTOIRE (1)
The study of the evolution of piano music; designed for music majors to acquaint them with the literature for piano.

MUSC 340. ADVANCED TOPICS IN WESTERN MUSIC (3)
This course is intended to be an extension of the Western music history curriculum and will involve a more in-depth study of selected composers and genres. Prerequisite: Sophomore standing in music. This course may be repeated for credit.

MUSC 341. ADVANCED TOPICS IN WORLD MUSIC (3)
This course is intended to be an extension of the world music component in MUSC 312 and will involve a more in-depth study of selected non-Western musical cultures including those of India, Indonesia, and Africa. Prerequisite: Sophomore standing in music. This course may be repeated for credit.

MUSC 342. AMERICAN MUSIC (3)
An extensive survey of the rich variety of music found throughout the history of the United States. The course will begin with the music of the early Puritans and continue through the works of contemporary composers. The survey will incorporate music listening assignments, paper presentations, a class lecture-recital, and visits to area concerts featuring American composers and performers. Prerequisite: Sophomore standing in music.

MUSC 350. MUSIC PSYCHOLOGY (3)
A thorough survey of the rapidly growing field of music psychology. The course is divided into three different sections that include a detailed look at various contemporary issues in the field, a discussion of contemporary research methodology, including experimental design and analysis, and an overview of landmark studies. Highly recommended for music majors and psychology majors. Prerequisite: Music major or MUSC 111.

MUSC 420. APPRENTICESHIP IN MUSIC PEDAGOGY (1-3)
Allows students to get firsthand experience in the practices and materials required to become the instructors of the future.

MUSC 421. MUSIC RESEARCH AND INDEPENDENT STUDY (1-3)
Qualified juniors or seniors may pursue a course of independent study in their major area under the supervision of the appropriate faculty advisor. Students selected must exhibit outstanding ability and scholarship in their chosen area and must meet the requirements for the Independent Study Program as outlined elsewhere in this Catalog.

MUSC 498. SENIOR MUSIC SEMINAR (1)
This seminar is a capstone course designed to review and synthesize knowledge and skills gained through music course work leading to the senior year in music. Students will prepare for and take an appropriate examination that assesses the student’s knowledge. Prerequisite: Completion of all other requisite MUSC courses.

NURSING
NURS 231. INTRODUCTION TO NURSING (2)
This is the survey course for all junior and senior level nursing classes. It is designed to provide an overview of the nursing profession. The Shepherd University B.S.N. mission, philosophy, conceptual framework, and expected outcomes are presented. All concepts, subconcepts, and curricular threads are introduced. Prerequisite: Sophomore standing. This course must be taken at Shepherd University.
NURS 311. NURSING I INTRODUCTION TO HEALTH CARE (3)
The course is designed as the basis upon which all other nursing courses develop and expand. The student is introduced to the nursing process and skills of critical thinking, decision making, and ethics/law in order to understand the health care needs of people of diverse cultures across the life span. Data collection is introduced via normal system approach. Prerequisite: NURS 231. Prerequisite or corequisite: NURS 313, 315.

NURS 313. NURSING I-A HEALTH ASSESSMENT (3)
The course is basic to all nursing clinicals through the program. Complete instruction of health assessment using the system approach is given. The concept of nursing process introduced in NURS 231 will be examined extensively as the method by which professional nurses assist persons to achieve optimum level of health. The student will be provided opportunities to exercise critical thinking, decision making, and ethical judgment through case studies, simulations/role play, and patient interviews. Prerequisite: NURS 231. Prerequisite or corequisite: NURS 311, 315.

NURS 315. NURSING I-B CLINICAL COMPONENT (3)
The course is designed to correlate theory with practice in the primary care setting. The course will initiate the student to living examples of the nursing process: 1) data collecting via interviewing and physical assessment, 2) critical thinking skills via decision making, 3) organization via planning, 4) restorations via appropriate nursing action-implementation, 5) evaluation of the nursing process to meet specific needs. Prerequisite: NURS 231. Prerequisite or corequisite: NURS 311, 315, 317, or 326.

NURS 316. NURSING II HEALTH CARE OF THE ADULT (3)
This course provides a knowledge and practice base for the medical-surgical student. The focus is primarily on the acute care setting. The course gives in-depth knowledge and principles for patient education that include primary, secondary, and tertiary levels of prevention. This course builds upon knowledge gained in prerequisite courses and applies principles of physiology and pathophysiology to the diverse health care alterations of the adult. Prerequisites: NURS 311, 313, 315, 317. Corequisite: NURS 318. Prerequisite or corequisite: NURS 326 or 317.

NURS 317. ESSENTIALS IN CLINICAL PHARMACOLOGY/PATHOLOGY IN NURSING (2)
The first course in a two-course sequence that presents clinical pharmacology and pathophysiology emphasizing rationales and safe drug administration, relationships of drug mechanisms to disease processes, effects of lifespan on drug therapy, application of nursing research to pharmacologic principles. Alterations in biologic processes that affect the body’s homeostasis and various dysfunctions of biologic systems are examined. The rationale for diagnosis and therapeutic interventions is introduced. Prerequisite: BIOL 225, 226, 227, 228, or permission of instructor.

NURS 318. NURSING II CLINICAL COMPONENT (3)
This course provides guided clinical experiences for the student to operationalize the nursing process in the acute care, medical surgical adult setting. Students apply knowledge and principles of patient education to patients in the clinical setting and apply the nursing process to patients from different cultural backgrounds with diverse health care alterations. Opportunity for reinforcement and further development of assessment skills is provided through hands-on experience in the clinical setting. Experiences are also provided in the lab and/or clinical setting to assist the student in developing psychomotor skills. Students are expected to seek learning opportunities based upon self-assessed learning needs as they utilize the nursing process in multiple clinical settings. Corequisite: NURS 316.

NURS 320. NURSING III PSYCHIATRIC/MENTAL HEALTH CARE (3)
This course is designed to apply the nursing process to clients who have adaptive and/or maladaptive behaviors. The emphasis in the course is given to nurse/patient relationship and group process skills which can be applied to all areas of nursing. The socioeconomic and ethical dilemmas within communities will be explored. Primary, secondary, and tertiary prevention services to the mentally
ill from diverse cultural groups are identified and discussed. The principles of pharmacology, growth and development, health education, and teaching are interwoven throughout this course. Prerequisites: NURS 311, 313, 315. Corequisite: NURS 322. Prerequisite or corequisite: NURS 326 or 317.

NURS 322. NURSING III CLINICAL COMPONENT (2)
Weekly clinical focuses will guide the student in applying theory from NURS 320 to patients in a variety of clinical settings, including acute inpatient units and a community mental health setting. Corequisite: NURS 320.

NURS 324. NURSING RESEARCH (2)
Course is designed to introduce concepts of nursing research. The focus is on the professional nurse as a consumer of research in health and nursing. The student further develops skills in critical thinking and ethical decision making in the development of a nursing research project using the research process. Elementary concepts of statistics and the use of computer technology are introduced related to nursing research. Prerequisites: NURS 311, 313, 315, or permission of instructor.

NURS 326. ESSENTIALS IN CLINICAL PHARMACOLOGY/PATHOPHYSIOLOGY IN NURSING (2)
The second course in a two-course sequence that presents clinical pharmacology and pathophysiology emphasizing rationales and safe drug administration, relationships of drug mechanisms to disease processes, effects of lifespan on drug therapy, application of nursing research to pharmacologic principles. Alterations in biologic processes that affect the body’s homeostasis and various dysfunctions of biologic systems are examined. The rationale for diagnosis and therapeutic interventions in introduced.

NURS 410. ADVANCED NURSING CONCEPTS AND PRACTICE (6)
This course will lay the foundation for the R.N. to practice with a bachelor of science in nursing. R.N. students will establish professional and collegial relationships with nursing faculty, other R.N. students, and variety of professional nurses in health care agencies. An emphasis will be placed on advancing nursing practice through a combination of lecture, seminar, and clinical experiences. Prerequisite: NURS 324 and permission of instructor.

NURS 411. NURSING IV COMMUNITY HEALTH CARE (3)
This course is designed to expand the student’s knowledge of people as individuals, as members of a family, and as members of a community. Emphasis is placed on levels of prevention. With guidance, the student will identify socioeconomic, environmental, political, religious, and ethical aspects of health care which affect the health-illness continuum and the client’s aspects. The student will be able to assess community health problems, identify appropriate nursing interventions and community resources in planning nursing care of diverse populations in a variety of settings. Content topics related to school health, occupational health, home visiting, and public health are introduced. Prerequisite: NURS 320, 322, 324. Corequisite: NURS 413; R.N.s-NURS 410.

NURS 413. NURSING IV CLINICAL COMPONENT (3)
Course is designed to correlate theory with practice. The student will be able to assess community health problems, identify and apply appropriate nursing interventions and community resources in planning nursing care of diverse populations in a variety of settings. Corequisite: NURS 411.

NURS 415. NURSING V HEALTH CARE OF CHILDREN AND FAMILIES (3)
Course is designed to examine the biophysical and psychosocial development, illness care, and health maintenance of the neonate, infant, toddler, preschool, school-age, and adolescent child. This course builds upon knowledge gained in NURS 316 Health Care of the Adult and concurrent course, NURS 411 Community Health Care. The student will apply the nursing process utilizing critical thinking skills for the diverse health care alterations in the younger populations. Prerequisite: NURS 316, 318. Corequisite: NURS 411, 413, 417, or permission of instructor.
NURS 417. NURSING V CLINICAL COMPONENT (2)
Course is designed to provide opportunities for exploration, application, and integration of theory content of Health Care of Children and Families to enhance priority setting and decision making skills, collaboration, and use of organizational skills. A variety of clinical settings, such as a community hospital and a university-based teaching hospital, will be utilized which will expose the student to diverse social, cultural and economic aspects of the health care of children and families. Corequisite: NURS 415.

NURS 419. NURSING VI HEALTH CARE OF WOMEN (3)
Course is designed to examine the biophysical and psychosocial aspects of human reproductive function, childbearing, sexuality, illness care, and maintenance for the woman through the life span. This course builds upon knowledge gained in NURS 316 Health Care of the Adult, NURS 415 Health Care of Children and Families, and concurrent course, NURS 411 Community Health Care. The student will apply the nursing process utilizing critical thinking skills for the diverse health care alterations in the female population. Corequisite: NURS 411, 415, 421, or permission of instructor. Prerequisite: NURS 415.

NURS 421. NURSING VI CLINICAL COMPONENT (2)
Course is designed to provide opportunities for exploration, application, and integration of theory content of obstetric and gynecologic nursing to women throughout the life cycle. A variety of hospital, community health settings will be utilized to expose the student to diverse social, cultural, and economic components of the woman/family system. Corequisite: NURS 419.

NURS 422. NURSING VII HEALTH CARE OF THE ADULT: GERONTOLOGY FOCUS (3)
Course is designed to examine illness care, rehabilitation care, health counseling, and education for the gerontological client and family. This course builds upon knowledge gained in NURS 316 (Health Care of the Adult—medical-surgical focus). The diverse social, cultural, economic, and political components of older populations will be explored. Corequisite: NURS 424. Prerequisite: NURS 316, 324.

NURS 424. NURSING VII CLINICAL COMPONENT (3)
Course is designed to provide opportunities for application and integrations of theory content of gerontological nursing. A variety of health care settings will be utilized which will expose the student to a diverse social, cultural, economic, and political component of older populations. The student will apply the nursing process utilizing critical thinking skills to the multiple alterations in health for older populations. Corequisite: NURS 422.

NURS 426. NURSING VIII HEALTH CARE OF THE ADULT WITH COMPLEX PROBLEMS (3)
This final course of adult health nursing focuses on the therapeutic nursing interventions used to restore health to adults who are experiencing acute and/or complex health problems. Analyzes deviations from health with attention to the implications for the individual as well as the family in coping with health problems. Analyzes the client’s health care needs and the resources to meet them in collaboration with the client and health providers. Incorporates ethical and legal issues involving clients with complex needs. Corequisite: NURS 428. Prerequisite: NURS 316, 324, 415.

NURS 428. NURSING VIII CLINICAL COMPONENT (2)
This is the third and final medical-surgical course of adult health care nursing. The focus is planning and providing care for persons with complex health needs. Complex and multisystem needs are explored in-depth. Selected clinical experiences in specialty areas ICU, CCU, ER, open heart surgery, and cardiac cath lab are arranged. Corequisite: NURS 426.

NURS 434. MANAGEMENT AND ISSUES IN HEALTH CARE (3)
This course is designed to examine current health care issues influencing professional nursing practice. The student in introduced to management principles and leadership roles and responsibilities within different health care organizations and settings. Prerequisite: NURS 324.
NURS 436. SENIOR CAPSTONE SEMINAR (1)
This course will allow the culmination of nursing course work in which students will establish professional, collegial relationships with nursing mentors. Students will engage in creative endeavors that reflect synthesis of nursing knowledge and critical thinking, contribute to quality patient care, health care management, and nursing research. Students will choose mentors from a variety of integrated health care systems in collaboration with nursing faculty. Taken during final semester of B.S.N. Program.

NURS 440. SCHOOL HEALTH SEMINAR (3)
This course is designed to prepare nursing students to conduct and coordinate school health service programs. Through didactic sessions and clinical practica, students are provided with the theoretical knowledge and competencies required for certification as a school nurse by the West Virginia Department of Education.

PHILOSOPHY
PHIL 101. INTRODUCTION TO PHILOSOPHY (3)
An introductory consideration of language, meaning, and inference; of knowledge, truth, and certainty; of types (schools) of philosophy; of arguments regarding the existence of God; and of values.

PHIL 210. SOCIAL PHILOSOPHY (3)
Analysis of theories of the nature of humans, social institutions, social ethics, social purposes, patterns of relationship, and the problem of freedom and regulation.

PHIL 304. PHILOSOPHY OF RELIGION (3)
An analysis of certain elements of religious thought. Problems of religious language, knowledge and faith, and the existence of God and evil will be examined from various religious perspectives.

PHIL 305. HISTORY OF PHILOSOPHY (3)
Survey of the major movements in philosophy from ancient Greece to the 20th century.

PHIL 306. TWENTIETH-CENTURY PHILOSOPHY (3)
Emphasis on pragmatism, existentialism, and analytic philosophy.

PHIL 315. ETHICS (3)
Problems of choice within the context of society as considered by representatives of various philosophical and Christian traditions.

PHOTOGRAPHY/COMPUTER IMAGERY
(Also see Art and Graphic Design)
PHOT 281. BLACK AND WHITE PHOTOGRAPHY I (3)
Fundamentals of black and white photography and darkroom techniques. Topics include basic film processing and printing; basic lighting and exposure selection; composition and visual thinking; and use of auxiliary lenses. Corequisite: ART 140.

PHOT 282. BLACK AND WHITE PHOTOGRAPHY II (3)
A continuation of Black and White I. Topics include processing and printing of 120 and 4 x 5 size film; zone system of exposure and development; filters; and advanced printing techniques. Prerequisite: PHOT 281.

PHOT 380. HISTORY OF PHOTOGRAPHY (3)
An introductory course which explores, through student emulation and experimentation, the compositional sensibilities and aesthetic strategies of both historic and contemporary photographers.
PHOT 381. STUDIO PHOTOGRAPHY I (3)
This course serves as an introduction to the methodology and technology of studio photography. Emphasis is placed upon product and portrait photography, tabletop design, and lighting techniques. Prerequisite: PHOT 281 and PHOT 383, ART 208.

PHOT 383. COLOR PHOTOGRAPHY I (3)
A basic course in natural color photography. Includes fundamental principles, techniques, and applications of reversal and negative-subtractive color materials and equipment used in the production of color prints and transparencies. Discussion of the special demands of color technique, color relationships, light qualities, and the kinds of characteristics of film. Prerequisites: PHOT 281 and PHOT 282, ART 208.

PHOT 384. PHOTOJOURNALISM (3-6)
The tools and techniques of the news media and of business, public relations, journalism, sports, and publicity photography are covered. Emphasis on small-format cameras, electronic flash, and available-light photography. Examination of single picture, short picture stories, feature-story photography, layout, and captions. Prerequisites: PHOT 282 and PHOT 383, ART 208.

PHOT 385. COMPUTER DIGITAL IMAGERY I (3)
This course serves as an introduction to the technology and use of the computer for photographic purposes. Emphasis is placed upon working knowledge and creative use of the computer in order to develop and execute aesthetic solutions to photographic digital problems. Prerequisites: PHOT 282 and PHOT 383.

PHOT 386. COMPUTER DIGITAL IMAGERY II (3)
A continuation of the technology and use of the computer for photographic purposes developed in Computer Digital Imagery I. Prerequisites: PHOT 282 and PHOT 385.

PHOT 387. MULTI-MEDIA (3)
A continuation of Computer Digital Imagery in which the student will explore computer technology. Emphasis is placed upon working knowledge and creative use of the computer in order to develop and execute aesthetic solutions to photographic, video, and sound problems. Prerequisite: PHOT 386.

PHOT 392. COOPERATIVE EDUCATION IN PHOTOGRAPHY (1-6)
Intended to provide a bridge between the classroom and the professional world, cooperative education provides supervised work experience directly related to a student’s major subject area and career goals. Placement will be in a public or private photography/computer imagery position. May be repeated for credit, but not in the same term. Usually offered every term. Prerequisite: Junior level standing with minimum overall GPA of 2.3, 2.7 in the concentration area, approval of academic department, and placement by the Career Development Center. It is recommended that the student complete an internship or practicum prior to entering a cooperative education placement.

PHOT 400. SPECIAL TOPICS IN PHOTOGRAPHY/COMPUTER IMAGERY (3-9)
This course will vary in content with each offering as areas of particular interest or timeliness not covered by the regular curriculum are explored. Offerings may focus on a specific photographic or computer imagery process or style or on a specific area of content. Each course offering under this title bears a subtitle which indicates the specific subject covered.

PHOT 480. RESEARCH IN PHOTOGRAPHY (3-12)
An upper-division course designed as a culminating experience within the concentration area of photography with emphasis on contemporary issues. The development of a portfolio and artist’s statement as well as advanced standards of critical observation and analysis are expected. Prerequisites: PHOT 282, PHOT 485.
PHOT 481. GRAPHIC DESIGN / PHOTOGRAPHY (3)
This course introduces the student to the working relationship between graphic design and photography. Emphasis is upon the procedures and technology for producing photographs for reproduction. Prerequisites: PHOT 383, ART 208.

PHOT 484. STUDIO PHOTOGRAPHY II (3)
A continuation of the methodologies and technologies encountered in Studio Photography I but with greater emphasis placed upon color sensibilities and large format work as applied to product and field work. Prerequisite: PHOT 381, ART 208.

PHOT 485. COLOR PHOTOGRAPHY II (3)
A continuation of the methods and techniques presented in Color Photography I but with a greater emphasis placed upon color sensibilities and large format work as applied to product and field work. Prerequisite: PHOT 383, ART 208.

PHOT 486. ADVANCED PHOTOGRAPHY (3-12)
This course allows upper level students to pursue a photographic studio experience during summer school. A written plan of study must be approved by the program coordinator and it is expected that the plan will involve advanced and challenging ideas.

PHOT 488. INTERNSHIP IN PHOTOGRAPHY (3-6)
Supervised off-campus work experience in photography or an allied field. Seminars will be held to evaluate the integration of theory and practice. Prerequisite: Permission for the instructor. This course may be repeated for up to 6 hours.

PHYSICAL EDUCATION
PHED 104. FOUNDATIONS OF PHYSICAL EDUCATION (3)
An introduction to teaching health and physical education. Topics include philosophy and history, psychological, sociological and scientific principles of sport and physical activity, as well as career awareness, department procedures, the Shepherd University Teaching Model for skill acquisition, and general concerns related to teaching.

PHED 110. ELEMENTARY SCHOOL PHYSICAL EDUCATION ACTIVITIES (3)
Students will develop a working knowledge of fundamental movement patterns as they relate to action songs, folk and square dance, games, creative movement, and rhythmical activities. Teaching methods, program planning, and teaching opportunities are emphasized. Elementary education majors only.

PHED 120. HISTORY OF SPORT AND PHYSICAL EDUCATION (3)
Emphasizes relevant historical events that have influenced sport and physical education throughout history. (Crosslisted with RECR 120.)

PHED 246. AQUATICS (1)
This course emphasizes basic strokes, breathing techniques, and water safety skills, including survival floating and use of clothing as a flotation device.

PHED 301. ELEMENTARY SCHOOL PHYSICAL EDUCATION I (3)
Presents basic movement education teaching model for elementary school children. Students will apply principles and methods of this model through presentation of action songs, games, dances, stunts and tumbling, and elementary track. Prerequisites: PHED 104, PHED 325, PHED 326, and GSPE 210.

PHED 315. TEACHING TUMBLING AND GYMNASTICS (2)
Teaches future elementary physical education instructors fundamental skills of tumbling and gymnastics. Teaching methods and safety awareness are emphasized.
PHED 325. TEAM SPORT ACTIVITIES (3)
Prepares future physical education teachers to teach team sports. Rules, skill analysis, practice procedures, and safety awareness will be emphasized. Taught every fall.

PHED 326. INDIVIDUAL SPORT ACTIVITIES (3)
Prepares future physical education teachers to teach individual sports. Rules, skill analysis, practice procedures, and safety awareness will be emphasized. Taught every spring.

PHED 328. HEAD, TRUNK, AND EXTREMITIES ASSESSMENT (3)
An in-depth study of mechanisms, characteristics, and classification of sports injuries. Management skills of prevention, assessment, and treatment of injuries are explored and detailed study of upper and lower extremities is conducted. Prerequisites: ATHC 224 and HLTH 225.

PHED 330. THERAPEUTIC MODALITIES AND REHABILITATION TECHNIQUES (3)
A detailed study of the many therapeutic techniques used in the treatment and rehabilitation of sports-related injuries. Proper use of modalities as well as a concepts and techniques of rehabilitation exercises will be the focus of this course.

PHED 360. ATHLETIC TRAINING PRACTICUM I (3)
Rehabilitation of athletic injuries is main focus. Practical application of management skills through lectures, clinical and field experiences, and individual assistance is also studied. Permission of instructor.

PHED 365. ATHLETIC TRAINING PRACTICUM II (3)
Use of modalities and current issues of sports medicine are emphasized. Practical application of assessment, treatment, rehabilitation as well as traveling with athletic teams is also studied. Permission of instructor. Prerequisite: PHED 360.

PHED 370. APPLIED ANATOMY AND PHYSIOLOGY (4)
A study of homeostatic relationships of the body and their effects on neuromuscular, circulatory, and respiratory systems. Lab experiments will show how physiological functions change with exercise. Prerequisites: HLTH 225.

PHED 380. PERCEPTUAL MOTOR LEARNING (3)
Examines how people learn motor skills and analysis of Gentile's model for acquisition. Student will also learn how to recognize deficiencies related to motor learning and adjust teaching procedures to cope with inherent disabilities.

PHED 400. CURRENT ISSUES AND TRENDS IN PHYSICAL EDUCATION (3)
The course will examine readings and research associated with issues and trends in physical education in K-12 schools. Students will have the opportunity to apply previous peer teaching, field teaching, and observational experiences to case studies and current field observations. Focus will be on technology use, diversity, and disabilities, with an in-depth look at student and teacher behaviors. Prerequisites, PHED 325, PHED 326, PHED 301.

PHED 401. TEACHING ADAPTED PHYSICAL EDUCATION (3)
Acquaints students with the problems underlying the need for adapted physical education programs. Organization and administration of special physical education programs for the handicapped/disabled are studied. Out-of-class field experience in an approved setting required.

PHED 405. APPLIED KINESIOLOGY (3)
Study of the musculoskeletal system and its relationship to human movement. Students will identify anatomical and mechanical features of major joints of the body as well as muscles that operate them and how they interact to complete a motor skill. Prerequisites: HLTH 225.
PHED 406. CURRICULUM AND ADMINISTRATION OF PHYSICAL EDUCATION (3)
Enables personnel in health and physical education to understand and interpret the philosophy, principles, problems, policies, and procedures essential to the development of desirable programs. Students will develop a comprehensive physical education curriculum for teaching grades P-12.

PHED 410. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION (3)
Students will learn how to develop an accountable means of grade assessment in physical education based on a sound philosophy of skill development.

PHED 430. TEACHING ELEMENTARY SCHOOL PHYSICAL EDUCATION (3)
Examines the taxonomy of skill acquisition, teaching methods, and curriculum of physical education for grades K-5. Emphasis is on application of content in PHED 301 in an elementary school.

PHED 490. HUMAN GROWTH AND DEVELOPMENT FOR HPERS (3)
This course will familiarize HPERS professionals with the major theories of human growth and development and the continuing research in the field. Students will develop an understanding of human development including the cognitive, emotional, physical, and social domains of each state of development. An emphasis will be placed on the role developmental stages play in the teaching and leading of physical activities for all ages. Prerequisites: RECR 140, RECR 210, or permission of the instructor.

PHYSICS

PHYS 201. UNIVERSITY PHYSICS I (3)
An algebra- and trigonometry-based treatment of the fundamentals of selected classical physics topics including motion, force, Newton’s laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. PHYS 201L must be taken concurrently with PHYS 201.

PHYS 201L. UNIVERSITY PHYSICS I LABORATORY (1)
A two hour per week laboratory course focusing on selected classical physics topics including motion, force, Newton’s laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. Must be taken concurrently with PHYS 201.

PHYS 202. UNIVERSITY PHYSICS II (3)
An algebra- and trigonometry-based treatment of the fundamentals of selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. PHYS 202L must be taken concurrently with PHYS 202. Prerequisite: PHYS 201.

PHYS 202L. UNIVERSITY PHYSICS II LABORATORY (1)
A two hour per week laboratory course focusing on selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. Must be taken concurrently with PHYS 202. Prerequisite: PHYS 201L.

PHYS 221. GENERAL PHYSICS I (3)
A calculus-based treatment of fundamentals of selected classical physics topics including motion, force, Newton’s laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. PHYS 221L must be taken concurrently with PHYS 221. Prerequisite or corequisite: MATH 207.

PHYS 221L. GENERAL PHYSICS I LABORATORY (1)
A two hour per week laboratory course focusing on selected classical physics topics including motion, force, Newton’s laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. Must be taken concurrently with PHYS 221.
PHYS 222. GENERAL PHYSICS II (3)
A calculus-based treatment of the fundamentals of selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. PHYS 222L must be taken concurrently with PHYS 222. Prerequisite: PHYS 221.

PHYS 222L. GENERAL PHYSICS II LABORATORY (1)
A two hour per week laboratory course focusing on selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. Must be taken concurrently with PHYS 222. Prerequisite: PHYS 221L.

PHYS 322. ELECTRICITY AND MAGNETISM (3)
Principles of electricity and magnetism with practical applications. Prerequisites: PHYS 222 and MATH 208.

PHYS 323. MODERN PHYSICS (3)
Topics will include special relativity, atomic structure, nuclear structure, solid state physics, and elementary particles. Prerequisites: PHYS 222 and MATH 207.

PHYS 330. ADVANCED LABORATORY (2)
A series of laboratory experiments in electricity, magnetism, mechanics, and modern physics. Six hours per week. Prerequisites: PHYS 221, 222.

PHYS 401, PHYS 404. SPECIAL PROJECTS (1 EACH)
Experimental and theoretical research projects in specific areas of physics. Project assignment dependent upon student's ability and interest.

POLITICAL SCIENCE
PSCI 100. POLITICS AND GOVERNMENT (3)
A consideration of concepts and issues essential to the understanding and study of politics. Classical and modern theories of the political system, including communism, fascism, democracy, and socialism are examined in an American and international context including study of specific nations. The approach of this course will be both empirical and normative.

PSCI 101. AMERICAN FEDERAL GOVERNMENT (3)
A study of the functions and administration of the government of the United States.

PSCI 102. STATE AND LOCAL GOVERNMENT (3)
A study of the functions and administration of the government on the state and county levels.

PSCI 201. INTRODUCTION TO PUBLIC ADMINISTRATION (3)
An introductory study of the development, organization, procedures, processes, and human relations factors in governmental administration. Particular emphasis will be placed on the study of administrative practices in the federal, state, and local governments in the United States.

PSCI 301. PUBLIC POLICY (3)
Study of public policy development and implementation in the United States, with emphasis on the ways in which cultural, political, and institutional factors may inhibit or expedite pursuit of public policies designed to meet societal needs and with consideration of selected contemporary issues of public policy within this framework.

PSCI 305. U.S. CONGRESS (3)
Study of the United States Congress focusing on constitutional powers, theories of representation, and the electoral process. Legislative decision making and the influences upon it are demonstrated and experienced by students in a semester-long simulation of the legislative process.
PSCI 310. PARTIES, POLITICS, AND ELECTIONS (3)
An examination of elections in the United States. Includes consideration of the role of political parties, the media, polling, interest groups, and professional consultants.

PSCI 315. EARLY POLITICAL THEORY (3)
A general survey of leading theories from ancient times to the 16th century. Includes an opportunity to study the influence of political and social ideas upon the fundamental institutions of modern societies.

PSCI 316. RECENT AND CONTEMPORARY POLITICAL THEORY (3)
The recent schools of political thought are presented with particular emphasis on the basic ideologies of the contemporary period.

PSCI 317. AMERICAN POLITICAL THOUGHT (3)
A study of the growth and development of American political concepts from the Colonial period to the present.

PSCI 320. AMERICAN JUDICIAL PROCESS (3)
The purpose of this course is to introduce students to the American judicial process. Topics to be covered include basic legal concepts, civil law procedures, and criminal law procedures.

PSCI 325. COMPARATIVE GOVERNMENT: WESTERN EUROPE (3)
A comparative study of modern political institutions with particular attention to European government and politics.

PSCI 327. COMPARATIVE GOVERNMENT: SOVIET UNION AND ITS AFTERMATH (3)
An examination of the U.S.S.R. as a 20th-century political phenomenon, with emphasis on the political concepts it typified—including revolution, Communism, and one-party rule. Explores the dynamics of political change in Russia and other former Soviet Republics.

PSCI 328. COMPARATIVE GOVERNMENT: ASIA (3)
An examination of the governments of China, Japan, and Korea including their ideology, culture, theory, institutions, leadership, and politics, as well as their relations with other countries, will be explored.

PSCI 330. POLITICS AND CIVIL RIGHTS (3)
This course examines the politics of the African-American civil rights struggle with an emphasis on the years 1960 through 1965. The latter is often thought of as the high point of success for the Second Reconstruction. The course is divided into three major sections: 1) an overview of the politics of civil rights from the end of the Civil War through the Eisenhower administration; 2) the Kennedy-Johnson presidencies; and 3) a very brief overview of the post-Johnson years, with an emphasis on the changes that have occurred in political party strategies and public opinion as they effect and are effected by African-American civil rights.

PSCI 331. RACE, GENDER, AND POLITICS (3)
The purpose of this course will be to acquaint the student with political issues that are related to race and gender. Historic, economic, legal, and ideological context will be presented. Individuals, groups, and government responses will be examined, as well as how similar issues are viewed differently in various cultures and political situations.

PSCI 343. PRACTICUM: PUBLIC POLICY AND ADMINISTRATION (3)
This course is a form of independent study that integrates lessons learned in the classroom with supervised work experience in government. Students will be afforded the opportunity to attend seminars conducted by the Eastern Management Development Center and to work at the center. Written reports will be required as part of this class.
PSCI 397. CRITICAL POLITICAL ISSUES (3)
Detailed exploration of critical issues like abortion rights, gun control, and affirmative action helps students understand and evaluate fundamental questions about policy making and the policy process in American government. Themes of the course include questions of power, checks and balances among the three branches of American government, the legitimacy of policy outcomes in the area of social regulatory policy, and the obstacles to collective action in the political realm.

PSCI 400. THE SUPREME COURT AND CONSTITUTIONAL LAW (3)
Examines the Supreme Court as a legal and political decision-making body; analyzes the development of the American constitutional system, the evolution of fundamental doctrines in constitutional law, and the nature of Supreme Court opinions; relates Supreme Court decisions to contemporary political, social, and economic problems.

PSCI 401. CONSTITUTIONAL LAW: CIVIL RIGHTS AND CIVIL LIBERTIES (3)
Examines Supreme Court cases and doctrines on freedom of speech, press and association, on race and sex discrimination, on privacy, on protection of criminal defendants, and on related questions; emphasizes recent decisions and ongoing development of guidelines and doctrines by the present Court; relates constitutional issues to political issues involving civil rights and civil liberties.

PSCI 403. INTERNATIONAL RELATIONS (3)
Surveys the political relationships among states, emphasizing the methods and goals of diplomacy; analyzes concepts such as the balance of power, collective security, and the peaceful settlements of disputes.

PSCI 404. INTERNATIONAL ORGANIZATION OF WORLD GOVERNMENTS (3)
Examines the theory and structure of international organizations with special emphasis on the U.N.; other organizations to be discussed include NATO, the European Community, OAS, and other regional organizations.

PSCI 406. AMERICAN FOREIGN POLICY SINCE WORLD WAR II (3)
An analysis of American foreign policy since 1945. Special emphasis is placed on the Cold War rivalry between the U.S. and U.S.S.R. Recent developments will also be treated.

PSCI 407. INTRODUCTION TO INTERNATIONAL LAW (3)
A survey of the nature, sources, and development of international law. Study of substantive elements through case studies will be stressed.

PSCI 410. POLITICAL ETHICS (3)
An examination of some contemporary issues of power, freedom, obligation, human rights, and community, in the light of major philosophical understandings of ethical behavior in the public sphere.

PSCI 411. THE POLITICS OF POVERTY (3)
This course examines the variety, extent, and causes of poverty especially in the United States, the relationship of poverty to societal values, the political situation of the poor, and various policy responses.

PSCI 412. METROPOLITAN POLITICS (3)
An examination of local government in metropolitan areas; emphasis is placed on economic, demographic, and political characteristics of the urban community and their implications for effective and responsive government.

PSCI 413. CONDUCT OF POLITICAL INQUIRY I (3)
Introduction to research methods and their application to the study of politics. Topics include epistemology, empiricism, survey research and polling, elite interviewing, and document analysis.
Special attention will be given to hypothesis formation, research design, and literature review. A central focus of the course is on learning to effectively evaluate the large amounts of information presented to us in daily life.

**PSCI 414. CONDUCT OF POLITICAL INQUIRY II (3)**
Continued exploration of research methods and their application to the study of politics. Special attention will be given to literature review, data collection, and statistical analysis. A central focus of the course is on learning to evaluate effectively the large amounts of information presented to us in daily life.

**PSCI 425. READINGS IN POLITICAL SCIENCE (3)**
An examination of a selected topic in political science devoted to extensive reading of classic, standard, and/or contemporary monographs, articles, and/or books. Specific topic and presiding professor will be announced prior to the registration period. Prerequisite: Minimum overall GPA of 2.5.

**PSCI 443. INTERNSHIP IN GOVERNMENT (1-15)**
This course provides full- or part-time work experience in federal, state, or local agencies; in private trade and policy organizations that are active in the public sector; or in other appropriate placements. The goal is to enable the student to gain practical knowledge of political processes, public administration, or the formation and implementation of public policy. Interns must have a 2.5 GPA, must complete half of the 128 credits required for graduation before the internship begins, must submit applications to the department early in the semester preceding the internship, and must follow the department’s norms and procedures for internships. A copy of the norms and procedures is available from the department chair or from the department’s coordinator of internship programs.

**PSYCHOLOGY**

**PSYC 203. INTRODUCTION TO PSYCHOLOGY (3)**
A survey course introducing the core areas of psychology, including neuropsychology, learning and memory, intelligence, developmental psychology, stress and health, personality, abnormal psychology, psychotherapy, and social psychology.

**PSYC 206. SPECIAL TOPICS IN PSYCHOLOGY (3)**
Introduction of selected topics in psychology which are not included in the psychology curriculum.

**PSYC 301. ADOLESCENT DEVELOPMENT (3)**
Designed for those with a professional interest in adolescence. Course content emphasizes cognitive, physical, and psychosocial-affective variables which affect adolescent development.

**PSYC 302. PSYCHOLOGY OF AGING (3)**
This course explores both the physiological and psychosocial correlates of the aging process. Topics include the sensory-motor, hormonal, biochemical, nutritional, and neurological aspects of aging; factors related to substance abuse, memory loss, attention deficits, delirium, and dementia; and key factors in the mental health of the elderly. Consideration is also given to cultural and social-political aspects of aging, as well as death and the process of dying. Prerequisite: PSYC 203.

**PSYC 304. COMPUTERS IN THE BEHAVIORAL AND SOCIAL SCIENCES (3)**
This course will introduce the use of computer technology in the behavioral and social science disciplines. Available technology and software will be described. Students will learn to communicate and collaborate with others electronically, to use Internet resources to find information, and to use computers to collect, analyze, model, and present data. Prerequisite: PSYC 203. Completion of a statistics course is strongly suggested, but not required.

**PSYC 305. SOCIAL PSYCHOLOGY (3)**
A study of the interaction of individuals in group situations, the products of collective activity, and their influence upon the individual. Prerequisite: PSYC 203.
PSYC 306. SPECIAL TOPICS IN PSYCHOLOGY (3)
Introduction of selected topics in psychology which are not included in the psychology curriculum.

PSYC 311. INTRODUCTION TO CLINICAL PSYCHOLOGY (3)
An introduction to the methods, techniques, and approaches to an understanding of personality and the treatment of emotional disturbances.

PSYC 312. PRACTICUM IN PSYCHOLOGY I (3)
This course consists of on-site practical experience and a supervisory discussion/content seminar related to paraprofessional work in psychology in one of the following areas: 1) teaching, 2) research, 3) clinical work. Prerequisite: Permission of the psychology faculty.

PSYC 313. PRACTICUM IN PSYCHOLOGY II (3)
Same course description as PSYC 312. A second practicum in psychology. Prerequisite: PSYC 312.

PSYC 314. FIELD EXPERIENCE IN ART THERAPY (3)
Same course description as PSYC 312 Practicum in Psychology. This course shall function separately in title only from that of PSYC 312 Practicum in Psychology. In order to meet undergraduate art therapy recommendations of the American Art Therapy Association, it is necessary for the practicum to be identified as Field Experience in Art Therapy. The course will be offered at the same time, etc., as PSYC 312 (when demanded) and will meet all the requirements and expectations of PSYC 312.

PSYC 316. ART THERAPY (3)
An introduction to therapeutic techniques using artistic productions as an aid to psychotherapy. The course involves an analysis of approaches with specific clinical populations; e.g., juvenile delinquents, geriatric clients, etc. This course also includes a historical and theoretical appraisal of the use of art therapy in both clinical practice and research.

PSYC 320. HUMAN SEXUAL BEHAVIOR (3)
A course designed to investigate the scope of intrapersonal and interpersonal human sexual behavior. A psychological approach is emphasized, examining the acquisition of sexual scripts through learning, varieties of sexual experience, both typical and atypical, and the psychodynamics of sexual adjustment. Prerequisite: PSYC 203.

PSYC 321. INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (3)
The application of psychological theory and methodology to individuals and groups in organizational settings. Topics include managerial appraisal and consultation, employee training and development, personnel research, improving employee relations, and designing optimal work environments.

PSYC 323. CONVERSATIONAL SIGN LANGUAGE I (3)
This course involves both the teaching of the American Sign Language (ASL) as a skill to be acquired by the student in both the receptive and signing modes, and the development of a knowledge of cultural differences between deaf and hearing people. A further objective of the course is to have the student experience at least one social situation frequented by people who are deaf.

PSYC 324. CONVERSATIONAL SIGN LANGUAGE II (3)
This course involves advanced skill acquisition of the American Sign Language (ASL), both in the signing and receptive modes. The culture of deaf people is also further explored along with the literature on deafness and appraisal of state legislative activity favoring ASL as fulfilling the foreign language requirement for high school graduation.
PSYC 325. HEALTH PSYCHOLOGY (3)
This course explores contemporary trends and techniques in the field of health psychology. Included are such topics as psychological intervention in physical illness, adherence, activity level, obesity, smoking prevention, acute and chronic stress, stress appraisal, delay in seeking treatment, immunological competence, interventions with children, lifestyle change programs, holistic psychology, and the health care system.

PSYC 326. PSYCHOLOGY OF SUBSTANCE ABUSE (3)
The focus of this course is to provide an in-depth understanding of the nature of addiction to various psychoactive substances and its treatment. This includes a study of the psychological and social factors associated with substance abuse and theories of etiology, along with an understanding of the scope of services and critical issues in services for persons with psychoactive substance use disorders.

PSYC 330. FAMILY THERAPY (3)
The focus of this course is on the major schools of family therapy. The family is viewed as a unit of treatment and as a multigenerational emotional system. Case studies are emphasized.

PSYC 364. LIFESPAN DEVELOPMENTAL PSYCHOLOGY (3)
This course consists of an introduction to the scientific study of human development over the lifespan. Prerequisite: PSYC 203.

PSYC 365. PSYCHOPHARMACOLOGY (3)
Psychopharmacology is the study of drugs that influence mood and behavior. This course will address principles of drug action, basic physiological mechanisms by which psychoactive drugs work, drugs used to treat mental/emotional/neurological disorders, and drugs of abuse. Social issues surrounding drugs will be only briefly discussed, as it is most important to understand drug mechanisms and effects before forming opinions on social policy. Students will be required to write a research paper on a topic of interest to them within the field. Prerequisites: PSYC 203 and PSYC 361 or 363.

PSYC 367. MOTIVATION AND EMOTION (3)
This course examines the organization of purposive behaviors and the origin of psychological experiences that accompany behaviors and emotions. Major theoretical perspectives and experimental paradigms will be considered (biopsychology, behaviorism, cognitive theory, decision-making strategies, and evolutionary psychology). The scope of topics will include biologically driven behaviors, the effect of conditioning and reinforcement of behaviors, behavior modification, how decisions are made, social motivation, emotions, and complex motives. Prerequisite: PSYC 203 and PSYC 361 or 363.

PSYC 370. SENSATION AND PERCEPTION (3)
Sensation and perception is the subfield of psychology which examines how elemental stimuli in the environment (e.g. light) are translated into a complex psychological phenomenon (e.g. perception of color). All five sensory modalities (vision, audition, olfaction, gustation, and tactile/body senses) will be addressed. Physiology of the sensory systems and theories of perception are the major thrust of this course. An attempt will be made to address applications of this field (e.g. acuity testing and therapy). Prerequisites: PSYC 203 and PSYC 361 or 363.

PSYC 392. COOPERATIVE EDUCATION IN PSYCHOLOGY (1-9)
Cooperative education is a form of education which integrates classroom study with paid, planned, and supervised work experiences in the public and private sectors. Cooperative education allows students to acquire essential, practical skills by being exposed to the reality of the work world beyond the boundaries of campus, enhancing their self-confidence and career direction. An agreement is signed by the employer supervisor, the faculty supervisor, and the student. The co-op may be repeated for credit. Prerequisite: Sophomore standing; minimum 2.3 GPA, 2.5 major GPA; approval of the Department of Psychology; placement by the Career Center.
PSYC 400. EXPERIMENTAL PSYCHOLOGY (4)
As the first course in a series of two, the Experimental Psychology class is designed to prepare students for the senior thesis capstone course. Students will gain an understanding of how to approach research questions in a scientific manner, which reduces as many alternative interpretations and potential sources of bias as is possible. Students will see that each research design is valuable for different types of questions and that the replication of findings using different methods, different subjects, at different times, and in different places is the key to giving theories strength and credibility. Through the study of the research methods that psychologists use, students will become more educated consumers of research findings appearing in the daily media. Prerequisites: PSYC 203 and MATH 314 or BADM 224.

PSYC 404. PSYCHOLOGY SEMINAR (3)
A course designed to serve the needs of students who are majoring or minoring in psychology and who expect to pursue graduate studies in the field. The purpose of this course is to allow faculty to expose students to topics not included in the present curriculum, or topics which, although included, are not covered in sufficient depth for pre-professional students. The seminar may include sharing the results of individually assigned readings, individualized research, and/or a discussion of theoretical or research topics as reported in contemporary literature and chosen by the faculty instructor. Prerequisite: Permission of instructor.

PSYC 406. SPECIAL TOPICS IN PSYCHOLOGY (3)
Introduction of selected topics in psychology which are not included in the psychology curriculum.

PSYC 410. PSYCHOLOGY OF PERSONALITY (3)
A study of a variety of theories of personality determinants, structure, and functioning. Prerequisite: PSYC 203.

PSYC 415. PSYCHOLOGICAL TESTS AND MEASUREMENTS (3)
A course designed to develop knowledge of psychological instruments available for the appraisal of human behavior and skill in administering and interpreting those tests and measurements. Prerequisite: PSYC 203.

PSYC 420. HISTORY AND SYSTEMS OF PSYCHOLOGY (3)
An overview of the historical and philosophical basis of psychology and the relationship of contemporary systems. Prerequisite: PSYC 203.

PSYC 430. HUMANISTIC PSYCHOLOGY (3)
An exploration of the field of humanistic psychology. The theoretical orientations of selected humanistic psychologists (e.g. Carl Rogers, Leo Buscaglia, Viktor Frankl, Harold Greenwald, and Abraham Maslow) are covered in depth.

PSYC 460. ABNORMAL PSYCHOLOGY (3)
A study of the classifications, dynamics, symptoms, and treatment of abnormal behavior. Prerequisite: PSYC 203.

PSYC 461. SURVEY OF PHYSIOLOGICAL PSYCHOLOGY (3)
This course involves a study of structure and function of the nervous system. Students will gain an appreciation for the biological basis of everyday behaviors, such as language, movement, emotion, reading, writing, sleeping, learning, and personality. Likewise, students will gain an understanding of the physiological correlates of many types of psychological pathology, such as schizophrenia, depression, autism ADD/ADHD, Alzheimer’s disease, Parkinson’s disease, drug addiction, learning disabilities, and stroke rehabilitate. The aim of the class is for students in many helping-related fields (e.g., psychology, nursing, education, gerontology) to gain an appreciation of just how pervasive the impact of physiological variables are within the context of a psychosocial approach throughout the lifespan. Prerequisite: PSYC 203.
PSYC 471. COGNITIVE PSYCHOLOGY (3)
An introduction to human cognitive processes including attention, perception, memory, concept formation, psycholinguistics, problem solving, and thinking. Course emphasizes the role of experimentation in understanding the information processing systems underlying human cognition, language, and memory. Prerequisite: PSYC 203.

PSYC 472. PSYCHOLOGY OF LEARNING (3)
A survey of methods, empirical findings, and theoretical interpretations in human and animal learning, including such topics as classical and operant conditioning, animal cognition, and machine learning. The course also covers discrimination, generalization, and the role of reward, punishment, and other motivational variables in learning. Prerequisite: PSYC 203.

PSYC 485. SENIOR THESIS (3)
Students acquire and perform skills involved in conducting and reporting empirical research. These include the forming of hypotheses, designing research to test those hypotheses, analysis of the resulting data, and the writing up of a complete report of the research results following APA guidelines. This is the Department of Psychology's capstone course, designed to foster and evaluate the students' fundamental understanding of psychology as an empirical research science. Prerequisite: PSYC 400.

RECREATION AND LEISURE STUDIES
RECR 108. INTRODUCTION TO SPORT STUDIES (3)
For students who want to enter the world of fitness or athletics as a professional as opposed to a classroom teacher.

RECR 115. INTRODUCTION TO THERAPEUTIC RECREATION (3)
Provides understanding of methods and techniques employed in serving special populations with recreation opportunities. A 20-hour field experience in a therapeutic setting is required.

RECR 120. HISTORY OF SPORT AND PHYSICAL EDUCATION (3)
Emphasizes relevant historical events that have influenced sport and physical education throughout history. (Crosslisted with PHED 120.)

RECR 125. INTRODUCTION TO COMMERCIAL RECREATION /TOURISM (3)
Examines purpose and function of leisure delivery system in the commercial setting. Topics include development and operation of commercial goods and services including tourism, resort, and campground industries as well as small business management.

RECR 140. INTRODUCTION TO LEISURE STUDIES (3)
A study of the historical and philosophical foundation of recreation and leisure and its impact on society. Topics include recreation programs in various settings, commercial and tourism, therapeutic recreation, and career opportunities.

RECR 210. LEISURE ACTIVITIES (3)
Prepares students to lead and teach leisure activities as well as implement programs. Activities for special populations will also be explored.

RECR 226. SPORT PROMOTION/MARKETING/FUND RAISING (3)
Emphasizes policies, procedures, and administrative skills to organize and develop both internal and external techniques.

RECR 228. SPORT ADMINISTRATION (3)
Emphasizes effective leadership and management styles, planning and organizing, personnel, time management, budgeting, legal concerns, and future directions of sport programs.
RECR 250. FIELD EXPERIENCE IN RECREATION (3)
Provides practical career-related experiences in leisure services. A supervised 120 hour experience is required. Students should consult the practicum handbook for specific course procedures. Prerequisite: RECR 140.

RECR 316. RECREATION PROGRAMMING (3)
A study of principles, policies, and procedures needed to organize, direct, and conduct recreation programs. Prerequisite: RECR 140.

RECR 320. FACILITIES MANAGEMENT (3)
Examines design, construction, operation, and management of physical education, recreation, and sport facilities.

RECR 324. SPORTS WRITING (3)
This course focuses on techniques of reporting, interviewing, gathering information, and writing sports stories from basic news to feature style format. Practical experience and lab work are included.

RECR 325. SPORT APPRECIATION (3)
This course is designed for students to explore and understand the various aspects of sport at the various levels: scholastic, intercollegiate, professional, and international.

RECR 331. MEDICAL TERMINOLOGY FOR THERAPEUTIC RECREATION (3)
This course provides students with a working knowledge of medical terms used in therapeutic recreation. Taught every third semester.

RECR 332. CAMP COUNSELING (3)
Provides skills necessary to plan, organize, and work in a camp setting. Permission of department chair.

RECR 335. LEISURE FOR THE AGING (3)
Introduces students to leisure activities for the elderly. Topics include procedures for programming, assessment, and implementation.

RECR 342. CAMPUS RECREATION AND EVENT MANAGEMENT (3)
A study of the organization, administration, and supervision of campus recreation, intercollegiate athletic events, and local recreational events. Students will assist in these activities as part of their class requirements.

RECR 343. 21ST-CENTURY TOURISM (3)
This course examines the commercial potential and the unique business opportunities associated with the travel and tourism industry.

RECR 344. HOSPITALITY (3)
An examination of the numerous aspects of the hospitality and commercial recreation industry including lodging, food, beverage, customer service, hospitality management, safety, and event management. This course will also make students aware of jobs in the industry.

RECR 345. THERAPEUTIC RECREATION IN AN INSTITUTIONAL SETTING (GATEWAY) (3)
Students will examine fundamental techniques in providing recreation activities for the disabled. Students will be catalysts working in partnership with the staff at various institutions to foster self-esteem and optimum health for their clients. Students will attend four class trips to various agencies in the metropolitan Washington, D.C., area.

RECR 350. FIELD EXPERIENCE IN LEISURE SERVICES (3)
Provides career-related experiences through 180-hour supervised field work in approved settings. Prerequisite: RECR 140.
RECR 355. SPORT PHOTOGRAPHY (3)
Gives students hands-on experience in taking and developing film relating to sports activities.

RECR 363. LIFEGUARD TRAINING/PROFESSIONAL RESCUER (3)
Students learn skills necessary to prevent aquatic accidents and to rescue drowning victims in a variety of aquatic environments. Professionalism, working with people, and facility surveillance are also included. Students appropriately passing written and practical tests may receive American Red Cross Lifeguarding, CPR, and First Aid Certificates. Prerequisite: Good swimming skills (ability to swim 20 lengths of the pool without stopping).

RECR 364. WATER SAFETY INSTRUCTOR (3)
Students learn American Red Cross techniques of teaching swimming and diving. Other topics include aquatic safety, hydrodynamics, stroke mechanics, fitness, training, competitive activities, and rescue techniques. Students who successfully complete the course to American Red Cross standards receive certificates.

RECR 370. ENVIRONMENTAL EDUCATION (3)
Examines philosophy, techniques, and application of education in and for the out-of-doors. Topics include history and development of outdoor education, environmental education, including school camping, conservation, and interpretation techniques.

RECR 380. LEADERSHIP IN LEISURE STUDIES (3)
Provides skills for successful leadership through observations in recreation settings. A 40-hour out-of-class recreational activity and leadership experience is required.

RECR 392. COOPERATIVE EDUCATION IN RECREATION LEISURE STUDIES (1-9)
This course is offered each semester, including the summer. May be repeated for credit, but not during the same term. Prerequisite: 2.5 GPA in major plus RECR 140, RECR 210. This course may be repeated up to 9 hours.

RECR 407. MANAGEMENT IN RECREATION AND LEISURE SERVICES (3)
Prepares the student to manage sport, recreation, and leisure services in public and private settings. Topics include public relations, human relations, personnel management, budgets, and management theory. Prerequisites: RECR 140; junior standing required.

RECR 430. THERAPEUTIC RECREATION PROGRAMMING (3)
Provides an understanding of the methods and techniques employed in formulating and conducting programs for special populations.

RECR 431. ISSUES AND TRENDS IN THERAPEUTIC RECREATION (3)
A study of contemporary issues and problems of special populations in relation to corresponding philosophy and theory. Prerequisite: RECR 115. Taught every third semester.

RECR 432. DOCUMENTATION IN THERAPEUTIC RECREATION (3)
This course acquaints students with the regulations of governmental and accrediting organizations which affect therapeutic recreation professionals and the development and implementation of therapeutic recreation programs in a variety of clinical settings.

RECR 440. LATE ADULTHOOD ISSUES (3)
This course is designed to acquaint students with the field of gerontology. The class content will enable the student to better understand the older person’s experience as a result of aging.

RECR 449. PRE-PRACTICUM (1)
Course content includes writing a résumé, cover letter, interviewing for the internship in addition to completing other requirements prior to enrolling in RECR 450 Recreation Internship.
RECR 450. RECREATION INTERNSHIP (9)
Internship programs provide professionally-supervised career-related experience in a leisure service organization. Student must complete a minimum of 400 agency hours in a setting that demonstrates planning, leadership, administrative, and supervisory skills. Students should consult the Planning Your Career in the 21st Century Handbook and follow specific procedures stated. Prerequisites: RECR 140, RECR 316, RECR 407, RECR 449, junior/senior status with 2.5 GPA in major, and permission of the instructor.

RECR 460. SEMINAR IN SPORT-RELATED ISSUES (3)
Investigates issues and problems facing sports through a variety of sports materials.

RECR 465. ESSENTIALS OF STRENGTH AND CONDITIONING (3)
Class provides an understanding of teaching and demonstrating fitness and wellness activities. The focus will be on advanced principals of training, speed, ability, balance, CV endurance, and polymeric. Students will also gain an understanding of exercise sciences, theoretical practices, nutrition, testing protocols, program design, and administration. This class may be used as preparation of certification exam. Prerequisites: Senior standing, have taken or concurrently taking Applied Anatomy and Physiology, or permission of instructor.

RELIGION
RELG 308. OLD TESTAMENT (3)
Survey of the Old Testament, concentrating on the history of the Hebrew covenant-community of people, their understanding of life in relation to God, and the literary forms in which they expressed this understanding. Offered upon demand.

RELG 309. NEW TESTAMENT (3)
Covers the life and teachings of Jesus as described in the Gospels, the writings of Paul, and the contents of other New Testament books, along with certain critical questions regarding authorship and interpretation of New Testament material. Offered upon demand.

RELG 325. GREAT RELIGIOUS BOOKS (3)
Examines a number of the great books which have helped shape classic Christian thought in Western culture. The concepts of law, justice, order, authority, and salvation as they occur in the writings of major religious thinkers are stressed. Selections from the Old and New Testaments, St. Augustine, Abelard, Aquinas, Luther, Calvin, Hooker, Pascal, Kant, Kierkegaard, Tillich, Bonhoeffer, Barth, and Buber will be read and discussed. Offered upon demand.

RELG 330. HISTORY OF EARLY CHRISTIANITY (3)
The history of Christianity from New Testament times to the Reformation will be studied. Emphasis will be on geographical spread, significant persons, philosophies, governments, and theological concerns (see HIST 330). Offered upon demand.

RUSSIAN
When demand for them is warranted, sequenced courses in Elementary and Intermediate Russian are offered under a RUSS prefix number: RUSS 101, RUSS 102, RUSS 203, and RUSS 204. Each course carries three hours credit.

SOCIAL WORK
SOWK 201. INTRODUCTION TO SOCIAL WORK (3)
Sophomore-level course designed to introduce the beginning-level social work student to the issues and knowledge with which social welfare and social work are concerned. Through examination of the scope of social welfare as a concept, the structures that have grown out of it, and the theory and practice techniques which enable the structures to function, this course will attempt to lay the base for later, more detailed and advanced study of basic policy and practice concerns. The students will be introduced to the generalist concept of social work practice upon which the undergraduate curriculum is built and will have the opportunity to explore their own readiness to identify with
the values, principles, and practices of the social work profession. Required for all social work majors. Prerequisites: SOCI 203, PSYC 203, or consent of instructor.

SOWK 300. COMMUNITY SERVICE LEARNING (3)
Community Service Learning provides students an opportunity to actively participate in both the classroom and the community to foster an awareness of social issues and citizenship development. The course emphasizes interactive, experiential education by placing curricular concepts in the context of community service. Students use critical thinking skills as they evaluate and synthesize these concepts through actual problem solving. Students see connections between service and learning through writing, reflection, and discussion as they evaluate experiences, analyze the connection to and the role of social services agencies, and meet in seminars to process their experience. Prerequisite: SOCI 203.

SOWK 301. SOCIAL WELFARE AS A SOCIAL INSTITUTION (3)
A survey of the historical development of social welfare institutions and the societal processes devised to deal with social welfare concerns. Special attention is given to the origin and development of the American social welfare system as well as current trends and issues in the social welfare field. This course also focuses on the profession of social work from both a historical and a contemporary perspective. Prerequisites: SOCI 203 and SOCI 205.

SOWK 305. HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I (3)
The first of two courses in a sequence designed to introduce the student to theories and knowledge of the bio-psychosocial development of individuals within the context of a range of social systems. The dynamic interaction of human beings and their sociocultural context is explored in each of the developmental stages of the human lifespan. Particular attention is given to group memberships, family dynamics, and cross-cultural distinctions. Special emphasis is also placed on ethical issues, differing values, and the role of social institutions in both enhancing and limiting human growth and potential. This course is focused on the earlier part of the lifespan, through the adolescence and young adulthood. It introduces the systems model and how organizational and community systems affect client systems. Prerequisite: PSYC 203.

SOWK 306. HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT II (3)
The second of two courses in a sequence designed to introduce the student to theories and knowledge of the bio-psychosocial development of individuals within the context of a range of social systems. This course offering examines the impact of biological, psychological, and sociocultural systems on middle through late adulthood. It includes material on gender roles, sexism, sexual orientation, retirement, death, and dying. The impacts of social and economic forces and macro system responses to the challenges of development in adulthood are explored. Prerequisites: SOCI 203 and SOWK 305.

SOWK 311. SOCIAL WORK METHODS I (3)
An introduction to the basic interviewing techniques and skills utilized in social work practice. The mechanics of conducting interviews, gathering information, and making assessments as well as recording interviews will be covered. Techniques used in one-to-one interviews, cross-cultural interviews, social assessments, and termination are discussed. Roles of the social worker in staging interventions on the micro level in the context of responsibility for macro level charge are stressed. Prerequisites: SOWK 201 and SOWK 300.

SOWK 312. SOCIAL WORK METHODS II (3)
This course utilizes critical thinking from an empowerment perspective to engage in problem solving in mezzo generalist practice. A central focus of the course will be on developing generalist skills that help prepare clients in groups and families to effectively cope with future problems. Generalist practitioners are those who have attained an integrated understanding of social work knowledge, skills, and values which enable graduates to select and use appropriate methods of intervention on all levels in the delivery of human services. The selection and utilization of appropriate theories, strategies, and techniques with client systems is stressed. Prerequisite: SOWK 311; majors only.
SOWK 313. SOCIAL WORK METHODS III (3)
This course is designed to be an introduction to the topic of administration and supervision in the human services. The purpose of the course is to give B.S.W. level practitioners a knowledge and skill base for beginning administrative and supervisory practice. The content of the course will include an exploration of formal organizations, management styles and theories, issues in supervision, interpersonal and organizational communication, program planning, and evaluation as a function of social planning. The format of the course is designed to combine formal lecture presentations with experimental exercises, simulations, and films in an effort to explore the materials from a variety of perspectives. Prerequisites: SOWK 311 and 312; majors only.

SOWK 320. CHILD WELFARE SERVICES (3)
An introduction to the areas of child welfare problems, needs, and services in America. The historical development of child welfare services is surveyed as well as dealing with major current issues. Course content includes public and private agencies and specialized services in the categories of dependent and neglected children, family-centered services, physically and mentally handicapped children, adoptions, foster care, and institutional services. Prerequisites: SOCI 203 and PSYC 203.

SOWK 325. ORIENTATION TO FIELD PRACTICUM (1)
This seminar for junior level students meets once a week to prepare students for field experience and to facilitate the application and interview process needed to secure a field placement. Students must complete a portfolio, a series of interviews and a proposal for a learning contract. Topics to be covered include 1) professional boundaries and liabilities, 2) diverse client populations, 3) practice settings, 4) legal, ethical, and practical concerns in the field experience practicum. Prerequisites: SOWK 301, 305, 311; majors only.

SOWK 402. SOCIAL GERONTOLOGY (3)
An interdisciplinary consideration of the sociological, psychological, and biological processes of aging with emphasis on modes of social intervention. Important aspects of the demography of the aged are clarified, as is the aging’s relationship with the family. Studies in changes in intelligence, memory, brain function, and behavior accompany a look at the physiological aspects of the psychology of aging. Normal and pathological physical changes and the effects of exercise receive attention. Discussions of environmental and social issues such as prolongation of life, institutionalization, economics, neighborhood planning, public policy, and community services are examined in their particular applications to older persons and the aging processes. Strategies and techniques of the development and delivery of social services are presented. Prerequisites: SOCI 203 and PSYC 203 or permission of instructor.

SOWK 404. SOCIAL WELFARE SEMINAR (3)
Gives the advanced undergraduate student an opportunity to explore further and integrate, in a generic way, knowledge learned in individual courses covering many other areas of content. There is in-depth analysis of social work values and ethics, professionalism, social change, and systems of delivering human welfare services. Prerequisite: senior majors only.

SOWK 407. FIELD EXPERIENCE IN SOCIAL WORK I (3)
The culmination of the social welfare student’s course work in which the student will be expected to transform theory into practice through direct delivery of human welfare services in an approved community agency under the direction of a qualified supervisor. The student works in an agency 20 hours per week and attends a two-hour seminar held weekly on the University campus. The University faculty and the agency supervise work closely to insure the student undergoes an intense, thorough, broad experience in direct service to people in need. Prerequisite: senior majors only.
NOTE: All students required to complete field work must fill out a field work application form in duplicate during the semester preceding the proposed field work. Forms can be obtained from the field instruction coordinator.
SOWK 408. FIELD EXPERIENCE IN SOCIAL WORK II (3)
Continuation of Field Experience in Social Work I.
Note: All students required to complete field work must fill out a field work application form in
duplicate during the semester preceding the proposed field work. Forms can be obtained from the
chair of the Social Work Department. Prerequisite: senior majors only.

SOWK 409. FIELD EXPERIENCE SEMINAR I (2)
Weekly seminar which aids the student in meeting the objectives of the field experience program
and in applying, in an integrated manner, the theoretical concepts and principles learned in the
classroom to the actual delivery of social services. Through use of the case presentation format,
the student will be exposed to a variety of change agent, client, target, and action systems and will
further develop the ability to analyze and evaluate differing interventive approaches and techniques.
The seminar will also expand the student’s knowledge of and experience with group problem-solv-
ing and professional relationships. Prerequisite: senior majors only.

SOWK 410. FIELD EXPERIENCE SEMINAR II (2)
Weekly seminar which aids the student in meeting the objectives of the field experience program
and in applying, in an integrated manner, the theoretical concepts and principles learned in the
classroom to the actual delivery of social services. Through use of the case presentation for-
mot, the student will be exposed to a variety of change agent, client, target, and action systems
and will further develop the ability to analyze and evaluate differing interventive approaches and
techniques. The seminar will also expand the student’s knowledge of and experience with group
problem-solving and professional relationships. Prerequisite: senior majors only.

SOWK 411. FIELD EXPERIENCE IN SOCIAL WORK III (3)
The culmination of the social welfare student’s course work in which the student will be expected
to transform theory into practice through direct delivery of human welfare services in an approved
community agency under the direction of a qualified supervisor. The student works in an agency
20 hours per week and attends a two-hour seminar held weekly on the University campus. The
University faculty and the agency supervisor work closely to insure the student undergoes an intense,
through, broad experience in direct service to people in need. Prerequisite: senior majors only.

SOWK 415, SOWK 416. READINGS IN SOCIAL WORK (3 EACH)
Selected, in-depth analysis of specialized areas of social welfare. The class is structured around intensive
reading in a concentrated area with follow-up discussion groups. Each student prepares a research
paper exploring some aspect of the topic under study. Content areas include historical analysis, policy
formulation, practice theory, comparative policy and theory, and research theory and methodology.
Prerequisite: junior/senior status.

SOWK 417. SEX AND GENDER IN CONTEMPORARY SOCIETY (3)
This course explores changing roles for women and men in contemporary society. Rapid social
change creates crisis and opportunity for individuals and society. Women and men are presently
undergoing transitions in the social psychological, economic, and political spheres of their lives.
Students critically analyze some of the current changes in gender roles. Lecture material is integrated
with experiential material in the form of classroom activities. It is assumed that students have a
basic knowledge of core concepts in sociology and social work. Prerequisite or corequisite: SOCI
203 and SOCI 303 or permission of instructor.

SOCIOLOGY

SOCI 203. GENERAL SOCIOLOGY (3)
This course introduces the student to the concepts and theories that pertain to social relationships
and social organization. The course covers topics that range from micro interpersonal relationships
to macro social structures. The course is a prerequisite for all other courses in sociology and/or
social welfare. Not recommended for freshmen.
SOCI 205. SOCIAL PROBLEMS (3)
In large, complex, heterogeneous, and rapidly changing societies, social problems are inevitable consequences. The problems may vary in their nature, extent, and volume but the negative impact has equally significant implications for all aspects and members of the society. Although these problems are an integral aspect of society, their impact needs to be and can be controlled within a normal range. In order to ameliorate the negative consequences of these social conditions so that they do not reach a pathological state, it is imperative to understand their source, nature, and effects. This course examines these aspects of various social problems and the suggested corrective strategies to deal with them.

SOCI 303. THE FAMILY (3)
This course is an objective description and analysis of families. The course will examine the development and functions of traditional family forms as well as explore a variety of other family forms. Problems and issues facing contemporary families will be addressed. Diversity among American families will be emphasized.

SOCI 307. POPULATION AND URBAN PROBLEMS (3)
The course examines how a society is affected by its rates of birth, death, disease, migration, marriage, and divorce. These are the components of population growth and its geographic distribution. Specifically, the course will consider how family structure affects population growth and vice versa; how gender roles change when population growth goes up or down; how the movement of people from one place to another is changing people’s lives worldwide; and how inequality and populations are related.

SOCI 309. SOCIOLOGY OF RELIGION (3)
This course examines the structure and functions of organized religion in traditional and modern societies with an emphasis on reciprocal relations among religion, economic, family, educational, and political systems. Also, various patterns of cults, sects, and denominations will be examined.

SOCI 312. INTRODUCTION TO JUVENILE DELINQUENCY (3)
The course provides an understanding of the historical development of the concepts of delinquency and juvenile justice system; the volume and extent of delinquency; and the nature and processes of the juvenile system and corrections. The course will also explore various factors (biological, psychological, and sociological) associated with delinquency. These theories and an understanding of the aspects of delinquency and juvenile justice are imperative to the development of effective means of preventing young persons from starting the life of crime or graduating to adult criminal life.

SOCI 333. THE SOCIOLOGY OF SPORT (3)
This course surveys the principles that underlie the social structure and processes that create and transform the social institutions within the institution of sport. It also investigates the social milieu in which sport participation is embedded with respect to who participates, when, where, and the consequences of participation.

SOCI 340. SOCIOLOGY OF HUMOR (3)
This course is designed to introduce the student to the various theories and scientific analyses of humor. The student will learn about the importance of humor within interpersonal communications. Interpersonal dynamics, such as group formation and the generation of cultural identity, are also presented and discussed. The evolution of a national character is evaluated and assessed. The material stresses the use of humor in the media and how humor is used as a vehicle for cultural domination. The topics of humor that are examined included the areas of politics, race and ethnicity, and gender.
SOCI 390. THE SOCIOLOGY OF VIOLENCE (3)
This course is a survey of patterns and trends of violence in American society. These patterns and trends concern interpersonal, domestic, police, corporate, prison, schools, media, collective, and political violence. The course also examines theories, preventive treatment and public policies concerning violence.

SOCI 402. CRIMINOLOGY (3)
Crime is a major social problem that increasingly continues not only to undermine and stifle individual liberties, but also is having a tremendous draining effect on the already burdened valuable resources of the American society. This course provides an understanding of the historical development and definition of the concepts of crime and the criminal justice system; the volume and extent of crime; and the nature and processes of the criminal justice system and correction. The course will also explore various factors (biological, psychological, and sociological) associated with crime.

SOCI 403. ETHNIC RELATIONS (3)
The content of the course goes beyond the literal meaning of its title. It involves an analysis of stratification based on race, ethnicity, gender, class, and other social categories such as caste. Such a structure is not deliberate, but rather dictated by the inextricable relationship and uniformity of the consequences of the various forms of stratification. While emphasis is placed on the social arrangements in the American society, the issues are also examined from a cross-cultural perspective. The course tries to provide a general theoretical framework of stratification by exploring the factors, the process, and the consequent tensions and hostilities associated with it.

SOCI 404. SOCIOLOGY SEMINAR (3)
Designed for students who have a major or minor in sociology and who expect to pursue graduate study in the field.

SOCI 405. RESEARCH METHODS (3)
This course focuses on the scientific assessment of social phenomena. The student is introduced to the principles of the scientific method in order to conduct social research. The course includes the development and testing of hypothesis and covers various methods of data collection. Qualitative and quantitative assessment techniques are presented and discussed. Prerequisite: MATH 315 or consent of instructor.

SOCI 406. COMMUNICATION IN AMERICAN SOCIETY (3)
Special emphasis is placed upon mass communications and the structure of function of communication as the art of transmitting information, ideas, concepts, and attitudes from one person or group to another.

SOCI 407. COLLECTIVE BEHAVIOR (3)
This course centers on the relatively unstructured, spontaneous, unpredictable, temporary, and usually irrational aspects of human behavior, including such social behavior as rumors, fads, fashions, crazes, panics, escapes, riots, protests, collective delusions, migrations, and disasters.

SOCI 410. SOCIAL THEORY (3)
This course introduces the student to the fundamental forms of social thought. The philosophical beginnings of social theory are presented in order to form the basis for the analysis of classical social theory. The influence of social conditions and classical social theory is discussed in order to trace the development of contemporary social theory.

SOCI 411. SOCIAL STRATIFICATION (3)
A study of the factors which account for differences in influence, power, and social prestige held by different individuals and groups in the community and the society. Also considered are the theories of stratification and the relationships between social class and education, occupational
choice, political preference, and religious affiliation. The relationship between social class and social mobility is reviewed.

SOCI 412. MEDICAL SOCIOLOGY (3)
The purpose of this course is to provide an overview of the general field of medical sociology. Research and analysis of the medical environment from a sociological perspective will be explored. The course will focus on the major concerns of medical sociology: social facets of health and illness, the social functions of health institutions and organizations, the relationship of systems of health care delivery to other social systems, and the social behavior of health personnel and consumers of health care services.

SOCI 419. INTERNSHIP IN SOCIOLOGY/CRIMINAL JUSTICE (3)
This course provides supervised field experience enabling students to integrate theory and practice. A variety of community-based organizations are used for student placement. The course may not be repeated. Prerequisites: Junior or senior standing; 2.5 minimum overall GPA; permission of sociology faculty.

SOCI 421. SOCIAL ORGANIZATIONS (3)
This course focuses upon the nature and structure of social organizations. This includes the assessment of the impact of organizational structure upon individuals and society. A discussion of both informal and formal groups is presented within the course material. The course also introduces the student to the concept of globalization and the effects of this process. Issues originating with the works of Weber, Taylor, and Ford lead to the contemporary analyses of Ritzer, Tomlinson, Giddens, and others. The material focuses upon the relationship between the structure of the organization and the resulting consciousness of the participants of the organizations.

SPANISH

SPAN 101. ELEMENTARY SPANISH I (3)
A basic, culturally-oriented course in conversational Spanish designed for beginning students who wish to develop skills in speaking, reading, writing, and comprehending Spanish. Emphasis is placed on oral communication through dialogue and guided compositions. Audio and video tapes of Spain and Mexico are extensively used.

SPAN 102. ELEMENTARY SPANISH II (3)
A continuation of SPAN 101, this course allows students to strengthen their comprehension and speaking proficiency in Spanish by providing extensive practice in oral and written communication and self-expression and thorough discussions and oral presentations of readings in the culture of Spain, Mexico, Central America, and South America. Prerequisite: SPAN 101.

SPAN 203. INTERMEDIATE SPANISH I (3)
A review of the basic structures and phonetics of the Spanish language studied through readings and discussions of the culture and literature of Spain and other countries in Central and South America, and enhanced through further oral communication practices, brief compositions, and oral reports. Prerequisites: SPAN 101 and SPAN 102.

SPAN 204. INTERMEDIATE SPANISH II (3)
A continuation of SPAN 203, this course is designed for more advanced students and allows them to strengthen their proficiency in Spanish through advanced structural and oral exercises and several different kinds of writing assignments. Prerequisites: SPAN 101, SPAN 102, and SPAN 203.

SPAN 301. ADVANCED CONVERSATION AND COMPOSITION (3)
A course designed to help students sharpen their oral and writing skills through the use of guided conversation and composition. Topics for discussion include the family and cultural differences. Prerequisite: SPAN 204 or permission.
SPAN 303. THE CONTEMPORARY HISPANIC WORLD (3)
Based on current documentation (literature and film) of contemporary society in Spain and Latin America, the course strives to give students an understanding of these cultures from a political, historical, social, and literary perspective. Prerequisite: SPAN 204 or permission.

SPAN 304. INTRODUCTION TO SPANISH AND LATIN AMERICAN LITERATURE (3)
An introduction to textual analysis, the course comprises prose, poetry, and drama. The texts are studied using current critical techniques. Prerequisite: SPAN 204 or permission.

SPAN 305. SPANISH FOR BUSINESS (3)
A course that will focus on the language of business, commerce, and management with the purpose of enabling the student to function better in a job market that requires language specific skills. Through oral and written exercises, students will learn to deal with business situations in the Spanish speaking world. Prerequisite: SPAN 204 or permission.

SPAN 310. SURVEY OF SPANISH LITERATURE I (3)
An introduction to the study of literary movements from the Middle Ages to the Golden Age highlighting major representative works. Prerequisite: SPAN 304 or permission.

SPAN 311. SURVEY OF SPANISH LITERATURE II (3)
A study of the major literary and philosophical movements in Spain from the 18th through the 20th centuries. The student will be exposed to examples of theater, prose, and poetry. Prerequisite: SPAN 304 or permission.

SPAN 312. SURVEY OF LATIN AMERICAN LITERATURE I (3)
An introduction to the study of Latin American literature through representative works. Students engage in an examination of the literature of the New World beginning with the conquest and going on to Romanticism. Literary study will include analysis of prose and poetry. Prerequisites: SPAN 304 or permission.

SPAN 313. SURVEY OF LATIN AMERICAN LITERATURE II (3)
A continuation of major literary movements in Latin America from post-Modernism to the present. Through the study of prose and poetry, students will be exposed to the social, artistic, and historical aspects of Latin America that these works evoke. Prerequisite: SPAN 304 or permission.

SPAN 400. SEMINAR IN LITERATURE I (3)
A seminar course focusing on a literary genre, movement, period, or figure chosen by the instructor and approved by the coordinator. The student is expected to attend regular meetings of the seminar, participate in open discussions, and present a series of short written and oral reports related to the topic chosen for study. The student is also responsible for submitting a major documented paper which individually investigates an aspect of the topics of the course as a whole.

SPAN 401. SEMINAR IN LITERATURE II (3)
A seminar course with the same format and requirements as SPAN 400 but concentrating on a different genre, movement, period, or figure chosen by the instructor and approved by the coordinator. Prerequisites: SPAN 310 or 311 or 312 or 313 and permission.

SPAN 402. SEMINAR IN LITERATURE III (3)
A seminar course with the same format and requirements as SPAN 400 but focusing on a different genre, movement, period, or figure chosen by the instructor and approved by the coordinator. Prerequisites: SPAN 310 or 311 or 312 or 313 and permission.

SPAN 403. SEMINAR IN LITERATURE IV (3)
A seminar course with the same format and requirements as SPAN 400 but centering on a different genre, movement, period, or figure chosen by the instructor and approved by the coordinator. Besides SPAN 400, students may also sign up for SPAN 401 and/or SPAN 402 and 403 and receive
three credit hours for each course successfully completed. None of these courses is a prerequisite for the other two, but permission is necessary for admission. Prerequisites: SPAN 310 or 311 or 312 or 313 and permission.

SPAN 410. PRACTICUM IN SPANISH (3)
A course designed in alliance with the Washington Semester program or co-op program to allow University credit for practical work experience in the Washington/Baltimore areas. Prerequisites: SPAN 301 or 303 or 304 or 305 and permission of the instructor.

SPAN 419. INDEPENDENT STUDY IN SPANISH (1-6)
An independent plan of study determined by the instructor and student, with syllabus approved by the department. See detailed requirements for independent study in Section V, Academic Information. This course may be repeated up to 6 hours.

THEATER
THEA 203. ACTING I (3)
Fundamentals of acting. Basic theories and concepts in stage acting for the beginning student. Emphasis on relaxation techniques and improvisation exercises.

THEA 204. INTRODUCTION TO THEATER (3)
Develops an appreciation and understanding of theater as a fine art through normal lecture and attendance at live theater productions. Emphasis on the artists of the theater including playwrights, directors, designers, and actors.

THEA 205. THEATER TECHNOLOGY (3)
Fundamentals of scenery construction and lighting through formal lecture and practical crew experience. Laboratory requirements include assignments on construction and running crews.

THEA 207. THEATER PRACTICE (3)
Assigned theater projects supervised by faculty.

THEA 208. THEATER PRACTICE (3)
Assigned theater projects supervised by faculty.

THEA 309. DIRECTING I (3)
Fundamentals of directing stage plays. Emphasis on the work of the director in relation to the actor, designer, and text analysis.

THEA 310. PRODUCTION (3)
Advanced studies in theater technology. Emphasis on assigned theater projects. Consent.

THEA 311. DIRECTING II (3)
Advanced directing examines the work of the director in relationship to the rehearsal process. Assigned project. Prerequisite: Directing I, consent.

THEA 312. ACTING STUDIO I (3)
Basic process work to prepare the student for scene study. Emphasis on modern/contemporary scenes and monologues. Prerequisite: Acting I, consent.

THEA 314. ACTING STUDIO II (3)
Fundamentals of scene study work. Emphasis on character analysis and the importance of exercise work and its relationship to a text. Consent.

THEA 316. ACTING STUDIO III (3)
THEA 340. STAGE MANAGEMENT (3)
Detailed study of the role of the stage manager. Examines production duties, the rehearsal process, performances, and post-production.

THEA 341. HISTORY OF THE THEATER (3)
The development of the theater with special attention to period theaters and theatrical styles which influence modern stage productions.

THEA 346. THEATER DESIGN (3)
A study of the theory and practice of theater design. Emphasis on scenery, lighting, and costume design.

WASHINGTON SEMESTER
WASH 390. THE WASHINGTON SEMESTER INTERNSHIP (6-12)
The Washington Semester program supplements classroom learning with practical knowledge, by providing work experience in agencies and organizations in the Washington, D.C. metropolitan area. Each intern works four full days a week in a setting that is matched to the student’s skills, interests and career goals. The program is open to all majors, provided the student has a 2.5 GPA and has completed one-half of the requirements for graduation before the beginning of the internship. Other requirements are detailed in the Program’s norms and procedures, copies of which are available from the Washington Semester program coordinator and the department chairpersons. All Washington Semester interns must also register for WASH 391.

WASH 391. THE WASHINGTON SEMESTER SEMINAR (3)
Open only to registrants in WASH 390. This interdisciplinary seminar meets once a week to examine American society through analysis of one or more basic concepts from a variety of academic perspectives. It provides a larger framework of understanding for participants in the Washington Semester internship experience. Members of the seminar write a major research paper.

WOMEN’S STUDIES
WMST 201. INTRODUCTION TO WOMEN’S STUDIES: THEORY ACROSS THE DISCIPLINES (3)
A team-taught course dealing with the classic feminist and women’s studies text in addressing theory and questions about gender from the disciplines of social sciences, humanities, fine arts, and natural sciences.

WMST 421. WOMEN’S STUDIES CAPSTONE/INDEPENDENT STUDY (3)
An independent study project individualized according to student interest and designed to permit focus and specialization in the student’s major or field of interest proposed to the Women’s Studies Advisory Committee for approval. See detailed requirements for independent study in Section V, Academic Information.
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Sotiroulla Rivera ........................................................ Food Service Supervisor
Don Rohel ............................................................... Director of Student Center
Dorothy Roman .......................................................... Assistant Manager, Bookstore
Jodie Runner ........................................................... Women's Head Basketball Coach and Director of Intramurals
Kimberly Scranage ........................................................ Director, Admissions
Tracy Seffers................................................................. Registrar
Samuel Shade III....................................................... Roads and Grounds Supervisor
Elizabeth Shanton .................................................... Program Manager
Jack Shaw .................................................................. Director, Dining Services
Elizabeth Sheets....................................................... Admissions Counselor
Mary Beth Sibert ...................................................... Administrative Assistant, Student Affairs
Gail Siemer ................................................................ Assistant Wellness Center Director
Mike Siewert ............................................................. Assistant Book Division Manager, Bookstore
Emily Smith .............................................................. Residence Hall Manager
Cindy Snyder ............................................................. Associate Registrar for Student Systems
Jennifer Spataro ...................................................... Assistant Director of Alumni Relations and Annual Fund
Barbara Spicher ....................................................... Administrative Assistant, Music/Theater
Daniel Starliper ........................................................ Director, Human Resources
Richard A. Stevens ................................................ Asst. Vice President for Student Affairs
Elizabeth Sturm ....................................................... Director, Financial Aid
James Sweeney ........................................................ Director, Wellness Center
Katrina Swomley ..................................................... Bookstore Accountant
Agnes H. Tabler ....................................................... Associate Registrar for Records
Shelley Tharp ........................................................... Comptroller
David Thompson ..................................................... Director, Computer Services
Sandra Van Metre .................................................... Associate Director, Admissions
James Vigil ................................................................ Director, Auxiliary Services
Patrick Wallace ........................................................ Technical Director, Theater
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Elaine Wells ............................................................... Financial Aid Counselor, Senior
Marian Willauer ........................................................ Payroll Accountant
Karl Wolf .................................................................. Athletic Director
Ellisa Woodbrey ....................................................... Assistant Director Residence Life
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LuAnn Yanna ............................................................ Executive Assistant to the President

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Krissy Bell ............................................................... Financial Aid Assistant
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Stephanie Horst ........................................................ Editorial Assistant, External Affairs
Doris Glenn ............................................................. Financial Aid Assistant
Karen Hart ............................................................. Program Assistant I, Enrollment Management/Counsel
Elizabeth Hess ........................................................ Console Attendant, Telecommunications
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<td>Melinda Y. Landolt</td>
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<td>Michelle Lawson</td>
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<td>Cheryl C. Layton</td>
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<td>Emily Long</td>
<td>Purchasing Assistant II, Procurement Services</td>
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<td>Lexa V. Long</td>
<td>Senior Acquisition Assistant, Library</td>
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<td>Deborah Manuel</td>
<td>Records Assistant, Office of the Registrar</td>
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<td>Amy Martz</td>
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<td>Peg Swisher</td>
<td>Certification Analyst</td>
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<td>Thomas White</td>
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**SHEPHERD UNIVERSITY FOUNDATION**

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