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Dr. Richard Helldobler, Vice President for Academic Affairs
Lorenzo D. Benedict IV, Dean, School of Arts and Humanities
Dr. Virginia Hicks, Dean, School of Education and Professional Studies
Dr. Ann Legreid, Dean, School of Business and Social Sciences
Dr. Colleen Nolan, Dean, School of Natural Science and Mathematics
Dr. Russell Porter, Dean of Graduate Studies and Continuing Education
Dr. Laura Renninger, Dean of Teaching, Learning, and Instructional Resources
Dr. Sally Brasher, Director, Honors Program
Nancy Gunther-Snyder, Regents Bachelor of Arts Degree Program Director

Business Affairs
Dr. Edward Magee, Vice President for Administration and Finance
Shelley Tharp, Comptroller

Advancement and Alumni Affairs
Dr. Diane E. Melby, Vice President for Advancement
Julie Siler, Director of Alumni Relations and Annual Fund

Enrollment Management
Kimberly Scranage, Vice President for Enrollment Management
Tracy Seffers, Registrar
Randall Friend, Director of Admissions
Sandra Oerly-Bennett, Director of Financial Aid

Human Resources, Affirmative Action
Dr. Marie DeWalt, Director of Human Resources

Public Relations and Publications
Valerie Owens, Executive Director for External Affairs

Shepherd University Foundation
Monica Lingenfelter, Executive Vice President of the Foundation

Sports Information
Chip Ransom, Director of Sports Information

Student Affairs
Dr. Sharon L. Kipetz, Vice President for Student Affairs
Dr. John E. Adams, Assistant Vice President for Student Affairs and Dean of Students
Thomas Segar, Assistant Vice President for Student Affairs and Director of Residence Life
David B. Cole, Jr., Assistant Dean of Students and Judicial Manager
Barbara Byers, Director of Counseling
Christana Johnson, Director of Multicultural Student Affairs/Disability Support Services
Ardyth A. Gilbertson, Director of Student Health Services

Shepherd University
P.O. Box 5000
Shepherdstown, West Virginia 25443-5000
Telephone: 304-876-5000 or 800-344-5231
Fax Number: 304-876-3101
www.shepherd.edu
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 orientation, 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 orientation, 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.
Section III: Student Life ................................................................. 24

Section IV: Expenses and Financial Assistance ......................................... 31
  Tuition and Fees .................................................................................... 31
  Explanation as to Use of Enrollment Fees ................................................ 32
  Refund Policy ......................................................................................... 32
  Special Fees ........................................................................................ 33
  Reduced Tuition and Fee Program, WV Residents who are at Least 65 ......... 33
  Room and Board ................................................................................ 34
  Financial Aid and Scholarships ............................................................... 35
  Satisfactory Academic Progress Policy ................................................... 38
  Appeal Process ..................................................................................... 38

Section V: Academic Information ............................................................ 40
  Academic Advisement ........................................................................... 40
  Academic Work ..................................................................................... 41
    Schedule of Classes ............................................................................ 40
    Final Examinations ............................................................................ 41
    Academic Load .................................................................................. 42
    Auditing Courses .............................................................................. 42
    Special Examination for Course Credit .............................................. 42
    Courses Taken at Other Institutions ................................................ 42
    Special Topics Courses .................................................................... 43
    General Studies Curriculum .............................................................. 43
    Classification of Students .................................................................. 45
    Selecting a Major and Minor .............................................................. 45
    Degree-Seeking Undecided Majors ..................................................... 45
    Withdrawal and Change of Class Schedule ......................................... 46
    Absence from University/Readmission ............................................... 47
    Grading ............................................................................................ 47
    General Requirements for Graduation .............................................. 49
    Academic Performance ...................................................................... 51
    Academic Support Center .................................................................. 51
    Attendance ....................................................................................... 51
    Shepherd University Cancellation Policy ............................................. 52
    Graduation with Honors ................................................................... 53
    McMurran Scholars .......................................................................... 53
    Dean's List ....................................................................................... 53
    Assessment ..................................................................................... 53
    Academic Forgiveness Policy ............................................................. 54
    Good Academic Standing .................................................................. 55
    Academic Probation ........................................................................ 55
    Academic Suspension ........................................................................ 55
    Academic Dishonesty ........................................................................ 56
    Special Programs ............................................................................. 56

Section VI: Programs of Study ................................................................ 67

Section VII: Courses of Instruction ......................................................... 159

Directory ............................................................................................. 284

Index .................................................................................................... 298
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/12/10</td>
<td>Thu</td>
<td>New Freshman/Transfer Orientation; Faculty Report for Fall Semester; Faculty Meetings.</td>
</tr>
<tr>
<td>8/13/10</td>
<td>Fri</td>
<td>Orientation, Academic Advisement; Registration/Payment for New Freshmen, Transfers and Readmits.</td>
</tr>
<tr>
<td>8/13/10</td>
<td>Fri</td>
<td>Add/Drop and Late Registration (Late Fee Applies) via RAIL begins at 5 p.m. (All hours except 4-8 a.m.)</td>
</tr>
<tr>
<td>8/13/10</td>
<td>Fri</td>
<td>New Student Convocation.</td>
</tr>
<tr>
<td>8/16/10</td>
<td>Mon</td>
<td>Classes Begin.</td>
</tr>
<tr>
<td>8/16/10</td>
<td>Mon</td>
<td>Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor.</td>
</tr>
<tr>
<td>8/20/10</td>
<td>Fri</td>
<td>Last Day to Add/Drop or Late Register via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.—Consult Advisor.</td>
</tr>
<tr>
<td>8/27/10</td>
<td>Fri</td>
<td>Last Day to Change a Course from Credit to Pass/Fail Status.</td>
</tr>
<tr>
<td>9/3/10</td>
<td>Fri</td>
<td>Last Day to Change a Course from Credit to Audit Status.</td>
</tr>
<tr>
<td>9/6/10</td>
<td>Mon</td>
<td>Labor Day Holiday.</td>
</tr>
<tr>
<td>9/24/10</td>
<td>Fri</td>
<td>Last Day to Withdraw from First 8-weeks Class—See Advisor by Noon.</td>
</tr>
<tr>
<td>9/30/10</td>
<td>Thu</td>
<td>First Day of Mid-term Exams.</td>
</tr>
<tr>
<td>10/1/10</td>
<td>Fri</td>
<td>Last Day to Apply for May 2011 Graduation (Registrar’s Office).</td>
</tr>
<tr>
<td>10/6/10</td>
<td>Wed</td>
<td>Last Day of Mid-Term Exams.</td>
</tr>
<tr>
<td>10/8/10</td>
<td>Fri</td>
<td>Mid-term Grades Due—9 a.m.</td>
</tr>
<tr>
<td>10/11/10</td>
<td>Mon</td>
<td>Fall Break.</td>
</tr>
<tr>
<td>10/12/10</td>
<td>Tue</td>
<td>Fall Break.</td>
</tr>
<tr>
<td>10/13/10</td>
<td>Wed</td>
<td>Second 8-weeks Classes Begin; Mid-term Grades Available on RAIL (tentative).</td>
</tr>
<tr>
<td>11/5/10</td>
<td>Fri</td>
<td>Last Day to Withdraw from a Full Semester Class—See Advisor by Noon.</td>
</tr>
<tr>
<td>11/8/10</td>
<td>Mon</td>
<td>First Day of Spring 2011 RAIL Registration for Continuing Students; 9 a.m.-4 p.m.</td>
</tr>
<tr>
<td>11/10/10</td>
<td>Wed</td>
<td>Last Day of Academic Advisement for Continuing Students for Spring 2011.</td>
</tr>
<tr>
<td>11/19/10</td>
<td>Fri</td>
<td>Last Day to Withdraw from Second 8-weeks Class—See Advisor by Noon.</td>
</tr>
<tr>
<td>11/21/10</td>
<td>Sun</td>
<td>First Day of Thanksgiving Recess.</td>
</tr>
<tr>
<td>11/28/10</td>
<td>Sun</td>
<td>Last Day of Thanksgiving Recess.</td>
</tr>
<tr>
<td>12/7/10</td>
<td>Tue</td>
<td>Last Day of Classes; Last Day for Complete Withdrawal from Semester.</td>
</tr>
<tr>
<td>12/8/10</td>
<td>Wed</td>
<td>Study Day.</td>
</tr>
<tr>
<td>12/9/10</td>
<td>Thu</td>
<td>First Day of Final Exams.</td>
</tr>
<tr>
<td>12/15/10</td>
<td>Wed</td>
<td>Last Day of Final Exams.</td>
</tr>
<tr>
<td>12/17/10</td>
<td>Fri</td>
<td>First Semester Grades Due 9 a.m.—End of First Semester.</td>
</tr>
<tr>
<td>12/20/10</td>
<td>Mon</td>
<td>Grades will be Available via RAIL (tentative).</td>
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<tr>
<td>Date</td>
<td>Event</td>
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<tr>
<td>1/7/11</td>
<td>Fri Faculty Report; Orientation, Academic Advisement, Registration/Payment for New Freshmen, Transfers, and Readmits.</td>
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<tr>
<td>1/10/11</td>
<td>Mon Classes Begin.</td>
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<tr>
<td>1/10/11</td>
<td>Mon Add/Drop and Late Registration (Late Fee Applies), via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.–Consult Advisor.</td>
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<tr>
<td>1/14/11</td>
<td>Fri Last Day to Add/Drop or Late Register via RAIL or at Ikenberry Hall, 9 a.m.-4 p.m.–Consult Advisor.</td>
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<tr>
<td>1/17/11</td>
<td>Mon Martin Luther King, Jr. Day–No Classes.</td>
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</tr>
<tr>
<td>1/24/11</td>
<td>Mon Last Day to Change a Course from Credit to Pass/Fail Status.</td>
<td></td>
</tr>
<tr>
<td>1/31/11</td>
<td>Mon Last Day to Change a Course from Credit to Audit Status.</td>
<td></td>
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<tr>
<td>2/18/11</td>
<td>Fri Last Day to Withdraw from First 8-weeks Class –See Advisor by Noon.</td>
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<tr>
<td>2/28/11</td>
<td>Mon First Day of Mid-term Exams.</td>
<td></td>
</tr>
<tr>
<td>3/4/11</td>
<td>Fri Last Day of Mid-term Exams; Last Day to Apply for August and December 2011 Graduation (Registrar's Office).</td>
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<tr>
<td>3/7/11</td>
<td>Mon Mid-term Grades Due–9 a.m.; Second 8-weeks Classes Begin.</td>
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<tr>
<td>3/13/11</td>
<td>Sun First Day of Spring Recess.</td>
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</tr>
<tr>
<td>3/20/11</td>
<td>Sun Last Day of Spring Recess.</td>
<td></td>
</tr>
<tr>
<td>3/28/11</td>
<td>Mon First Day of Summer 2011 RAIL Registration for Continuing Students, 9 a.m.-4 p.m.</td>
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<tr>
<td>3/30/11</td>
<td>Wed First Day of Academic Advisement for Continuing Students for Fall 2011.</td>
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<tr>
<td>4/8/11</td>
<td>Fri Last Day to Withdraw from a Full Semester Class –See Advisor by Noon.</td>
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<tr>
<td>4/11/11</td>
<td>Mon First Day of Fall 2011 RAIL Registration for Continuing Students, 9 a.m.-4 p.m.</td>
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<tr>
<td>4/13/11</td>
<td>Wed Last Day of Academic Advisement for Continuing Students for Fall 2011.</td>
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<tr>
<td>4/20/11</td>
<td>Wed Last Day to Withdraw from Second 8-weeks Class–See Advisor by Noon.</td>
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<tr>
<td>4/21/11</td>
<td>Thu First Day of Spring Weekend Recess (If no snow days used).</td>
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<tr>
<td>4/22/11</td>
<td>Fri Second Day of Spring Weekend Recess (If no snow days used).</td>
<td></td>
</tr>
<tr>
<td>4/29/11</td>
<td>Fri McMurran Scholars Convocation; Last Day of Classes; Last Day for Complete Withdrawal from Semester.</td>
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<tr>
<td>5/2/11</td>
<td>Mon First Day of Final Exams.</td>
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<tr>
<td>5/6/11</td>
<td>Fri Last Day of Final Exams.</td>
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</tr>
<tr>
<td>5/9/11</td>
<td>Mon Second Semester Grades Due 9 a.m.–End of Second Semester.</td>
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</tr>
<tr>
<td>5/10/11</td>
<td>Tue Grades will be Available via RAIL (tentative).</td>
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<tr>
<td>5/14/11</td>
<td>Sat Commencement.</td>
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</tr>
<tr>
<td>5/30/11</td>
<td>Mon Memorial Day.</td>
<td></td>
</tr>
</tbody>
</table>

Please check [www.shepherd.edu/register/schedules.html](http://www.shepherd.edu/register/schedules.html) for calendar updates or changes.
SECTION I

GENERAL INFORMATION

Shepherd University is a state-supported institution within the West Virginia system of higher education. From its beginnings more than 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. Shepherd offers master’s programs in business administration, teaching, curriculum and instruction, college student development and administration, and music education.
- 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.ncahlc.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 College, 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 12 new buildings, including the $9 million Robert C. Byrd Science and Technology Center; the $18 million addition to the Scarborough Library, which also houses the Robert C. Byrd Center for Legislative Studies; the $10 million Erma Ora Byrd nursing classroom building; the $10 million Center for Contemporary Arts; and the $21.6 million Wellness Center.

MISSION STATEMENT AND
STATEMENT OF CORE VALUES

Shepherd University, a West Virginia public liberal arts university, is a diverse community of learners and a gateway to the world of opportunities and ideas. We are the regional center for academic, cultural and economic opportunity. Our mission of service succeeds because we are dedicated to our core values: learning, engagement, integrity, accessibility, and community.

Core Values

Committed to excellence, Shepherd University embraces the following five core values:

Learning
Shepherd University creates a community of learners who integrate teaching, scholarship, and learning into their lives. In order to create challenging, relevant experiences, inside and outside of the classroom, the University continually evaluates and assesses student learning. We recognize and accommodate diverse learning styles and perspectives necessary for global understanding.

Engagement
Shepherd University fosters environments in which students, faculty, staff, and members of the community engage with each other to form mutually beneficial relationships. We believe that meaningful engagement, with ideas and with people, promotes deep learning and nurtures critical thought.

Integrity
Shepherd University strives for an environment of honesty and fairness in its actions. University officials seek input from students, faculty, and staff and make informed and objective decisions. We expect all members of the community to act in accordance with this value.

Accessibility
Shepherd University provides services to all qualified students. Our staff and faculty are available to students and are committed to respecting and meeting individual needs. University governance and budgeting structures reflect our commitment to transparent processes and public access to information.
Community
Shepherd University comprises a community that includes students, faculty, staff, alumni, and involved citizens. We meet the needs of this community through assessment, development, and implementation of innovative programs and initiatives. We strive to create a safe environment based on mutual respect and acceptance of differences.

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. 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, sexual preference/orientation, physical disability, or financial status. Admission to Shepherd University does not guarantee admission into a specific program. Some programs, most notably nursing, music, art, social work, 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 5000, 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. All official documents received by Shepherd University become the property of the university and cannot be returned to the student. Any willful misrepresentation of information within the application for admissions may be grounds for denial of admission and/or dismissal. 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 must submit a $100 nonrefundable deposit.

A health form is sent to students upon acceptance and is required to be completed by a physician upon enrolling at Shepherd University. This health form should be returned to the Health Center prior to registration. Students desiring financial aid should complete and mail the FAFSA by the stated deadlines.

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. Residence hall contracts will be provided to students upon receipt of an enrollment deposit of $100 in the Office of Admissions. 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 director of disability support services.

Delayed Enrollment
Students who are offered admission to Shepherd University may postpone their enrollment up to 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. 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 current 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, available in the Office of Admissions or online at www.shepherd.edu/admweb;
• $45 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). The writing portion is strongly recommended.

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

Required Units (Years)
- 4 English (including courses in grammar, composition, and literature)
- 3 Social studies (including U.S. history)
- 4 Mathematics (three units must be Algebra I and higher)
- 3 Science (all courses to be college preparatory laboratory science, preferably including units from biology, chemistry, and physics)
- 1 Arts
- 2 Foreign language (two units of the same 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 (critical reading and math).

If the applicant obtains a 3.0 academic core GPA, a minimum composite ACT score of 17 and/or 820 SAT (critical reading and math) score is acceptable.

*Applicants who have been graduated from high school more than five years at the time of application for admissions do not need ACT or SAT scores unless requested by Admissions or Academic
personnel. Students admitted without ACT or SAT scores are normally required to take a placement examination prior to course registration.

**Admission by GED Test**

Non-high school graduates 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. GED students may not enroll at Shepherd University prior to the graduation date of their high school class. When extenuating circumstances exist, GED students who wish to enroll before their high school class has graduated may appeal for acceptance as freshmen to the director of admissions.

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 should submit evidence of the course work completed and the level of performance;
- In absence of such a document, a detailed portfolio describing the breadth of course work should be submitted. 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, writing portion is strongly recommended;
- Essay (highly recommended but not required).

**General Transfer Admission**

Applicants who have earned 26 college-level credits or 43 college-level 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, available in the Office of Admissions or online at [www.shepherd.edu/admweb](http://www.shepherd.edu/admweb);
- $45 application fee;
- Official transcripts from each college/university previously attended*;
- Student Personnel Record Form if requested;
- Students who have earned fewer than 26 college-level credits or 43 college-level 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.

*Shepherd University does not, under any condition, disregard college or university courses/credits 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 regionally accredited colleges and universities will apply when applicable toward a degree at Shepherd University. A student who is on academic probation or suspension at another institution is not eligible for admission to Shepherd University. Students seeking transfer admission to Shepherd University must be academically eligible to return to their previous institutions. Individuals who have been out of school for a period of at least two full academic years
High school courses that have been accepted by a community college for credit under a special arrangement between a high school and a community college are not eligible for transfer. Transfer articulation agreements do not apply to these credits.

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 provisions: 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.

Community College Collaborations
Shepherd University has collaborated with Blue Ridge Community and Technical College (BRCTC), Frederick Community College (FCC), Hagerstown Community College (HCC), and Lord Fairfax Community College (LFCC) to offer students unique educational opportunities provided by both institutions. To view specific admission criteria, visit unexpected.shepherd.edu/admweb/unexpected/apply.html.

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 students applying for admission to Shepherd University must submit the following:

1. Completed admissions application, available in the Office of Admissions or online at www.shepherd.edu/admweb;
2. Nonrefundable application fee of $45;
3. 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 Education Testing Service. A minimum score of 550 on the paper test, 213 on the computer test, or 79 on the internet test is required for admission to Shepherd University. The institutional code is 5615. The International English Language Testing System (IELTS) is also accepted with a minimum score of 7, or an SAT score of 450 on the critical reading portion.
4. Original or certified (attested) copies sent directly from your institution(s) of all academic documents including official academic records which show grades, dates and course titles as well as diploma(s) or certificate(s) awarded. These documents should be in original language of issue. Official English translations must be provided. Copies of the originals are not acceptable in lieu of the original documents;
5. Official university transcript(s) if the applicant has credit from a postsecondary institution. The transcripts must be evaluated by an international academic credential evaluation service. The costs associated with this evaluation will be the applicant’s responsibility;
6. Documentation of financial support;
   a. If the student or student’s family will fund the student’s studies at Shepherd University, the student must submit an official bank statement showing the availability of the required
amount in U.S. dollars. Bank statements must be no older than six months.

b. If a private sponsor (relative, friend, etc.) will be supporting the student, the sponsor must provide a letter declaring intent of sponsorship and an official bank statement showing the availability of the required amount in U.S. dollars. Bank statements must be no older than six months.

It is strongly recommended that application be made six months before the semester begins to ensure timely processing of the application and SEVIS materials. Having health/hospitalization insurance is also strongly recommended.

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 or online at www.shepherd.edu/admweb. As part of the readmission 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;
- $45 application fee;
- 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 the director of the Academic Support Center before the Office of Admissions can process the readmission application;
- The health record is kept for only five years. If a student’s original health record is older than five years, then a new one is required.
- If on campus housing is desired or required (see section on Residence Life), the residence hall application and a deposit check of $200 ($100 advance room payment and a $100 damage deposit) should be submitted to the Office of Residence Life after readmission and submission of the $100 enrollment deposit to Admissions.

Early Action Plan

Shepherd University offers early action to students whose first college choice is Shepherd. Under early action, qualified applicants who have submitted all required documents for admission by November 15 will receive notice of decision within 10 business 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 Action 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 Action 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 students. Special nondegree students may enroll in those courses for which they are qualified. Transcripts may be required to evaluate academic preparation before enrolling special nondegree students in certain courses. A maximum of 15 credit hours may be accumulated, a maximum of 7 credits per term, as a special nondegree 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 $45 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 to the Office of Admissions:

- Completed nondegree application, available in the Office of Admissions or online at [www.shepherd.edu/admweb](http://www.shepherd.edu/admweb);
- Official copy of high school transcript indicating a minimum academic grade point average of a 3.0 (on a 4.0 scale);
- Composite ACT score of 21 and/or SAT score of 1000 (critical reading and math combined), PLAN or PSAT equivalents will be accepted;
- Written recommendation from high school principal and/or counselor.

**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 nondegree application for admission at least one month prior to the opening of the semester in which the student decides to enroll.

**OTHER ADMISSION CATEGORIES**

**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 through interviews, portfolios, or auditions. See individual programs in this Catalog for specific details on admission requirements and evaluation criteria.

**Admission to the MedSTEP Program**

The MedSTEP program (Medical Students in the Eastern Panhandle) is an innovative program available to incoming freshmen. 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 MedSTEP applications;
- High school total GPA ≥ 3.6 (send official school transcripts);
- ACT score ≥ 24; or SAT scores ≥ to 1100 (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 medical doctor and in entering the MedSTEP program.

See the Shepherd University Web site for the current deadline of application and letters deadline for fall enrollment. Applications are due by February 15 for fall enrollment. Students selected 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 designed for incoming freshmen at Shepherd University who have a desire to attend pharmacy school.

The PharmSTEP program assures 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.

- Completed PharmSTEP application;
- 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.

See the Shepherd University Web site for the current deadline of application and letters deadline for fall enrollment. Students selected will be interviewed during the month of March and successful candidates will be notified in April or May.

Admission to the DentSTEP Program

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

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 DentSTEP application;
- High school total GPA ≥ to 3.25 (send official school transcript);
- Minimum ACT score ≥ 22; or SAT scores ≥ to 1000 (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 citing your communication skills and/or community service;
Personal statement of your interest in the program;
Personal interview.

See the Shepherd University Web site for the current deadline of application and letters deadline for fall enrollment. Students selected 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
Academic Common Market Options for Out-of-State Students
A student must apply to his/her home state to be certified as eligible to be considered for Academic Common Market (ACM) status to be eligible to pay West Virginia in-state tuition rates. For more information visit [www.sreb.org/programs/acm/acmindex.asp](http://www.sreb.org/programs/acm/acmindex.asp).

Applications generally require a letter from Shepherd University certifying that the student is admitted to or is pursuing the appropriate ACM program (specific major and concentration). New students can request this letter from the Office of Admissions; current students can request it from the Office of the Registrar.

Certification by the home state ACM coordinator must be received by the Office of the Registrar by the first Friday in August to be considered for ACM 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. Be aware that some states have early processing deadlines prior to the requested semester, so check with the home state ACM coordinator. These deadlines are firm and may result in ACM status being delayed until the next semester. ACM status is not applied retroactively.

If a student comes to Shepherd under the Academic Common Market and has been certified by the corresponding state agencies as a bona fide resident of Maryland or Virginia or any other state with which Shepherd may have an Academic Common Market agreement, the Academic 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.

ACM advisors for current students at Shepherd University:
Art program—Rick Bruner (304-876-5372)
Computer science programs—Reza Mirdamadi (304-876-5368)
Environmental studies program—Dr. Ed Snyder (304-876-5428)
History—Dr. Anders Henriksson (304-876-5329)
Recreation and leisure studies program—Dr. Andro Barnett (304-876-5259)

An Academic Common Market student must show steady progress in taking courses specific to the allowed 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 an Academic Common Market student stays out a year, he/she will have to reapply to Shepherd University and must resubmit an application to the home state for Academic Common Market status.

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 101
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

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 and from which you have withdrawn. 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 Web site of the Career Development Center for more information on testing www.shepherd.edu/jobweb/clep/index.htm. 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.
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. For specific information go to www.shepherd.edu/bogweb/policy27.pdf.

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 from the requirement for a second measles, mumps and rubella immunization.

Beginning with the fall semester 2007, all new students (incoming freshmen or transfers) who wish to live in the residence halls must present proof of immunity to meningococcal meningitis in order to move into any residence hall. 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 and a completed Health Status Review Form

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 detailing the medical issue(s) from their physicians. Students claiming religious exemptions must submit a statement from their religious faith leader. Proof of a DPT series, as well as proof of a polio series of immunizations, is required. It is highly recommended, but not required, for students to have chicken pox/varicella or hepatitis B immunizations in order to prevent potentially serious illnesses. In addition, results of a recent physical examination are strongly recommended.
1. Immunizations
   a. Date and results (in millimeters, or “zero” of a TB test (PPD or Mantoux skin test) within one year prior to entrance. If greater than 10 mm, proof of negative chest x-ray is required.
   b. A tetanus shot within the past 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(s).
   d. Dates and proof of a DPT series.
   e. Dates and proof of polio series.
   f. Date and proof of meningitis vaccination for new residential students (see above).

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 more than 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](http://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](http://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 or 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 attest-
ing 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.

Non-U.S. Citizens
A non-U.S. citizen 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 Center, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000. Telephone: 304-876-5221.

- Admissions and Credits Committee, Chair, c/o Office of the Registrar, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000.

- Office of Admissions, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000. Telephone: 304-876-5165. E-mail: admissions@shepherd.edu. URL: www.shepherd.edu/admweb.

- Americans with Disabilities Act Coordinator, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000. Telephone: 304-876-5453.

- Office of Financial Aid, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000. Telephone: 304-876-5470. Fax: 304-876-5238. URL: www.shepherd.edu/faoweb.

- Residence Life Office, Shepherd University, P.O. Box 5000, Shepherdstown WV 25443-5000. Telephone: 304-876-5172. Fax: 304-876-5150. URL: www.shepherd.edu/rloweb.
SECTION III
STUDENT LIFE

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, International Student Services, and Veterans Services. 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 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 advisement and registration 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 a similar 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 mission of the Career Development Center is to help students define and accomplish personal career and academic goals. The Career Development Center (CDC) carries out this mission through Career Services, the Washington Gateway Program, and Academic Advising.

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.

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 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 a list of prohibited items are sent to students and are posted online at www.shepherd.edu/rloweb.

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 Student 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. Commuter meal plans are available. For more information, call 304-876-5149. Dining services also enlists the services of a registered dietician who is available to consult with students about their dietary concerns. West Campus dining services venues include the Ram Mart convenience store located in Boteler Hall on and the Wellness Café, featuring healthy snacks, sandwiches, soups, salads, smoothies, and coffee.

Student Health Services
Health services are available to all undergraduate students at Shepherd University—full-time, part-time, resident, or commuter. The Student Health Center is located on the ground floor of Gardiner Hall on East Campus. The Student Health Center is directed and staffed by nurses, with registered nurses and an advanced practice registered nurse (NP) offering an integrated approach to address the physical and emotional well-being of students. Hours of operation are Monday through Friday, 8 a.m. to 4:30 p.m. Students are seen by appointment only, although urgent care is accommodated as needed, and walk-ins may be worked in if the daily schedule permits. The Student Health Center offers a self-care station with over-the-counter medication for self-care of minor ailments or injuries, and basic-level care for common complaints such as flu, sprains, strains, colds, seasonal allergies, and minor injuries. State-sponsored family planning services are also available. Emergency services, x-rays, and other advanced diagnostic services are not available.
All students must submit a completed health record prior to matriculation. A complete immunization record is required in accordance with West Virginia law. Immunization against bacterial meningitis is required for all students entering the residential halls. A physician’s or religious leader’s statement is required for those claiming exemption from state immunization requirements. A basic physical examination is also required. These requirements apply as well to students transferring to Shepherd University.

Expenses incurred by emergency or medical care outside Student Health Services basic care, such as lab work, x-rays, ambulance transport, or hospitalization, are the responsibility of the student. Health insurance is recommended but is neither required nor offered by Student Health Services or the University. In cases of severe illness, it is advisable that personal physicians treat students at home; Student Health Center staff do not make visits into the residence halls. Special health services are available to eligible veterans at the Veterans Administration Medical Center in Martinsburg.

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 full-time licensed professionals 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. Please visit our Web site for additional information about our staff and services. If you want to take the online screenings, the keyword is Rambler.

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 216, 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. Local and out-of-town Alternative Spring Break trips are planned each year that gives students the option of spending their spring break volunteering outside their immediate community. Students who wish to volunteer can view a list of nonprofit agencies and opportunities on the Office of Student Community Services Web site www.shepherd.edu/scsweb/.

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, 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 Good Morning Commuter during finals week. The program offers free breakfast, lunch, scantrons, and bluebooks. 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, Game Zone, TV lounge, several meeting rooms, Information Center with lost and found, Rambler Card Office, and a variety of student affairs offices. A large screen TV with surround sound is available in the Ram’s Den.
The Game Zone includes eight bowling lanes and a large activity room with billiard tables, table tennis, air hockey, 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.

Late Night in the Zone, a free program cosponsored with the Program Board, offers free prizes as well as free bowling and billiards, free food, crafts, bingo, special performances by hypnotists, bands, DJs, and casino nights. For more information about the Student Center, visit www.shepherd.edu/scccweb/.

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.

Shepherd students with a valid Rambler ID may receive one free ticket to each PASS performance at the Student Center Information Center. For information on the current season visit PASS’s Web site www.shepherd.edu/passweb/.

Student Activities Programming
The Program Board (PB) sponsors diverse, positive events that entertain and unite Shepherd’s community. From comedians and coffeehouse performers to special events and films, the PB provides free entertainment for Shepherd students and their families every week and cosponsors the Late Night in the Zone program with the Student Center. 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 or call 876-5326.

Leadership Conference at Shepherd
For more than two decades, 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, and community leaders 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. Activities during the conference range from large group sessions with dynamic keynote speakers to small, interactive group workshops.

Intramurals
The Shepherd University Intramurals program strives to enhance the mind, body, and spirit of all students by providing intramurals activities that are responsive to the physical, social, recreational, and lifelong education needs of the campus community as they relate to health, fitness, and learning. To sign up for individual sports, stop by the Intramural Office, Butcher Center 222. For more information, call 304-876-5076 or visit our Web site www.shepherd.edu/intramurals/.

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 intent 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 of this university, in particular the Student Code of Conduct, found in the Student Handbook, which includes a section on residence life policies. Handbooks are available in the Office of Student Affairs in the Student Center.

Student Organizations, Groups, Committees
Allies (Gay/Straight Alliance)
Alpha Kappa Delta
Alpha Phi Omega
Alpha Sigma Tau
Alternative Spring Break
Amnesty International
Art Education Association
A-Team Peer Leaders
Beta Beta Beta
Catholic Campus Ministries
Common Ground
Creative Educators
Debate and Forensics
Delta Sigma Pi
Delta Zeta
Fellowship of Christian Athletes
Habitat for Humanity
Homecoming Committee
Interclass Council
Interfraternity Council
International Student Union
Kappa Delta Pi
Lacrosse Club
Lambda Chi Alpha
Leadership Conference Committee
Mu Alpha Theta
Multicultural Leadership Team
Music Educators National Conference
Nursing Association
Panhellenic Association
Performing Arts Series at Shepherd
Phi Alpha Theta
Phi Epsilon Kappa
Phi Kappa Phi
Phi Kappa Tau
Phi Mu Alpha Sinfonia
Pi Kappa Delta
Pi Sigma Alpha
The Picket Newspaper
Program Board
Progressive Action Committee
Psi Chi
Psychology Club
Ram Marching Band
Relay for Life
Rotaract
Rude Mechanicals Medieval and Renaissance Players
Rugby Club
Sans Merci
Shepherd Ambassadors Association
Shepherd Collegiate 4-H Club
Shepherd Dance Team
Shepherd Education Student Association
Shepherd Environmental Organization
Shepherd Swing Cats
Sigma Alpha Iota
Sigma Pi Epsilon
Sigma Sigma Sigma
Sigma Tau Delta
SISTAZ
Social Work Association
Spanish Speakers
Student Community Services
Student Environmental Action Coalition
Student Government Association
Student Life Council
Student Nursing Association
SUGAG (Shepherd University Gamers and Anime Guild)
Tau Kappa Epsilon
Theater
Theta Xi
UNICEF
United Brothers
University Democrats
University Republicans
Women's Lacrosse
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.

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 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 semi-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 2010-11

West Virginia Students Enrolled in a 4-year Program

<table>
<thead>
<tr>
<th>Hours Enrolled</th>
<th>Enrollment Fee</th>
<th>Hours Enrolled</th>
<th>Enrollment Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Hours or more (full-time)</td>
<td>2,617.00</td>
<td>6 Hours</td>
<td>1,284.00</td>
</tr>
<tr>
<td>11 Hours</td>
<td>2,354.00</td>
<td>5 Hours</td>
<td>1,070.00</td>
</tr>
<tr>
<td>10 Hours</td>
<td>2,140.00</td>
<td>4 Hours</td>
<td>856.00</td>
</tr>
<tr>
<td>9 Hours</td>
<td>1,926.00</td>
<td>3 Hours</td>
<td>642.00</td>
</tr>
<tr>
<td>8 Hours</td>
<td>1,712.00</td>
<td>2 Hours</td>
<td>428.00</td>
</tr>
<tr>
<td>7 Hours</td>
<td>1,498.00</td>
<td>1 Hour</td>
<td>214.00</td>
</tr>
</tbody>
</table>

Out-of-State Students Enrolled in a 4-year Program

<table>
<thead>
<tr>
<th>Hours Enrolled</th>
<th>Enrollment Fee</th>
<th>Hours Enrolled</th>
<th>Enrollment Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Hours or more (full-time)</td>
<td>7,023.00</td>
<td>6 Hours</td>
<td>3,486.00</td>
</tr>
<tr>
<td>11 Hours</td>
<td>6,391.00</td>
<td>5 Hours</td>
<td>2,905.00</td>
</tr>
<tr>
<td>10 Hours</td>
<td>5,810.00</td>
<td>4 Hours</td>
<td>2,324.00</td>
</tr>
<tr>
<td>9 Hours</td>
<td>5,229.00</td>
<td>3 Hours</td>
<td>1,743.00</td>
</tr>
<tr>
<td>8 Hours</td>
<td>4,648.00</td>
<td>2 Hours</td>
<td>1,162.00</td>
</tr>
<tr>
<td>7 Hours</td>
<td>4,067.00</td>
<td>1 Hour</td>
<td>581.00</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>$493.00</td>
<td>$968.00</td>
</tr>
<tr>
<td>Intercollegiate Athletic Fee: Restricted to defray expenses associated with the University’s intercollegiate athletic program.</td>
<td>183.00</td>
<td>183.00</td>
</tr>
<tr>
<td>Intercollegiate Athletic Equity Fee: Restricted to defray expenses associated with the Institution’s compliance with Title IX.</td>
<td>54.00</td>
<td>54.00</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>11.00</td>
<td>11.00</td>
</tr>
<tr>
<td>Wellness Center Fee: Provide general operating revenues for the Wellness Center</td>
<td>74.00</td>
<td>74.00</td>
</tr>
<tr>
<td>Student Union Fee: Restricted to defray building and other expenses associated with the Shepherd Student Center.</td>
<td>101.00</td>
<td>101.00</td>
</tr>
<tr>
<td>University Operation Fee: Unrestricted for general operating purposes.</td>
<td>1,534.00</td>
<td>5,465.00</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>
<tr>
<td>TOTAL</td>
<td>$2,617.00</td>
<td>$7,023.00</td>
</tr>
</tbody>
</table>

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’s Office. 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
Admissions Application Fee (undergraduate) ....................................... $45
Admissions Deposit (non-refundable) .................................................. $100
Applied Music Fee per credit hour ..................................................... $306
Archaeology Lab Fee ......................................................................... $20
Art Studio Fee ................................................................................... $20
CIS Lab Fee ....................................................................................... $25
Communication Course Fee ............................................................... $25
Diploma Replacement ........................................................................ $20
Education Major Fee ......................................................................... $40
Electronic Course fee (per credit hour) .............................................. $25
Emergency Transcript .................................................................... $25
Family and Consumer Sciences Fee .................................................. $40
Graduate Admissions Fee (non-refundable) ........................................ $40
Graduate Posting Fee (continuing ed/per credit hour) ....................... $38
Graduation Fee ................................................................................ $35
Health, Physical Education, Recreation and Sports Fee ....................... $37
History Course Fee (304 only) .......................................................... $75
I.D. Card Replacement ...................................................................... $25
Late Payment Fee ............................................................................. $25
Late Registration Fee (non-refundable) ................................................ $25
MAT Transcript Analysis Fee ............................................................ $20
Music Lab Fee .................................................................................. $30
Nursing Lab Fee ............................................................................... $75
Nursing Program Fee ........................................................................ $90
Orientation Fee (non-refundable) ....................................................... $75
Parking Fee ...................................................................................... $65
Physical Education Major Program Fee ............................................. $20
R.B.A. Degree Evaluation .................................................................. $300
R.B.A. Posting Fee (per credit hour) ................................................ $10
Recreation Major Program Fee ........................................................ $40
Return Check Handling Fee .............................................................. $10
Science Lab Fee ............................................................................... $35
Special Examination (per credit hour) .............................................. $35
Transcript (after first) ....................................................................... $5

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 chose 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 Office) 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. 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 who withdraw from campus after the first day of classes will have meal charges prorated, but no deduction will be made from room rental during the absence. Allow four to six weeks for refunds following the date of withdrawal from the University. All room deposits and board refunds must be authorized by the director of residence life.

For new freshman, transfers, and continuing students, written notice of cancellation of room reservation must be received in Residence Life prior to the first day of classes of any given semester. Failure to meet this deadline will result in forfeiture of the room deposit. Charges continue to accrue until cancellation notice has been received and approved.

Room and Board Rates Regular Session 2010-11 (per semester)

<table>
<thead>
<tr>
<th>Residence Halls</th>
<th>Fee (per semester)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardiner, Kenamond, Turner, Shaw, and Thacher Halls (room)</td>
<td>$2,101.00</td>
</tr>
<tr>
<td>Burkhart, Moler, Yost, Lurry, Martin, Miller, and Boteler Halls (room)</td>
<td>$2,418.00</td>
</tr>
<tr>
<td>Birch and Maple Apartments</td>
<td>$2,758.00</td>
</tr>
<tr>
<td>Birch and Maple Rooms 200-300</td>
<td>$3,035.00</td>
</tr>
<tr>
<td>Board</td>
<td>$1,759.00</td>
</tr>
<tr>
<td>Room Damage Deposit (Refundable)</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

Room Rates Summer Terms 2010 (per term)

<table>
<thead>
<tr>
<th>Apartments (room only)</th>
<th>Fee (per term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartments (room only)</td>
<td>$1,011.00</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</th>
<th>Out-of-State Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>2,617.00</td>
<td>7,023.00</td>
</tr>
<tr>
<td>Room and Board*</td>
<td>4,177.00</td>
<td>4,177.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,794.00</strong></td>
<td><strong>$11,200.00</strong></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 $550 and personal expenses and transportation expenses of $1,288 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.

FINANCIAL AID AND SCHOLARSHIPS
Office of Financial Aid
Gardiner Hall, 304-876-5470 or 800-344-5231
www.shepherd.edu/faoweb or faoweb@shepherd.edu

The Office of Financial Aid is committed to helping students and their families finance their higher education. Every effort is made to provide financial aid to qualified students through grants, loans, employment, and scholarships. All funds are administered in compliance with federal, state, and institutional guidelines.

Application Process
Students interested in applying for financial aid need to complete a Free Application for Federal Student Aid (FAFSA). This form is the application for all major federal, as well as some state and institutional student aid programs, and must be received by the federal processing center by March 1 for priority consideration. Shepherd University's federal school code (003822) must be included so that the results will be sent to the Office of Financial Aid.

It is recommended that the FAFSA is completed online at www.fafsa.ed.gov. The online process ensures a higher rate of accuracy and quicker processing time. For students who filed a FAFSA for the previous year, your application may be pre-filled at the same Web site which can be even quicker.

For the summer session(s), a separate Shepherd Financial Aid Application also is required. The application is generally available at the beginning of March. Students must schedule their summer courses before the application can be processed.

You must apply for financial aid each year.

Types of Financial Aid
There are four types of financial aid: grants, loans, employment and scholarships. Shepherd University administers a broad range of financial aid programs. For more detailed descriptions of the aid programs outlined below and many others, please refer to the Office of Financial Aid Web site at www.shepherd.edu/faoweb.

Federal and state grant programs are generally only available to undergraduates who have not received their first baccalaureate degree:

- Federal Pell Grant
- Federal Academic Competitiveness Grant (must be full time)
- National SMART Grant (must be full time)
- Federal Supplemental Educational Opportunity Grant (SEOG)
- West Virginia Higher Education Grant (must be full time)
- West Virginia Higher Education Adult Part-time Student Grant (HEAPS)
- Other state grants, including but are not limited to Washington, D.C., Maryland, and Pennsylvania. Contact your state’s higher education policy commission for details.

Loans
Shepherd University participates in the U.S. Department of Education’s William D. Ford Federal Direct Loan and the Federal Perkins Loan programs. Generally, students must be in at least six credit hours to be eligible for loan assistance. Loan limits vary based on grade level, financial need, and dependency status in the Direct Loan program. Perkins Loan funding is limited. Parents may also borrow on the student’s behalf through the Federal Direct Parent Loan for Undergraduate Students (PLUS). This requires a separate application which can be obtained in the Office of Financial Aid or online at www.shepherd.edu/faoweb.
Alternative loans also are available. Credit worthiness or a co-borrower is required. Shepherd University participates with many different lenders.

Employment
Opportunities are provided through Federal College Work Study and institutional funds. Positions are offered in many areas across the campus and in the community. Work study funds are limited. A work study award is not available to assist with the invoice at the beginning of the term. Earnings are paid by check twice a month. To review a list of available positions, go to www.shepherd.edu/afweb/student_employment/jobs.html.

Scholarships
Shepherd University, committed to promoting academic excellence, offers a variety of scholarships. Scholarships have been established through the Shepherd University Foundation to recognize academic achievement, special talents, and abilities, as well as community service. The Office of Financial Aid collaborates with the Office of Admissions, Athletics Program, Honors Program, Department of Music, and all academic departments to award scholarships. Admissions applications are automatically reviewed by the Office of Admissions for new students. Continuing students should contact their academic department or program of interest for specific scholarship applications or deadlines.

State scholarships are processed through the Office of Financial Aid; however, they are awarded by the state’s Higher Education Policy Commission. For example, West Virginia administers the Promise Scholarship; Underwood Smith Scholarship; Engineering, Science and Technology Scholarship; and Robert C. Byrd Honors Scholarship.

Students can also search for private scholarships. These scholarships are funded through businesses, civic organizations, churches, etc. These checks should be made co-payable to the student and institution and forwarded to the Office of Financial Aid for processing.

Renewal Criteria: Some scholarships are renewable. Each scholarship program has different renewal criteria, such as semester or cumulative grade point averages, required number of credit hours earned, major, etc.

Other Sources of Financial Aid
Students, depending on their unique situations, may contact outside agencies for other sources of financial aid, for example, Vocational Rehabilitation, Veterans Benefits, National Guard, Workers’ Compensation, Corporation for National and Community Service (AmeriCorps), etc.

Any funding received by an outside source must be reported to the Office of Financial Aid. This type of financial assistance has an impact on eligibility of other aid programs.

Consortium Agreements
Under a consortium agreement, students may receive financial aid to take courses at another school provided those credits count toward their degree. Students taking classes at another school must complete the Transfer Approval Form with the Office of the Registrar. It is then the student’s responsibility to provide a copy of the approved form to the Office of Financial Aid and complete the Consortium Agreement. This agreement will then be forwarded to the financial aid office of the host school for completion.

Students participating in consortium agreements are required to provide a transcript of grades from the host institution to the Office of the Registrar at the end of each consortium semester. Failure to provide the transcript will result in the suspension of aid for any subsequent semester. In addition, grades received from the host institution will be included in determining satisfactory academic progress.

Study Abroad
Students interested in Study Abroad must be approved by the Study Abroad Office at Shepherd University. See the section Study Abroad for details. Most financial aid programs can apply toward study abroad expenses; however, it may depend on the agency or institution through which you plan to study. For example, a Promise Scholarship or West Virginia Higher Education Grant can only be used if studying through a program in which tuition and fees are assessed by a West...
Virginia institution. Students must complete the Consortium Agreement process outlined above. If anticipated expenses are more than the cost of attendance at Shepherd, students must also submit a budget along with supporting documentation.

Disbursement dates for the release of financial aid are determined in accordance with federal regulations and the Shepherd academic year; therefore, special disbursement dates cannot be arranged. Students can complete a form in the Cashier’s Office to allow authorization for a third party to pick up their check or request it be mailed.

**Definition of Academic Year for Financial Aid Purposes**

The definition of academic year for financial aid purposes for undergraduate students is as follows:

- Students earning 29 credit hours or less shall be classified as first year.
- Students earning 30-59 credit hours shall be classified as second year.
- Students earning 60-89 credit hours shall be classified as third year.
- Students earning 90-128 credit hours shall be classified as fourth year.
- Students earning more than 128 credit hours shall be classified as fifth year.

This definition will be used when awarding aid programs that are based on grade level or year in school.

**Financial Aid Refund and Repayment Policy**

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. The federal Title IV financial aid programs must be recalculated in these situations.

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:

- **Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (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:

- **Aid to be returned = (100 percent of the aid that could be disbursed minus the percentage of earned aid) multiplied by 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 institution 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 120 days of the student's withdrawal.

The institution must return the amount of Title IV funds for which it is responsible no later than 30 days after the date of the determination of the date of the student's withdrawal.

Refunds are allocated in the following order:

- Federal Unsubsidized Direct Stafford Loans
- Federal Subsidized Direct Stafford Loans
- Federal Perkins Loans
- Federal Direct Parent (PLUS) Loans (graduate student)
- Federal Direct Parent (PLUS) Loans (parent)
- Federal Pell Grants for which a return of funds is required
- Federal Academic Competitiveness Grant for which a return of funds is required
- Federal National SMART Grant for which a return of funds is required
- Federal Supplemental Educational Opportunity Grants (SEOG) for which a return of funds is required
Please keep in mind this repayment policy is in addition to the institution's refund policy. A student who withdraws from school could owe federal financial aid as well as repayment back to the West Virginia Higher Education Grant Program, Promise Scholarship Program, Shepherd University, etc.

Failing to Earn a Grade in Any Class: If a student who began attendance does not officially withdraw and fails to earn a grade in at least one course, he/she is considered to have unofficially withdrawn for financial aid purposes. A recalculation of federal Title IV financial aid eligibility is required. The recalculation will be based on 50 percent of the period unless documentation supports a last date of attendance to the contrary. Generally, the student will owe a return of funds. A grade of F is considered earned failure. An IF is considered failure due to irregular withdrawal. See the section Grading System for details on grades.

Satisfactory Academic Progress Policy
Students must be making measurable academic progress towards completion of an eligible degree to receive financial aid. Federal regulations require an evaluation of both quantitative and qualitative academic progress. 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 1995 as published by the U.S. Department of Education, section, 668.34).

The following policy is effective as of May 2005 and supersedes any previous policy:

1) All bachelor's degree-seeking students must maintain a minimum of 2.0 GPA as of their 25th attempted credit. While attempting 0-24 credit hours, a minimum of 1.75 GPA is required.
2) All master's degree-seeking students must maintain a minimum 2.25 GPA.
3) All undergraduate students must pass at least 70 percent of the credit hours attempted.
4) All graduate students must pass at least 80 percent of the credit hours attempted.
5) All bachelor's degree seeking students must complete the program within 192 attempted credit hours.

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.

Students admitted or readmitted on academic probation may not meet GPA standards.

The standards are evaluated at the end of the spring semester. Students who are not in compliance will have a two-semester probationary period. Students are notified of this status in writing. Each student is only provided one probationary period. If the student continues to fail the satisfactory academic progress standards after the probationary period, they will be notified in writing that they are no longer eligible for financial aid.

Appeal Process for Federal, State and Institutional Financial Aid
Appeals may be granted due to hardship based on extenuating circumstances such as death of an immediate family member; personal injury or illness of the student; or other documented circumstances as described by the student. Documentation such as death certificate/notice, physician's statement, academic degree plans, academic transcripts, etc will be reviewed.

I. A student who wishes to appeal any decision related to his or her federal, state, or institutional financial aid is required to complete the Satisfactory Academic Progress (SAP) Appeal Form located in the Office of Financial Aid or on the Shepherd University Web site at www.shepherd.edu/faoweb. The form and any supporting documentation shall be submitted to the Office of Financial Aid for review.

II. The appeal will be reviewed by the Office of Financial Aid. A request for clarification or additional documentation may be made. The appeal will be considered incomplete until any
requested documentation is provided. The student will be notified as to the decision of the Office of Financial Aid.

III. If the appeal is denied by the Office of Financial Aid, the student may request a review by the Scholarship and Financial Aid Committee. The written request shall be sent to the attention of the director of financial aid who will convene the committee. This committee is appointed by the president of Shepherd University each year and is comprised of faculty and staff. The committee will review the appeal form and all previously submitted documentation. The decision of the committee is final. The student will be notified as to the decision of the committee.

IV. Should the committee deny the appeal, the student is not eligible for any further financial aid from Shepherd University until such time that the student becomes compliant with the satisfactory academic progress policy. Neither paying for classes nor sitting out a semester will automatically reinstate a student’s financial aid eligibility.

Deadlines to submit appeals are as follows:

- Fall term: September 15
- Spring term: February 15
- Summer terms: June 15
SECTION V

ACADEMIC INFORMATION

Degrees Offered: The bachelor of arts degree is conferred upon majors in communication and new media, English, history, music, psychology, elementary education, secondary education, Spanish, 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 upon 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, computer engineering, economics, environmental studies, family and consumer sciences, communication and new media, 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 distinct 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 assistant dean of teaching, learning, and instructional resources 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 student. 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**

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 a 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**

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 ≥ 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 else-
where, 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
MUSC 111 Introduction to Music (waived for music major and minor) ............ 2
ART 103 Introduction to Visual Arts OR .......................................................... 2
ART 104 Introduction to Visual Arts (required for art majors) OR
THEA 204 Introduction to Theater ................................................................. 3
HNRS 101† Honors Core ............................................................................... 6
ENGL 101* Written English AND .............................................................. 3
ENGL 102 Writing for the Arts and Humanities OR
ENGL 103 Writing for the Social Sciences OR
ENGL 104 Science and Technical Writing ................................................... 3
ENGL 204 Survey of American Literature ................................................... 3
ENGL 208 Survey of World Literature I OR
ENGL 209 Survey of World Literature II OR
PHIL 208 Survey of Philosophy ................................................................. 3
COMM 202 Fundamentals of Speech .............................................................. 3
Students who score below 18 on the English section of the ACT (or 450 on the SAT Verbal test) must enroll in ENGL 100A and ENGL 100B in place of ENGL 101. For further information, see Academic Support Services in Section V–Academic Information and the course listings in Section VII–Courses of Instruction.

† HNRS 101 (Honors Core) is restricted to students enrolled in the Honors Program. HNRS 101 satisfies the ENGL 101 requirement and one World History requirement (HIST 100, 101, 103, or 104, as determined by the director of the Honors Program).

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

‡ The West Virginia Core Coursework Agreement provides transfer students a measure of flexibility in satisfying general studies requirements. At Shepherd, a single 4-credit transfer course in Biology may be substituted for one General Studies Lab Science (except where the degree program requires a specific General Studies Lab Science sequence). In most cases, however, because of the sequence of our biology curriculum the student MAY NOT take another General Studies Biology to complete the sequence. Instead, transfer students may complete the 8-credit requirement by taking any 4-credit NON-BIOLOGY General Studies Lab Science listed in the Catalog: CHEM, GSCI, or PHYS.

MATHEMATICS—3 semester hours

- MATH 101** Fundamentals of Mathematics OR ..................................................... 3
- MATH 105 College Algebra OR ........................................................................... 3
- MATH 108 Precalculus OR .................................................................................. 3
- MATH 154 or 155 Finite Mathematics OR Discrete Structures OR .................... 3
- MATH 205 Calculus with Applications OR ......................................................... 4
- MATH 314 Statistics ........................................................................................... 3

** Students who score below 19 on the Mathematics section of the ACT (or 460 on the SAT Quantitative test) must enroll in MATH 101A and MATH 101B. For further information, see Academic Support Services in Section V–Academic Instruction and the course listings in Section VII–Courses of Instruction.

SOCIAL SCIENCES—15 semester hours

- ECON 123 Contemporary Economics OR
- ECON 205 Principles of Macroeconomics ** ...................................................... 3
- 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 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
- 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 and Spanish will be administered by a member of the foreign language faculty during registration for the fall and spring semesters. 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 un-
less 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

Summary of 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>
</tbody>
</table>
AU Audit*+ –
CR Credit only awarded*+ –

*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.

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.

Prior to conferral of the bachelor’s degree: A Shepherd University student wishing to complete requirements for more than one distinct degree may apply to receive the additional distinct degree when the first is conferred, provided that all requirements for the additional degree have been satisfied.

After the conferral of the bachelor’s degree: A Shepherd University graduate may earn an additional distinct degree by completing all requirements for the additional degree. (Note: May require readmission. Students must meet the requirements stated in the Catalog in effect at the time of their re-enrollment in the additional degree program.)

The additional degree will be added to the transcript with a comment on the date the requirements were completed.

Students possessing a baccalaureate degree from another regionally accredited 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, with at least 15 resident hours in the major. (Note: Hours needed to complete requirements for a degree may exceed the stated minimum.)

Except for graduates from the Regents Bachelor of Arts Program or similar programs, baccalaureate holders from Shepherd University or any other regionally accredited institution will not need to be re-evaluated for meeting the general studies curriculum (except where the additional program requires specific general studies course work).

A course required in both degrees will be applied to both without the need for substitution.
Double Majors
Prior to conferral of the bachelor’s degree: A Shepherd University student who wishes to complete requirements for more than one major may submit an approved Academic Change Form to the Office of the Registrar.

After the conferral of the bachelor’s degree: A Shepherd University graduate may return for an extra major by completing all requirements for the additional major. (Note: May require readmission. Students must meet the major requirements stated in the Catalog in effect at the time of their re-enrollment in the additional major.)

The additional major will be added to the transcript 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
Academic Support Center
The Academic Support Center, headquartered in Scarborough Library, first floor, offers a variety of course work and services to assist students in achieving academic success at Shepherd. The responsibilities of this office include the following: 1) placement testing, 2) advising, 3) directing of stretch-model classes in writing and mathematics, 4) tutoring, and 5) the Writing Center.

Students seeking placement into university writing and mathematics classes can arrange to take the ASSET, ACCUPLACER, or Residual ACT placement tests. Students will receive advice on placement into appropriate classes at the conclusion of testing. Students returning to campus after academic suspension receive advising concerning a variety of policies and programs that Shepherd offers to help them boost their grade point averages. Students who do not meet the state requirement for placement in writing and/or mathematics enroll in stretch-model classes—ENGL 100A, ENGL 100B, MATH 101A, and MATH 101B—which are directed by this office. Students who wish to work with peer tutors from a variety of disciplines can make an appointment online at www.shepherd.edu/ascweb. Tutoring is free of charge. Students interested in being a peer tutor need to fill out an application, maintain a GPA of 3.0 or higher in the subject that they tutor, and need a recommendation from a faculty member. Students who need help with writing can also visit the Writing Center, which is staffed by tutors who have additional training in composition theory and who also offer online writing tutoring.

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.

Shepherd University Cancellation Policy

Generally, Shepherd University does not cancel operations because of inclement weather. Unlike the K-12 schools, the University has different operational issues and its student are not minor children thus, if severe weather conditions render it dangerous for students to reach the University, those who fail to travel to campus on that particular day will not be put at a serious disadvantage. Individual students who have encountered severe travel conditions should notify their instructors of their absence prior to the next class meeting and should request appropriate arrangements for the makeup of course work.

Employees encountering severe travel conditions should notify their supervisors of their absence and discuss work conditions, leave time, and special needs.

All employees designated as emergency personnel (via a memo from their supervisors) will be required to report at their regular work times regardless of weather conditions, unless otherwise directed by their unit supervisors.

Should an extreme weather emergency or power or water failure warrant the closing of offices and/or canceling or altering the schedule of classes by the President, then public notification will be made via Shepherd Web, switchboard, Rave text-messaging system, and area media. Radio and television stations carrying emergency announcements include: WEMP (1340 AM), WKMZ (95.9 FM), WLFT (97.5 FM), WRNR (740 AM), Martinsburg; WMRE (1550 AM), Charles Town; WUSQ (102.5 FM), WFQX (99.3 FM), WKSI (98.3 FM), WINC (92.5 FM), Winchester; WDHC (1010 AM, 93.5 FM), Berkeley Springs; WJEN (1240 AM), WWMD (104.7 FM), WHAG-TV Ch. 25, Hagerstown; West Virginia Public Radio; and WUSA-TV Ch. 9, Washington, D.C.

Announcements of emergency plans will also be available by calling 304-876-5000 or on the Web at www.shepherd.edu or by signing up for the Rave text messaging notification system at www.shepherd.edu/university/rave/.

Announcements of emergency plans will be communicated as early as possible (presumably 6 a.m.) when the emergency condition precedes the start of the work and/or instructional day. When the emergency condition arises during the day, the announcement will be communicated through the heads of those units which may be affected. Announcements concerning evening classes will be communicated by 4:30 p.m.

Please note: Shepherd announces delays and closings only—if Shepherd is not mentioned on
Academic Information • 53

designated radio/TV stations as a delay or cancellation, the University is open and operating on its regular schedule.

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 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.

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.

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

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

1. Have been presented by the vice president for academic affairs to the Scholarship and Awards 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 3.86 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 Scholarship and Awards Committee chair. All challenges shall be returned to the originating department for consideration and action.

The elected Scholars are appropriately recognized at the McMurran Scholars award ceremony and the commencement exercise.

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 advisement, 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 groups 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 repealed, 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.

Good Academic Standing
At the end of each grading period each student’s Shepherd University and cumulative grade point average (GPA) is calculated. The calculation is determined by dividing the number of earned quality points by the number of GPA hours. In the computation of the Shepherd and cumulative GPA, a grade of I will not be included in the GPA 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.

A student remains in good standing when he or she maintains BOTH a minimum 2.0 Shepherd University GPA AND a minimum 2.0 cumulative GPA (including course work attempted at other institutions).

Academic Probation
For 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 GPA. If the student fails to achieve a 2.0 in the first semester of residency, the student will be placed on academic probation.

For Continuing Students: A student in good academic standing 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 academic probation.

The student on academic probation is not longer in good academic standing, but is allowed to continue course work while improving the GPA.

The student who begins a semester on probation and withdraws from the University after the first five weeks of the semester will be suspended through the end of the next regular semester and may apply for readmission by completing an application for admission.

To be removed from probation and return to good academic standing, a student must attain BOTH a 2.0 Shepherd University GPA and a cumulative GPA (including course work attempted at other institutions).

Academic Suspension
The student placed on probation prior to the beginning of the fall semester must attain a 2.0 GPA on his or her combined hours for the fall, spring, and summer session(s) to avoid suspension and be eligible to return for the following fall semester. Failing to meet the minimum GPA for these terms will result in suspension.
The student placed on probation prior to the beginning of the spring semester must attain a 2.0 GPA on his or her combined hours for the spring and summer session(s) to avoid suspension and be eligible to return for the following fall semester. Failing to meet the minimum GPA for these terms will result in 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 amend their academic year GPA by attending either one or both summer sessions (at Shepherd) immediately following notice of suspension. Academic status will be reviewed at the end of the summer sessions(s).

**First Suspension:** The student who has been suspended from the University for the first time may apply for readmission after one regular semester by completing an application for admission.

**Second Suspension:** 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.

**Third Suspension:** 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 who begins a semester on probation and withdraws from the University after the first five weeks of the semester will suspended through the end of the next regular semester, and may apply for readmission by completing an application for admission.

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
Academic Information • 57

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)
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 recommendation 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 knowledge 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 acceptable 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 curriculum 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 Baltimore; 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-centered 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. 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, Honors students must participate in at least one Honors Seminar. The topics of the seminars vary from semester to semester, with an emphasis on interdisciplinary and multidisciplinary explorations of provocative and timely topics. 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 capstone project to be completed as a graduation requirement. After completing a required one-credit Honors Project Preparation class, each student chooses a mentor from the faculty and begins to formulate a reading list that would contribute to a capstone project proposal. In collaboration with his/her 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 Capstone Project 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), one Honors Seminar (3 hours), the Honors Project Preparation class (1 hour), Directed Readings (3 hours), and the Honors Capstone 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
Martin Hall is the home of the Shepherd University Honors Center and is reserved for the work, recreation, and residence of Honors students. Martin Hall is the official Honors residence hall. Students in Martin share suite-style rooms with four people per suite. The Honors Program Office is situated on the first floor and houses a computer lab and lounge, which are open to all Honors students 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, Maryland, and the Performing Arts Center at George Mason University.

Required Honors Courses
Honors First Year Core
This team-taught learning community 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. (HNRS 101.)

Directed Reading/Honors Capstone Project
After completing a proposal in the Directed Reading course, a candidate in Honors shall have one semester to complete the Honors Capstone Project, the final requirement for graduation from the Honors Program. The project topic should be chosen from within the candidate’s major or minor field of study. In many cases, the Honors Project will take the form of a thesis and include support of the thesis statement. 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 or project shall culminate in a formal presentation of research to an audience consisting of faculty, students, friends, and family. (488H, 489H.)
Scholars Program
The Scholars Program as Shepherd University is designed for high-performing upperclass and transfer students who desire Honors education but are not able to complete the full four-year Honors Program. Like the four-year Honors Program, the two-year Scholars Program provides a varied and stimulating curriculum to students who have demonstrated the ability and willingness to engage in intellectual challenges.

Scholars Program Requirements
Approximately 20 students are selected each year to enter the Scholars Program. To be considered for the program, a student must have earned at least 24 credits at Shepherd University or another accredited institution of higher learning (including accredited community colleges) and have earned a grade point average of 3.3 or above. Interested students must complete the Scholars Program application and provide a writing sample.

Required Honors Courses for the Scholars Program
In order to remain in the Scholars Program, students must maintain an overall 3.0 GPA and a 3.0 GPA in all Honors courses. Scholars Program students must participate in at least one Honors Seminar. The topics of the seminars vary from semester to semester, with an emphasis on interdisciplinary and multidisciplinary explorations of provocative and timely topics. During the junior year, students begin research toward a capstone project to be completed as a graduation requirement. After completing a required one-credit Honors Project Preparation class, each student chooses a mentor from the faculty and begins to formulate a reading list that would contribute to a capstone project proposal. In collaboration with his/her 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 Capstone Project Presentation session scheduled toward the end of the semester.

In order to graduate from the Scholars Program, students must complete 13 hours of Honors courses including one Honors Seminar (3 hours), the Honors Project Preparation class (1 hour), Honors Directed Readings (3 hours), and the Honors Capstone Project (3 hours). The three remaining honors credits are acquired through electives; students may choose among Honors courses in a specific discipline, a second Honors seminar, or an Honors section of a general studies course.

Study Abroad
Shepherd offers a wide variety of study abroad opportunities: short-term study abroad courses (up to three weeks) led by Shepherd faculty, West Virginia University’s exchange programs for a semester or a year, or programs offered by affiliate study abroad providers for summer, semester, and year abroad programs. For non-Shepherd study abroad programs, students must have earned 30 credits (15 of them at Shepherd) and have a 2.5 grade point average.

The Study Abroad Office (www.shepherd.edu/university/studyabroad/) advises students about study abroad, coordinates non-Shepherd study abroad opportunities, and works with the Registrar’s Office and Financial Aid to facilitate the required forms for prior transfer credit approval and financial aid arrangements. Students should contact this office as early as possible to begin planning for their study abroad experience.

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);
- Support for 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 super-visors 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 Student Affairs Office.

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.

Application Procedure: Students must first complete a Co-op Application which is located at www.shepherd.edu/safweb/coop/coform.htm. This form also can be picked up in the Co-op Office which is located in the Student Affairs Office on the first floor of the Student 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. 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.

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 5000, 118 Ikenberry Hall, Shepherd University, Shepherdstown, WV 25443-5000. For full details go to 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.

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.
SECTION VI

PROGRAMS OF STUDY

Accounting Major, B.S. ..................................................................................................................67
Accounting Minor .......................................................................................................................67
Anthropology/Geography Minor ............................................................................................68
Appalachian Studies Minor ........................................................................................................68
Art Comprehensive Major, B.F.A. ..........................................................................................69
  Graphic Design Concentration ...............................................................................................70
  Painting Concentration ............................................................................................................70
  Photography/Computer Imagery Concentration ................................................................71
  Printmaking Concentration ....................................................................................................71
  Sculpture Concentration ........................................................................................................72
Art Minor ..................................................................................................................................72
Art Teaching Field, PreK-Adult, B.A.......................................................................................72
Biology Major, B.S. ......................................................................................................................74
  Ecological Science Concentration .........................................................................................74
  Biology Minor, Molecular Track .............................................................................................75
  Biology Minor, Traditional Track ............................................................................................75
Biology Teaching Field Grades 9-Adult, B.A. ........................................................................76
Business Administration Major, B.S. ........................................................................................77
  General Business Concentration ............................................................................................77
  Entrepreneurship and Small Business Management Concentration ..................................78
  Financial Planning Concentration ........................................................................................78
  Hospitality Management Concentration .............................................................................79
  Human Resource Management Concentration .....................................................................79
  Management Concentration ..................................................................................................80
  Marketing Concentration .......................................................................................................81
Business Administration Minor ...............................................................................................81
Chemistry Major, B.S. ..................................................................................................................83
  Biochemistry Concentration ..................................................................................................84
  Environmental Chemistry Concentration .............................................................................85
  Traditional Concentration ......................................................................................................83
Chemistry-Biopharmaceutical Sciences ....................................................................................84
Chemistry Education Teaching Field Grades 9-Adult, B.A. .........................................................86
Chemistry Minor, Traditional Track ..........................................................................................86
Chemistry Minor, Physical Analytical Track ...........................................................................86
Coaching Minor ........................................................................................................................87
Communication and New Media, B.A. or B.S. .........................................................................88
  New Media Concentration .....................................................................................................88
  Digital Filmmaking Concentration ........................................................................................88
  Media Studies Concentration ................................................................................................88
Computer and Information Sciences Comprehensive Major, B.S. ...........................................90
  Computer Graphics and Games Concentration ...................................................................90
  Computer Programming and Information Systems Concentration .....................................91
  Computer Science Concentration ...........................................................................................91
  Networking and Security Concentration ...............................................................................91
Computer and Information Technology Noncomprehensive Major, B.S. ...............................91
  Biometrics and Information Security Concentration ............................................................92
<table>
<thead>
<tr>
<th>Programs of Study • 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology Concentration ................................................................. 92</td>
</tr>
<tr>
<td>Web Programming and Design Concentration ................................................................. 92</td>
</tr>
<tr>
<td>Computer and Information Sciences Minor ................................................................. 92</td>
</tr>
<tr>
<td>Computer Engineering Comprehensive Major, B.S. ......................................................... 92</td>
</tr>
<tr>
<td>Digital Filmmaking Minor ............................................................................................. 89</td>
</tr>
<tr>
<td>Economics Major, B.S. .................................................................................................. 93</td>
</tr>
<tr>
<td>Financial Economics Concentration .............................................................................. 94</td>
</tr>
<tr>
<td>Economics Minor ......................................................................................................... 94</td>
</tr>
<tr>
<td>Education .................................................................................................................... 95</td>
</tr>
<tr>
<td>Elementary Education Professional Studies Core, B.A. ............................................... 99</td>
</tr>
<tr>
<td>Elementary Education K-6 Specialty Studies ............................................................... 99</td>
</tr>
<tr>
<td>Early Education PreK-K Teaching Endorsement ......................................................... 100</td>
</tr>
<tr>
<td>Middle School Education Teaching Endorsement ....................................................... 100</td>
</tr>
<tr>
<td>Secondary Education Professional Studies Core, B.A. ................................................. 100</td>
</tr>
<tr>
<td>Education Minor ....................................................................................................... 101</td>
</tr>
<tr>
<td>English Education Teaching Field Grades 5-Adult, B.A. ............................................ 103</td>
</tr>
<tr>
<td>English Major, B.A. ..................................................................................................... 102</td>
</tr>
<tr>
<td>Creative Writing Concentration .................................................................................. 102</td>
</tr>
<tr>
<td>English Literature Concentration ................................................................................ 103</td>
</tr>
<tr>
<td>English Minor .......................................................................................................... 103</td>
</tr>
<tr>
<td>Environmental Studies Comprehensive Major, B.S. .................................................. 104</td>
</tr>
<tr>
<td>Aquatic Science Concentration .................................................................................. 106</td>
</tr>
<tr>
<td>Environmental Engineering Concentration ................................................................... 108</td>
</tr>
<tr>
<td>Environmental Science Concentration ......................................................................... 104</td>
</tr>
<tr>
<td>Environmental Sustainability Concentration (noncomprehensive) ............................ 109</td>
</tr>
<tr>
<td>Historic Preservation Concentration ......................................................................... 107</td>
</tr>
<tr>
<td>Resource Management Concentration ......................................................................... 105</td>
</tr>
<tr>
<td>Environmental Studies Minor .................................................................................... 110</td>
</tr>
<tr>
<td>Family and Consumer Sciences Major, B.S. ............................................................... 110</td>
</tr>
<tr>
<td>Hospitality and Food Service Management Concentration ....................................... 111</td>
</tr>
<tr>
<td>General Family and Consumer Sciences Minor ......................................................... 111</td>
</tr>
<tr>
<td>Family and Consumer Sciences Minor with a Child Development Emphasis ............... 112</td>
</tr>
<tr>
<td>Family and Consumer Sciences Minor with a Fashion Emphasis ................................ 112</td>
</tr>
<tr>
<td>Family and Consumer Sciences Minor with a Hospitality and Food Management Emphasis .. 112</td>
</tr>
<tr>
<td>Family and Consumer Sciences Education Teaching Field Grades 5-Adult, B.A .......... 113</td>
</tr>
<tr>
<td>French Minor ............................................................................................................ 123</td>
</tr>
<tr>
<td>General Science Minor ............................................................................................. 114</td>
</tr>
<tr>
<td>General Science Teaching Field Grades 5-Adult, B.A. ................................................ 114</td>
</tr>
<tr>
<td>Graphic Design Minor ............................................................................................... 73</td>
</tr>
<tr>
<td>Health and Fitness Minor .......................................................................................... 115</td>
</tr>
<tr>
<td>Health Education Teaching Endorsement Grades 5-Adult .......................................... 115</td>
</tr>
<tr>
<td>Historic Preservation Minor ...................................................................................... 116</td>
</tr>
<tr>
<td>History Major, B.A. .................................................................................................... 117</td>
</tr>
<tr>
<td>Civil War and 19th-Century America Concentration ............................................... 118</td>
</tr>
<tr>
<td>Public History Concentration .................................................................................... 117</td>
</tr>
<tr>
<td>Traditional Concentration ....................................................................................... 117</td>
</tr>
<tr>
<td>History Minor .......................................................................................................... 118</td>
</tr>
<tr>
<td>Hospitality Management Minor ................................................................................. 82</td>
</tr>
<tr>
<td>Journalism Minor ...................................................................................................... 119</td>
</tr>
<tr>
<td>Marketing Minor ....................................................................................................... 82</td>
</tr>
<tr>
<td>Mathematics Major, B.S. ............................................................................................ 119</td>
</tr>
<tr>
<td>Engineering Concentration ...................................................................................... 120</td>
</tr>
<tr>
<td>Industrial Mathematics Concentration ....................................................................... 121</td>
</tr>
<tr>
<td>Traditional Mathematics Concentration ..................................................................... 119</td>
</tr>
<tr>
<td>Mathematics Minor .................................................................................................. 122</td>
</tr>
</tbody>
</table>
Mathematics Teaching Field Grades 5-Adult, B.A .................................................................122
Mathematics Teaching Field Grades 5-9 General Math through Algebra I .............................123
Modern Languages……………………………………………………………………………………..123
  French Minor…………………………………………………………………………………………..123
  Spanish Major, B.A ………………………………………………………………………………………124
  Spanish Education Teaching Field, B.A ………………………………………………………………124
  Spanish Minor …………………………………………………………………………………………125
Music Comprehensive Major, B.A……………………………………………………………………126
  Composition Concentration…………………………………………………………………………127
  Guitar Performance Concentration …………………………………………………………………128
  Music Theater Performance Concentration ……………………………………………………..128
  Orchestral Performance Concentration ……………………………………………………………127
  Piano Pedagogy Concentration ……………………………………………………………………127
  Piano Performance Concentration …………………………………………………………………127
  Voice Performance Concentration …………………………………………………………………127
Music Minor……………………………………………………………………………………………129
Music Teaching Field, PreK-Adult, B.M.E……………………………………………………………129
New Media Minor ………………………………………………………………………………………189
Nursing Comprehensive Major, B.S.N………………………………………………………………..136
  R.N. to B.S.N…………………………………………………………………………………………….138
Organizational and Business Communications Minor ……………………………………………139
Photography/Computer Imagery Minor ……………………………………………………………..73
Physical Education Teaching Field, PreK-Adult, B.A …………………………………………………138
Physics Minor ……………………………………………………………………………………………139
Political Science Major, B.S ……………………………………………………………………………140
  International Concentration …………………………………………………………………………140
Political Science Minor …………………………………………………………………………………141
Pre-Dentistry, Pre-Medicine, Pre-Veterinary Medicine, Pre-Law …………………………………...141
Psychology Major, B.A…………………………………………………………………………………143
Psychology Minor ………………………………………………………………………………………143
Recreation and Leisure Studies Comprehensive Major, B.S …………………………………………145
  Athletic Coaching and Officiating Concentration …………………………………………………145
  Commercial Recreation/Tourism Concentration …………………………………………………145
  Fitness/Exercise Science Concentration ……………………………………………………………146
  Sport and Event Management Concentration …………………………………………………..147
  Sport Communication Concentration ………………………………………………………………147
  Sports Marketing Concentration …………………………………………………………………147
  Therapeutic Recreation Concentration ……………………………………………………………147
Recreation and Leisure Studies Minor ………………………………………………………………..148
Regents Bachelor of Arts Degree, R.B.A ………………………………………………………………..148
Secondary Education Professional Studies Core, B.A ………………………………………………101
  Social Studies Teaching Field Grades 5-Adult, B.A ……………………………………………..149
  Social Studies Teaching Field Endorsement Grades 5-9 …………………………………………150
  Social Work Comprehensive Major, B.S.W ……………………………………………………..153
Sociology Major, B.S ……………………………………………………………………………………155
  Criminal Justice Concentration ……………………………………………………………………155
  Traditional Concentration …………………………………………………………………………..155
Sociology Minor ………………………………………………………………………………………..156
Spanish Education Teaching Field, B.A ……………………………………………………………….124
Spanish Major, B.A ………………………………………………………………………………………124
Spanish Minor ………………………………………………………………………………………….125
Theater Minor……………………………………………………………………………………………..156
Women’s Studies Minor…………………………………………………………………………………157
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
Required 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 and 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 105 World Cultural Geography .................................................................................................. 3
GEOG 301 World Economic Geography .............................................................................................. 3
ANTH 300 Introduction to Archaeology ................................................................................................. 3
ANTH 314 Physical Anthropology and Archaeology ............................................................................ 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

APPALACHIAN STUDIES MINOR
The Appalachian studies minor is an interdisciplinary minor that is designed to make students aware of the rich and varied traditions of and the cultural and environmental influences on the geographical area known as Appalachia. Students often attach the minor to degrees in history, English, environmental science, recreation and leisure studies, sociology, and other degrees with an associated connection with this geographic area.

Curriculum for a Minor in Appalachian Studies
Total hours required ........................................................................................................................................ 18
Required courses* ....................................................................................................................................... 12
APST/ENGL 356 Appalachian Culture ................................................................................................... 3
APST/HIST 309 West Virginia and Appalachian Region ......................................................................... 3
APST/ENGL 358 Appalachian Literature ................................................................................................. 3
APST 486 Appalachian Studies Capstone ............................................................................................... 3
Elective courses ............................................................................................................................................ 6
APST 400 Seminar in Appalachian Studies ........................................................................................... 1-3
ART 304 Special Topics in Art History .................................................................................................. 3
ENGL 371 Introduction to Creative Writing ............................................................................................ 3
ENGL 471 Creative Writing: Fiction ......................................................................................................... 3
ENGL 472 Creative Writing: Poetry ......................................................................................................... 3
ENGL 473 Creative Writing: Nonfiction .................................................................................................. 3
ENVS 307/HIST 300 Introduction to Historic Preservation ................................................................... 3
ENVS 308 Physical Resource Management .......................................................................................... 3
ENVS 309 Regional Geology and Geomorphology ............................................................................. 3
ENVS 325 Oral History ............................................................................................................................ 3
ENVS 368 Geology of National Parks ................................................................................................... 3
HIST 305 History of the Lower Shenandoah Valley ............................................................................. 3
HIST 308 History of the Old South ......................................................................................................... 3
HIST 345 Public History .......................................................................................................................... 3
MUSC 343 Special Topics in Musicology ............................................................................................... 1-3
RECR 125 Introduction to Commercial Recreation/Tourism ................................................................ 3
RECR 140 Introduction to Leisure Studies ........................................................................................... 3
RECR 370 Environmental Education .................................................................................................... 3
SOWK 300 Community Service Learning ............................................................................................ 3
SOWK 301 Social Welfare as a Social Institution .................................................................................. 3
SOCI 303 The Family .............................................................................................................................. 3
* While the required courses will provide a diverse foundation for understanding the Appalachian region and culture, the electives will broaden the students’ knowledge-base and experiences. Students will work with the coordinator of the Appalachian studies minor to select from the courses above
an elective course of study that complements both their specific interests and majors, as well as
courses that fulfill the interdisciplinary nature of the minor. Students can select no more than one
elective course from any single discipline for the minor.

**ART AND THEATER (CONTEMPORARY)**

In order to maintain a quality learning environment, the Department of Contemporary Art and
Theater requires an application/portfolio for prospective students. For information procedures,
please see the department Web site at [www.shepherd.edu/artweb/](http://www.shepherd.edu/artweb/).

The Department of Contemporary Art and Theater has energetic programs designed to provide
students with a diversified and interdisciplinary experience in visual art. The Department of Con-
temporary Art and Theater links two dynamic programs under one heading. Shepherd is the home
of the Contemporary American Theater Festival (CATF) dedicated to producing and developing
new American theater. CATF and the visual arts are focusing on new work while encouraging an
adventurous spirit of self-discovery.

**Art (Contemporary)**

The Contemporary Art Program offers two degree options:

- The Bachelor of Fine Arts (B.F.A.) is the professional degree for students who aspire to
become professional visual artists. B.F.A. candidates may concentrate in graphic design,
painting, photography/computer imagery, printmaking, or sculpture.
- The Bachelor of Arts (B.A.) in art education is available for students interested in the
  teaching profession with K-12 certification.

In the Department of Contemporary Art, students are challenged and encouraged to grow
creatively and professionally progressing through a carefully designed series of courses which mix
the development of technical skills, language, and theories of the visual arts with a broad-based
knowledge of the liberal arts. The freshman year is one of discovery as students transition toward
professional identities as artists, designers, photographers, or educators. The sophomore year is
one of practice, application, and beginning professionalism. The junior year is one of synthesis—
students build and expand concepts and skills. The senior year is one of refinement and transition
to professions. This energetic contemporary art department is continuously revitalized because of
opportunities and resources that reach beyond the classroom including:

- Annual travel opportunities to Washington, D.C., Baltimore, New York City, and other
  metropolitan areas; two-week or longer travel opportunities to destinations world-
  wide.
- Professional experiences for students including collaborations with the National Park
  Service, Contemporary American Theater Festival, and regional businesses.
- Internships, co-ops, and portfolio reviews
- Exposure to visiting artist exhibitions and lecture series
- Opportunities for students to exhibit their work both on and off campus

**Curriculum for a Comprehensive Major in Art (Contemporary)**

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 .............................................................................................................. 12

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  

Group I  
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  Introduction to Graphic Design ................................. 3  
PHOT 281  Black and White Photography I ................................... 3  

Group II  
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 320  Digital Studio I .......................................................... 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 ................................................................................................. 30  
ART 115  Drawing I ................................................................. 3  
ART 215  Drawing II ................................................................. 3  
GRDS 200  Introduction to Graphic Design ................................. 3  
GRDS 300  Typography I ............................................................. 3  
GRDS 320  Digital Studio I .......................................................... 3  
GRDS 340  Intermediate Graphic Design ........................................... 3  
GRDS 360  Digital Studio II ............................................................ 3  
GRDS 380  History of Graphic Design ........................................... 3  
GRDS 410  Typography II ............................................................. 3  
GRDS 430  Advanced Design .............................................................. 3  
Select 12 hours from the following (to be discussed with advisor) ................. 12  
GRDS 400  Special Topics in Graphic Design ..................................... 3-9  
GRDS 440  Interactive Design ....................................................... 3  
GRDS 442  Web Site 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 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 434 Advanced Painting Studio ................................................3
ART 475 Interdisciplinary Studio ....................................................3
Photography/computer digital imagery concentration .......................... 42
Required courses ........................................................................... 33
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 Photography .........................................................3
PHOT 383 Color Light in Photography .............................................3
PHOT 385 Computer Digital Imagery ..............................................3
PHOT 387 Introduction to Web Art ..................................................3
ART 403 Art Criticism ....................................................................3
PHOT 480 Research in Photography I ...............................................3
PHOT 482 Photography and Advertising .........................................3
PHOT 487 Extended Image ...............................................................3
Select 9 hours from the following ..................................................... 9
PHOT 388 Multi-Media for the Web ..................................................3
PHOT 400 Special Topics in Photography/Computer Imagery ..........3
PHOT 420 Time-Based Media ...........................................................3
PHOT 483 Alternative Processes ......................................................3
PHOT 486 Advanced Photography ..................................................3-6
PHOT 488 Internship in Photography ..............................................3-6
PHOT 489 Research in Photography II .............................................3
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
Curriculum for a Teaching Field in Art, PreK-Adult

The art education program adheres to a contemporary pedagogy that hones future teachers to be artists, scholars, and advocates of the arts. A student who wishes to earn a Bachelor of Arts degree in art education must take the following courses: general studies (48 credits), educational professional studies courses (34), fine arts core and concentration (45), and art education (7).

Total semester hours required ................................................................. 134
Fine arts core and concentration ............................................................ 45

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 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 Minor in Art

Total hours required ......................................................................................... 27
Required courses ............................................................................................... 12
ART 140 Visual Thinking Skills I .......................................................... 3
ART 115 Drawing I .............................................................................. 3
ART 203 Survey History of Western Art .............................................. 3
ART 204 Contemporary Art ................................................. 3
Select 9 hours from the following ........................................ 9
ART 250 Sculpture I .......................................................... 3
ART 230 Painting I ........................................................... 3
ART 260 Printmaking I ....................................................... 3
PHOT 281 Black and White Photography I ....................... 3
GRDS 200 Introduction to Graphic Design ....................... 3
ART 305 Illustration I ........................................................ 3
Select 6 hours from the following ................................. 6
ART 330 Painting II .......................................................... 3
ART 350 Sculpture II .......................................................... 3
ART 361 Printmaking II ....................................................... 3
ART 405 Illustration II ........................................................ 3
GRDS 320 Digital Studio I ................................................. 3
PHOT 385 Computer Digital Imagery 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 Introduction to Graphic Design ....................... 3
GRDS 300 Typography I ....................................................... 3
GRDS 320 Digital Studio I ................................................. 3
GRDS 340 Intermediate Graphic Design .......................... 3
Select 6 hours from the following ................................. 6
GRDS 360 Digital Studio II ................................................. 3
GRDS 380 History of Graphic Design ............................... 3
GRDS 410 Typography II ..................................................... 3

Curriculum for a Minor in Photography/Computer Imagery

Total semester hours required ........................................ 24
ART 140 Visual Thinking Skills I ....................................... 3
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 Photography .......................................... 3
PHOT 383 Color Light in Photography ............................. 3
PHOT 385 Computer Digital Imagery I ............................ 3
PHOT 387 Introduction to Web Art ..................................... 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................................................................................. 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 300 and above except BIOL 350

Required related courses ................................................................................................... 8

PHYS 201, 201L  College Physics and Lab AND
PHYS 202, 202L  College Physics and Lab OR .................................................. 8
PHYS 221, 221L  General Physics and Lab ....................................................... 8

Curriculum for a Comprehensive Major in Biology—Ecological Science Concentration

The curriculum enables the student to attain a broad understanding of the physical and life sciences. The comprehensive program provides a fundamental understanding of science and encourages the development of critical thinking and an attitude of inquiry. Program flexibility allows for concentrations within the areas of organismic and ecological sciences to provide the needed breadth and depth of knowledge required for specific post-graduate education and employment.

Total hours required ....................................................................................................... 128-130

General studies (other than science and mathematics) ...................................................... 36

Science core......................................................................................................................... 45-46

BIOL 208  Plants as Organisms .............................................................. 4
BIOL 209, 209L  Animals as Organisms and Lab .............................................. 4
CHEM 207, 207L  General Chemistry and Lab ................................................... 4
CHEM 209, 209L  General Chemistry and Lab ................................................... 4
CHEM 325  Computers in Science ........................................................................ 3
PHYS 201, 201L  College Physics and Lab AND
PHYS 202, 202L  College Physics and Lab ....................................................... 8
MATH 205  Calculus with Applications OR .............................................. 4
MATH 314  Statistics..............................................................................3-4
ENVS 342  Limnology ............................................................................. 4
BIOL 301  Evolution and Lab ........................................................................ 4
BIOL 394  Principles of Biological Research ........................................... 3
BIOL 420  General Ecology .................................................................... 4

Choose one of the following courses .................................................................................. 4

BIOL 332  Comparative Anatomy ............................................................. 4
BIOL 406  Developmental Biology ............................................................. 4
BIOL 412  Comparative Animal Physiology ..................................................... 4
Choose two of the following courses.................................................................6-8
BIOL 315  Advanced Plant Biology .................................................................4
BIOL 324  Plant Taxonomy I AND .................................................................2
BIOL 325  Plant Taxonomy II ........................................................................1
ENVS 422  Stream Ecology ........................................................................4

Choose three of the following courses ...........................................................11-12
BIOL 313  Invertebrate Natural History .........................................................4
ENVS 343  Aquatic Entomology .....................................................................4
ENVS 344  Ichthyology ..................................................................................4
BIOL 411  Animal Behavior ........................................................................4

Additional upper-division electives* ................................................................26-28
BIOL any 300 or above except BIOL 350 ......................................................8
CHEM 300 or above .......................................................................................8

* Students considering pursuing advanced degrees should consider taking the following courses as electives: BIOL 305, 344, 394; CHEM 315, 315L, 316, 316L, 329, 330.

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

Choose two of the following ...........................................................................8
BIOL 301  Evolution and Lab .................................................................4
BIOL 406  Developmental Biology .............................................................4

Elective biology courses ..................................................................................4
BIOL 302  Microbiology ............................................................................4
BIOL 313  Invertebrate Natural History .....................................................4
BIOL 315  Advanced Plant Biology .............................................................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 ..................................................................................4
BIOL 404  Immunology .............................................................................4
BIOL 406  Developmental Biology .............................................................4
BIOL 411  Animal Behavior .....................................................................4
BIOL 412  Comparative Animal Physiology ..............................................4
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 ................................................................................. 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-Adult

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 College Physics I and Lab ...................................................... 4
PHYS 202, 202L College 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 ................................................................................. 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 (37 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-Adult, Chemistry 9-Adult, or General Science 5-Adult Specializations.

Contact Person: Dr. Burt Lidgerding, Byrd Science Center 216, 304-876-5231.
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 Financial Planning

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
Financial planning concentration requirements .................................................................... 9
BADM 308  Financial Planning and Insurance........................................... 3
BADM 425  Investments.......................................................................... 3
ACCT 335  Income Tax........................................................................... 3
Required elective ................................................................................................. 3
BADM 427  Retirement Planning and Employee Benefits OR
BADM 429  Estate Planning..................................................................... 3
Curriculum for a Major in Business Administration with a Concentration in Hospitality Management

The concentration in hospitality management provides students with the knowledge, skills, and abilities necessary to perform effectively in the hospitality industry and to meet the challenges inherent to this product and service 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 and 202 Introductory Accounting I and II ........................................... 6
- ECON 206 Principles of Microeconomics ................................................... 3
- BADM 224 Business Statistics........................................................................ 3
- BADM 300 Introduction to Financial Management................................. 3
- BADM 310 Principles of Management........................................................... 3
- BADM 312 Business Law I ........................................................................ 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
- At least three hours must be taken from each of the following four groups.

Group I: Marketing courses
- Select one of the following courses ................................................................. 3
  - BADM 360 Marketing of Services............................................................... 3
  - BADM 395 Consumer Behavior................................................................. 3
  - BADM 406 Professional Selling................................................................. 3
  - BADM 411 Entrepreneurship................................................................. 3

Group II: Foods and experiential courses
- Select one of the following courses ................................................................. 3
  - FACS 202 Food Science and Technology .................................................... 4
  - FACS 318 Nutrition.................................................................................... 3
  - FACS 328 Nutrition and Diet Therapy......................................................... 2
  - BADM 392 Cooperative Education in Business .............................................. 3
  - BADM 385 Business Externship................................................................. 3
  - FACS 392 Cooperative Education in Family and Consumer Sciences .......... 3
  - FACS 385 Family and Consumer Sciences Externship .....................................3

Group III: Tourism courses
- Select one of the following courses ................................................................. 3
  - RECR 125 Introduction to Commercial Recreation/Tourism............................ 3
  - RECR 343 21st-Century Tourism................................................................. 3
  - RECR 344 Hospitality................................................................................. 3

Group IV: Management courses
- Select one of the following courses ................................................................. 3
  - BADM 311 Small Business Management...................................................... 3
  - BADM 320 Employment Law....................................................................... 3
  - BADM 323 Human Resource Management.................................................. 3

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

Management concentration 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
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.

Curriculum for a Major in Business Administration with a Concentration in Marketing
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 (four from the following) ................................... 12
BADM 345 Business Communication .................................................. 3
BADM 350 Retailing .......................................................... 3
BADM 365 Promotional Strategy ............................................................ 3
BADM 375 Strategic Marketing .............................................................. 3
BADM 395 Consumer Behavior .......................................................... 3
BADM 405 Marketing Research ............................................................ 3
BADM 406 Professional Selling and Applied Business .......................... 3
BADM 292 Business Internship/Externship OR
BADM 385 Co-op .......................................................... 3

Students should complete MATH 154, ACCT 201, ACCT 202, CIS 102, BADM 224, BADM 3 12, 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
ECON 205 Principles of Macroeconomics .............................................. 3
MATH 154 Finite Mathematics ............................................................... 3
Total hours required for a minor ................................................................. 24

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 340 Marketing ....................................................................................... 3

*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.

Curriculum for a Minor in Hospitality Management

The minor in hospitality management enables students to apply their general business knowledge to the specific needs of the hospitality industry. The minor offers the opportunity to develop the knowledge, skills, and abilities necessary to function in the hospitality industry and to appreciate the challenges inherent to this product and service field.

Total hours required .................................................................................... 27-28

Required courses .......................................................................................... 18-19

BADM 310 Principles of Management .............................................................. 3
BADM 340 Marketing ....................................................................................... 3
BADM 360 Marketing of Services ................................................................. 3
FACS 202 Food Science and Technology ......................................................... 4
RECR 343 21st-Century Tourism ................................................................. 3
RECR 344 Hospitality .................................................................................... 3

Elective courses .............................................................................................. 9

BADM 311 Small Business Management OR
BADM 411 Entrepreneurship ........................................................................... 3
BADM 350 Retailing ....................................................................................... 3
BADM 406 Professional Selling ...................................................................... 3
FACS 318 Nutrition OR
FACS 328 Nutrition and Diet Therapy ........................................................... 2-3
BADM 392 Cooperative Education in Business OR
BADM 385 Business Externship OR
FACS 385 Family and Consumer Sciences Externship OR
FACS 392 Cooperative Education in Family and Consumer Sciences ................. 1-9

Curriculum for a Minor in Marketing

The marketing minor enables students to have the opportunity to apply their academic expertise to the world of work. The marketing minor prepares students to be better consumers, giving them an understanding of the power of various selling machines in our society. Students will understand the impact of advertising on their pocketbooks; they will appreciate the power of pricing strategies; they will examine the impact of government regulations on marketing efforts; they will explore the ethical issues surrounding marketing. This should lead to a positive impact on other departments because of the complementary nature of the marketing minor.

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

Required course ............................................................................................. 3

BADM 340 Marketing ....................................................................................... 3

Elective courses ............................................................................................... 18

BADM 150 Introduction to Business ............................................................... 3
BADM 312 Business Law I ........................................................................... 3
BADM 350 Retailing ....................................................................................... 3
CHEMISTRY

The Department of Chemistry offers a B.S. degree in chemistry. There are four concentrations—the traditional, the biochemistry, the biopharmaceutical, and the environmental chemistry concentrations, the former emphasizing the more quantitative aspects of chemistry, the second and third emphasizing 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
CHEM 207, 207L General Chemistry and Lab .............................................. 4
CHEM 209, 209L General Chemistry and Lab .............................................. 4
Total hours required .......................................................................................... 49
Core courses ................................................................................................... 35
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 450 Research in Chemistry ........................................................... 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
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

NOTE: 45 hours of upper-division credits are required for graduation.
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 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
BIOL 208 Plants as Organisms ........................................................................ 4
BIOL 209 Animals as Organisms ........................................................................ 4
BIOL 305 Cell Biology .......................................................................................... 4
BIOL 344 Genetics ............................................................................................... 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 Concentration in Chemistry–Biopharmaceutical Sciences

The biopharmaceutical sciences concentration degree program will prepare Shepherd students for admission into the West Virginia University School of Pharmacy program. Those students will receive their bachelor of science degree in chemistry from Shepherd through the transfer of specified first-year pharmacy courses from the WVU School of Pharmacy (SOP) after successfully completing their first professional year in the pharmacy program.

Required Shepherd courses .................................................................................. 73
CHEM 207, 207L General Chemistry I and Lab AND
CHEM 209, 209L General Chemistry II and Lab .............................................. 8
BIOL 101, 102 General Biological Science and Labs OR
BIOL 208, 209 Plants as Organisms and Animals as Organisms .......................... 8
PHYS 201, 201L College Physics I and Lab AND
PHYS 202, 202L College Physics II and Lab ...................................................... 8
MATH 207 Calculus I OR
MATH 205 Calculus with Applications ............................................................... 4
MATH 314 Statistics ........................................................................................... 3
CHEM 315, 315L Organic Chemistry I and Lab .................................................... 4
CHEM 316, 316L Organic Chemistry II and Lab ................................................... 4
BIOL 302 Microbiology ...................................................................................... 4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 305</td>
<td>Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 344</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 394</td>
<td>Principles of Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Computers in Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 327</td>
<td>Solution Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 329</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 450</td>
<td>Research Capstone (to be completed at WVU SOP)</td>
<td>4</td>
</tr>
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</table>

WVU SOP courses (transferred back to Shepherd for major) ........................................... 19

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 311</td>
<td>Chemical Properties of Drugs</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 443</td>
<td>Fundamentals of Physiology</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 402</td>
<td>Physical Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 431</td>
<td>General Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 408</td>
<td>Pharmaceutics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 409</td>
<td>Immunology and Biotechnology</td>
<td>2</td>
</tr>
</tbody>
</table>

Curriculum for a Comprehensive Major in Chemistry–Environmental Chemistry Concentration

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

**Specific general studies requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 314</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201, 201L</td>
<td>College Physics I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>PHYS 202, 202L</td>
<td>College Physics II and Lab OR</td>
<td></td>
</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I and Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 222, 222L</td>
<td>General Physics II and Lab</td>
<td></td>
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</tbody>
</table>

**Core courses.................................................................................................................. 42**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab</td>
<td>4</td>
</tr>
<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>
<tr>
<td>CHEM 329, 329L</td>
<td>Biochemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 333</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 450</td>
<td>Research in Chemistry (Environmental)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Environmental science concentration requirements.......................................................... 13**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 201</td>
<td>Dimensions of Environmental Science I</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 305</td>
<td>Environmental Law and Regulations OR</td>
<td></td>
</tr>
<tr>
<td>ENVS 306</td>
<td>Environmental Policy</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 308</td>
<td>Physical Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 401</td>
<td>Conservation Ecology</td>
<td>4</td>
</tr>
</tbody>
</table>

Choose two of the following courses.................................................................................. 8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 440</td>
<td>Solid Waste/Air Quality Management and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 441</td>
<td>Hydrology and Lab</td>
<td>4</td>
</tr>
<tr>
<td>GSCI 301</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GSCI 303</td>
<td>Meteorology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Additional requirements........................................................................................................ 8**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 102</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 205</td>
<td>Calculus with Applications OR</td>
<td></td>
</tr>
<tr>
<td>MATH 207</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>
Curriculum for a Minor in Chemistry, Physical Analytical Track

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>Elective chemistry courses</td>
<td>(at least two must be lab courses)</td>
<td>16</td>
</tr>
<tr>
<td>CHEM 301</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 308</td>
<td>Radiochemistry</td>
<td>3</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 327, 327L</td>
<td>Solution Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 427,*</td>
<td>Spectroscopy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 427L</td>
<td>Advanced Physical Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 428*</td>
<td>Thermodynamics</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 450</td>
<td>Research in Chemistry</td>
<td>1</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab</td>
<td>4</td>
</tr>
<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>Elective chemistry courses</td>
<td>(at least one must be a lab course)</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 301</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 308</td>
<td>Radiochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 311</td>
<td>Chemical Pharmacology</td>
<td>3</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 327, 327L</td>
<td>Solution Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 329, 329L</td>
<td>Biochemistry I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 330, 330L</td>
<td>Biochemistry II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 333, 333L</td>
<td>Environmental Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 415</td>
<td>Advanced Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 416</td>
<td>Advanced Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 427,*</td>
<td>Spectroscopy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 427L</td>
<td>Advanced Physical Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 428*</td>
<td>Thermodynamics</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 436</td>
<td>Advanced Protein Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

* 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-Adult

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>MATH 314</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total hours required ............................................................................................................... 49

A. Interdisciplinary core ................................................................................................... 20
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 208, 209</td>
<td>Plants as Organisms and Animals as Organisms</td>
<td>8</td>
</tr>
<tr>
<td>GSCI 301</td>
<td>Geology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201, 201L</td>
<td>College Physics I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202, 202L</td>
<td>College Physics II and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>
B. Chemistry 9–12 specialization

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 327, 327L Solution Chemistry .................................... 4
CHEM 329 Biochemistry I ..................................................... 3
CHEM 330 Biochemistry II ................................................... 3
CHEM xxx Elective in Chemistry .......................................... 3
MATH 205 Calculus with Applications .................................. 4

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-Adult, Chemistry 9-Adult, and General Science 5-Adult Specializations. See professional education course listings under Education: Professional Studies Core for Secondary Education (37 hours required). Special Methods of Teaching Sciences in EDUC 423.

Contact Person: Dr. Burt Lidgerding, Byrd Science Center 216, 304-876-5231.

COACHING–ATHLETIC

The Department of Health, Physical Education, Recreation, and Sports 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
COMMUNICATION

The Department of Communication recognizes the value of an education that integrates professional knowledge and critical understanding. Digital technologies are changing the ways that people generate, disseminate, receive, and use ideas and information. The communication and new media program accounts for these changes by offering a curriculum that is focused, fundamental, and flexible. Our curriculum is grounded on student participation and empowerment, and provides students with the skills necessary to communicate effectively and appropriately in a variety of professional contexts. Students learn to critically examine their own experiences, recognize the complexities of living in the global village, and explore the ways that communication technologies and popular culture infuse and affect their lives. The program prepare graduates to be intellectually and technologically resilient and ready for inevitable change. Graduates work in television, radio, film, advertising, public relations, journalism, sales, and marketing. Capstone experiences include senior projects, seminars, and internships. Students may select the Washington Gateway program and finish their education in the Washington, D.C., area—an educational opportunity unique to colleges in the state.

Curriculum for a Major in Communication and New Media

Required courses..................................................................................................................... 51

Students may earn a bachelor of arts or a bachelor of science degree. The B.A. requires 12 hours of a foreign language, but the B.S. does not. Students take a common core, elective practicum and common capstone sequences, and choose one of three concentrations: 1) digital filmmaking, 2) new media, or 3) media studies.

Required core courses* .................................................................................................... 15
COMM 203 Communication and New Media ................................................................. 3
COMM 222 Voice and Diction ................................................................................. 3
COMM 302 Narrative Scriptwriting .......................................................................... 3
COMM 304 History of Film OR
COMM 305 History of Television .......................................................................... 3
COMM 352 Computer-Mediated Communication ................................................... 3

Select one concentration ................................................................................................... 18
Digital filmmaking concentration .................................................................................... 18
Students who opt for this concentration may choose to develop and create an independent film over a two-year directed-study program with the department’s digital filmmaking coordinator.
COMM 329 Sound Design ......................................................................................... 3
COMM 330 Single-Camera Production ...................................................................... 3
COMM 333 Music Video OR
COMM 334 Experimental Video ............................................................................. 3
COMM 360 Studio Production .................................................................................... 3
COMM 420 Advanced Production ............................................................................. 3

One course from new media concentration ..................................................................... 3
New media concentration .......................................................................................... 18
COMM 343 Graphic Novel ......................................................................................... 3
COMM 344 Game Design ......................................................................................... 3
COMM 345 Animation and Communication ................................................................ 3
COMM 346 Motion Graphics ...................................................................................... 3
COMM 447 Advanced Internet Media ........................................................................ 3

One course from digital filmmaking concentration ...................................................... 3
Media studies concentration ........................................................................................ 18
Any 18 hours of digital filmmaking and new media courses.
Required practicum** (one course from the following) ................................................... 3
COMM 348 News Practicum ...................................................................................... 3
COMM 349 New Media Practicum ............................................................................. 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>COMM 326</td>
<td>Radio Practicum</td>
<td>3</td>
</tr>
<tr>
<td><strong>Required theory, criticism, and literacy courses</strong></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 403***</td>
<td>Media Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMM 406***</td>
<td>Advertising and Imagery</td>
<td>3</td>
</tr>
<tr>
<td><strong>Required capstone courses</strong></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>COMM 450</td>
<td>Internship in Communication OR</td>
<td></td>
</tr>
<tr>
<td>COMM 392</td>
<td>Cooperative Education in Communication OR</td>
<td></td>
</tr>
<tr>
<td>COMM 402****</td>
<td>Seminar in Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 461</td>
<td>Senior Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students are asked to complete the core courses before entering a concentration. Because of scheduling and course availability, some exceptions may be made; however, students are asked to meet with their academic advisor or department chair prior to enrolling in a concentration course when the core has not been completed.

**Students may take practicum courses three times for a total of nine credit hours. The first three hours count toward a major and any additional hours are counted as general electives.

***COMM 403 Media Studies and COMM 406 Advertising and Imagery are also electives in the women's studies minor.

****COMM 399 Special Topics and COMM 402 Seminar in Communication are courses in new technologies, course content, or faculty research and publication. These courses may be taken more than one time if the topics or instructors are different. These classes may be used as substitutions for courses in the regular catalog; please obtain permission to substitute a course from the department chair prior to registration.

### Minor in Digital Filmmaking

<table>
<thead>
<tr>
<th>Required hours for a minor</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 203</td>
<td>Communication and New Media</td>
</tr>
<tr>
<td>COMM 302</td>
<td>Narrative Scriptwriting</td>
</tr>
<tr>
<td>COMM 352</td>
<td>Computer-Mediated Communication</td>
</tr>
<tr>
<td>COMM 350</td>
<td>Single-Camera Production</td>
</tr>
<tr>
<td>COMM 333</td>
<td>Music Video OR</td>
</tr>
<tr>
<td>COMM 3654</td>
<td>Experimental Video</td>
</tr>
<tr>
<td>COMM 360</td>
<td>Studio Production</td>
</tr>
<tr>
<td>COMM 329</td>
<td>Sound Design</td>
</tr>
<tr>
<td>COMM 420</td>
<td>Advanced Production</td>
</tr>
</tbody>
</table>

### Minor in New Media

<table>
<thead>
<tr>
<th>Required hours for a minor</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 203</td>
<td>Communication and New Media</td>
</tr>
<tr>
<td>COMM 302</td>
<td>Narrative Scriptwriting</td>
</tr>
<tr>
<td>COMM 352</td>
<td>Computer-Mediated Communication</td>
</tr>
<tr>
<td>COMM 343</td>
<td>Graphic Novel</td>
</tr>
<tr>
<td>COMM 344</td>
<td>Game Design</td>
</tr>
<tr>
<td>COMM 345</td>
<td>Animation and Communication</td>
</tr>
<tr>
<td>COMM 346</td>
<td>Motion Graphics</td>
</tr>
<tr>
<td>COMM 447</td>
<td>Advanced Internet Media</td>
</tr>
</tbody>
</table>

### Minor in Organizational and Business Communications

<table>
<thead>
<tr>
<th>Required hours for a minor</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 315</td>
<td>Organizational Communications</td>
</tr>
<tr>
<td>BADM 406</td>
<td>Professional Selling and Applied Business</td>
</tr>
<tr>
<td>COMM 312</td>
<td>Presentations in Business and Professional Contexts</td>
</tr>
<tr>
<td>COMM 410</td>
<td>Intercultural Communications</td>
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<tr>
<td>COMM 308</td>
<td>Interpersonal Communications</td>
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<tr>
<td>Three of the following courses</td>
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<tr>
<td>BADM 345</td>
<td>Business Communications</td>
</tr>
</tbody>
</table>
COMM 325  Critical Thinking for Conflict Resolution ......................... 3
BADM 359  International Business ...................................................... 3
COMM 310  Conducting Business Meetings and Group Discussions .... 3
COMM 408  Communications for the Consultant ................................. 3
BADM 340  Marketing ........................................................................ 3
BADM 365  Promotional Strategy ....................................................... 3
BADM 395  Consumer Behavior .......................................................... 3

All students minoring in organizational and business communications must earn a C or better in all 300- and 400-level classes.

A student may major in communication and new media and minor in organizational and business communications.

Students minoring in organizational and business communications must meet with Dr. Joyce Webb to receive advisor assignment.

### 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. Students wishing to pursue a double major in computer science and mathematics can refer to the department Web site [www.shepherd.edu/university/cis_math/](http://www.shepherd.edu/university/cis_math/) for curriculum requirements.

Total hours required (including free electives) ....................................................... 132-34

Specific general studies requirements

MATH 155  Discrete Structures ......................................................................... 3

Math requirements for all concentrations ......................................................................... 10

MATH 254  Discrete Mathematics ............................................................ 3
MATH 205*  Calculus With Applications ................................................... 4
MATH 314  Statistics................................................................................. 3

*Math and CGG concentrations must take MATH 207 instead of MATH 205

Core requirements* .......................................................................................................... 33

MATH 100  Freshman Seminar ........................................................................ 1
CIS 102  Computer Literacy and 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
CIS 390  Operating Systems ........................................................................ 3

* Must have a C average in core requirements

Computer graphics and games (CGG) concentration ....................................................... 41

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 302  Windows Programming ................................................................. 3
CIS 324  Introduction to Artificial Intelligence ............................................. 3
CIS 405 Computer Graphics .................................................................3
CIS 431 Algorithms and Data Structures ........................................3
CIS 455 Game Design and Programming ......................................3
Required electives ................................................................................................. 9
Any CIS course numbered 300 or above.

Computer programming and information systems (CPIS) concentration .................................................. 36
Required business and mathematics courses .................................................................................. 12
ACCT 201 Introductory Accounting I ...................................................3
BADM 310 Principles of Management ..............................................3
BADM 345 Business Communications ..............................................3
MATH 354 Operation Research .........................................................3
Required CIS courses ............................................................................................... 15
CIS 287 Systems Analysis and Design ..............................................3
CIS 302 Windows Programming ...................................................3
CIS 331 Programming Languages ..................................................3
CIS 487 Software Engineering .......................................................3
CIS 418 Management Information System ....................................3
Required electives ................................................................................................. 9
Any CIS course numbered CIS 300 or above

Computer science (CS) concentration ............................................................................................. 34
Required mathematics courses ........................................................................................................ 7
MATH 208 Calculus II ........................................................................4
MATH 307 Introduction to Linear Algebra ...................................................3
Required CIS courses ............................................................................................... 12
CIS 331 Programming Languages ..................................................3
CIS 421 Computer Architecture ....................................................3
CIS 431 Algorithms and Data Structures ........................................3
CIS 487 Software Engineering .......................................................3
Required electives ................................................................................................. 15
Any CIS course numbered CIS 300 or above

Networking and security (NS) concentration ................................................................................... 35
Required CIS courses ............................................................................................... 23
CIS 287 Systems Analysis and Design ..............................................3
CIS 395 Cryptography and Computer Security ........................................3
ENGR 305 Logic Design and Lab ............................................................ 4
CIS 419 Data Communications and Computer Networks ..................3
CIS 421 Computer Architecture ....................................................3
CIS 423 Server Operations and Systems Programming ..............3
CIS 486 Network Security .............................................................4
Required electives ................................................................................................. 12
Any CIS course numbered 300 or above.

Curriculum for a Noncomprehensive Major in Computer and Information Technology
This discipline not only expands support systems but also covers other aspects of the business world. A mix of skills along with technical proficiency is important in real world applications. This degree will place greater emphasis on the knowledge of business fundamentals. This degree requires a minor in a related field.
Specific general studies requirement:
MATH 155 Discrete Structures .................................................................3
Required courses (C average required in core coursework) .................................................. 34
MATH 100 Freshman Seminar ................................................................. 1
CIS 102 Microcomputer Applications ..................................................3
CIS 104 Introduction to Computer and Information Systems ..............3
CIS 211  Computer Language Concepts ............................................... 4
CIT 234  Introduction to Networking .................................................. 3
CIS 287  Systems Analysis and Design ............................................... 3
CIT 385  Computer System Design .................................................... 4
CIT 388  Database Management Systems ............................................ 4
CIT 332  Web Programming I .............................................................. 3
CIT 419  Data Communication and Computer Networks ................. 3
MATH 314  Statistics ........................................................................... 3

Biometrics and information security concentration .......................................................... 22
CIT 372  Introduction to Biometrics .................................................... 3
CIT 310  Information Security .............................................................. 3
CIT 418  Management Information Systems ........................................ 3
CIT 486  Network Security ................................................................. 4
Electives .............................................................................................. 9
Any CIS/CIT course numbered 300 or above or MATH 254.

Information technology concentration ............................................................................. 24
BADM 310  Principles of Management ...................................................... 3
CIT 310  Information Security .............................................................. 3
CIT 361  E-Commerce ......................................................................... 3
BADM 345  Business Communications .................................................... 3
CIT 418  Management Information Systems ........................................ 3
Electives .............................................................................................. 9
Any CIS/CIT course numbered 300 or above or MATH 254.

Web programming and design concentration ................................................................... 24
A minor in art is recommended with this concentration.
CIT 334  Web Programming II .............................................................. 3
GRDS 200  Introduction to Graphic Design ............................................ 3
GRDS 300  Typography I ...................................................................... 3
GRDS 320  Digital Studio I .................................................................... 3
CIT 430  Web Design Studio ................................................................. 3
Electives .............................................................................................. 9
Any CIS/CIT course numbered 300 or above or MATH 254.

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.

**COMPUTER ENGINEERING**
**Curriculum for a Comprehensive Major in Computer Engineering**
Total hours required (including technical electives) ......................................................... 132
General studies requirements ......................................................................................... 30
Specific general studies requirements .............................................................................. 17
ECON 205  Principles of Macroeconomics ....................................................... 3
ENGL 104  Science and Technical Writing .................................................... 3
MATH 155  Discrete Structures ..................................................................... 3
PHYS 221, 221L  General Physics I ............................................................ 4
PHYS 222, 222L  General Physics II ............................................................ 4
Other general requirements .......................................................................................... 4
CHEM 207, 207L  General Chemistry .......................................................... 4
Computer engineering requirements .............................................................................. 33
CPE 234  Introduction to Networking ................................................... 3
CPE 221, 222  Introduction2 to Electrical Engineering and Lab .................... 4
CPE 224, 225  Electrical Circuits and Lab ................................................. 4
CPE 287  Systems Analysis and Design ..................................................... 3
CPE 305  Digital Logic Design and Lab ...................................................... 4
CPE 386  Computer Organization .......................................................... 4
CPE 421  Computer Architecture .......................................................... 3
CPE 433  Microprocessor System Design and Lab ...................................... 4
CPE 489  Engineering Capstone Project I .............................................. 1
CPE 490  Engineering Capstone Project II ............................................. 3

Computer science, mathematics, and engineering requirements ........................................ 42
CIS 104  Introduction of Computer and Information Sciences ............. 3
CIS 211  Computer Language Concepts ............................................... 4
CIS 390  Operating Systems ................................................................. 3
MATH 100  Freshman Seminar ............................................................. 1
MATH 207  Calculus I ............................................................................. 4
MATH 208  Calculus II ........................................................................... 4
MATH 254  Discrete Mathematics ............................................................ 3
MATH 309  Calculus III ............................................................................ 4
MATH 307  Linear Algebra ....................................................................... 3
MATH 310  Differential Equations ............................................................ 4
MATH 321  Probability and Statistics ........................................................ 3
ENGR 101  Engineering I .......................................................................... 3
ENGR 326  Linear Systems ....................................................................... 3
Technical electives ...........................................................................................................6-8
CIS 314  Advanced Computer Language Concepts ................................ 4
CIS 321  Data and File Structures ........................................................... 4
CIS 324  Introduction to Artificial Intelligence ..................................... 3
CIS 487  Software Engineering .............................................................. 3
ENGR 241  Engineering Statics ................................................................. 3
ENGR 242  Engineering Dynamics .......................................................... 3
CIS 482  Real Time and Embedded System Design .................................. 3

**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
Curriculum for a Major in Economics with a Concentration in Financial Economics

The concentration in financial economics provides students with the opportunity to explore the increasingly complex and important field of finance. It will help students develop a strong conceptual understanding of financial markets, banking, investments, and monetary policies in a global context, and cultivate the skills of financial analysis and forecasting. Careers in business, finance, governmental service, law, graduate studies, and research are among those open to graduates with concentration in financial economics.

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

Total hours required for a major ............................................................................................ 39

Required courses .............................................................................................................. 15
- ECON 206  Principles of Microeconomics ............................................... 3
- BADM 224  Business Statistics .................................................................... 3
- ECON 301  Intermediate Microeconomics ............................................... 3
- ECON 302  Intermediate Macroeconomics ............................................... 3
- ECON 450  Senior Seminar in Economics ................................................ 3

Concentration requirements ............................................................................................. 15
- ACCT 201  Introductory Accounting I ..................................................... 3
- ACCT 202  Introductory Accounting II .................................................... 3
- BADM 300  Introduction to Financial Management............................... 3
- ECON 305  Money and Banking  OR
  BADM 301  Money Markets and Financial Institutions............................. 3
- BADM 425  Investments................................................................. 3

Electives ............................................................................................................................. 9
- ACCT 305  Managerial Accounting......................................................... 3
- ECON 310  Public Finance ................................................................. 3
- ECON 325  International Finance ......................................................... 3
- ECON 303  Managerial Economics ....................................................... 3
- ECON 326  International Trade ............................................................ 3
- BADM 302  Intermediate Financial Management............................... 3
- BADM 302  Calculus with Applications OR
  MATH 205  Calculus with Applications .................................................... 3
- BADM 413  Quantitative Methods .......................................................... 3
- BADM 308  Financial Planning and Insurance........................................ 3

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 at Shepherd University is committed to the idea that knowledge enables one to make informed choices, to actively participate in the shaping of one’s own life, and to influence the social, cultural, political, and economic structures of a democratic society. Based on the belief that education should empower all students and teachers to exercise informed choices in a global society, our purpose is to facilitate the development of liberally educated teachers who demonstrate the willingness and capacity to empower all P-12 students. The program is committed to promoting social justice, embracing diversity and inclusion, and enhancing teaching and learning through technology.

The schooling context is very complex; it is characterized by a significant degree of ambiguity that precludes a formulaic approach to teaching. This complexity necessitates that teacher candidates and practitioners develop a philosophy and principles for practice based on reflective problem solving. Teachers must identify and frame problems, generate and consider multiple solutions, choose and implement courses of action, and evaluate impacts. 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 on 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 activities.

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
The teacher education program at Shepherd University is accredited by the National Council for Accreditation of Teacher Education (NCATE) and also is approved for recommending teacher licensure by the state of West Virginia.

Shepherd University offers the bachelor of arts in elementary education, the bachelor of arts in secondary education, and the bachelor of music 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-Adult
- Chemistry Education 9-Adult
- Elementary Education K-6
- Early Education PreK-K (only as an added endorsement to Elementary Education K-6)
- English Education 5-Adult, 5-9 (5-9 only as an added endorsement to a K-6 or secondary program)
- Family and Consumer Science Education 5-Adult
- General Science Education 5-Adult
- Health Education 5-Adult (only as an added endorsement to Physical Education PreK-Adult)
- Mathematics Education 5-Adult, General Mathematics through Algebra I Education 5-9 (5-9 only as an added endorsement to a K-6 or secondary program)
- Music Education PreK-Adult
- Physical Education PreK-Adult
- Social Studies Education 5-Adult, 5-9 (5-9 only as an added endorsement to a K-6 or secondary program)
- Spanish Education

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 of 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, achievement, and an openness to diversity 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, 103, or 104 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 require-
ments 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 EDUC 400 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 edu-
cation 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 el-
   ementary 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 prac-
tices;
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 func-
tion 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>Credits</th>
</tr>
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<tbody>
<tr>
<td>GSCI 103, 104</td>
<td>General Physical Science I and II</td>
</tr>
<tr>
<td>MATH 105</td>
<td>College Algebra</td>
</tr>
</tbody>
</table>

**Professional Studies Core for Elementary Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 150</td>
<td>Seminar in Education</td>
</tr>
<tr>
<td>EDUC 200</td>
<td>Foundations of Education</td>
</tr>
<tr>
<td>EDUC 320</td>
<td>Social and Psychological Conditions of Learning</td>
</tr>
<tr>
<td>EDUC 360</td>
<td>Survey of Exceptional Children</td>
</tr>
<tr>
<td>EDUC 351</td>
<td>Integrated Reading and Language Arts I</td>
</tr>
<tr>
<td>EDUC 352</td>
<td>Integrated Math, Science, and Social Studies I</td>
</tr>
<tr>
<td>EDUC 353</td>
<td>Integrated Reading and Language Arts II</td>
</tr>
<tr>
<td>EDUC 354</td>
<td>Integrated Math, Science, and Social Studies II</td>
</tr>
<tr>
<td>EDUC 380</td>
<td>Technology in 21st Century Teaching and Learning</td>
</tr>
<tr>
<td>EDUC 400</td>
<td>Inclusion in the Regular Classroom</td>
</tr>
<tr>
<td>EDUC 450</td>
<td>Student Teaching K-6</td>
</tr>
</tbody>
</table>

**Specialty Studies for Elementary Education K–6**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MUSC 102</td>
<td>Fundamentals of Music Education</td>
</tr>
<tr>
<td>MUSC 226</td>
<td>Classroom Music Education</td>
</tr>
<tr>
<td>ARED 325</td>
<td>Aesthetic Inquiry</td>
</tr>
<tr>
<td>HLTH 310</td>
<td>Health and Physical Education for Elementary Educators</td>
</tr>
<tr>
<td>HIST 201</td>
<td>History of the United States to 1865 OR</td>
</tr>
<tr>
<td>HIST 202</td>
<td>History of the United States, 1865 to Present</td>
</tr>
<tr>
<td>HIST 309</td>
<td>West Virginia and the Appalachian Region</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>World Cultural Geography</td>
</tr>
</tbody>
</table>
BIOL 100  Life Science for Elementary Teachers OR
BIOL 101  General Biological Science OR
BIOL 102  General Biological Science .................................................... 4
CHEM 100  Chemical Science .............................................................. 3
CHEM 100L Chemical Science Laboratory .............................................. 1
MATH 102  Math for Elementary Teachers ........................................... 3
MATH 200  Geometry and Measurement ................................................. 3
MATH 300  Math Methods for Elementary Teachers ............................... 3

**Electives:** Students are encouraged to select upper-division courses for electives. The variety of options for 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 101D 304-876-5330, or Department of Education, Knutti Hall 108, 304-876-5305.

**Teaching Endorsement 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 add this endorsement to the elementary education K-6 program. Upon completion of the four courses below, successful student teaching at the kindergarten level, and satisfactory completion of the elementary education K-6 program, a student may be recommended for certification in both areas.

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 2007 and again in spring 2009. Students should plan accordingly in order to follow this sequence.

**Contact Person:** Dr. Elizabeth Miller, Knutti Hall 109, 304-876-5270, or Department of Education, Knutti Hall 108, 304-876-5305.

**Teaching Endorsement for Middle School Education**

The middle school endorsement includes 5-9 grade ranges. Students can pursue a 5-9 endorsement in English, mathematics, or social studies. These endorsements can only be completed as an add-on to the K-6 elementary program or as an add-on to any secondary program (PreK-Adult, 5-Adult, or 9-Adult). The required courses in professional studies are listed below. See individual specialization areas for specialty curriculum.

**Professional Studies Core for an Endorsement in Middle School Education**

Hours required ...........................................................................................................40-48
Professional studies core for elementary education OR ........................................... 45
Professional studies core for secondary education AND ........................................... 37-40
EDUC 4XX  Special Methods (for the 5-9 endorsement specialty areas)........... 3

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

**Secondary Education**

The secondary certification includes K-Adult, 5-Adult, or 9-Adult grade ranges. The required courses in professional studies are listed below. See individual specialization areas for specialty curriculum.
Programs of Study • 101

Professional Studies Core for Secondary Education

Hours required .......................................................................................................37-40**

EDUC 150 Seminar in Education ........................................................................ 1
EDUC 200 Foundations of Education ................................................................ 3
EDUC 320 Social and Psychological Conditions of Learning ........................ 5
EDUC 360 Survey of Exceptional Children OR
ARED 180 Inclusive Approaches to Art Education (art education majors only) OR
PHED 401 Teaching Adaptive Physical Education (physical education majors only) ........................................................................ 3
EDUC 370 Creating Learning Environments ................................................... 4
EDUC 380 Technology in 21st Century Teaching and Learning ....................... 3
EDUC 4XX Special Methods ..........................................................................3-6*
EDUC 400 Inclusion in the Regular Classroom ............................................... 3
EDUC 443 Reading in the Content Areas ........................................................ 3
EDUC 45X Student Teaching ........................................................................... 9

* Family and consumer sciences education requires 6 hours.
** Art education and physical education will have 34 hours because of the substitution of their special education courses for EDUC 360.
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 ..............................................................................................................10-11
EDUC 200 Foundations of Education ................................................................ 3
EDUC 320 The Social and Psychological Conditions of Learning .................... 5
EDUC 392 Cooperative Education in Education OR ......................................... 2-3
EDUC 429 Adult Education Models and Practices OR ...................................... 3
EDUC 336 Clinical Experiences in Early Education OR .................................... 3
EDUC 390 Experiential Learning .......................................................................... 2-3

Electives ........................................................................................................................... 12
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 307 Teaching Reading and Young Adult 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 342 Adolescent Development ........................................ 3
FACS 304 Child Development .................................................. 3
PSYC 405 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 ..................................................................................... 19
ENGL 301 Introduction to Literary Study ........................................... 3
ENGL 310 British Literature to 1660 ............................................... 3
ENGL 311 British Literature, 1660-1900 ............................................ 3
ENGL 312 American Literature to 1900 .......................................... 3
ENGL 313 Literature in English since 1900 ..................................... 3
ENGL 421 Shakespeare ................................................................. 3
ENGL 485 Senior Capstone Practicum ............................................. 1

Creative writing concentration .............................................................. 12
ENGL 371 Introduction to Creative Writing ...................................... 3
Two of the following courses ............................................................ 6
ENGL 471 Fiction ................................................................. 3
ENGL 472 Poetry ................................................................. 3
ENGL 473 Nonfiction ......................................................... 3
ENGL 474 Drama ................................................................. 3
Upper-division English elective ........................................... 3

English literature concentration ........................................... 12
ENGL 415 Chaucer OR
ENGL 423 Milton ................................................................. 3
Upper-division English electives .......................................... 9

**Curriculum for a Minor in English**

Total hours required for an English minor ........................................... 21
Required courses .................................................................................. 15
ENGL 301 Introduction to Literary Study .............................................. 3
Three of the following courses ......................................................... 9
ENGL 310 British Literature to 1660 .................................................. 3
ENGL 311 British Literature, 1660-1900 ............................................. 3
ENGL 312 American Literature to 1900 ............................................. 3
ENGL 313 Literature in English since 1900 ...................................... 3
ENGL 372 Advanced Composition OR
ENGL 377 Peer Tutoring and Composition Theory ............................ 3
Electives ............................................................................................... 6

Two literature courses, numbered 300 or 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 labora-
tory 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 .................................................................................. 37
ENGL 301 Introduction to Literary Study .............................................. 3
ENGL 307 Teaching Reading and Young Adult Literature ...................... 3
ENGL 400 Greek Mythology OR
ENGL 402 The Bible as Literature ...................................................... 3
ENGL 310 British Literature to 1660 .................................................. 3
ENGL 311 British Literature, 1660-1900 ............................................. 3
ENGL 312 American Literature to 1900 ............................................. 3
ENGL 313 Literature in English since 1900 ...................................... 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 ..................................... 3
ENGL 377 Peer Tutoring and Composition Theory ............................ 3
ENGL 421 Shakespeare ................................................................. 3
ENGL 486 English Education Capstone Presentation .......................... 1
Electives (select two of the following) ................................................................................ 6

ENGL 356 Appalachian Culture OR
ENGL 358 Appalachian Literature .......................................................... 3
ENGL 373 Creative Writing .................................................................... 3
ENGL Any other English elective approved by advisor ..................... 3

See professional education course listings under Education: Professional Studies Course for Secondary Education (37 hours required). Special Methods of Teaching English is EDUC 421.
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 ............................................................................................. 30
ENVS 201 Dimensions of Environmental Science I .................................. 4
ENVS 202 Dimensions of Environmental Science II ............................... 4
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 .............................................................................. 52
ENVS 307 Introduction to Historic Preservation ................................................................ 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
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 313</td>
<td>Invertebrate Natural History</td>
<td>4</td>
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<tr>
<td>BIOL 324</td>
<td>Plant Taxonomy I</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 325</td>
<td>Plant Taxonomy II</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Plant Physiology</td>
<td>3</td>
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<tr>
<td>BIOL 412</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 344*</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 416**</td>
<td>Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>GSCI 306, 307</td>
<td>Introduction to Oceanography and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 315, 315L</td>
<td>Organic Chemistry I and Lab</td>
<td>4</td>
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<tr>
<td>CHEM 316, 316L</td>
<td>Organic Chemistry II and Lab</td>
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<td>CHEM 321, 321L</td>
<td>Analytic Chemistry and Lab</td>
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<td>CHEM 322, 322L</td>
<td>Instrumental Analysis and Lab</td>
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<tr>
<td>CHEM 327, 327L</td>
<td>Solution Chemistry and Lab</td>
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<tr>
<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>
<td>4</td>
</tr>
<tr>
<td>CHEM 333, 333L</td>
<td>Environmental Chemistry and Lab</td>
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### Earth sciences

<table>
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<tr>
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<tbody>
<tr>
<td>ENVS 360</td>
<td>Sedimentology and Stratigraphy</td>
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<tr>
<td>ENVS 362</td>
<td>Soil Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 440</td>
<td>Solid Waste/Air Quality Management</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 441</td>
<td>Hydrology and Lab</td>
<td>4</td>
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<tr>
<td>GSCI 303</td>
<td>Meteorology</td>
<td>4</td>
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<tr>
<td>GSCI 312</td>
<td>Historical Geology</td>
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### Physics

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<th>Course Code</th>
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<td>PHYS 201, 201L</td>
<td>College Physics I and Lab AND</td>
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<tr>
<td>PHYS 202, 202L</td>
<td>College Physics II and Lab OR</td>
</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I and Lab AND</td>
</tr>
<tr>
<td>PHYS 222, 222L</td>
<td>General Physics II and Lab</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 101, 102</td>
<td>General Biological Science OR</td>
</tr>
<tr>
<td>BIOL 208, 209</td>
<td>Plants as Organisms and Animals as Organisms</td>
</tr>
<tr>
<td>MATH 205</td>
<td>Calculus with Applications OR</td>
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<tr>
<td>MATH 314</td>
<td>Statistics</td>
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</table>

### Concentration requirements

#### Required courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENVS 307</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 450</td>
<td>Environmental Internship</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 101, 101L</td>
<td>Chemistry in Society I and Lab AND</td>
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</tr>
<tr>
<td>CHEM 102, 102L</td>
<td>Chemistry in Society II and Lab OR</td>
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</tr>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab AND</td>
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</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab</td>
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<tr>
<td>CHEM 325</td>
<td>Computers in Science</td>
<td>3</td>
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</table>

### Environmental science and biological resources

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 310*</td>
<td>Plant Pathology</td>
<td>3</td>
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<tr>
<td>BIOL 313*</td>
<td>Invertebrate Natural History</td>
<td>4</td>
</tr>
</tbody>
</table>

### Concentration requirements

50-54 credits
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 .............................. 3
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 Lab ....................................... 4
ENVS 345  Sustainable Development ............................................ 3
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 356  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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BIOL 208, 209</td>
<td>Plants as Organisms and Animals as Organisms</td>
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<tr>
<td>MATH 205</td>
<td>Calculus with Applications OR MATH 314</td>
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Concentration requirements ................................................................................. 42

Required courses .................................................................................................. 36

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 325</td>
<td>Computers in Science</td>
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<tr>
<td>ENVS 307</td>
<td>Introduction to Historic Preservation</td>
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<td>ENVS 342</td>
<td>Limnology</td>
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<tr>
<td>ENVS 343</td>
<td>Aquatic Entomology OR</td>
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<td>ENVS 344</td>
<td>Ichthyology</td>
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<td>ENVS 441</td>
<td>Hydrology and Lab</td>
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<td>ENVS 450</td>
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<td>College Physics II and Lab OR</td>
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<td>General Physics I and Lab AND</td>
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<tr>
<td>Biological and earth sciences</td>
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<tr>
<td>ENVS 360</td>
<td>Sedimentology</td>
<td>4</td>
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<tr>
<td>ENVS 362</td>
<td>Soil Science</td>
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<td>ENVS 440</td>
<td>Solid Waste/Air Quality Management</td>
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<td>GSCI 303</td>
<td>Meteorology</td>
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<td>GSCI 306, 307</td>
<td>Introduction to Oceanography and Lab</td>
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<tr>
<td>GSCI 312</td>
<td>Historical Geology</td>
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<tr>
<td>BIOL 302</td>
<td>Microbiology</td>
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<td>BIOL 305</td>
<td>Cell Biology</td>
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<td>BIOL 310</td>
<td>Plant Pathology</td>
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<td>BIOL 313</td>
<td>Invertebrate Natural History</td>
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<td>BIOL 324</td>
<td>Plant Taxonomy I</td>
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<td>Plant Taxonomy II</td>
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<td>BIOL 344*</td>
<td>Genetics</td>
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<td>BIOL 410</td>
<td>Plant Physiology</td>
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<td>BIOL 412</td>
<td>Comparative Animal Physiology</td>
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<tr>
<td>BIOL 416**</td>
<td>Molecular Biology</td>
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</table>

*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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry I and Lab.</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 315, 315L</td>
<td>Organic Chemistry I and Lab OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 321, 321L</td>
<td>Analytic Chemistry and Lab OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 333, 333L</td>
<td>Environmental Chemistry and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101, 102</td>
<td>General Biological Science OR</td>
<td></td>
</tr>
<tr>
<td>BIOL 208, 209</td>
<td>Plants as Organisms and Animals as Organisms OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 101, 101L</td>
<td>Chemistry and Society I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>CHEM 102, 102L</td>
<td>Chemistry and Society II and Lab OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab OR</td>
<td>8</td>
</tr>
<tr>
<td>MATH 314</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration requirements ....................................................................................... 51-54

Required courses ...................................................................................................... 33
ANTH 225 Introduction to Museum Studies ........................................ 3
ANTH 300 Introduction to Archaeology ............................................. 3
ANTH 370 American Architectural Heritage .................................... 3
CHEM 325 Computers in Science ...................................................... 3
ENVS 307 Introduction to Historic Preservation .................................. 3
ENVS 371 Documentation of Historic Properties ............................. 3
ENVS 372 Preservation Technology .................................................. 3
ENVS 450 Environmental Internship ................................................ 6
HIST 201 History of the United States to 1865 .................................. 3
HIST 202 History of the United States, 1865 to Present .......................... 3
Management of our resources (select two courses) .................................. 6-7
ENVS 210 Introduction to Park Administration .................................. 3
ENVS 305 Environmental Law and Regulation .................................. 4
ENVS 309 Regional Geology and Geomorphology ............................ 3
ENVS 310 Park Management ............................................................. 3
ENVS 319 Land Use Planning ............................................................. 3
ENVS 368 Geology of National Parks ................................................ 3
Historical perspective (select two courses) ............................................. 6
ENVS 302 Era of the American Revolution, 1816-1850 ....................... 3
ENVS 303 The Jacksonian Era, 1816-1850 ......................................... 3
ENVS 304 The American Civil War and Reconstruction ..................... 3
ENVS 305 History of the Lower Shenandoah Valley .......................... 3
HIST 309 West Virginia and the Appalachian Region .......................... 3
ENVS 220 Battlefield Preservation .................................................... 3
Archaeology and anthropology (select two courses) .................................. 6-8
ANTH 315 Cultural Anthropology ..................................................... 3
ANTH 345 Archaeological Field Methods and Lab .............................. 4
ANTH 380 Historical Archaeology and Lab ....................................... 4
ANTH 390 Native American Ethnography .......................................... 3

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 243 Engineering Mechanics of Materials ................................... 3
ENGR 301 Engineering Thermodynamics OR
ENGR 351 Introduction to Fluid Mechanics ....................................... 3
### Programs of Study • 109

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 450</td>
<td>Environmental Internship</td>
<td>6</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>PHYS 222, 222L</td>
<td>General Physics II and Lab.</td>
<td>8</td>
</tr>
<tr>
<td>Environmental science (select three courses)</td>
<td></td>
<td>11-12</td>
</tr>
<tr>
<td>ENVS 341</td>
<td>Sustainable Energy and Development</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 362</td>
<td>Soil Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 422</td>
<td>Stream Ecology</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 440</td>
<td>Solid Waste/Air Quality Management</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 441</td>
<td>Hydrology and Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 314*</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

The environmental sustainability concentration provides students with a strong background in environmental studies with an emphasis on sustainability. The program explores ways of meeting humans’ current and future needs for energy, food, and shelter that are scientifically, socially, and economically viable and that do not compromise earth’s resources and ecological systems. Students develop a specific research problem and acquire hands-on training through a required internship. Students also select a minor in a complementary field, enabling them to tailor their degree to future employment or further study of sustainable living solutions at the graduate level.

### 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>GSCI 103, 104</td>
<td>General Physical Science I and II</td>
<td>8</td>
</tr>
<tr>
<td>MATH 314*</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

*The prerequisite for MATH 314 is MATH 154, MATH 108, or permission of the chair.

Total hours required: 51-52

### Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101, 101L</td>
<td>Chemistry in Society I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>CHEM 102, 102L</td>
<td>Chemistry in Society II and Lab OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry I and Lab AND</td>
<td></td>
</tr>
<tr>
<td>CHEM 209, 209L</td>
<td>General Chemistry II and Lab</td>
<td>8</td>
</tr>
<tr>
<td>ENVS 201</td>
<td>Dimensions of Environmental Science I</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 202</td>
<td>Dimensions of Environmental Science II</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 306</td>
<td>Environmental Policy</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 340</td>
<td>Sustainable Agriculture and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 341</td>
<td>Sustainable Energy and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 345</td>
<td>Sustainable Development</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 422</td>
<td>Stream Ecology OR</td>
<td></td>
</tr>
<tr>
<td>ENVS 342</td>
<td>Limnology OR</td>
<td></td>
</tr>
<tr>
<td>ENVS 441</td>
<td>Hydrology and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 450</td>
<td>Environmental Internship</td>
<td>6</td>
</tr>
<tr>
<td>ENVS 451</td>
<td>Senior Research Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Computers in Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 333, 333L</td>
<td>Environmental Chemistry and Lab</td>
<td>4</td>
</tr>
<tr>
<td>Any ENVS course numbered 300 or above</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Any GSCI course numbered 300 or above</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Students wishing to take upper-level Chemistry should complete the CHEM 207, 209 sequence.

### Portfolio Requirement for Environmental Studies Major:

It is required that each major complete a portfolio prior to graduation. See advisor for specific details.
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 ......................................................................................................... 27
ENVS 201  Dimensions of Environmental Science I .............................................. 4
ENVS 202  Dimensions of Environmental Science II .......................................... 4
ENVS 306  Environmental Policy ................................................................. 4
ENVS 307  Introduction to Historical Preservation ............................................ 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
ENVS 360  Sedimentology ........................................................................ 4
ENVS 362  Soil Science ........................................................................... 4
ENVS 440  Solid Waste/Air Quality Management ........................................ 4
ENVS 441  Hydrology and Lab ................................................................. 4
ENVS 422  Stream Ecology ......................................................................... 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 .............................................................................................................. 34
FACS 100  FACS Freshman Seminar ......................................................... 3
FACS 101  Textiles ................................................................................. 3
FACS 102  Apparel Construction Techniques .............................................. 3
FACS 202  Food Science and Technology .................................................. 4
FACS 215  Fashion Analysis ..................................................................... 3
FACS 300  Marriage Relations .................................................................... 3
FACS 304  Child Development ................................................................. 3
FACS 308  Housing .................................................................................. 3
FACS 318  Nutrition .................................................................................. 3
PSYC 343  Psychology of Aging OR
SOWK 402  Social Gerontology ................................................................. 3
FACS 404  Personal Finance ..................................................................... 3
FACS 430  Seminar .................................................................................. 2

Electives ............................................................................................................................. 6
FACS 310  Parents and Children through the Lifespan .................................. 3
FACS 315  Cultural Influences on Clothing .................................................. 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 392</td>
<td>Co-op in Family and Consumer Sciences</td>
<td>3</td>
</tr>
<tr>
<td>FACS 403</td>
<td>Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>FACS 410</td>
<td>Special Studies</td>
<td>1-4</td>
</tr>
<tr>
<td>ENVS 321</td>
<td>American Decorative Arts</td>
<td>3</td>
</tr>
<tr>
<td>BADM 360</td>
<td>Marketing of Services</td>
<td>3</td>
</tr>
</tbody>
</table>

**Curriculum for a Major in Family and Consumer Sciences with a Concentration in Hospitality and Food Service Management**

Specific general studies requirements:
- CHEM 120, 120L College Chemistry I and Lab AND
- CHEM 122, 122L College Chemistry II and Lab
- Two semesters of foreign language

Total hours required: 46

Required courses: 31

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 101</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FACS 102</td>
<td>Apparel Construction Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FACS 202</td>
<td>Food Science and Technology</td>
<td>4</td>
</tr>
<tr>
<td>FACS 300</td>
<td>Marriage Relations</td>
<td>3</td>
</tr>
<tr>
<td>FACS 304</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 306</td>
<td>Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>FACS 307</td>
<td>Family Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>FACS 308</td>
<td>Housing</td>
<td>3</td>
</tr>
<tr>
<td>FACS 318</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FACS 403</td>
<td>Consumer Economics</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>
<tr>
<td>RECR 125</td>
<td>Introduction to Commercial Recreation/Tourism OR</td>
<td>3</td>
</tr>
<tr>
<td>RECR 343</td>
<td>21st-Century Tourism OR</td>
<td>3</td>
</tr>
<tr>
<td>RECR 344</td>
<td>Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>FACS 410</td>
<td>Special Studies</td>
<td>1-4</td>
</tr>
</tbody>
</table>

A student is required to take the courses listed in the Catalog under General Studies, except that CHEM 120, 120L, 122, and 122L must be selected for the science requirement. The student must complete two semesters of any one or two foreign language(s).

**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**

Select eight of the following courses with advisor approval: 24-25

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 101</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FACS 102</td>
<td>Apparel Construction Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FACS 202</td>
<td>Food Science and Technology</td>
<td>4</td>
</tr>
<tr>
<td>FACS 300</td>
<td>Marriage Relations</td>
<td>3</td>
</tr>
<tr>
<td>FACS 304</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 307</td>
<td>Family Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>FACS 308</td>
<td>Housing</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>FACS 403</td>
<td>Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>FACS 404</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 321</td>
<td>American Decorative Arts</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 343</td>
<td>Psychology of Aging OR</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 402</td>
<td>Social Gerontology</td>
<td>3</td>
</tr>
</tbody>
</table>
### 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.

Total hours: 24

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 300 Marriage Relations</td>
<td>3</td>
</tr>
<tr>
<td>FACS 304 Child Development</td>
<td>3</td>
</tr>
<tr>
<td>FACS 404 Personal Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose five of the following courses: 15

- FACS 310 Parents and Children through the Lifespan
- FACS 318 Nutrition
- FACS 403 Consumer Economics
- PSYC 343 Psychology of Aging
- SOWK 402 Social Gerontology
- EDUC 314 Foundations in Early Education
- EDUC 334 Instructional Strategies in Early Education

### 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.

Total hours: 24

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 101 Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FACS 102 Apparel Construction Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FACS 215 Fashion Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FACS 315 Cultural Influences on Clothing</td>
<td>3</td>
</tr>
<tr>
<td>FACS 318 Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>BADM 360 Marketing of Services</td>
<td>3</td>
</tr>
<tr>
<td>FACS 403 Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>FACS 404 Personal Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

### Curriculum for a Minor in Family and Consumer Sciences with a Hospitality and Food Management Emphasis

Total hours: 27

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 318 Nutrition OR FACS 328 Nutrition and Diet Therapy</td>
<td>2-3</td>
</tr>
<tr>
<td>FACS 202 Food Science and Technology</td>
<td>4</td>
</tr>
<tr>
<td>FACS 403 Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>FACS 404 Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>FACS 392 Cooperative Education in Family and Consumer Sciences (hospitality placement) OR FACS 385 Family and Consumer Sciences Externship (hospitality placement)</td>
<td>3</td>
</tr>
<tr>
<td>FACS 410 Special Studies</td>
<td>2-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 310 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 340 Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BADM 311 Small Business Management OR BADM 411 Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 302 Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BADM 360 Marketing of Services</td>
<td>3</td>
</tr>
<tr>
<td>RECR 343 21st-Century Tourism</td>
<td>3</td>
</tr>
<tr>
<td>RECR 344 Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 201 Introductory Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105 World Cultural Geography</td>
<td>3</td>
</tr>
</tbody>
</table>
Curriculum for a Teaching Field in Family and Consumer Sciences Education
Grades 5-Adult

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 develop critical thinking skills in dealing with family concerns, issues, and problems;
2. To explore the role of families in society and the application of theories to enhance problem-solving abilities;
3. To develop a student's knowledge base and experience regarding issues that affect families using a lifespan perspective; and
4. To apply the ecosystem approach to the daily lives of students using family and consumer sciences curriculum to increase life satisfaction.

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

FACS 100 FACS Freshman Seminar ........................................................ 1
FACS 101 Textiles ................................................................................. 3
FACS 102 Apparel Construction Techniques ......................................... 3
FACS 202 Food Science and Technology ................................................ 4
FACS 300 Marriage Relations ............................................................... 3
FACS 304 Child Development ............................................................... 3
FACS 307 Family Resource Management .............................................. 3
FACS 308 Housing ................................................................................ 3
FACS 310 Parents and Children through the Lifespan ............................ 3
FACS 318 Nutrition .............................................................................. 3
FACS 404 Personal Finance .................................................................... 3
FACS 430 Seminar .................................................................................. 2
Electives (choose three of the following) ..................................................................... 9
FACS 215 Fashion Analysis .............................................................. 3
FACS 315 Cultural Influences on Clothing ........................................... 3
FACS 403 Consumer Economics .......................................................... 3
PSYC 343 Psychology of Aging OR SOWK 402 Social Gerontology .................................................. 3
ENVS 321 American Decorative Arts .................................................... 3

Students are required to take the courses listed in the Catalog under General Studies and under the Professional Studies Core for Secondary Education. See professional education course listings under Education: Professional Studies Core for Secondary Education (37 hours required). EDUC 428 Special Methods of Teaching Family and Consumer Sciences is required.

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-Adult, 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-Adult 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-Adult

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 College Physics I and Lab AND
PHYS 202, 202L College 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, 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 specialization in general science education 5-Adult 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 (37 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-Adult, Chemistry 9-Adult, and General Science 5-Adult Specializations.

Contact Person: Dr. Burt Lidgerding, Byrd Science Center 216, 304-876-5231.

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 College Physics I and Lab ...................................................... 4  
PHYS 202, 202L College 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 AND FITNESS  
Curriculum for a Minor in Health and Fitness  
This minor is designed to provide students with knowledge of health, fitness, and applied movement.  
Total hours required for minor................................................................. 25  
HLTH 225 First Aid................................................................................. 4  
HLTH 103 Personal Health OR  
HLTH 200 Health and Wellness .............................................................. 3  
HLTH 300 Substance Use and Abuse OR  
ATHC 324 Care and Prevention of Athletic Injuries ................................. 3  
HLTH 468 Principles of Sport Nutrition OR  
FACS 318 Nutrition ............................................................................... 3  
HLTH 390 Exercise Prescription OR  
HLTH 391 Worksite Health Promotion ................................................... 3  
PHED 370 Applied Anatomy and Physiology ........................................... 4  
PHED 380 Perceptual Motor Learning .................................................... 3  
PHED 405 Applied Kinesiology ............................................................... 3

HEALTH EDUCATION  
The Department of Health, Physical Education, Recreation, and Sports, 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-Adult. 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-Adult  
Total hours required for the endorsement teaching field.................................... 30  
Required courses  
HLTH 103* Personal Health ..................................................................... 3  
HLTH 225* First Aid/CPR ........................................................................ 3  
GSPE 210* Fitness for Life ...................................................................... 2  
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  
HLTH 320 Human Sexuality ................................................................... 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-Adult:
I. Academic Requirements
Students in health education 5-Adult student teaching field must meet the following criteria before enrolling in EDUC 455 Student Teaching Grades PreK-Adult:
   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 Health, Physical Education, Recreation, and Sports 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 (34 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

<table>
<thead>
<tr>
<th>Total hours required</th>
<th>24-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses</td>
<td>18</td>
</tr>
<tr>
<td>ANTH 225 Introduction to Museum Studies</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 300 Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 370 American Architectural Heritage</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 307 Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 371 Documentation of Historical Properties</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 372 Preservation Technology and Historic Materials</td>
<td>3</td>
</tr>
</tbody>
</table>

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:

PSCI 101 American Federal Government .............................................. 3

Total hours required for a major .................................................................... 36

Required courses ................................................................................................. 18

HIST 201 and 202 History of the United States .................................................. 6
HIST 250 Introduction to Historical Studies...................................................... 3
HIST 314 Recent United States History OR
HIST 404 Contemporary World since 1929 ...................................................... 3

One 300- or 400-level course in European history from the following ....................... 3
HIST 329 Renaissance and Reformation.......................................................... 3
HIST 332 Medieval History ............................................................................. 3
HIST 333 Modern Europe ................................................................................. 3
HIST 338 European Women to 1500 .............................................................. 3
HIST 339 European Women since 1500.......................................................... 3
HIST 360 Evolution of European Government ................................................ 3
HIST 375 First World War ................................................................................ 3
HIST 407 England to 1603 .............................................................................. 3
HIST 408 England since 1603 ......................................................................... 3
HIST 410 Russia to 1855 ................................................................................ 3
HIST 412 Russia since 1855 ............................................................................. 3
HIST 416 Italian City States .............................................................................. 3
HIST 440 Ideas in the Modern West ............................................................... 3

Any other course (including independent studies and special topics courses)
in European history with permission of the Department of History ..................... 3

One 300- or 400-level course in African, Asian, Middle Eastern, or Latin American history chosen from the following................................................................. 3
HIST 320 Sub-Saharan Africa .............................................................3
HIST 331 Ancient History ........................................................................... 3
HIST 419 East Asia to 1800 ........................................................................... 3
HIST 420 East Asia since 1800 ....................................................................... 3
HIST 421 Modern Japan ................................................................................. 3
HIST 445 Latin American History to 1840 .................................................... 3
HIST 446 Latin American History since 1820 ................................................ 3

Other courses (including independent studies and special topics courses)
in African, Asian, Middle Eastern, or Latin American history with permission of the Department of History ................................................................. 3

Traditional concentration .................................................................................... 18

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

Public history concentration ............................................................................. 18

HIST 345 Introduction to Public History ......................................................... 3
HIST 300 Historic Preservation (crosslisted as ENVS 307) .......................... 3
HIST 432 Internship in Public History OR
HIST 435 Civil War Practicum ........................................................................ 3

One course from the following ........................................................................... 3
HIST 318 The United States and World War II .............................................. 3
HIST 360 Evolution of European Government ............................................. 3
HIST 375 First World War .............................................................................. 3

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

ANTH 225 Introduction to Museum Studies .................................................. 3
ANTH 345 Archaeological Field Methods and Lab ..................................... 3
ANTH 370 Historic Architecture in the United States .................................. 3
ENVS 220 Battlefield Preservation ............................................................... 3
ENVS 322 Environmental History .................................................... 3
HIST xxx Any two 300- or 400-level history courses and can include PSCI 400 Supreme Court and Constitutional Law ................................. 6

Civil War and Nineteenth-Century America concentration............................................... 18
HIST 304 Civil War America, 1850-1865 .............................................. 3
HIST 307 The Reconstruction Era, 1865-1877 ......................................... 3
HIST 430 Civil War Seminar OR
HIST 435 Practicum in Civil War Studies ............................................... 3
One course from the following................................................................................... 3
HIST 303 The Jacksonian Era, 1816-1850 .......................................3
HIST 308 The Old South .................................................................3
HIST 345 Introduction to Public History ............................................3
HIST 405 Introduction to African American History ............................3
HIST 438 Soldiers and American Society, 1861-1865 ........................3
Elective courses.......................................................................................................... 6

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

Curriculum for a Minor in History
Specific general studies requirement:
PSCI 101 American Federal Government .............................................. 3
Total hours required for a minor ............................................................................................ 24
Required courses.............................................................................................................. 15
HIST 201 and 202 History of the United States .................................................. 6
HIST 314 Recent United States History OR
HIST 404 Contemporary World since 1929 ............................................... 3
One 300- or 400-level course in European history from the following ....................... 3
HIST 329 Renaissance and Reformation ...................................................... 3
HIST 332 Medieval History ........................................................................... 3
HIST 333 Modern Europe ........................................................................... 3
HIST 338 European Women to 1500 ......................................................... 3
HIST 339 European Women since 1500 ...................................................... 3
HIST 360 Evolution of European Government ........................................ 3
HIST 375 First World War ........................................................................... 3
HIST 407 England to 1603 ........................................................................... 3
HIST 408 England since 1603 ................................................................. 3
HIST 410 Russia to 1855 ........................................................................... 3
HIST 412 Russia since 1855 ........................................................................... 3
HIST 416 Italian City States ........................................................................... 3
HIST 440 Ideas in the Modern West ......................................................... 3
Any other course (including independent studies and special topics courses) in European history with permission of the Department of History ............................. 3
One 300- or 400-level course in African, Asian, Middle Eastern, or Latin American history chosen from the following .............................................. 3
HIST 320 Sub-Saharan Africa ....................................................................... 3
HIST 331 Ancient History ........................................................................... 3
HIST 419 East Asia to 1800 ........................................................................... 3
HIST 420 East Asia since 1800 ........................................................................... 3
HIST 421 Modern Japan .............................................................................. 3
HIST 445 Latin American History to 1840 .............................................. 3
HIST 446 Latin American History since 1820 ............................................. 3
Other courses (including independent studies and special topics courses) in African, Asian, Middle Eastern, or Latin American history with permission of the Department of History ........................................................................... 3
JOURNALISM
Shepherd University recognizes the interdisciplinary nature of the field of 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 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 Journalism
Total hours required ......................................................................................................... 24
JOUR 204 Introduction to Print Journalism ................................................................. 3
JOUR 300 Visual Reporting ......................................................................................... 3
JOUR 316 Magazine Writing ...................................................................................... 3
ENGL 270* Traditional Grammar and Standard Usage ............................................. 3
COMM 400 Media Law and Ethics .............................................................................. 3
JOUR 444** Practicum in The Picket ........................................................................... 3
JOUR 451 Internship in Journalism ............................................................................ 3
Elective (choose one course listed below) .................................................................... 3
COMM 305 Writing Across the Media ........................................................................ 3
ENGL 372 Advanced Composition ............................................................................. 3
ENGL 382 Technical Editing ...................................................................................... 3
JOUR 305 History of Journalism in America ............................................................. 3
JOUR 310 Media and Politics ...................................................................................... 3
JOUR 315 Editing ........................................................................................................ 3

*Students may “test out” of ENGL 270, making a total of 21 hours for the minor.
**Students may repeat JOUR 444 more than once for credit.

MATHEMATICS
Mathematics is a very basic subject in the sense that it stands at the basis of all sciences, and it can be argued that a good training in mathematics enhances all intellectual activity in general. Most of the population, while they may never explicitly use mathematics in their everyday lives, do use their reasoning power, and the best way to strengthen that is through a solid mathematical training. The benefits of mathematical training are manifold. Aside from the obvious careers that are available, mathematical training develops a flexible mind and an ability to quickly and efficiently learn new things and solve diverse problems that arise in all walks of life. A minor in engineering is not allowed.

Curriculum for a Major in Mathematics (Traditional)
Required general studies
ECON 205 Principles of Macroeconomics ............................................................... 3
ENGL 104 Science and Technical Writing ................................................................. 3
PHYS 221/221L General Physics I ............................................................................ 4
PHYS 222/222L General Physics II .......................................................................... 4
MATH 155 Discrete Structures .................................................................................. 3
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 207</td>
<td>Calculus I (C or better required)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Calculus II (C or better required)</td>
<td>4</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>
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<tr>
<td>MATH 321</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 433</td>
<td>Applied Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 434</td>
<td>Senior Capstone</td>
<td>3</td>
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</table>

Five of the following courses: 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGR 451</td>
<td>Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Introduction to Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 318</td>
<td>Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 354</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 414</td>
<td>History and Development of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 424</td>
<td>Foundations of Geometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Curriculum for a Comprehensive Major in Mathematics—Engineering Concentration

The focus of this concentration is to prepare students for the third year of a baccalaureate degree program in engineering.

**First and Second Year**

Specific general studies requirements: 21

<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 207*</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 222, 222L</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Written English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 104</td>
<td>Science and Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

* A minimum grade of C is required in MATH 207.

Required engineering courses: 25-30

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGR 101</td>
<td>Engineering I</td>
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<tr>
<td>ENGR 102</td>
<td>Engineering II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 221, 222</td>
<td>Introduction to Electrical Engineering and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 241</td>
<td>Engineering Static</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 242</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 243</td>
<td>Engineering Mechanics or Materials* OR</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 315/316</td>
<td>Organic Chemistry I and II and Labs OR</td>
<td>8</td>
</tr>
<tr>
<td>ENGR 305</td>
<td>Digital Logic</td>
<td>3</td>
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<tr>
<td>ENGR 301</td>
<td>Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 351</td>
<td>Introduction to Fluid Mechanics</td>
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Concentration requirements: 20

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<tr>
<td>MATH 100</td>
<td>Freshman Seminar</td>
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<tr>
<td>MATH 208</td>
<td>Calculus II</td>
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<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>CHEM 207, 207L</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ECON 206</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>
Students who are seeking a degree in mathematics with a concentration in engineering must complete the following course of study concurrently with the first two years.

**Third and Fourth Years**

Required courses in computer science and mathematics ................................................... 36

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<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>
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<td>MATH 318</td>
<td>Numerical Analysis</td>
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<tr>
<td>MATH 321</td>
<td>Probability and Statistics</td>
<td>3</td>
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<td>MATH 329</td>
<td>Mathematical Modeling</td>
<td>3</td>
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<tr>
<td>MATH 354</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 392</td>
<td>Internship in Mathematics</td>
<td>3</td>
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<tr>
<td>MATH 434</td>
<td>Senior Capstone</td>
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<tr>
<td>ENGR 351</td>
<td>Fluid Mechanics</td>
<td>3</td>
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<tr>
<td>CIS 234</td>
<td>Introduction to Networking</td>
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<tr>
<td>CIS 386</td>
<td>Computer Organization</td>
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</table>

**Curriculum for a Comprehensive Major in Mathematics—Industrial Mathematics Concentration**

Total hours required .............................................................................................................. 127

Specific general studies requirements ................................................................................ 17

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECON 205</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>ENGL 104</td>
<td>Science and Technical Writing</td>
<td>3</td>
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<tr>
<td>MATH 155</td>
<td>Discrete Structures</td>
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</tr>
<tr>
<td>PHYS 221, 221L</td>
<td>General Physics I and Lab</td>
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<td>PHYS 222, 222L</td>
<td>General Physics II and Lab</td>
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Mathematics requirements ............................................................................................... 41

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<tbody>
<tr>
<td>MATH 100</td>
<td>Freshman Seminar</td>
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<tr>
<td>MATH 207*</td>
<td>Calculus I</td>
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<td>MATH 208</td>
<td>Calculus II</td>
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<td>MATH 309</td>
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<tr>
<td>MATH 310</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 318</td>
<td>Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 321</td>
<td>Probability and Statistics</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>Co-op in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 433</td>
<td>Applied Mathematics</td>
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</tr>
</tbody>
</table>

* A minimum grade of C is required in MATH 207.

Engineering requirements ................................................................................................. 25

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ENGR 101</td>
<td>Engineering I</td>
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<tr>
<td>ENGR 102</td>
<td>Engineering II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 241</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 242</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 221, 222</td>
<td>Introduction to Electrical Engineering and Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 243</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 326</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 351</td>
<td>Fluid Mechanics</td>
<td>3</td>
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</table>

Additional requirements ..................................................................................................... 7

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 207, 207L</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CIS 234</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 287</td>
<td>System Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 305</td>
<td>Digital Logic Design</td>
<td>4</td>
</tr>
</tbody>
</table>
Required courses from other departments ................................................................. 6
BADM 150 Introduction to Business ................................................................. 3
BADM 310 Principles of Management ............................................................. 3
ECON 206 Principles of Microeconomics ...................................................... 3

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-Adult
Total hours required ......................................................................................... 42
Content skill level:
MATH 106 Trigonometry .............................................................................. 3
MATH 108 Precalculus (general studies requirement)
MATH 154 Finite Mathematics .................................................................... 3
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 ....................................................................... 3
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

Special Requirements: 1.) Prior to student teaching, prospective student teachers must demonstrate competency in a computer programming language or receive a minimum of C in ENGR 102 Engineering II or CIS 104 Introduction to Computer and Information Sciences. 2.) To graduate, prospective student teachers must pass PRAXIS II Math Content Test or pass MATH 435 PRAXIS II Math Preparation.

Special Methods of Teaching Mathematics is EDUC 420.

Contact Person: Dr. Osman Guzide, Stutzman-Slonaker Hall 211A, 304-876-5304.
Curriculum for Endorsement in Mathematics Teaching Field Grades 5-9

General Mathematics through Algebra I

This endorsement is offered as an add-on to the K-6 elementary program or to any of the secondary programs.

Total hours required ........................................................................................................................................ 22

Content skill level:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 106</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 108</td>
<td>Precalculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 200</td>
<td>Geometry and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>MATH 205</td>
<td>Calculus with Applications</td>
<td>4</td>
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</table>

Additional mathematics for education:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 154</td>
<td>Finite Mathematics (general studies requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 254</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 314</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

See professional education course listings under Education: Professional Studies Core for Endorsement in Middle School Education (40-48 hours required). Special Methods of Teaching Mathematics is EDUC 420.

Contact Person: Dr. Osman Guzide, Stutzman-Slonaker Hall 211A, 304-876-5304.

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 .................................................................................................................................................. 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French II</td>
<td>3</td>
</tr>
<tr>
<td>FREN 203</td>
<td>Intermediate French I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 204</td>
<td>Intermediate French II</td>
<td>3</td>
</tr>
<tr>
<td>FREN 301</td>
<td>Advanced Conversation and Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (at least one must be 400-level) ........................................................................................................ 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>FREN 306</td>
<td>Introduction to France and the Francophone World</td>
<td>3</td>
</tr>
<tr>
<td>FREN 307</td>
<td>Introduction to French and Francophone Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 308</td>
<td>French Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>FREN 309</td>
<td>Francophone Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>FREN 311</td>
<td>Survey of French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 313</td>
<td>Survey of Francophone Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 367</td>
<td>Francophone Film Studies</td>
<td>3</td>
</tr>
<tr>
<td>FREN 411</td>
<td>Study Abroad</td>
<td>3</td>
</tr>
<tr>
<td>FREN 412</td>
<td>French-language Short Story</td>
<td>3</td>
</tr>
<tr>
<td>FREN 414</td>
<td>French-language Novel</td>
<td>3</td>
</tr>
<tr>
<td>FREN 416</td>
<td>Seminar in French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 419</td>
<td>Independent Study in French</td>
<td>3</td>
</tr>
</tbody>
</table>
Curriculum for a Major in Spanish

The major in Spanish 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 Spanish and Latin American literature, the Spanish language, and Spanish for the professions. 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 Spanish 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 Spanish language;
2. To contribute to the liberal arts education of all students by exposing them to the diversity and richness of Spanish and Latin American literature;
3. To prepare English education majors to become reflective problem solvers capable of teaching Spanish on the middle and secondary levels in a country as ethnically diverse as ours;
4. To provide students, particularly Spanish majors, with a broad background which will enable them to pursue graduate study; and
5. To give Spanish and Spanish 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.

Total hours required for a major in Spanish ................................................................. 31

Required courses .............................................................................................................. 16

- SPAN 301 Advanced Conversation and Composition I .............................................. 3
- SPAN 302 Advanced Conversation and Composition II .......................................... 3
- SPAN 306 Peninsular Culture and Civilization ............................................................ 3
- SPAN 307 Latin American Culture and Civilization ................................................... 3
- SPAN 411 Study Abroad ............................................................................................ 3
- SPAN 485 Capstone Presentation .............................................................................. 1

Electives ........................................................................................................................... 15

- SPAN 305 Spanish for Business .................................................................................. 3
- SPAN 310 Survey of Spanish Literature I .................................................................. 3
- SPAN 311 Survey of Spanish Literature II .................................................................. 3
- SPAN 312 Survey of Latin American Literature I ...................................................... 3
- SPAN 313 Survey of Latin American Literature II ..................................................... 3
- SPAN 367 Spanish and Latin American Film Studies .................................................. 3
- EDUC 425 Special Methods of Teaching Foreign Language ...................................... 3
- SPAN 400 Survey in Spanish I: Hispanic Short Story ............................................... 3
- SPAN 401 Survey in Spanish II: Hispanic Drama ....................................................... 3
- SPAN 402 Survey in Spanish III: Hispanic Novel ....................................................... 3
- SPAN 403 Survey in Spanish IV: Hispanic Poetry ..................................................... 3
- SPAN 404 Spanish Linguistics .................................................................................... 3
- SPAN 405 Seminar in Literature I ............................................................................. 3
- SPAN 406 Seminar in Literature II ............................................................................ 3
- SPAN 407 Seminar in Literature III ........................................................................... 3
- SPAN 410 Practicum in Spanish ................................................................................ 3
- SPAN 419 Independent Study in Spanish ................................................................... 3

Spanish majors must satisfy a general education language requirement in Spanish either by taking the appropriate courses or through a departmental challenge exam.

Curriculum for a Teaching Field in Spanish Education

Total hours required for a major in Spanish education ...................................................... 31

Required courses .............................................................................................................. 22

- SPAN 301 Advanced Conversation and Composition I .............................................. 3
- SPAN 302 Advanced Conversation and Composition II .......................................... 3
- SPAN 306 Peninsular Culture and Civilization ............................................................ 3
- SPAN 307 Latin American Culture and Civilization ................................................... 3
- SPAN 404 Spanish Linguistics .................................................................................... 3
- SPAN 411 Study Abroad ............................................................................................ 3
Programs of Study • 125

EDUC 425  Special Methods of Teaching Foreign Language ........................................... 3
SPAN 486  Capstone Presentation ....................................................................................... 1

Electives ......................................................................................................................................... 9

SPAN 305  Spanish for Business ......................................................................................... 3
SPAN 310  Survey of Spanish Literature I (recommended) ................................................. 3
SPAN 311  Survey of Spanish Literature II (recommended) ................................................ 3
SPAN 312  Survey of Latin American Literature I (recommended) ....................................... 3
SPAN 313  Survey of Latin American Literature II (recommended) ....................................... 3
SPAN 367  Spanish and Latin American Film Studies ....................................................... 3
SPAN 400  Survey in Spanish I: Hispanic Short Story ....................................................... 3
SPAN 401  Survey in Spanish II: Hispanic Drama ............................................................. 3
SPAN 402  Survey in Spanish III: Hispanic Novel .......................................................... 3
SPAN 403  Survey in Spanish IV: Hispanic Poetry ............................................................ 3
SPAN 405  Seminar in Literature I ...................................................................................... 3
SPAN 406  Seminar in Literature II ..................................................................................... 3
SPAN 407  Seminar in Literature III ................................................................................... 3
SPAN 410  Practicum in Spanish ......................................................................................... 3
SPAN 419  Independent Study in Spanish ......................................................................... 3

Students in the Spanish education program must also satisfy a general education language require-
ment in Spanish, either by taking the appropriate courses or through a departmental challenge
exam. See professional education course listings under Education: Professional Studies Core for
Secondary Education (37 hours required).

Contact Person: Dr. Denis Berenschot, Knutti Hall 217, 304-876-5346, dberensc@shepherd.edu.

Curriculum for a Minor in Spanish

*Total hours required for a minor in Spanish ........................................................................ 24

Required courses .................................................................................................................... 12

SPAN 101  Elementary Spanish I ......................................................................................... 3
SPAN 102  Elementary Spanish II ....................................................................................... 3
SPAN 203  Intermediate Spanish I ....................................................................................... 3
SPAN 204  Intermediate Spanish II ..................................................................................... 3

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

Nonliterary Track**:

SPAN 301  Advanced Conversation and Composition I ....................................................... 3
SPAN 302  Advanced Conversation and Composition II ..................................................... 3
SPAN 305  Spanish for Business ......................................................................................... 3
SPAN 306  Peninsular Culture and Civilization .................................................................... 3
SPAN 307  Latin American Culture and Civilization .......................................................... 3
SPAN 367  Spanish and Latin American Film Studies ....................................................... 3
SPAN 404  Spanish Linguistics ............................................................................................ 3
SPAN 411  Study Abroad ..................................................................................................... 3
EDUC 425  Special Methods for Teaching Foreign Languages ........................................ 3

Literary Track**:

SPAN 310  Survey of Spanish Literature I ........................................................................... 3
SPAN 311  Survey of Spanish Literature II ......................................................................... 3
SPAN 312  Survey of Latin American Literature I ............................................................. 3
SPAN 313  Survey of Latin American Literature II ............................................................. 3
SPAN 400  Survey in Spanish I: Hispanic Short Story ....................................................... 3
SPAN 401  Survey in Spanish II: Hispanic Drama ............................................................. 3
SPAN 402  Survey in Spanish III: Hispanic Novel .......................................................... 3
SPAN 403  Survey in Spanish IV: Hispanic Poetry ............................................................ 3
SPAN 405  Seminar in Literature I ...................................................................................... 3
SPAN 406  Seminar in Literature II ..................................................................................... 3
SPAN 410  Practicum in Spanish ......................................................................................... 3
SPAN 419  Independent Study in Spanish ......................................................................... 3
*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 music education with a teaching field in comprehensive music grades PreK-Adult 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 music 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 .................................................................................. 45*
Foreign language requirement ..................................................................................... 12
Music core requirements .............................................................................................. 32
Music concentration area plus electives ..................................................................... 39-43

Basic music core:

- MUEN 375 Masterworks ......................................................................................... 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 205 and voice performance majors may substitute MUSC 317 for MUSC 205.
***Waived for composition concentration students.

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
- MUEN 360 Band ...................................................................................................... 8
- Non-music electives ............................................................................................... 23

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.
- MUAP 344 Applied Voice ...................................................................................... 1
- MUEN 360 Band .................................................................................................. 1
- MUEN 373 Piano Ensemble and Accompanying .................................................. 6
- MUEN 374 Concert Choir OR
- MUEN 375 Masterworks ..................................................................................... 3
- MUSC 314 Keyboard Literature ............................................................................ 3
- MUSC 321 Piano Pedagogy .................................................................................... 2
- MUSC 329 Electronic Music Media ...................................................................... 2
- Non-music electives ............................................................................................ 16

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.
- MUSC 237 Diction I ............................................................................................... 3
- MUSC 247 Diction II .............................................................................................. 3
- MUSC 316 Vocal Literature ................................................................................... 3
- MUSC 323 Vocal Pedagogy .................................................................................... 2
- THEA 203 Acting I ................................................................................................. 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 207</td>
<td>Theater Practice OR</td>
<td>3</td>
</tr>
<tr>
<td>THEA 208</td>
<td>Theater Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non-music electives</td>
<td>14</td>
</tr>
</tbody>
</table>

**Students with a voice performance concentration may substitute MUSC 317 Opera and Oratorio Literature for MUSC 205 Theory IV.**

**Guitar performance concentration:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAP 342*</td>
<td>Applied Guitar</td>
<td>8</td>
</tr>
<tr>
<td>*</td>
<td>Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 8.</td>
<td></td>
</tr>
<tr>
<td>MUEN 360</td>
<td>Band</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 360</td>
<td>Band OR</td>
<td></td>
</tr>
<tr>
<td>MUEN 375</td>
<td>Masterworks</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 372</td>
<td>Guitar Ensemble</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Guitar Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-music electives</td>
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</tr>
</tbody>
</table>

**Music theater performance concentration:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAP 344*</td>
<td>Voice</td>
<td>8</td>
</tr>
<tr>
<td>*</td>
<td>Applied lessons. Must have 8 hours credit to graduate and must receive a jury level of 7.</td>
<td></td>
</tr>
<tr>
<td>GSPE 115</td>
<td>Modern Dance I</td>
<td>3</td>
</tr>
<tr>
<td>GSPE 116</td>
<td>Modern Dance II</td>
<td>3</td>
</tr>
<tr>
<td>MUEN 380</td>
<td>Music Theater/Opera Workshop</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 317</td>
<td>Opera and Oratorio Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 237</td>
<td>Diction I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 247</td>
<td>Diction II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 203</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 207</td>
<td>Theater Practice OR</td>
<td>3</td>
</tr>
<tr>
<td>THEA 208</td>
<td>Theater Practice</td>
<td>3</td>
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<tr>
<td></td>
<td>Non-music electives</td>
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</table>

**Students with a music theater performance concentration may substitute MUSC 316 or MUSC 205 Theory IV.**

**Composition concentration:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAP xxx</td>
<td>Applied Major Instrument (must achieve level 6 or higher)</td>
<td>6</td>
</tr>
<tr>
<td>MUAP xxx</td>
<td>Applied Minor Instrument (must achieve level 3 or higher)</td>
<td>2</td>
</tr>
<tr>
<td>MUAP 430</td>
<td>Music Composition</td>
<td>4</td>
</tr>
<tr>
<td>MUAP 450</td>
<td>Orchestration/Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MUEN 360</td>
<td>Band</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 374</td>
<td>Concert Choir OR</td>
<td></td>
</tr>
<tr>
<td>MUEN 375</td>
<td>Masterworks Chorale OR</td>
<td></td>
</tr>
<tr>
<td>MUEN 376</td>
<td>Chamber Singers OR</td>
<td></td>
</tr>
<tr>
<td>MUSC 227</td>
<td>Introduction to Conducting</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 230</td>
<td>Woodwind Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 231</td>
<td>Woodwind Techniques II</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 232</td>
<td>Brass Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 233</td>
<td>String Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 234</td>
<td>Percussion Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 327</td>
<td>Advanced Choral Conducting OR</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 328</td>
<td>Advanced Instrumental Conducting</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 329</td>
<td>Electronic Music Media</td>
<td>2</td>
</tr>
<tr>
<td>COMM 329</td>
<td>Sound Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non-music electives</td>
<td>13</td>
</tr>
</tbody>
</table>

**Piano pedagogy concentration:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUAP 340</td>
<td>Applied Piano</td>
<td>8</td>
</tr>
<tr>
<td>*</td>
<td>Applied lessons. Must have 8 hours credit to graduate, and must receive a jury level of 7.</td>
<td></td>
</tr>
<tr>
<td>MUAP 344</td>
<td>Applied Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 360</td>
<td>Band</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 373</td>
<td>Piano Ensemble &amp; Accompanying</td>
<td>6</td>
</tr>
</tbody>
</table>
Programs of Study • 129

MUEN 374 Concert Choir OR
MUEN 375 Masterworks.................................................................2
MUSC 314 Keyboard Literature.......................................................3
MUSC 321 Piano Pedagogy..............................................................2
MUSC 329 Electronic Music Media...................................................2
MUSC 420 Apprenticeship in Music Pedagogy .................................4
PSYC 101 Introduction to Psychology OR
MUSC 350 Music Psychology .........................................................3
PSYC 342 Adolescent Development...............................................3
Non-music electives ......................................................................8

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 .............................................2
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 PreK-Adult
Total minimum semester hours required ........................................................................................................... 149
Professional education requirements .................................................................................................................. 37
General education requirements ....................................................................................................................... 45
Music requirements ........................................................................................................................................... 67
MUAP xxx Applied Major Instrument .........................................................7
MUAP 497 Senior Music Activity .........................................................1

*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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUEN 360</td>
<td>Band (instrumentalists) OR MUEN 375 Masterworks (vocalists)</td>
<td>6</td>
</tr>
<tr>
<td>MUSC 100</td>
<td>First Year Seminar for Music Majors</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 103</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 104</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 105</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 106</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 203</td>
<td>Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 204</td>
<td>Aural Skills III</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 205</td>
<td>Theory IV</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 206</td>
<td>Aural Skills IV</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 227</td>
<td>Introduction to Conducting</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 230</td>
<td>Woodwind Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 231*</td>
<td>Woodwind Techniques II</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 232</td>
<td>Brass Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 233*</td>
<td>String Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 234*</td>
<td>Percussion Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 237**</td>
<td>Diction I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 303</td>
<td>Forms and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 310</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 311</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 312</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Guitar Pedagogy OR</td>
<td></td>
</tr>
<tr>
<td>MUSC 321</td>
<td>Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 322</td>
<td>Instrumental Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 323**</td>
<td>Vocal Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 324*</td>
<td>Marching Band Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 325</td>
<td>Choral Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 326</td>
<td>Teaching Elementary Education</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 327</td>
<td>Conducting II-Choral OR</td>
<td></td>
</tr>
<tr>
<td>MUSC 328</td>
<td>Conducting II-Instrumental</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 329</td>
<td>Electronic Music Media</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 498</td>
<td>Senior Music Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

* 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 (37 hours required). Special Methods of Teaching Music is EDUC 426.

Contact Person: Dr. David Gonzol, Coordinator of Music Education, Frank Center M-02, 304-876-5225.

Special Requirements for Music Majors (entrance audition required)

I. GPA Requirement

Music majors must achieve a C in all MUSC courses. Students receiving grades lower than C in any MUSC course must retake the course. Students accepted into the music program are tested to evaluate their relative skill level in music theory. Those students who pass the evaluation will enter the core curriculum Music Theory and Aural Skills sequence (MUSC 103 and MUSC 104).

A. Students who fail may retake the evaluation prior to the first day of classes, at the instructor's discretion, and once attaining a passing grade may enter into the normal course of study or;

B. Students who fail the evaluation will be required to register for Foundations of Music Theory (MUSC 101) in addition to Music Theory and Aural Skills (MUSC 103 and MUSC 104). These courses are to be taken concurrently.
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, even if the student has reached his/her required performance level and has achieved the required private applied credit hours. Composition majors must take a full hour of lessons on their primary instrument until they have reached a level of 6 on that instrument. At that point they may take lessons on their minor instrument or other instruments as desired. Composition majors may take more than one applied in a semester if desired and approved by the director of the music theory/composition area. Composition majors begin applied composition lessons after they have passed MUSC 105 (Music Theory II), and after that must take composition or orchestration lessons every semester they attend the University.

III. Ensemble Participation
A. Music majors are required to participate in the appropriate ensembles every semester of their University careers, with or without credit, save for the semester during which they are doing directed teaching. The term “appropriate ensemble” is determined by the head of each area and the department chair. Stage productions (opera and musical theater) are considered ensembles; all majors concentration in voice performance or musical theater are expected to audition for and participate in each stage production. Instrumental emphasis majors will take band each semester; vocal emphasis majors will take choir each semester. Keyboard and guitar emphasis majors may choose which of the two is most suitable to their goals. Piano emphasis majors may substitute keyboard ensemble as their appropriate ensemble after their fourth semester. The primary ensemble for composition majors is determined by their primary instrument; however, exceptions may be granted by permission of the department. A petition for such an exception must be submitted in writing to the department chair prior to registration for the affected semester.
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.
G. Ensemble directors may dismiss a student from an ensemble at any point in the semester if the student does not adhere to the guidelines stated in the course syllabus.

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. This level will be determined through a competency exam. The exam will be administered each spring semester. Students must receive a passing score (which may vary depending on the test) on the exam to graduate. Transfer students must take the exam the first spring semester they are enrolled in the department or during the semester they are enrolled in MUSC 205, as determined by the music history and music theory coordinators.

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.

XI. Music is a selective major and all majors must audition to be admitted into the Department of Music. In addition, all music majors must remain in good standing to continue within the music major. Generally, a student in good standing attends lessons, classes, and ensemble rehearsals; progresses through the course work (both major courses and general studies) in a timely manner; progresses through jury levels in a timely manner; passes barrier exams such as the sophomore competency exam in a timely manner; provides a positive influence on his or her peers; and acts in a manner befitting a future professional in the field of music. Failure to adhere to these standards, and others listed in the Music Student Handbook, may result in suspension or dismissal from the department.

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 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 the pre-nursing curriculum prior to matriculation;
2. Cumulative grade point average of 2.5. Must achieve grade C or above in the following courses: BIOL 225/227, BIOL 226/228, BIOL 302, CHEM 120/120L, CHEM 122/122L, NURS 310;
3. Submit a Department of Nursing Education application for admission; and
4. 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 certification 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 and drug screen, according to the procedure specified by the Department of Nursing Education;
6. Complete all course work within three years of completing the first upper-division nursing course;
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

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 and CPR certification;
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. 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)

Articulation: R.N.s will receive 39 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, and NURS 436. Completion of NURS 410 waives the requirement of NURS 310, 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. Earn 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 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
General studies and nursing prerequisites ......................................................................................... 64
Upper-division nursing requirements ............................................................................................... 63
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 Fundamentals of Mathematics OR
  MATH 105 College Algebra OR
  MATH 108 Precalculus OR
  MATH 154 Finite Mathematics OR
  MATH 155 Discrete Structures OR
  MATH 205 Calculus with Applications OR
  MATH 314 Statistics .................................................................... 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 OR
THEA 204 Introduction to Theater .................................................................. 2-3
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 OR
PHIL 208 Survey of Philosophy .................................................................. 3
BIOL 225* Human Anatomy and Physiology ............................................. 3
BIOL 227* Human Anatomy and Physiology Lab ...................................... 1
BIOL 302* Microbiology ........................................................................... 4
SOCI 203 General Sociology ..................................................................... 3
PSYC 101 Introduction to Psychology ...................................................... 3
COMM 202 Fundamentals of Speech ......................................................... 3

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 338 Nutrition and Diet Therapy OR
FACS 318 Nutrition ................................................................................... 3
NURS 310 Lifespan Health Promotion in Nursing ........................................... 3
*It is recommended that science courses 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 426 Nursing VIII Health Care of the Adult with Complex Problems ... 3
NURS 428 Nursing VIII Clinical Component .............................................. 2

Senior: second semester
NURS 419 Nursing VI Health Care of Women .......................................... 3
NURS 421 Nursing VI Clinical Component ............................................... 2
NURS 422 Nursing Health Care of the Adult: Gerontology Focus ............ 3
NURS 424 Nursing VII Clinical Component ............................................. 3
NURS 434 Management and Issues in Health Care .................................... 3
NURS 436 Senior Capstone Seminar ....................................................... 1

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 .............................................................................. 39
B.S.N. courses .......................................................................................................... 20

II. Upon completion of general studies and prerequisites, the R.N. will enroll in:
Fall or Spring:
NURS 313 Nursing I-A Health Assessment .................................................. 3
Spring or Fall:
NURS 324 Nursing Research ........................................................................... 2
Summer Only:
NURS 410 Advanced Nursing Concepts and Practice ................................ 6
Fall Only:
NURS 411 Nursing IV Community Health ............................................... 3
NURS 413 Nursing IV Clinical Component ................................................. 3
Spring Only:
NURS 434 Management and Issues in Health Care ...................................... 3

PHYSICAL EDUCATION
The Department of Health, Physical Education, Recreation, and Sports (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, PreK-Adult
Total hours required ................................................................................................ 45
See course listings under Education for professional courses.

Required courses
HLTH 103 Personal Health ............................................................................. 3
HLTH 225 First Aid/CPR .............................................................................. 3
PHED 104 Foundations of Physical Education ........................................... 3
PHED 246 Aquatics ....................................................................................... 1
PHED 301 Elementary School Physical Education I .................................. 3
PHED 315  Teaching Tumbling and Gymnastics ........................................ 2
PHED 325  Team Sport Activities ............................................................ 3
PHED 326  Individual Sport Activities ..................................................... 3
PHED 370  Applied Anatomy and Physiology ......................................... 4
PHED 380  Perceptual Motor Learning .................................................... 3
PHED 400  Current Issues and Trends in Physical Education ................. 3
PHED 401  Teaching Adaptive Physical Education ................................... 3
PHED 405  Applied Kinesiology ............................................................. 3
PHED 406  Curriculum and Administration of Physical Education ........ 3
PHED 410  Tests and Measurements in Physical Education .................... 3
GSPE 210  Fitness for Life ..................................................................... 2

Students should look under Curriculum for a Teaching Field in Health Education 5-Adult 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 PreK-Adult:

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 PreK-Adult:

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 Health, Physical Education, Recreation, and Sports 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 PreK-Adult:

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 academic 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 (34 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
Total hours required ......................................................................................................... 27
PHYS 221, 221L General Physics I and Lab ................................................................. 4
PHYS 222, 222L General Physics II and Lab ............................................................... 4
PHYS 322 Electricity and Magnetism ............................................................................ 3
PHYS 323 Modern Physics ......................................................................................... 3
PHYS 330 Advanced Laboratory .................................................................................. 2
ENGR 242 Engineering Dynamics ............................................................................... 3
MATH 207 Calculus I ................................................................................................. 4
MATH 208 Calculus II ................................................................................................. 4

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 oppor-
tunities to observe the federal government in operation.

Curriculum for a Major in Political Science
Total hours required ......................................................................................................... 36
Required courses .............................................................................................................. 18
PSCI 210, 211 Conduct of Political Inquiry I and II .................................................. 6
PSCI 300 State and Local Government ....................................................................... 3
PSCI 315 Early Political Theory OR
PSCI 316 Recent and Contemporary Political Theory ............................................. 3
PSCI 324 International Relations ............................................................................... 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
Elective courses ................................................................................................................ 18
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 Major in Political Science, International Concentration
Total hours required ......................................................................................................... 36
Required courses .............................................................................................................. 24
PSCI 210, 211 Conduct of Political Inquiry I and II .................................................. 6
PSCI 315 Early Political Theory OR
PSCI 316 Recent and Contemporary Political Theory ............................................. 3
Two of the following Comparative Government courses:
PSCI 325 Comparative Government: Western Europe OR
PSCI 327 Comparative Government: The Soviet Union and its Aftermath OR
PSCI 328 Comparative Government: Asia OR
PSCI 329 Comparative Government: The Middle East ......................................... 6
PSCI 324 International Relations ............................................................................. 3
PSCI 405 International Political Economy ............................................................... 3
PSCI 407 Introduction to International Law ............................................................. 3
International elective courses ........................................................................................ 6
PSCI 404 International Organization ....................................................................... 3
PSCI 406 American Foreign Policy since World War II ........................................... 3
PSCI 408 Global Problems ....................................................................................... 3
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<tr>
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<td>Comparative Government: The Soviet Union and its Aftermath OR</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 328</td>
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<td>Comparative Government: The Middle East</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 425</td>
<td>Readings in Political Science (International)</td>
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<tr>
<td>PSCI 443</td>
<td>Internship in Government (International)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 325</td>
<td>International Finance</td>
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<tr>
<td>ECON 326</td>
<td>International Trade</td>
<td>3</td>
</tr>
<tr>
<td>HIST 320</td>
<td>Sub-Saharan Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 404</td>
<td>The Contemporary World since 1929</td>
<td>3</td>
</tr>
<tr>
<td>HIST 420</td>
<td>Modern East Asia since 1800</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective courses ................................................................. 6

Any 300- or 400-level courses in political science except for the international elective courses listed above.

In addition, the student is required to complete 12 semester hours in the same foreign language and to demonstrate intermediate competence in that language by achieving a score specified by the department on a standardized language examination and by passing an interview with the modern language faculty.

Study Abroad: The department recommends study abroad for a summer, a semester, or a year, and will be inclined to accept credits earned abroad in partial fulfillment of the requirements of the international concentration.

### Curriculum for a Minor in Political Science

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

**Required courses** .................................................................. 12

<table>
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<tr>
<th>Course Code</th>
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<td>PSCI 315</td>
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<td>Recent and Contemporary Political Theory</td>
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<tr>
<td>PSCI 328</td>
<td>Comparative Government: Asia</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 324</td>
<td>International Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective courses ....................................................................... 12

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, students must also complete the general studies program, complete a minor field of study, meet the 12-hour foreign language requirement, and include at least 45 hours of courses numbered 300 and above 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**

**Total hours required**: 40

**Required hours**: 25

- **PSYC 101** Introduction to Psychology ................................................................. 3
- **PSYC 250** Statistics for the Social Sciences .......................................................... 4
- **PSYC 251** Research Methods in Psychology ....................................................... 3
- **PSYC 340** Lifespan Developmental Psychology .................................................. 3
- **PSYC 461** Survey of Physiological Psychology ................................................... 3
- **PSYC 420** History and Systems of Psychology ..................................................... 3
- **PSYC 484** Directed Readings ........................................................................... 1
- **PSYC 485** Senior Thesis .................................................................................. 3

**Electives**: 15

Restricted electives, Group I (choose one course)
- **PSYC 370** Sensation and Perception .................................................................. 3
- **PSYC 371** Memory and Cognition ....................................................................... 3
- **PSYC 372** Psychology of Learning ...................................................................... 3

Restricted electives, Group II (choose two courses)
- **PSYC 309** Abnormal Psychology ....................................................................... 3
- **PSYC 405** Social Psychology .............................................................................. 3
- **PSYC 410** Psychology of Personality .................................................................. 3

**Free electives (choose a minimum of two courses)** ....................................................... 6

At least 6 additional credits of PSYC 206 or any 300-400 PSYC, excluding PSYC 323 and 324 Conversational Sign Language I and II**.

*MATH 314 Statistics or BADM 224 Business Statistics may be substituted for PSYC 250.

**PSYC 415 Psychological Tests and Measurements is strongly recommended for those students interested in pursuing a career in clinical or counseling psychology.

**Curriculum for a Minor in Psychology**

**Total hours required**: 25

**Required courses**: 13

- **PSYC 101** Introduction to Psychology ................................................................. 3
- **PSYC 250** Statistics for the Social Sciences ....................................................... 4
- **PSYC 251** Research Methods in Psychology ....................................................... 3
- **PSYC 340** Lifespan Developmental Psychology .................................................. 3

**Electives**: 12

Restricted electives, Group I (choose one course)
- **PSYC 370** Sensation and Perception .................................................................. 3
- **PSYC 371** Memory and Cognition ....................................................................... 3
- **PSYC 372** Psychology of Learning ...................................................................... 3

Restricted electives, Group II (choose one course)
- **PSYC 309** Abnormal Psychology ....................................................................... 3
- **PSYC 405** Social Psychology .............................................................................. 3
- **PSYC 410** Psychology of Personality .................................................................. 3

**Free electives (choose a minimum of two courses)** ....................................................... 6

At least 6 additional credits of PSYC 206 or any 300-400 PSYC, excluding PSYC 323 and 324 Conversational Sign Language I and II**.

*MATH 314 or BADM 224 may be substituted for PSYC 250. Where the student has taken Statistics for the major, an additional upper-level PSYC course may be substituted.

**PSYC 415 Psychological Tests and Measurements is strongly recommended for those students interested in pursuing a career in clinical or counseling psychology.
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.

Sports Marketing
This concentration is designed to give students a broad background in marketing and sport-related marketing in addition to a strong foundation in recreation and sport.

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 and Progression 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.
3. Earn a minimum of C in each recreation and leisure studies core and concentration class.

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 Management in Recreation and 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 sport 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 OR
RECR 201 Sport Finance ............................................................................................... 3
BADM 340 Marketing .................................................................................................... 3
FACS 202  Food Science and Technology ................................................. 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 Services 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  Communication and New Media ................................... 3
COMM 302  Narrative Scriptwriting ............................................... 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 Services ............................. 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**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ACCT 201</td>
<td>Introductory Accounting I OR</td>
<td>3</td>
</tr>
<tr>
<td>RECR 201</td>
<td>Sport Finance</td>
<td>3</td>
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<tr>
<td>BADM 312</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BADM 340</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BADM 365</td>
<td>Promotional Strategy</td>
<td>3</td>
</tr>
<tr>
<td>RECR 108</td>
<td>Introduction to Sport Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 323</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>RECR 228</td>
<td>Sport Administration</td>
<td>3</td>
</tr>
<tr>
<td>RECR 342</td>
<td>Campus Recreation and Event Management</td>
<td>3</td>
</tr>
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</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 311</td>
<td>Small Business Management</td>
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</tr>
<tr>
<td>RECR 226</td>
<td>Sport Promotion/Marketing/Fund Raising</td>
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Select one of the following:

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<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 202</td>
<td>Introductory Accounting II</td>
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</tr>
<tr>
<td>RECR 350</td>
<td>Field Experience in Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>RECR 392</td>
<td>Cooperative Education in Recreation/Leisure Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

### Sport Marketing Concentration

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECR 108</td>
<td>Introduction to Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>RECR 226</td>
<td>Sport Promotion/Marketing/Fund Raising</td>
<td>3</td>
</tr>
<tr>
<td>BADM 340</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BADM 395</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>RECR 326</td>
<td>Advertising and Public Relations for Sport Professionals</td>
<td>3</td>
</tr>
<tr>
<td>RECR 350</td>
<td>Field Experience in Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>RECR 392</td>
<td>Cooperative Education in Recreation/Leisure Studies</td>
<td>3</td>
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Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BADM 350</td>
<td>Retailing</td>
<td>3</td>
</tr>
<tr>
<td>BADM 365</td>
<td>Promotional Strategy</td>
<td>3</td>
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<tr>
<td>BADM 375</td>
<td>Strategic Marketing</td>
<td>3</td>
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<tr>
<td>BADM 405</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>BADM 406</td>
<td>Professional Selling and Applied Business</td>
<td></td>
</tr>
<tr>
<td>RECR 323</td>
<td>Human Resource Management in HPERS</td>
<td>3</td>
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</tbody>
</table>

### Therapeutic Recreation Concentration

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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 401</td>
<td>Teaching Adapted Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>RECR 115</td>
<td>Introduction to Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>RECR 331</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>RECR 350</td>
<td>Field Experience in Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>RECR 430</td>
<td>Therapeutic Recreation Programming</td>
<td>3</td>
</tr>
<tr>
<td>RECR 431</td>
<td>Issues and Trends in Therapeutic Recreation</td>
<td>3</td>
</tr>
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</table>

Required for certification

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 309</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 300</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>
Curriculum for a Minor in Recreation and Leisure Studies
Total hours required ................................................................. 24
HLTH 225 First Aid/CPR ......................................................... 3
RECR 115 Introduction to Therapeutic Recreation .................. 3
RECR 125 Introduction to Commercial Recreation and Tourism .... 3
RECR 140 Introduction to Leisure Studies ........................... 3
RECR 316 Recreation Programming ..................................... 3
RECR 320 Facilities Management ....................................... 3
RECR 370 Environmental Education .................................... 3
RECR 407 Management in Recreation and Leisure Services ....... 3

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 four years post-high school 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.

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>
</tbody>
</table>
Additional from one or any combination of the above four areas &nbsp; 9  
Math &nbsp; 3  
MATH 101, 105, 154 (with satisfactory placement score). 
Total required general education &nbsp; 36  

A further requirement is 40 semester hours credit in 300- and 400-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 in the calculation of the institutional and overall grade point average. If an R.B.A. graduate returns to complete a traditional baccalaureate degree, all grades of F will be returned to the calculation of the institutional overall grade point average.

** 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-Adult **

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 315  History of American Women 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 410  Russia to 1855 OR  
HIST 412  History of Russia since 1855 OR  
HIST 445  Latin American History to 1840 OR  
HIST 446  Latin American History since 1820 ................................................................. 3  
HIST 320  Sub-Saharan Africa OR  
HIST 419  East Asia to 1800 OR  
HIST 420  Modern East Asia OR  
HIST 421  History of Modern Japan .......................................................................... 3  
GEOG 105  World Cultural Geography ...................................................................... 3  
GEOG 301  World Economic Geography .................................................................. 3  
GEOG 400  Geography of Latin America OR  
GEOG 407  Geography of Asia OR  
GEOG 408  Geography of Africa .............................................................................. 3  
PSCI 300  State and Local Government OR  
PSCI 422  American Political Thought ....................................................................... 3
ECON 206 Principles of Microeconomics ......................................................... 3
PSYC 101 Introduction to Psychology .......................................................... 3
SOCI 205 Social Problems ............................................................................ 3
ANTH 315 Cultural Anthropology OR
PSYC 405 Social Psychology OR
SOCI 403 Ethnic Relations........................................................................... 3

Curriculum for Teaching Field Endorsement 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. This endorsement is offered only as an add-on to the K-6 elementary program or to any of the secondary programs.

Specific general studies requirements .................................................................................. 6
PSCI 101 American Federal Government .......................................................... 3
ECON 123 Contemporary Economics......................................................................... 3

Required courses ............................................................................................................. 24
HIST 201 History of the United States to 1865................................................. 3
HIST 202 History of the United States 1865 to Present ................................. 3
HIST 309 West Virginia and the Appalachian Region .................................... 3
HIST 314 Recent United States History, 1945 to Present OR
HIST 315 History of American Women OR
HIST 405 Introduction to African-American History .................................... 3
HIST 320 Sub-Saharan Africa OR
HIST 333 Modern European History OR
HIST 338 History of Women in Europe before 1500 OR
HIST 339 History of Women in Europe after 1500 OR
HIST 419 East Asia to 1800 OR
HIST 420 Modern East Asia OR
HIST 421 History of Modern Japan ...................................................................... 3
GEOG 105 World Cultural Geography ............................................................ 3
GEOG 301 World Economic Geography .......................................................... 3
PSCI 300 State and Local Government............................................................... 3

See professional education course listings under Education: Professional Studies Core for Endorsement in Middle School Education (40-48 hours required). Special Methods of Teaching Social Studies is EDUC 422.

Contact Person: Department of Education, Knutti Hall 107, 304-876-5305.

SOCIAL WORK
The Mission
The mission of the social work program, in concert with the University mission and the Council on Social Work Education Educational Policy and Accreditation Standards (2008), is to prepare competent, beginning-level professional practitioners who possess the knowledge and skills, values, and ethics necessary to intervene effectively on behalf of diverse clients on all practice levels. Through continuing education and training, the program enhances the practice community’s ability to facilitate the social functioning of clients and advance social change. The social work program envisions graduates as regional leaders whose efforts improve the social service delivery system and who work toward social and economic justice.

At the completion of the program, students are prepared to:

1. Practice beginning-level, evidence-based generalist social work with individuals, families, other groups, organizations, and communities through the use of professional knowledge, skills, principles, values, and ethics (EP 2.1.2, 2.1.6, 2.1.10).
2. Practice utilizing policy to inform and transform interventions targeting human rights and social and economic justice, particularly with oppressed and vulnerable populations (EP 2.1.5, 2.1.8).
3. Integrate knowledge of human behavior and the social environment to view diversity
4. Identify as a social worker whose professional judgment is based on critical thinking and communicated through professional use of self (EP 2.1.1, 2.1.3).

Accredited by the Council on Social Work Education, Shepherd University offers a four-year liberal arts-based 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 sequence of core 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.

**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. Students who do not comply with these requirements will not be admitted to the field instruction 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.

**Progression Through the Program**

In order to maintain good standing in the program, a student must maintain the following criteria:

1. Have a C or better in all Methods (SOWK 311, 312, 313), Field Experience (SOWK 407, 408, 411, 412), Social Work Capstone (SOWK 404), and Field Seminar courses (SOWK 409, 410). These courses may not be repeated more than once.

2. As per University policy, maintain a minimum 2.0 cumulative grade point average.

3. In order to fulfill community-based field education requirements, students must comply with agency screening criteria and arrange for reliable transportation.

**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 unac-
credited 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 Office in providing information to 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. This requirement is consistent with standard 3.2.5 of the EPAS of the Council on Social Work Education (CSWE). 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. The Social Work Program reserves the right to complete background checks on students applying to the field as deemed necessary and/or required by field instruction agencies.

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 2.1.8).

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 (temporarily barred from taking required social work courses) 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.

Eligibility for Licensure
As social work is a protected title throughout most of the United States (meaning one must have the B.S.W. degree from a Council on Social Work Education-accredited college or university and a state license), graduates must meet the criteria of social work licensing boards, established independently of any college or university. Having a B.S.W. degree entitles one to sit for the licensing exam; it does not guarantee licensure. Additionally, the licensing board of any state has the authority to deny a license to a person who has been convicted of a felony. Any student applying to the program who has a felony conviction is encouraged to discuss these matters with program faculty during the admission process. A felony conviction may severely restrict and prohibit field education opportunities.

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

Every Shepherd student needs a general studies math course. Social work also requires a statistics course. MATH 314 will satisfy both of these requirements. However, MATH 314 has prerequisites which may also need to be taken if this course is chosen. If another statistics course is chosen, students must make sure they also complete a general studies math course. If MATH 314 is the only math course taken, then three additional elective credits will be needed to fulfill credits required for graduation.

Social work curriculum requirements .............................................................................. 69
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 Capstone ............................................................... 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 412 Field Experience in Social Work IV ............................................. 3
SOWK 409 Field Experience Seminar ........................................................... 2
SOWK 410 Field Experience Seminar ........................................................... 2

Related required courses:
MATH 314* Statistics OR
BADM 224 Business Statistics OR
PSYC 250 Statistics for the Social Sciences ............................................... 3
PSYC 101 Introduction to Psychology ......................................................... 3
LBSC 103 Information Literacy for the Social Sciences ............................... 1
SOCI 205 Social Problems ........................................................................... 3
SOCI 303 The Family .................................................................................. 3
SOCI 405 Research Methods in Social Sciences ......................................... 3

Required electives .......................................................................................... 9
At least one of the required electives must be a social work elective
SOWK 320 Child Welfare Services ............................................................... 3
SOWK 402 Social Gerontology ................................................................. 3
SOWK 417 Sex and Gender in Contemporary Society ................................... 3

Two courses from the following .................................................................... 6
FACS 304 Child Development OR
PSYC 341 Infant/Child Development ......................................................... 3
PSYC 340 Life Span Development ............................................................... 3
SOCI 410 Social Theory .............................................................................. 3
SOCI 403 Ethnic Relations ......................................................................... 3

Additionally, students may choose any women's studies course, any sociology course, or any foreign
language (including sign language), study abroad course, co-op course(s), or advisor-approved
elective in extraordinary circumstances.

General electives .......................................................................................... 12
*MATH 314 also satisfies the general studies math requirement. Students must complete one ad-
ditional elective if they do not take a lower level math course.

**SOCIETY**

The sociology program, with both a traditional and a criminal justice concentration, offers stu-
dents 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 gradu-
ate 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 205</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 303</td>
<td>The Family</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 312</td>
<td>Juvenile Delinquency OR</td>
<td></td>
</tr>
<tr>
<td>SOCI 402</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 403</td>
<td>Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 405</td>
<td>Research Methods in Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 410</td>
<td>Social Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

*MATH 314 or BADM 224 may be substituted for PSYC 250.*

### Curriculum for a Major in Sociology, Criminal Justice Concentration

**Total hours required**: 42

**Required courses in sociology**: 18

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SOCI 205</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 303</td>
<td>The Family</td>
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**PSYC 250* Statistics for the Social Sciences**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Hours</th>
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<tr>
<td>SOCI 403</td>
<td>Ethnic Relations</td>
<td>3</td>
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<tr>
<td>SOCI 405</td>
<td>Research Methods in Social Sciences</td>
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</tr>
<tr>
<td>SOCI 410</td>
<td>Social Theory</td>
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**Required courses in criminal justice**: 15

<table>
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<tr>
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<tr>
<td>CRIM 200</td>
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<tr>
<td>CRIM 325</td>
<td>Penology OR</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 440</td>
<td>Probation and Parole</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 312</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 402</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 419</td>
<td>Internship in Sociology/Criminal Justice</td>
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**Electives in criminal justice and sociology**: 9

Choose any 3 of the following courses:

<table>
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<tr>
<td>CRIM 315</td>
<td>Criminal Investigation</td>
<td>3</td>
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<tr>
<td>CRIM 310</td>
<td>Principles of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 311</td>
<td>Criminal Justice Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 425</td>
<td>Police and Community Relations</td>
<td>3</td>
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<tr>
<td>SOCI 390</td>
<td>Sociology of Violence</td>
<td>3</td>
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<tr>
<td>SOCI 411</td>
<td>Social Stratifications</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 407</td>
<td>Collective Behavior</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 417</td>
<td>Sex and Gender Roles in Contemporary Society</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

*MATH 314 or BADM 224 may be substituted for PSYC 250.*
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 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, or SOWK 417.

THEATER (CONTEMPORARY)

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 (Contemporary)

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

- THEA 204 Introduction to Theater ................................................. 3
- THEA 205 Theater Technology .................................................... 3
- THEA 203 Acting I ........................................................................... 3
- THEA 309 Directing I ................................................................. 3
- THEA 207 Theater Practice ............................................................ 3

(Electives: 9 hours from one of the following two areas)

**Acting/Directing**

- THEA 312 Acting Studio I ................................................................. 3
- THEA 314 Acting Studio II ................................................................. 3
- THEA 316 Acting Studio III ................................................................. 3
- THEA 341 History of the Theater .................................................... 3
- THEA 311 Directing II ................................................................. 3

**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

- WMST 350 Seminar in Women’s Studies ............................................................................... 3-6
- PSYC 320 Human Sexual Behavior .................................................................................. 3
- PSYC 343 Psychology of Aging ......................................................................................... 3
- HIST 315 History of American Women ............................................................................. 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
- SOCI 303 Family ..................................................................................................................... 3
- PSCI 416 Race, Gender, and Politics ................................................................................... 3
- PSCI 411 Politics of Poverty ................................................................................................. 3
- SOWK 320 Child Welfare Services .................................................................................... 3
- SOWK 402 Social Gerontology ........................................................................................... 3
- SOWK 417 Sex and Gender in Contemporary Society ...................................................... 3
- COMM 403 Media Studies ...................................................................................................... 3
- COMM 406 Advertising and Imagery .................................................................................. 3
- MUSC 313 Women in Music ................................................................................................. 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 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:

<table>
<thead>
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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>ACCT</td>
<td>10 Accounting</td>
<td>COMM</td>
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<td>BADM</td>
<td>11 Business Administration</td>
<td>WASH</td>
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<td>45 Recreation</td>
<td>ENGR</td>
<td>89 Engineering</td>
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<td>63 Library Science</td>
<td>HPRE</td>
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<td>MUAP</td>
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<td>SIGN</td>
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<td>Appalachian Studies</td>
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SECTION VII

COURSES OF INSTRUCTION

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.

ANTHROPOLY
ANTH 203. INTRODUCTION TO ANTHROPOLOGY (3)
An introduction to the discipline of anthropology including an overview of the diversity of human culture from both biological and cultural perspectives. The course will examine the four sub-disciplines of the field including cultural anthropology, linguistics, physical anthropology, and archaeology.
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. PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY (3)
A survey of the origins of humans and the development of prehistoric cultures. A focus on the major forces of human evolution as well as the study of early cultural evolution.

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.

APPALACHIAN STUDIES
APST 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.

**APST 356. APPALACHIAN CULTURE (3)**
This interdisciplinary, crosslisted introduction to Appalachian culture will expose students to a wide variety of creative expression from the geographic region that constitutes Appalachia, particularly West Virginia, Virginia, Tennessee, North Carolina, and Kentucky. Students will study cultural stereotypes about Appalachia, the unique historical and cultural forces at work in Appalachia, and the rich expression of creativity in the area, including oral and written literatures, visual arts and crafts, and signing and songwriting. Prerequisite: ENGL 204 or permission of instructor.

**APST 358. APPALACHIAN LITERATURE (3)**
A course designed to survey the rich and diverse literature associated with the geographical region known as Appalachia. Both traditional writers identified with the area, such as Rebecca Harding Davis, Jesse Stuart, and Ambrose Bierce, as well as contemporary writers such as Denise Giardina, Robert Morgan, Marilou Awiakta, Fred Chappell, and Henry Louis Gates, will be explored in the course. Prerequisite: ENGL 204 or permission of instructor.

**APST 400. SEMINAR IN APPALACHIAN STUDIES (1-3)**
A course that may be crosslisted with courses in other disciplines or that offers students the opportunity to study related topics to the minor that would enhance the understanding of the area, the people, or the cultural heritage. Prerequisite: Permission of instructor and approval of the Appalachian studies coordinator. Repeatable up to 6 credits.

**APST 476. APPALACHIAN STUDIES PRACTICUM (1-3)**
The student serves as an assistant and/or researcher for the Appalachian Heritage Festival or a classroom apprentice, works on a special project or does Web design, serves on the Anthology of Appalachian Writers Committee or as a student editor, serves on the AHWIR Committee, or completes some type of service or practical project that benefits the community, the region, the University, or the Appalachian Studies Program. May be repeated to a maximum of 6 credits. Prerequisite: Permission of Appalachian Studies coordinator or Appalachian Heritage Festival director.

**APST 486. APPALACHIAN STUDIES CAPSTONE (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 coordinator of Appalachian studies. See requirements for independent study under Academic Information. Prerequisite: Permission of Appalachian studies coordinator.

**ART (CONTEMPORARY)**
*(Also see Graphic Design and Photography/Computer Imagery)*

**ART 103. INTRODUCTION TO THE VISUAL ARTS (2)**
An introductory course 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. For art majors/minors this course replaces ART 103.
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 Contemporary 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. Prerequisite: ART 140.

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 mold the current dialogue and motivation of art making in the 21st century. Prerequisite: ART 103 or ART 104. Prerequisite or corequisite: ART 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 contemporary culture and thought. Students begin to comprehend the move from representation to abstraction to art as a form of cultural critique. Prerequisites: ART 103 or 104.

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, 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, form, 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 non-toxic 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-type. With each process the student explores the use of value, line texture, and color to create visual images utilizing innovative non-toxic 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.

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. Prerequisite: ART 230.

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 non-toxic lithography processes, intaglio-type 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 and/or intaglio type. With each process the student explores the use of value, line texture, and color to create visual images utilizing non-toxic 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: 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 sculpture. An opportunity is provided for the student to pursue a specific area of sculpture. 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. 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 art education majors 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. CURRICULUM AND INSTRUCTION IN ART EDUCATION (4)**
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.

ATHLETIC COACHING

ATHC 101. CHAMPS LIFE SKILLS PROGRAM (1)
This course will support efforts of every student-athlete in the areas of intellectual development by using athletics as preparation for success in life, meeting the changing needs of student-athletes, and promoting respect for diversity as well as enhance interpersonal relationships. This course also will assist the athlete in developing study skills and time management.

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 301. EVOLUTION (3)**
The evidence for the theory of evolution will be surveyed. Descriptions of how genes change, function, and become inherited will be tied to Darwin’s theory of natural selections at the physiological and ecological levels. Biology majors are required to co-register for BIOL 301L Evolution Laboratory. Prerequisites: BIOL 208 and BIOL 209, or BIOL 101 and BIOL 102.

**BIOl 301L. EVOLUTION LABORATORY (1)**
This laboratory course is the companion course for BIOL 301. Biology majors taking BIOL 301 are required to co-register for BIOL 301L. Exercises and experiments will demonstrate gene variation, natural selection, changes in gene frequency, and fossil evidence supporting the theory of evolution. Prerequisites: BIOL 208 and 209, or BIOL 101 and 102. Corequisite: BIOL 301.

**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 315. ADVANCED PLANT BIOLOGY (4)
An expansion of the Plants as Organisms topics. This course examines the structural features of the major plant groups with special reference to comparative life cycle mechanisms. There will be laboratory opportunities to investigate nutritional physiology, hormone regulation, and photo-physiology in various culture samples, including plant tissue cultures.

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 (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 development of the gene concept is traced from its origin as a 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, in vivo and 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 411. ANIMAL BEHAVIOR (4)
An evolutionary approach to behavioral strategies emphasizing ecological and physiological mechanisms of behavior. Topics include hereditary and environmental influences, neural control, behavioral choices, and the evolution of social behavior. Prerequisites: BIOL 101, 102 or BIOL 208, 209 or equivalent.

BIOl 412. COMPARATIVE ANIMAL PHYSIOLOGY (4)
A comparative approach to the functional adaptations of animals to diverse environments with emphasis on underlying physiological and biochemical mechanisms. Relevant physiological functions include gas exchange, circulation, digestion, excretion, osmoregulation, metabolism, muscle contraction, as well as neural and endocrine coordinating mechanisms. Prerequisites: BIOL 208, 209, 305 (concurrent acceptable), 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 (1-6)
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 or applied science. A student wishing to enroll in this course must submit a written proposal (following department 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. Students must complete 3 to 6 credit hours to meet the requirements of a biology major. Students may enroll repeatedly up to a maximum of 6 total semester hours. 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 prokary-
otes 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 (1-6)**
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. Students must complete 3 to 6 credit hours to meet the requirements for a biology major. Students may enroll repeatedly up to a maximum of 6 total semester hours. 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 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 319. BUSINESS ETHICS (3)
Business Ethics is the study of the general nature of morals and of the specific moral choices made by an individual or organizational members, grounded in philosophy, as applied to the current business environment or members of a profession.

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 360. MARKETING OF SERVICES (3)
This course introduces the student to services marketing as a separate and distinct area of marketing thought and practice. Students understand its powerful influence in competitive markets focusing on three main services marketing areas: the service customer, the service company and the integration of marketing; and human resources and operations within the service system. Students will develop proficiency in analyzing and judging the merits of services marketing strategies and assist them in making strategic decisions in both business and consumer services industries.

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 406. PROFESSIONAL SELLING AND APPLIED BUSINESS (3)
This course investigates the qualities and skills required to become a sales professional and the applied sales management tools that are used to manage a revenue generation team. These practical management tactics are also useful for any professional who is responsible for the productivity of others.
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 408. TECHNOLOGY IN BUSINESS (3)
This course examines the effects of technology on and in business. While information technology will be considered heavily, other related technologies will be addressed. Students should understand how specific technologies can affect businesses directly and the technological-centric issues that can drive business, including ethics and security.

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. Prerequisites: 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.

BADM 427. RETIREMENT/EMPLOYEE BENEFITS (3)
Preparation of comprehensive retirement needs analysis. Examination of advantages and disadvantages of the various plans and options available for business clients, including benefits provided to their employees and significant planning opportunities for tax deferral and capital accumulation. Skill development for implementing financial planning tools.

BADM 429. ESTATE PLANNING (3)
An examination of asset protection, elder law, valuation, appraisals, personal property tax implications, charitable planning, offshore trusts and international law, probate, living trusts, joint tenancy with rights of survivorship, and wills.

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 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. Prereq-
usites: 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/physiol-
ogy 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 biologi-
cal, 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 pola-
rimetry) 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 enroll-
ment 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 chemi-
cal 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 Schrodinger 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. COMMUNICATION AND NEW MEDIA (3)
New media are changing the ways we live and work. Communication professionals must be fluent across media platforms and ready to embrace perpetual change. Communication and New Media is a course that examines media technologies and their cultural implications. The course is designed to provide students with a survey of the field and an introduction to digital media production and media literacy.

COMM 222. VOICE AND DICTION (3)
This course is designed to improve speaking through 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. NARRATIVE SCRIPTWRITING (3)
This course is designed to educate students in the technical and aesthetic practices of narrative screenwriting, including story structure analysis and development, pitching, treatments, and professional screenplay formatting.

COMM 304. HISTORY OF FILM (3)
Historical and critical survey of the development of motion pictures as an industry, art form, and a distinctive medium of mass communication.

COMM 305. HISTORY OF TV (3)
Historical and critical survey of U.S. television as an industry, mass medium, and cultural form.

COMM 308. INTERPERSONAL COMMUNICATIONS (3)
This course is a survey of the basic concepts of interpersonal communication including self-awareness, perceptions, emotions, and conflict resolution. The focus of the course is upon the analysis of communication skills and human behavior in relation to others. Through the observation of oral and nonverbal behaviors, the student will learn to improve message transmissions, thereby leading to personal improvement.

COMM 310. CONDUCTING BUSINESS MEETINGS AND GROUP DISCUSSIONS (3)
This course is a study of communication behavior in business meetings and in group situations. Appropriate procedures for conducting meetings and discussions will be emphasized. Problem-solving techniques, styles of leadership, and personality barriers that inhibit effective communication will be discussed. The student will have the opportunity to fully participate in the meeting or discussion as leader and member.

COMM 312. PRESENTATIONS IN BUSINESS AND PROFESSIONAL CONTEXTS (3)
The clear dissemination of information will be the focus of this course. Emphasis will be given to the organization and presentation for business and professional speaking situations. Methods of persuasive strategies and appropriate visuals will be studied.
COMM 315. ORGANIZATIONAL COMMUNICATIONS (3)
This course offers the study of communication as it applies to formal organizations. Topics for lecture, discussion, and written analysis include organizational climate and structure, employer-employee communication, and management styles. Emphasis will be given to time management, written and oral communications within organizations, and the development of social communications as it relates to organizational contexts.

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 understanding of and performance of all types of broadcast material. Prerequisite: COMM 202 and COMM 203.

COMM 325. CRITICAL THINKING FOR CONFLICT RESOLUTION (3)
This course emphasizes the necessity for reasoned thinking and stresses the need for understanding conflict and its resolution. Methods of negotiation and mediation will be studied as well as advocacy theory. The analysis of issues, argument development, and critical listening will be key components of the course.

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 for a maximum of 9 credits.

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 333. MUSIC VIDEO (3)
Music Video outlines the history, significance, and impact of music video as a commercial commodity and aesthetic style. The cultural impact of music video on popular culture will be studied and students will engage in music video production as a form of writing and inscribing experience.

COMM 339. PUBLIC RELATIONS WRITING AND DESIGN (3)
Collaboration with the graphic design program provides insight into the function of public relations. 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 343. GRAPHIC NOVEL (3)
Once the domain of sticky-fingered kids clutching nickels and dimes, comics have grown up and are establishing themselves as a fast-growing and respected literary genre. Even the *New York Times* has recognized the power of the art form by including a regular section devoted to graphic novels in its Sunday magazine. Students enrolled in Graphic Novel will explore this cultural phenomenon by analyzing works such as Neil Gaiman’s Sandman series and Warren Ellis’s Transmetropolitan.
Students also will write and design their own graphic novels. And contrary to common belief, you don’t have to draw to create. Even non-artists can produce compelling content using imaging and animation software provided in class.

COMM 344. GAME DESIGN (3)
This course focuses on the structure/theory of game design and the analysis of games’ role in modern society. Using readings, playing of games, and in-class exercises, students will explore what makes meaningful play. Rule systems, game culture, and history will be covered. Students will learn game design by creating their own games. No programming knowledge is need for this class.

COMM 345. ANIMATION AND COMMUNICATION (3)
Computer-generated (CGI) animation has become standard fare in TV, film advertising, forensics/courtroom reenactment, education/training, gaming, Web design, and online media. This course explores the history and craft of computer animation via animation production with an emphasis on animation as a means of expressing perception (i.e., communication) and the discourses of animation as art and entertainment. Topics include key-framing, storytelling, storyboarding, lighting, compositing, and moviemaking as well as working with motion capture, particle effects, dynamic simulation, sound design, automation, and other facets of digital animation as they emerge.

COMM 346. MOTION GRAPHICS (3)
In today’s digital environment, savvy communicators exploit the synergy of the written word in combination with sound and the moving image. This course will focus on the study and creation of motion graphics in fine art, film, and advertising. How do motion graphics differ from other modes of communication? How does the introduction of text affect audience experience? While seeking answers to questions like these, students will explore groundbreaking work by visionaries such as Saul Bass while learning software that allows them to express their own messages in a professional manner.

COMM 348. NEWS PRACTICUM (3)
News Practicum is a course in which students study the practice and politics of news reporting and journalism using traditional and new media.

COMM 349. NEW MEDIA PRACTICUM (3)
New Media Practicum is a course in which students practice new media production. Topics will be announced.

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)
This course focuses on the study, practice, and criticism of computer-mediated communication. Students will develop projects using a variety of digital technologies, focusing primarily on the Web. The course is designed to teach students to effectively use these technologies, to study the impact on society, and to think critically about that impact.

COMM 354. EXPERIMENTAL VIDEO (3)
Experimental Video is an introduction to the ideological and aesthetic issues surrounding alternative modes of digital cinematography production.

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 403. 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.

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 406. ADVERTISING AND IMAGERY (3)
This course explores the significance and influence of advertising, public relations, and public opinion on contemporary culture. 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.

COMM 408. COMMUNICATIONS FOR THE CONSULTANT (3)
This course is designed to allow the student to explore the career path of consulting. The emphasis will be on communications in business as related to organizations and the client. The focus will include the analysis of specific communication problems an organization might have as well as designing communication exercises and workshops to address those problem areas.

COMM 410. INTERCULTURAL COMMUNICATIONS (3)
This is a course which focuses on building a broad-based understanding of communications similarities and differences between and among cultures. Students will explore areas of intercultural communication arising from life situations such as business, politics, family, travel, customs, and social traditions. Students will also engage in a comparative analysis of cultures through the communications of speech, music, literature, film, dance, and language.

COMM 420. ADVANCED PRODUCTION (3)
A course in which students develop and produce supervised original projects in electronic media. Projects may involve broadcasting, sound design, video, and multimedia. Prerequisites: COMM 202, COMM 203, and COMM 329 or COMM 350.

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 447. ADVANCED INTERNET MEDIA (3)
This course expands on the study, practice, and criticism of computer-mediated communication. Students will build upon skills developed in COMM 352, advancing their knowledge of Internet-based technologies. Prerequisite: COMM 352.

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 CAPSTONE (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 presentations. Projects 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)
A survey of computer hardware, software, and Internet/Web social and ethical implications of the use and misuse of the computer. Hands-on experiences with software applications such as word processing, spreadsheets, and databases.

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 104 and MATH 155 or 154.

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. Prerequisite: CIS 104.

CIS 287. SYSTEM 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. COOPERATIVE WORK EXPERIENCE IN COMPUTER SCIENCE AND ENGINEERING (1)
A supervised work experience in which the student is employed in an approved professional position with an industry, firm, or government agency. A final written report and a presentation are required. Pass/fail grading only. May not be repeated for credit. Prerequisites: 3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student’s advisor.

CIS 302. WINDOWS PROGRAMMING (3)
An in-depth study of creating the Windows graphical user interface (GUI). Students create powerful, full-featured applications which utilize the key features of Microsoft Windows, including ActiveX data objects (ADO.NET), Multiple Document Interface (MDI), Dynamic Link Libraries (DLLs), and graphics. Prerequisite CIS 211 or permission of instructor.

CIS 310. INFORMATION SECURITY (3)
Students will be introduced to fundamental concepts of information security including the establishment and implementation of an organization-wide security policy which is designed to protect the information assets of an organization. This course provides the student with the skills necessary to enforce an organization security policy and lays the foundation for continued study in the areas of information security. Prerequisite: CIS 234.

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; MATH 254; and MATH 205 or 207; or permission of instructor.

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, 321.

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)
Students learn new skills, languages, and concepts required to create applications that use the World Wide Web as the basis for the user’s interaction with the application. This is the first of the two-course sequence on this topic and focuses on client-side application programming (JavaScript, HTML/XML, CSS, DHTML, DOM, and Java). Prerequisite: CIS 104.
CIS 334. WEB PROGRAMMING II (3)
This is the second semester of the two-course sequence on Web programming. It focuses on the server-side application programming in general and database in particular. It covers ASP.NET and VBScript as well as advanced topics such as XML Web service, SOAP, cookies, and security. Three-tier architecture of Web-based applications will be discussed. Other server-side programming languages such as PHP may also be covered. Prerequisites: CIS 332 and CIS 302 or permission of the instructor.

CIS 361. E-COMMERCE (3)
This course covers concepts, IT skills and tools, and social and ethical issues encountered performing e-commerce in a contemporary fashion, with focus on technical issues rather than business practices. Also included are topics such as EDI, VAN, ExtraNet, shopping cart, database, and security. Prerequisite: CIS 234 and CIS 332.

CIS 372. INTRODUCTION TO BIOMETRICS (3)
An introduction to the basics of biometrics and investigation of the mainstream biometric technologies being used. This course explains the underlying image processing concepts required to understand biometric techniques. Also included are ethics, privacy concerns, and the future of biometric technologies. Prerequisite: CIS 104.

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 211 and 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 (1-2)
A supervised work experience in which the student is employed in an approved professional position with an industry, firm, or government agency. A final written report and a presentation are required. Pass/fail grading only. May be repeated to a maximum of 2 credits. Prerequisites: CIS 292/CPE 292 with a pass grade and positive comments from both the faculty and on-site advisors; 3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student's advisor.

CIS 395. INTRODUCTION TO CRYPTOGRAPHY AND COMPUTER SECURITY (3)
This course covers basic concepts of cryptography and coding theory, historical ciphers, modern symmetric ciphers such as DES and 3DES, public cryptography such as RSA and elliptic curve cryptosystems and their applications in computer and information security, including data integrity and authentication, digital signature, key exchange, and key management. Also covered are physical security, smart cards and biometrics, and security policy and documentation. Prerequisite: MATH 254 and CIS 234 or permission of instructor.
CIS 405. COMPUTER GRAPHICS (3)
Basic concepts such as graphics systems, modeling, and pipelines are introduced. Students also will learn to program in a popular graphics library, such as OpenGL or DirectX. Topics include basic 2-D and 3-D graphics programming, basic animation and controls, texture mapping, lights, and materials. Prerequisite: CIS 302.

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 COMMUNICATION AND COMPUTER NETWORKS (3)
This course introduces the role of data communications and computer networks in a computer science environment. Special topics include concepts in fundamental communications; data communication hardware; serial, parallel, Ethernet, and network configurations; protocols and software; microcomputer communications; and computer networks. 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. Prerequisites: CIS 386 and CPE/ENGR 305; or permission of instructor.

CIS 423. SERVER OPERATION SYSTEMS AND SYSTEM PROGRAMMING (3)
Students will learn the principles of current server operating systems and system level programming skills. The role of servers in enterprise networks and the design of modern server computer systems will be covered. Students also will learn how to use system level programming languages, such as C, Shell, Perl, etc., to automate repetitive system administration tasks. Prerequisites: CIS 395 or permission of instructor.

CIS 431. ALGORITHMS (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. Prerequisites: MATH 208, MATH 307, and CIS 321.

CIS 433. MICROPROCESSOR SYSTEM DESIGN AND LAB (4)
This course is a basic introduction to microprocessor/microcontroller programming using the INTEL 80xxx series of microprocessor/microcontrollers. The course has a strong lab component where students will be exposed to programming the INTEL 80xxx series microprocessors in addition to learning their basic architecture. Topics include Assembly language programming, instruction time cycles, memory interfacing, input-output interfacing, data converters A/D and D/A, interrupts, general purpose programmable peripherals, etc. If time permits, students will be asked to do a lab project in which the microprocessor/microcontroller is used in a real-life application, e.g., a digital thermometer. Prerequisites: ENGR 305 and CIS 386.

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 450. WEB DESIGN STUDIO (3)
This course is designed for students to learn through hands-on experience and production. Students will form teams to learn advanced techniques for Web site creations and design, programming, and integration. Languages, tools, and technology for creating advanced Web applications will be covered. Prerequisite: CIS 334.

CIS 455. GAME DESIGN AND PROGRAMMING (3)
This course introduces computer game design principles and techniques such as prototyping, interface design, implementation of functionalities in C++, and play-testing. Game graphics will also be introduced. Topics include an overview of Photoshop for game scene design, basic techniques for game texture creation, and case studies. Prerequisites: CIS 302 and CIS 321.

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 482. REAL TIME AND EMBEDDED SYSTEM DESIGN (3)
A general introduction to real-time operating systems and embedded system design. Prerequisite: CIS 421.

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 fundamental concepts of cryptography, cryptographic key distribution and management, authentication protocols, digital signatures, security policy, virtual private networks (VPNs) and their implications to security, and protection of Internet and Web-based systems and services. Weekly hands-on laboratories will investigate computer network security techniques. Prerequisite: CIS 423 or permission of instructor.

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.

CIS 492. COOPERATIVE WORK EXPERIENCE IN COMPUTER SCIENCE AND ENGINEERING (1-3)
A supervised work experience in which the student is employed in an approved professional position with an industry, firm, or government agency. A final written report and a presentation are required. Pass/fail grading only. May be repeated to a maximum of 3 credits. Prerequisites: CIS 392/CPE 392 with a pass grade and positive comments from both the faculty and on-site advisors; 3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student’s advisor.
COMPUTER AND INFORMATION TECHNOLOGY

CIT 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. Prerequisite: CIS 104.

CIT 310. INFORMATION SECURITY (3)
Students will be introduced to fundamental concepts of information security including the establishment and implementation of an organization-wide security policy which is designed to protect the information assets of an organization. This course provides the student with the skills necessary to enforce an organization security policy and lays the foundation for continued study in the areas of information security. Prerequisite: CIT 234.

CIT 332. WEB PROGRAMMING (3)
Students will learn new skills, languages, and concepts required to create applications that use the World Wide Web as the basis for the user’s interaction with the application. This is the first of the two-course sequence on this topic and focuses on client-side application programming (JavaScript, HTML/XML, CSS, DHTML, DOM, and Java). Prerequisite: CIS 211 or permission of instructor.

CIT 334. WEB PROGRAMMING II (3)
This is the second semester of the two-course sequence on Web programming. It focuses on the server-side application programming in general and database in particular. It covers ASP.NET and VBScript as well as advanced topics such as XML Web service, SOAP, cookies, and security. Three-tier architecture of Web-based applications will be discussed. Other server-side programming languages such as PHP may also be covered. Prerequisites: CIT 332 or permission of instructor.

CIT 361. E-COMMERCE (3)
This course covers concepts, IT skills and tools, and social and ethical issues encountered performing e-commerce in a contemporary fashion, with focus on technical issues rather than business practices. Also included are topics such as EDI, VAN, ExtraNet, shopping cart, database, and security. Prerequisites: CIT 234 and CIT 332.

CIT 372. INTRODUCTION TO BIOMETRICS (3)
An introduction to the basics of biometrics and investigation of the mainstream biometric technologies being used. This course explains the underlying image processing concepts required to understand biometric techniques. Also included are ethics, privacy concerns, and the future of biometric technologies. Prerequisite: CIS 104.

CIT 385. COMPUTER SYSTEM DESIGN (4)
This course provides a broad and in-depth coverage of a variety of computer hardware and software concepts, with focus on designing contemporary computing systems. Topics covered include binary system, Boolean algebra and digital logic design, instruction set architecture and processor design, memory, input/output and storage systems, distributed system, and advanced topics. Prerequisites: CIS 104 and MATH 155.

CIT 388. DATABASE MANAGEMENT SYSTEMS (4)
The design and maintenance of a computerized database management system will be examined, including 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. Also examined will be the advantages of tree, network, and relational data structures as well as query languages, data dictionaries, and security and privacy considerations. Prerequisite: CIS 211.
CIT 418. MANAGEMENT INFORMATION SYSTEMS (3)
An integration of the material covered in previous programming and systems courses and an examination of modern management information systems in a business setting. Topics covered will 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.

CIT 419. DATA COMMUNICATION AND COMPUTER NETWORKS (3)
This course introduces the role of data communications and computer networks in a computer science environment. Special topics include concepts in fundamental communications; data communication hardware; serial, parallel, Ethernet, and network configurations; protocols and software; microcomputer communications; and computer networks. Prerequisites: CIT 234 and CIT 385 or permission of instructor.

CIT 450. WEB DESIGN STUDIO (3)
This course is designed for students to learn through hands-on experiences and production. Students will form teams to learn advanced techniques for Web site creation and design, programming, and integration. Languages, tools, and technologies for creating advanced Web applications will be covered. Prerequisite: CIT 334.

CIT 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 fundamental concepts of cryptography, cryptographic key distribution and management, authentication protocols, digital signatures, security policy, virtual private networks (VPNs) and their implications to security, and protection of Internet and Web-based systems and services. Weekly hands-on laboratories will investigate computer network security techniques. Prerequisite: CIT 310 or permission of instructor.

COMPUTER ENGINEERING
CPE 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.

CPE 222. ELECTRICAL ENGINEERING LABORATORY (1)
A laboratory course in electrical engineering, 3 hours per week, to be taken simultaneously with CPE 221.

CPE 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: CPE 221 and MATH 208.

CPE 225. ELECTRICAL CIRCUITS LABORATORY (1)
A laboratory course in electrical circuits, 3 hours per week, to be taken simultaneously with CPE 224.

CPE 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. Prerequisite: CIS 104.

CPE 287. SYSTEM 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 disadvan-
tages of both approaches are examined. Prerequisite: CIS 211.

CPE 292. COOPERATIVE WORK EXPERIENCE IN COMPUTER SCIENCE AND ENGINEERING (1)
A supervised work experience in which the student is employed in an approved professional
position with an industry, firm, or government agency. A final written report and a presentation
are required. Pass/fail grading only. May not be repeated for credit. Prerequisites: 3.0 GPA in the
major; 2.3 GPA overall; and the recommendation of the student’s advisor.

CPE 305. DIGITAL LOGIC DESIGN AND LAB (4)
Topics include the logic gates and integrated circuits, design of Boolean logic and finite state ma-
chines, simplifications methods, combinational circuits and networks, programmable logic and
devices (PLDs), registers and counters, memory elements, Mealy and Moore machines, and analysis
design of sequential circuits. Laboratory projects include combinatorial and sequential logic
design using logic gates and PLDs, and simulation and implementation using hardware description
language (HDL). Prerequisites: ENGR 102 or MATH 254 or permission of instructor.

CPE 386. COMPUTER ORGANIZATION (4)
Students will learn the principles of computer organization. Topics include the functional com-
ponents 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 211 and CPE 234.

CPE 392. COOPERATIVE WORK EXPERIENCE IN COMPUTER SCIENCE AND ENGINEERING (1-2)
A supervised work experience in which the student is employed in an approved professional posi-
tion with an industry, firm, or government agency. A final written report and a presentation are
required. Pass/fail grading only. May be repeated to a maximum of 2 credits. Prerequisites: CIS
292/CPE 292 with a pass grade and positive comments from both the faculty and on-site advisors;
3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student’s advisor.

CPE 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,
business 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. Prerequisites: CPE 386 and CPE/ENGR 305; or permission of instructor.

CPE 433. MICROPROCESSOR SYSTEM DESIGN AND LAB (4)
This course is a basic introduction to microprocessor/microcontroller programming using the
INTEL 80xxx series of microprocessor/microcontrollers. The course has a strong lab compo-
nent where students will be exposed to programming the INTEL 80xxx series microprocessors
in addition to learning their basic architecture. Topics include Assembly language programming,
instruction time cycles, memory interfacing, input-output interfacing, data converters A/D and
D/A, interrupts, general purpose programmable peripherals, etc. If time permits, students will
be asked to do a lab project in which the microprocessor/microcontroller is used in a real-life
application, e.g., a digital thermometer. Prerequisites: ENGR 305 and CPE 386.

CPE 482. REAL TIME AND EMBEDDED SYSTEM DESIGN (3)
A general introduction to real-time operating systems and embedded system design. Prerequisite:
CPE 421.

CPE 489. ENGINEERING CAPSTONE PROJECT I (1)
Students learn methods and skills for the engineering design process, demonstrate the ability to
explore principles of engineering experimentation and design, identity real world projects in multi-
disciplinary engineering areas, and develop a practical plan to complete the projects (individual and/or group). Approved written project proposals and oral presentations are required at the end of the semester. The written proposal should include problem descriptions, objectives, selected approach, design alternatives, equipment requirements, time line as well as ethical, legal, and environmental issues. Prerequisite: Junior or senior standing and permission of instructor. Pass/fail grade.

CPE 490. ENGINEERING CAPSTONE PROJECT II (3)
Students develop and complete the proposed projects by utilizing the knowledge and experience gained from previous courses and by demonstrating the analyses and experiments. Students are required to present work in a professional manner which consists of three parts: comprehensive written reports including research and analysis, oral presentation, and operating working models. Prerequisite: CPE 489.

CPE 492. COOPERATIVE WORK EXPERIENCE IN COMPUTER SCIENCE AND ENGINEERING (1-3)
A supervised work experience in which the student is employed in an approved professional position with an industry, firm, or government agency. A final written report and a presentation are required. Pass/fail grading only. May be repeated to a maximum of 3 credits. Prerequisites: CIS 392/CPE 392 with a pass grade and positive comments from both the faculty and on-site advisors; 3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student's advisor.

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 315. CRIMINAL INVESTIGATION (3)
This course examines the fundamental principles of criminal investigation with concentration on the following areas—report writing; sources of information including witnesses, complainants, victims, observation, physical description, identification, interviews, interrogation, modus operandi, informants, surveillance, and undercover techniques; crime scene search, collection, preservation, and processing of physical evidence; and raids, arrests, search, seizure, and case preparation.

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 430. POLICE ORGANIZATION AND MANAGEMENT (3)
This course provides a broad understanding of the various aspects of police organizations and management. The various philosophies of policing, police organizations and management, and the role of police officers are discussed from political, cultural, and historical perspectives. The central objective of the course is to familiarize the student with the various criminal investigations techniques and crime control strategies within the framework of the American legal system.

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 pre-sentence 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. This course is offered on a three-semester rotation schedule.

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. This course is offered on a three-semester rotation schedule.

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. This course is offered on a three-semester rotation schedule.

EDUC 351. INTEGRATED READING AND LANGUAGE ARTS I (5)
Integrated Reading and Language Arts I, in conjunction with its corequisite Integrated Math, Science, and Social Studies 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 education experience for children. This course block has both a classroom and a field component. Student will complete 50 hours in their field placement. Prerequisite: Admission to teacher education program. Corequisite: EDUC 352.

EDUC 352. INTEGRATED MATH, SCIENCE, AND SOCIAL STUDIES I (4)
Integrated Math, Science, and Social Studies I, in conjunction with its corequisite Integrated Reading and Language Arts 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 education experience for children. This course block has both a classroom and field component. Students will complete 50 hours in their field placement. Prerequisite: Admission to teacher education program. Corequisite: EDUC 351.

EDUC 353. INTEGRATED READING AND LANGUAGE ARTS II (4)
Integrated Reading and Language Arts II, in conjunction with its corequisite Integrated Math, Science, and Social Studies II, is the second 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 education experience for children. This course block has both a classroom and field component. Students will complete 70 hours in their field placement. Prerequisites: EDUC 351 and EDUC 352. Corequisite: EDUC 354.

EDUC 354. INTEGRATED MATH, SCIENCE, AND SOCIAL STUDIES II (5)
Integrated Math, Science, and Social Studies II, in conjunction with its corequisite Integrated Reading and Language Arts II, is the second 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 education experience for children. This course block has both a classroom and field component. Students will complete 70 hours in their field placement. Prerequisites: EDUC 351 and EDUC 352. Corequisite: EDUC 353.

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
EDUC 380. TECHNOLOGY IN 21ST-CENTURY TEACHING AND LEARNING (3)
The focus of this course is the effective use of 21st-century technology in the contemporary classroom. The course aims to help teachers use the power of computer technology to spark students’ imagination and ultimately move them toward greater learning. This course provides a critical analysis of the full range of educational technology and its use in the classroom. In this course, pre-service teacher candidates will develop knowledge, skills, and dispositions which support the use of technology to create effective learning environments that provide opportunities for students to interact with content in meaningful ways and to assess students in nontraditional ways. 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. INCLUSION IN THE REGULAR CLASSROOM (3)
A weekly seminar taken concurrently with student teaching. Students will investigate and examine how to meet the needs of students identified with special needs who are placed in the regular classroom. Promotes the reflective analysis of the practice of teaching in an inclusive classroom in grades K-6, 5-9, PreK-Adult, 5-Adult, 9-Adult.

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 evolution 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.
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 443.

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 443.

EDUC 425. SPECIAL METHODS OF TEACHING FOREIGN LANGUAGE (3)
A course designed to acquaint students with the theories of language acquisition and prepare the students to teach language in context and use computer-aided language teaching methods. Students will develop lesson plans and teaching portfolios and will get practical experience teaching foreign language at the 101/102 level. This course is not taught every semester. Students should check in advance with the department chair. Corequisite: EDUC 370 or 443.

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 443.

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, ART 403, and admission to Teacher Education Program. Corequisite: EDUC 370 or 443.

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 443.
EDUC 429. ADULT EDUCATION MODELS AND PRACTICES (3)
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 443.

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 443.

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 THE CONTENT AREAS (3)
This is a field experience course for all students seeking certification in a secondary teacher education program. An on-campus seminar will focus on reading instruction in the content areas of the curriculum. Attention is given to the identification of the special reading abilities required in the subject matter areas. Students will focus many of their in-field lessons on the teaching of reading in the content area. Students will arrange their field work schedules so that they may meet their individual professional development needs. A minimum of 40 hours in a public school is required. Prerequisite: EDUC 370 or EDUC 319. Corequisite: Special Methods course for students’ content area.

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-ADULT (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-ADULT (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-ADULT (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. Prerequisite: MATH 108.

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 221 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 AND LAB (4)
Topics include the logic gates and integrated circuits, design of Boolean logic and finite state machines, simplifications methods, combinational circuits and networks, programmable logic and devices (PLDs), registers and counters, memory elements, Mealy and Moore machines, and analysis and design of sequential circuits. Laboratory projects include combinatorial and sequential logic design using logic gates and PLDs, and simulation and implementation using hardware description language (HDL). Prerequisites: ENGR 102 or MATH 254 or permission of instructor.

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.
ible fluids, flow measurements, open channel flow, and kinetics of fluids. Prerequisites: MATH 310 and ENGR 242.

ENGR 451. CONTROL SYSTEMS (3)
This course provides an introduction to the analysis, design, and applications of continuous-time linear control systems. The aim of the course is to develop student knowledge and understanding of control system design. It also aims to help the students apply their mathematical skills and knowledge of control system theory to a number of practical problems. At the end of this course, students will be able to model, analyze, and design controllers for simple electromechanical systems. Extensive use of MATLAB control systems toolbox is also included in this course. Prerequisites: MATH 310, MATH 307, and MATH 329.

ENGR 489. ENGINEERING CAPSTONE PROJECT I (1)
Students learn methods and skills for the engineering design process, demonstrate the ability to explore principles of engineering experimentation and design, identify real world projects in multidisciplinary engineering areas, and develop a practical plan to complete the projects (individual and/or group). Approved written project proposals and oral presentations are required at the end of the semester. The written proposal should include problem descriptions, objectives, selected approach, design alternatives, equipment requirements, and time line, as well as ethical, legal, and environmental issues. Prerequisite: Junior or senior standing and permission of instructor. Pass/fail grade.

ENGR 490. ENGINEERING CAPSTONE PROJECT II (3)
Students develop and complete the proposed projects by utilizing the knowledge and experience gained from previous courses and by demonstrating the analyses and experiments. Students are required to present work in a professional manner which consists of three parts: comprehensive written reports including research and analysis, oral presentations, and operating working models. Prerequisite: ENGR 489.

ENGLISH
ENGL 100A. BASIC ACADEMIC WRITING I (2)
The first of a two-semester course sequence, ENGL 100A is designed to enhance critical thinking, reading, and writing skills as they support academic essay writing, particularly the argument essay. The two semesters stretch the same material as ENGL 101 in order to give students more time to master the course objectives. ENGL 100A emphasizes instruction on the criteria of thesis, academic essay structure, critical reading skills, and critical thinking skills. An emphasis is placed on the reading and writing processes, particularly the stage of revision. Students will be required to attend 100 minutes a week of lecture and 50 minutes a week of tutoring. Completing both ENGL 100A and ENGL 100B serves as an alternate to ENGL 101, and as such serves a prerequisite to ENGL 102, 103, or 104.

ENGL 100B. BASIC ACADEMIC WRITING II (2)
The second of a two-semester course sequence, ENGL 100B is designed to enhance critical thinking, reading, and writing skills as they support academic essay writing, particularly the argument essay. The two semesters stretch the same material as ENGL 101 in order to give students more time to master the course objectives. ENGL 100B emphasizes instruction on the criteria of evidence, style, sentence-level correctness, and MLA documentation. An emphasis is placed on the reading and writing processes, particularly the stage of revision. Students will be required to attend 100 minutes a week of lecture and 50 minutes a week of tutoring. ENGL 100A is a prerequisite to ENGL 100B. Completing both ENGL 100A and ENGL 100B serves as an alternate to ENGL 101, and as such serves a prerequisite to ENGL 102, 103, or 104.

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 270. TRADITIONAL GRAMMAR AND STANDARD ENGLISH USAGE (3)**
This course will focus primarily on the study of traditional grammar and English structures (parts of speech, phrases, and clauses), noting additionally the practical application of standard English usage as apparent in publication and print. Prerequisite: ENGL 101.

**ENGL 301. INTRODUCTION TO LITERARY STUDY (3)**
This course introduces English majors to the discourse, practices, and protocols associated with the study of literature. The course is the gateway to all English classes above the sophomore-level surveys and must be completed with a C or higher before taking any upper-division classes in the major. Prerequisites: Successful completion of ENGL 101 (Written English) and ENGL 102, 103, or 104.
ENGL 307. TEACHING READING AND YOUNG ADULT 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. Prerequisite: ENGL 301.

ENGL 310. BRITISH LITERATURE TO 1660 (3)
A survey of the major works of poetry and prose of British literature from Beowulf through the Renaissance. Prerequisite: ENGL 301.

ENGL 311. BRITISH LITERATURE, 1660-1900 (3)
A survey of major works of poetry and prose of British literature from 1660 through 1900. Prerequisite: ENGL 301.

ENGL 312. AMERICAN LITERATURE TO 1900 (3)
American Literature to 1900 is an advanced critical study of the major writers, as well as the intellectual and literary movements, of the American experience and literary tradition from its beginnings to 1900. Prerequisites: ENGL 204 and ENGL 301.

ENGL 313. LITERATURE IN ENGLISH FROM 1900 (3)
A survey of British, American, and Anglophone literature from 1900 to the present with an emphasis on Modernist, post-Modernist, post-Colonial, and contemporary texts.

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 301.

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 301.

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 301.

ENGL 321. RENAISSANCE DRAMA (3)
A study of the major playwrights of the English Renaissance, excluding Shakespeare. Prerequisite: ENGL 301.

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 301.

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 301.

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 301.
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 301.

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 301.

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 301.

ENGL 341. THE VICTORIANS, SEEDS OF MODERNISM (3)
A study of Victorian prose and poetry which reflects both the Romantic literature of the past and the Modernist trends to come. The course will consider writers of the established canon, as well as Pre-Raphaelite poets and painters, the Victorian novel, periodical literature, drama, and fin de siècle writers such as Oscar Wilde and Bram Stoker. Attention is given to works which reflect those social and intellectual currents of the political and cultural landscape of the era. Prerequisite: ENGL 204 or 208 or 209.

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 301.

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 301.

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 301.

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. Prerequisite: ENGL 301.

ENGL 358. APPALACHIAN LITERATURE (3)
A course designed to survey the rich and diverse literature associated with the geographical region known as Appalachia. Both traditional writers identified with the area, such as Rebecca Harding Davis, Jesse Stuart, and Ambrose Bierce, as well as contemporary writers such as Denise Giardina,
Robert Morgan, Marilou Awiakta, Fred Chappell, and Henry Louis Gates, will be explored in the course. Prerequisite: ENGL 204 or permission of instructor.

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 301 or permission of instructor.

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 301.

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 301.

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 301.

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 301.

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 301.

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. W. Wordsworth, Barrett Browning, Dickinson, Gilman, Rich, Plath, Sexton, Woolf, Drabble, Dinesen, Zelda Fitzgerald, and Walker. Prerequisite: ENGL 204 or permission of instructor.

ENGL 367. FILM STUDIES (3)
An in-depth critical study of selected films. Course content will be determined by the individual instructor, but can cover any topic in film studies, i.e., films of any time period, any genre, or any country presented in English and foreign languages. Prerequisite: ENGL 301.

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 301.

ENGL 371. INTRODUCTION TO CREATIVE WRITING (3)
An introduction to the four basic creative writing genres: poetry, drama/screenwriting, fiction, and
non-fiction. Models of each will be studied, and students will write and share pieces in each of these differing literary forms. Prerequisites: ENGL 301 or permission of the instructor.

**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 301.

**ENGL 375. HISTORY OF THE ENGLISH LANGUAGE (3)**
A diachronic study of the English language and its linguistic heritage. Prerequisite: ENGL 301.

**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 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 400. 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 301.

**ENGL 402. THE BIBLE AS LITERATURE (3)**
A study of the various types of literature found in the Bible. Prerequisite: ENGL 301.

**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 of English. 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, ENGL 407, and/or ENGL 408 and receive three hours credit for each course successfully completed. Each course is repeatable. 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. Repeatable up to 9 credit hours.

**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 of English. In addition to ENGL 406, students also may take ENGL 405, ENGL 407, and/or ENGL 408 and receive three hours credit for each course successfully completed. Each course is repeatable. No one of this group of courses is a prerequisite for the others. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209. Repeatable up to 9 credit hours.
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 of English. In addition to ENGL 407, students also may take ENGL 405, ENGL 406, and/or ENGL 408 and receive three hours credit for each course successfully completed. Each course is repeatable. No one of this group of courses is a prerequisite for the others. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209. Repeatable up to 9 credit hours.

ENGL 408. SEMINAR IN LITERATURE IV (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 of English. In addition to ENGL 408, students also may take ENGL 405, ENGL 406, and/or ENGL 407 and receive three hours credit for each course successfully completed. Each course is repeatable. No one of this group of courses is a prerequisite for the others. Prerequisite: ENGL 204 or ENGL 208 or ENGL 209. Repeatable up to 9 credit hours.

ENGL 415. CHAUCER (3)
A study of Chaucer's language and art as they are revealed in his works, primarily *Troilus and Criseyde* and *The Canterbury Tales*. Prerequisite: ENGL 301

ENGL 421. SHAKESPEARE (3)
A study of selected plays and the sonnets. Minor emphasis on Shakespeare's biography and Elizabethan background. Prerequisite: ENGL 301.

ENGL 423. MILTON (3)
A thorough study of the lyric and epic poems of Milton, including a detailed critical reading of *Paradise Lost*, viewed within the literary and historical contexts of Stuart and Commonwealth England. Prerequisite: ENGL 301.

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 301 or permission of instructor. Repeatable.

ENGL 431. BRITISH LITERATURE TRAVEL PRACTICUM (1-3)
The course is designed to accompany British Literature and the Prominence of Place. Formal papers and a travel journal relating the literature course to the study tour practicum are required for the practicum. Prerequisites: ENGL 301 or 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 301.

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 301 or permission of instructor. Repeatable.

ENGL 447. AMERICAN LITERATURE TRAVEL PRACTICUM (1-3)
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 301 or permission of instructor. Repeatable. 
Prerequisite: ENGL 204 or permission of instructor.

ENGL 469. RENAISSANCE DRAMA PRACTICUM (3)
Students will serve as assistant directors, actors, stage managers, costume or set designers, dra-
maturges, or will assist in some other capacity for a production of Renaissance drama under the 
supervision of the professor. Students will research relevant areas of Renaissance drama. This 
course may be repeated to a maximum of 9 credits.

ENGL 470. MEDIEVAL DRAMA PRACTICUM (3)
Students will serve as assistant directors, actors, stage managers, costume or set designers, dra-
maturges, or will assist in some other capacity for a production of medieval drama under the 
supervision of a faculty member. Students will research relevant areas in medieval drama. This 
course may be repeated.

ENGL 471. CREATIVE WRITING: FICTION (3)
A writing course focusing on fiction. Instruction will be given on the techniques and terminology of 
fiction writing. Models will be studied, and students will read and respond to each other's writing, 
using a workshop format. Prerequisite: ENGL 371 or permission of the instructor.

ENGL 472. CREATIVE WRITING: POETRY (3)
A writing course focusing on poetry. Instruction will be given on the techniques and terminology of 
poetry. Models will be studied, and students will read and respond to each other's writing, using 
a workshop format. Prerequisite: ENGL 371 or permission of the instructor.

ENGL 473. CREATIVE WRITING: NONFICTION (3)
A writing course focusing on creative nonfiction. Instruction will be given on the techniques and 
terminology of creative nonfiction writing. Models will be studied, and students will read and respond 
to each other's writing, using a workshop format. Prerequisite: ENGL 371 or permission of the instructor.

ENGL 474. CREATIVE WRITING: DRAMA (3)
A writing course focusing on drama/screenwriting. Instruction will be given on the techniques and 
terminology of drama/screenwriting. Models will be studied, and students will read and respond 
to each other's writing, using a workshop format. Prerequisite: ENGL 371 or permission of the instructor.

ENGL 475. ADVANCED CREATIVE WRITING (3)
An advanced writing course focusing on one of four genres (fiction, poetry, nonfiction, or drama/ 
screenwriting). Instruction will be given on the techniques of writing. The workshop course will 
close on preparing students to send work to national literary magazines. Prerequisite: ENGL 371 or 
permission of the instructor.

ENGL 476. PRACTICUM IN ENGLISH I (1-3)
The student serves as a writing tutor, proofreader for The Picket, apprentice in a freshman com-
position 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 Writ-
ing Center. This course may be repeated. Prerequisites: ENGL 377 and permission of Writing Center director.

ENGL 484. PRACTICUM IN EDITING (1)
The student serves on the staff of *Sans Merci*, the Shepherd University literary magazine, as proof-reader, 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 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.

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.

ENVIRONMENTAL STUDIES

ENVS 201. DIMENSIONS OF ENVIRONMENTAL SCIENCE I (4)
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 (4)
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 philosophies 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 300. INTEGRATED PEST MANAGEMENT AND LAB (4)
Pest management is an important aspect of managing our natural resources, from agriculture to forests to wilderness areas. Some pest reduction tactics, like chemical pesticides, are highly effective in the short term but can cause environmental degradation via water and soil contamination or bioaccumulation. This course first examines the pest concept and major factors causing invertebrate
organisms to become pests and then explores a range of tactics that may be integrated to manage pests while minimizing environmental degradation. Strategies include biological control, trap crops, cultural methods, pheromone lures, mating disruption, and chemical pesticides. Laboratory exercises will provide hands-on experience with the management of common invertebrate pests. Prerequisites: ENVS 201, 202, and either BIOL 313 or permission of the instructor.

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 scientific principles underlying proper use of forest and range lands; wood, forage, and water production; 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 protection, 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 relationship to protection schemes and environmental impact analysis. This core course will introduce students to the wide diversity of cultural resources relevant to environmental science.

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. Prerequisites: ENVS 201 and 202.

ENVS 341. SUSTAINABLE ENERGY AND LAB (4)
This course introduces concepts of energy conservation and management and explores different renewable energy sources that are considered environmentally sustainable. Problems associated with nonrenewable energy use will be examined, and the range of sustainable alternatives will be explored. The fundamentals of passive solar collection, photovoltaics, wind, hydro, geothermal, and biomass will be covered. Economic and social implications for adopting each technology also will be considered. Prerequisites: ENVS 201, 202, and either GSCI 103 or PHYS 201 and 201L.

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, productiv-
ity, 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. ICHTHYOLGY (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 345. SUSTAINABLE DEVELOPMENT (3)
This course will explore the concept of developing in an economically viable and sustainable manner that conserves environmental and cultural resources. Concepts such as the design of net-energy-producer homes, incorporation of renewable and energy efficient technologies, use of nontoxic or responsibly harvested “green” building materials, farmland preservation, incorporation of common wildlife space, and the nature of community design will be explored. Prerequisites: ENVS 201, 202, and either ENVS 341 or permission of the instructor.

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 house 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 201 and 202, GSCI 301; CHEM 120 or 207.

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.
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.

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 100. FACS FRESHMAN SEMINAR (1)
The family and consumer sciences profession is examined from several different views including historical, cultural, international, current, and futuristic. Emphasis is placed upon the contributions the profession makes to solving family-related societal problems and career possibilities. Freshman standing or permission of instructor.

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. APPAREL CONSTRUCTION TECHNIQUES (3)
Introduction to appropriate sewing techniques for various fabrics and construction considerations used in apparel. Identification of commercial pattern specifications as well as an introduction to flat pattern design. Open to majors only.

FACS 202. FOOD SCIENCE AND TECHNOLOGY (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 RESOURCE 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 328. NUTRITION AND DIET THERAPY (2)
A study of the principles of normal nutrition including the major nutrients; the functions of and food sources of the nutrients; nutrient utilization by the body; the relationships of disease, genetics, and nutrition; food safety; and nutritional requirements through the life cycle. Prerequisites: CHEM 120 and CHEM 122, or permission of instructor.

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.

FACS 404. PERSONAL FINANCE (3)
A study of financial issues that affect individuals and families throughout the life cycle.

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 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.

FYEX 200. PEER EDUCATION (1)
This course provides an opportunity for students who have attended Shepherd University for at least two semesters to assist instructors of First-Year Experience courses. Peer educators will co-facilitate discussions, contact students who miss class, and provide information to first-year students about Shepherd services and programs. Peer educators must have strong leadership, communication, and interpersonal skills and must be comfortable with small group interactions. They must be in good standing with the University and have a minimum 2.5 cumulative GPA. They may choose their First-Year Experience course.

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 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. Prerequisite: FREN 204 or permission of instructor.

FREN 306. INTRODUCTION TO FRANCE AND THE FRANCOPHONE WORLD (3)
This course is an introduction to France and French-speaking countries around the world. Students will gain an understanding of these cultures from a political, historical, social, and literary perspective. Prerequisite: FREN 301 or permission of instructor.

FREN 307. INTRODUCTION TO FRENCH AND FRANCOPHONE LITERATURE (3)
An introduction to textual analysis, the course comprises prose, poetry, and drama. The texts are studied using current critical techniques. Prerequisite: FREN 301 or permission of instructor.

FREN 308. FRENCH CULTURE AND CIVILIZATION (3)
This course provides an in-depth, critical study of two or three aspects of French culture and civilization. Course content will be determined by the individual instructor but can cover any cultural product or institution from any time period. Prerequisites: FREN 301 and FREN 306 or permission of instructor.

FREN 309. FRANCOPHONE CULTURE AND CIVILIZATION (3)
This course provides an in-depth, critical study of two or three aspects of Francophone culture and civilization. Course content will be determined by the individual instructor but can cover any cultural product or institution from any time period. Prerequisites: FREN 301 and FREN 306 or permission of instructor.

FREN 311. SURVEY OF FRENCH LITERATURE (3)
A study of the major literary and philosophical movements in France from the 18th through the 21st century. The student will be exposed to examples of theater, prose, and poetry. Prerequisites: FREN 301 and FREN 307 or permission of instructor.

FREN 313. SURVEY OF FRANCOPHONE LITERATURE (3)
A study of major literary works from French-speaking areas in North America, Africa, and the Caribbean from the 19th century to the present. Prerequisites: FREN 301 and FREN 307 or permission of instructor.

FREN 367. FRANCOPHONE FILM STUDIES (3)
An in-depth critical study of selected films. Course content will be determined by the individual instructor, but can cover any aspect of Francophone cinema, i.e., films of any time period, any genre, or any Francophone country. The language of instruction is French. Prerequisites: FREN 101, FREN 102, FREN 203, FREN 204, and FREN 301.
FREN 411. STUDY ABROAD (3)
Shepherd University will offer a series of study abroad opportunities in a number of French-speaking countries such as Canada (Quebec), France, and Senegal. Students will be immersed in the target language through classroom instruction, family homestay, and cultural activities. Prerequisites: FREN 101 and 102. Repeatable up to 9 hours.

FREN 412. FRENCH-LANGUAGE SHORT STORY (3)
This course is a study of the short story (conte) in France and French-speaking countries from its beginnings to the contemporary period, with representative readings. Prerequisites: FREN 301 and FREN 307 or permission of instructor.

FREN 414. FRENCH-LANGUAGE NOVEL (3)
This course is a study of the novel in France and French-speaking countries from its beginnings to the contemporary period, with representative readings. Prerequisites: FREN 301 and FREN 307 or permission of instructor.

FREN 416. SEMINAR IN FRENCH LITERATURE (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. Prerequisites: FREN 301, FREN 307 and either FREN 311 or FREN 312.

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
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
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 105. WORLD CULTURAL GEOGRAPHY (3)
A survey of human populations in their natural environments by the study of physical and cultural geographic components such as climate, landforms, culture, migration, settlement, economic activities, and global interconnectedness. Emphasis on geographic skills development through the use of maps, models, and satellite imagery.

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 202. WORLD REGIONS (3)
In-depth analysis of world regions including physical and cultural geographic elements, human-land relationships, economic patterns, transportation and communication, urban systems, political patterns, and contemporary issues. Emphasis on geographic skills development through the use of maps, data, and comparative case studies. Prerequisite: GEOG 105 or consent of instructor.

GEOG 301. WORLD ECONOMIC GEOGRAPHY (3)
Involves the systems of livelihood of the industrial nations and of the Third World peasant economics. 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 U.S. AND CANADA (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 (Contemporary) and Photography/Computer Imagery)
GRDS 200. INTRODUCTION TO GRAPHIC DESIGN (3)
Introduction to Graphic Design provides the student with a comprehensive overview of the design field including principles, techniques, and practice. Projects and exercises encourage the exploration of a wide range of design applications. Throughout the course, the student will hone problem-solving skills, comprehend the design process, and learn craft-making techniques.

GRDS 300. TYPOGRAPHY I (3)
This course introduces students to the history and technology of one of the most integral components of visual communication—letterforms. Topics covered include typographic vocabulary, terminology, classification, measurement, syntax, communication, and legibility. The expressive potential of letterforms and words is explored, as well as the relationship between type and image. Students develop an appreciation of the subtleties of typographic form through projects that incorporate both traditional and digital methods and techniques. Prerequisites: GRDS 200; corequisite: GRDS 320.

GRDS 320. DIGITAL STUDIO I (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. INTERMEDIATE GRAPHIC DESIGN (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. Prerequisite: GRDS 320.

GRDS 360. DIGITAL STUDIO II (3)
Digital Studio II introduces students to using the Macintosh computer as a tool for design, page layout, and production. Grid, document structure, pagination, and basic typographic hierarchy are explored, as well as the use of master pages, style sheets, libraries, layers, and color models in the construction of both single- and multiple-page documents. Technical considerations in the design and production process are presented, such as working with image files and preparing documents for successful output to print and PDF. Through lecture and critique, students develop an awareness of how design decisions impact the cost of production and distribution. Prerequisites: GRDS 300, GRDS 320; corequisite: GRDS 340.

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 (3-6)
This course provides the student an opportunity to explore in-depth a specialization in the graphic design industry. Topics may include identity design and guidelines, branding and packaging design, publication design, environmental design, information architecture and systems design, and signage and wayfinding design. Other topics address critical thinking in graphic design and may include such issues as design and social responsibility, design for democracy, and design for global audiences, among others. Prerequisites: 18 credits in graphic design.

GRDS 410. TYPOGRAPHY II (3)
This course expands on 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 430. ADVANCED DESIGN (3)
Advanced Design offers students an overview of the many specializations in the diverse field of graphic design. Projects demand extensive research, analysis, and creative conceptualization. Students are expected to generate sophisticated design solutions that reflect a high level of expertise and achievement. Critical thinking in graphic design is stressed with readings and discussions on contemporary issues in the profession, both domestic and international. Prerequisite: GRDS 410.

GRDS 440. INTERACTIVE DESIGN (3)
This course is designed to educate students in interactive design for on-screen experiences. Students will learn the latest software techniques and be introduced to concepts of interactivity. Investiga-
tion will include the integration of concept, story, event, and content. This course will focus on the principles of user experience in relation to content and meaning. Students will explore the changing roles of designers in the environment of the World Wide Web, learning processes, and languages to create dynamic interactive experiences. Students will learn to analyze conventional and unconventional network experiences, to identify principles in action, and to develop strategies for interactive design. Prerequisites: GRDS 360 and ART 208 with a C or higher.

GRDS 442. WEB SITE DESIGN (3)
This course is designed to educate students in Web and interface design for on-screen experiences. Students will learn the latest software, gain fluency in WYSIWYG programming, and be introduced to Web accessibility guidelines. The class will review current visual communication practices on the Web, consider the basic concepts of information architecture, develop core technical and design competencies, and focus on developing a user-centered Web site. The class encourages a critical examination of net culture and challenges students to expand the creative potentials of the medium. Prerequisite: GRDS 360 and ART 208 with a C or higher.

GRDS 450. ANNUAL REPORT STUDIO (3-6)
This course challenges a student team to undertake 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 and design. 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. Annual Report Studio is a yearlong course; conceptual design and photography are generated in the fall and production design and imaging in the spring. A two-semester commitment is expected of students to ensure continuity in the creation of this critical document. 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 460. INTERNSHIP IN GRAPHIC DESIGN (3-6)
Internships offer students an opportunity to expand their knowledge and understanding of the field by working in a professional design setting. Client-oriented projects expose the student to multiple aspects of the professional design process: client meetings, cost estimates, presentation, design, and production. To complete this course, 200 hours of documented work (about 12 hours a week per semester) is required. Summer internships are strongly encouraged. Prerequisites: 24 credits in graphic design and minimum 3.0 GPA.

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 310. HEALTH AND PHYSICAL EDUCATION FOR ELEMENTARY EDUCATORS (4)
This course is designed to develop the knowledge and skills of elementary educators to provide instruction in health and physical education. The course will focus on instruction of fundamental movement patterns, skill development for games and activities, promotion of lifetime enjoyment of physical activity, health promotion and disease prevention, health literacy, the influence of culture and media, communication skills, and goal setting and decision making. The course includes an elementary school practicum and will provide opportunities to plan and demonstrate various instructional techniques, integrate health and physical education across the curriculum, and demonstrate alternative methods of content delivery. Students will develop technology skills to deliver health education and physical education instruction and reinforce classroom experience and learning.

HLTH 320. HUMAN SEXUALITY (3)
An in-depth study of sexuality across the lifespan with attention to psychological, physiological, ethical, and socio-cultural implications. This course is required for physical education majors seeking a teaching endorsement in health, K-adult. Prerequisite: HLTH 103.

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 fall 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. Prerequisite: HLTH 225.

HLTH 391. WORKSITE HEALTH PROMOTION (3)
This course will concentrate on the identification, assessment, planning, implementation, and evaluation of worksite health promotion. Students will have the opportunity to develop a worksite health promotion (wellness) program.

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.

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 250. INTRODUCTION TO HISTORICAL STUDIES (3)
An introduction to historiography and to historical methodology.

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 301. AMERICAN COLONIAL HISTORY (3)
This course examines the development of colonies in America, 1492-1763. Instead of seeing the
history of the mainland North American colonies as the rise of the United States, the course places the colonies in an Atlantic context. This multi-imperial, multi-ethnic, multicultural approach will focus on political, cultural, social, and economic interactions among Indians, African, and Europeans in the New World.

HIST 302. ERA OF THE AMERICAN REVOLUTION, 1763-1815 (3)
An intensive study of the 1763-1815 period, this course focuses on the causes, nature, and consequences of the American Revolution and the formation of the United States through the War of 1812. It examines how all peoples living in the mainland colonies affected the creation and security of the new nation and how that new regime in turn shaped their lives.

HIST 303. THE JACKSONIAN ERA, 1816-1850 (3)
Covering the period from the Era of Good Feelings to the aftermath of the Mexican War, this course encompasses the rise of early nationalism, territorial expansion, the westward movement, the development of the market economy, the rise of the common man, and the manifestation of reform. This complex era, epitomized by Andrew Jackson's career, saw the rise of disparate economic systems and political goals among the nation’s geographical sections.

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, socioeconomic, 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: Sophomore, junior, senior, nondegree status, or permission of instructor.

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: Sophomore, junior, senior, nondegree status, or permission of instructor.

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: Sophomore, junior, senior, nondegree status, or permission of instructor.

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 378. AMERICAN MILITARY HISTORY (3)
This course, which covers the period from the founding of Jamestown in 1607 through the 21st century War on Terror, examines the development of American military policy, the efforts of armed forces in carrying out that policy, and the effects of U.S. military policy on international relations and internal development. Prerequisite: Sophomore, junior, senior, nondegree status, or permission of instructor.

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. RUSSIA TO 1855 (3)
A survey of medieval and early imperial Russia with special emphasis on political, social, economic, and cultural developments.
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 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. 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. 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
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.

HIST 445. LATIN AMERICA TO 1840 (3)
This course examines the political and social formation of Latin America to 1840, including the pre-Columbian era, colonial society, and independence movements. Themes examined will include relations between the individual and the state, and issue of gender, race, and religion. Students will work extensively with primary documents.

HIST 446. LATIN AMERICA SINCE 1820 (3)
This course examines modern Latin America from the formation of independent states around 1820 through the present day. Themes emphasized include political and economic structures, relations with the United States, human rights, and the impact globalization.

HONORS
HNRS 101. HONORS FIRST-YEAR COURSE (6)
The 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.

HNRS 388. HONORS PROJECT PREPARATION (1)
This course prepares Honors candidates to undertake the work of the Honors Capstone Project, the final requirement for graduation from the Honors Program. Topics include an overview of the research process, the differences between theses and non-thesis projects, developing appropriate research questions, identifying an appropriate faculty mentor, techniques for overcoming common stumbling blocks in conducting research, and information on the expectations of the Honors Directed Readings and Honors Capstone Project courses. This course will culminate in the production of a final research proposal and plan that will be submitted for approval to the Honors Advisory Board. Permission of instructor.

HNRS 389. HONORS SEMINAR (3)
An advanced seminar for Honors students. Subject matter and content vary from semester to semester, with an emphasis on interdisciplinary and multidisciplinary explorations of provocative and timely topics.

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 CAPSTONE PROJECT (3)
After completing a proposal in the Directed Readings course, a candidate in honors shall have one semester to complete the Honors project, the final requirement for graduation from the Honors Program.
Program. The project topic should be chosen within the candidate’s major or minor field of study. In many cases, the Honors Capstone Project will take the form of a thesis and include a carefully prepared argument in support of the thesis statement. Rather than a thesis, students in certain fields of study (e.g., graphic design) may choose to design a capstone 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 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 300. VISUAL REPORTING (3)
An introduction to visual reporting, including individual assignments, lectures, and lab work. Topics include sports, documentary, and feature story reporting using technology consistent with visual, video, and Web site convergence. Prerequisite: JOUR 204. Students must own their own manually operable digital camera (minimum 3.2 megapixel) or 35 mm film camera. Good computer skills highly recommended.

JOUR 305. HISTORY OF JOURNALISM IN AMERICA (3)
From Ben Franklin to William Randolph Hearst to Matt Drudge and Rupert Murdoch: the evolution of American-style freedom of the press from colonial times to the era of the Internet will be examined. Topics include the differences between state-owned, corporate-controlled, and privately funded media and the pressures to redefine the media in the 21st century. Prerequisite: JOUR 204.

JOUR 310. MEDIA AND POLITICS (3)
A critical study of current media in contemporary democracies, in defending freedom of speech, upholding individual responsibilities, restraining government and business, and shaping public perceptions of the world. Prerequisite: JOUR 204.

JOUR 315. EDITING (3)
Copy editing, proofreading, and basic editorial skills. Articles will be analyzed for accuracy, libel, Associated Press style, effective attribution, concise structure, and precise diction.

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. INFORMATION LITERACY (1)
A hands-on introduction to research skills for finding, using, and evaluating library and Internet resources. Course content will be coordinated with majors and subjects of academic interest for those enrolled in the course.

LBSC 102. INFORMATION LITERACY FOR HUMANITIES (1)
A hands-on introduction to research skills for finding, using, and evaluating library and Internet resources. Course content will be coordinated with topics and methods appropriate to arts and humanities disciplines.

LBSC 103. INFORMATION LITERACY FOR SOCIAL SCIENCES (1)
A hands-on introduction to research skills for finding, using, and evaluating library and Internet resources. Course content will be coordinated with topics and methods appropriate to social science disciplines.

LBSC 104. INFORMATION LITERACY FOR SCIENCES (1)
A hands-on introduction to research skills for finding, using, and evaluating library and Internet resources. Course content will be coordinated with topics and methods appropriate to science disciplines.

LBSC 105. INFORMATION LITERACY FOR BUSINESS AND PROFESSIONAL STUDIES (1)
A hands-on introduction to research skills for finding, using, and evaluating library and Internet resources. Course content will be coordinated with topics and methods appropriate to business and professional studies disciplines.

MATHEMATICS
MATH 100. FRESHMAN SEMINAR (1)
This course provides beginning freshman students with information and tools to prepare them for a successful life as a student. This course is aimed at developing the cognitive skills required in computer, mathematics, and engineering courses. The activities in this course are designed to introduce the student to an academic support system through which freshman students can explore various concentrations in computer science, mathematics, and engineering and learn academic success strategies including developing a support network. One pass/fail credit.

MATH 101. FUNDAMENTALS OF MATHEMATICS (3)
This course is an extensive review of the properties of integers, fractions, decimals, and rational numbers. Topics will include the Euclidean algorithm, polynomials and operations on polynomials, irreducible versus reducible polynomials factoring, Bézout's theorem, the division algorithm, long division, geometric sequence as an application, simplifying expressions involving polynomials, revisiting the basic algorithms of arithmetic using the concept of polynomials, different number bases and operations, solving first and second degree equations, relationship between factoring and finding roots, solving first and second degree polynomial inequalities, graphic representation of inequalities and equations, interval notation including unions of intervals, exponential notation, laws of exponents, working with exponents and simplifying expressions using exponents, and solving systems of equations in two unknowns.

MATH 101A. FUNDAMENTAL MATHEMATICS I (2)
An extensive review of the properties of integers; working with fractions, decimals, and rational numbers; the Euclidean algorithm; polynomials and operations on polynomials; irreducible verses
reducible polynomials; factoring; Bézout’s theorem; the division algorithm and long division; geometric sequence as an application; simplifying expressions involving polynomials; revisiting the basic algorithms of arithmetic using the concept of polynomials; and different number bases and operations in them as an extension. The course ends with an exit exam. This course, together with MATH 101B, is equivalent to MATH 101 in general studies. Placement in this sequence of courses is determined by SAT or ACT score as mandated by state policy.

MATH 101B. FUNDAMENTAL MATHEMATICS II (2)
This course includes solving first and second degree equations; the relationship between factoring and finding roots; solving first and second degree polynomial inequalities; graphic representation of inequalities and equations; interval notation including unions of intervals; exponential notation; laws of exponents; working with exponents; simplifying expressions using exponents; and solving systems of equations in two unknowns. The course ends with an exit exam. This course, together with MATH 101A, is equivalent to MATH 101 in general studies. Placement in this sequence of courses is determined by SAT or ACT score as mandated by state policy.

MATH 102. MATH FOR ELEMENTARY TEACHERS (3)
A study of the structure of mathematical systems and operations defined on these systems; historical development of numbers and number systems including contributions from diverse cultures; and elementary probability, statistics, and data analysis. Emphasis on building conceptual understanding and developing problem-solving skills. Appropriate use of technology will be incorporated throughout the course.

MATH 105. COLLEGE ALGEBRA (3)
Topics in college 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. 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 (4)
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, and topics including trigonometry functions and identities, and inverse trigonometric functions. Prerequisite: MATH 105 or 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 155. DISCRETE STRUCTURES (3)
Topics in this course include solutions for a system of linear equations, matrix algebra, optimization problems and duality, counting arguments, combinations and permutations, elementary probability theory, Markov chains, elementary graph theory, and other applications arising out of finite mathematics. Prerequisite: MATH 105 or satisfactory math placement. Students in the Department of Computer Science, Mathematics, and Engineering must use this course instead of MATH 154 as the general studies requirement.
MATH 200. GEOMETRY AND MEASUREMENT (3)
This course explores the fundamental ideas of planar and spatial geometry. Content includes the analysis and classification of geometric figures; the study of geometry transformations; the concepts of tessellation, symmetry, congruence, and similarity; connection of geometry to other mathematical topics and to nature and art; and an overview of measurement. The course also includes an introduction to the use of computers in the teaching and learning of informal geometry.

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 108 or satisfactory math placement test score.

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 106 and MATH 108 or satisfactory math 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 218. NUMERICAL METHODS (3)
A study of numerical methods for interpolation, approximation, root finding, differentiation, integration, and linear and nonlinear systems. Computer algorithm development and error analysis will be emphasized. Prerequisite or corequisite: MATH 208.

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. Prerequisites: MATH 108; and MATH 155 or 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 155, 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. MATH METHODS FOR ELEMENTARY TEACHERS (3)
An in-depth study of the elementary curriculum content examining methods, problems, and techniques involved in mathematics instruction. Prerequisites: MATH 102 and MATH 200.

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 155 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 318. NUMERICAL ANALYSIS (3)
A study of the mathematics of numerical approximation. Topics include initial value problems, iterative techniques for linear systems, approximation theory, finding eigenvalues, boundary value problems, and numerical solutions to partial differential equations. A continuation of MATH 218. Prerequisites: MATH 218, MATH 307, and MATH 310.

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)
A study of how to model the world around us using mathematics, how to solve the resulting equations, and how to apply the results. Includes a thorough study of how to use both quantitative and qualitative solution behavior in the modeling process. Prerequisites: MATH 318, MATH 321, and MATH 310.

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 queueing algorithms. Additional topics may be chosen from Markov chains, integer programming, nonlinear programming, game theory and decision analysis, and simulation. Prerequisite: MATH 155 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. Prerequisite: 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 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 433. APPLIED MATHEMATICS (4)
This course concerns three major topics. The first topic is Fourier series and it includes Fourier integrals and Fourier transformation. The second topic is partial differential equations and methods of solving them. Important PDEs such as, but not limited to, wave, heat, and Laplace equations are considered. The third topic is complex analysis. Complex functions, complex sequences and series, and complex integration are briefly studied. Prerequisites: MATH 309 and MATH 310.

MATH 434. SENIOR CAPSTONE (3)
This course involves a research-oriented project under the guidance of a faculty advisor or internship mentor. The student has the opportunity to work on a long-term project that could lead to a presentation at a scientific meeting or publication in a scientific journal. Typically the research is spread over two or three semesters and at the end, the student writes a paper summarizing the results and also gives an oral presentation of the results. The student is required to meet with the faculty by the end of the second year of course work in order to get started on the research work. Students are strongly encouraged to present results at scientific meetings.

MATH 435. PRAXIS II MATH PREPARATION (2)
Designed for the first-time test-taker, but is also open to those who are planning to take a retest. The course will cover the contents of the test, address specific test-taking strategies, and provide a review of essential undergraduate mathematics concepts. The course will include several practice tests that will be scored and returned. Senior standing or permission of the instructor. Pass/fail.

MUSIC
Students receive one-half credit for a weekly 25-minute lesson, one credit for a weekly 50-minute lesson. All students who enroll for a private applied lesson must also be enrolled in a major ensemble. Students who wish to take lessons without this requirement are encouraged to enroll in the Department of Music Preparatory Program by calling 304-876-5555. All MUAP courses may be repeated for credit.

MUAP 339. HARP (0.5-1)
MUAP 340. PIANO (0.5-1)
MUAP 341. ORGAN (0.5-1)
MUAP 342. GUITAR (0.5-1)
MUAP 343. BASS GUITAR (0.5-1)
MUAP 344. VOICE (0.5-1)
MUAP 345. FLUTE (0.5-1)
MUAP 346. OBOE (0.5-1)
MUAP 347. CLARINET (0.5-1)
MUAP 348. BASSOON (0.5-1)
MUAP 349. SAXOPHONE (0.5-1)
MUAP 350. TRUMPET (0.5-1)
MUAP 351. FRENCH HORN (0.5-1)
MUAP 352. TROMBONE (0.5-1)
MUAP 353. EUPHONIUM (0.5-1)
MUAP 354. TUBA (0.5-1)
MUAP 355. PERCUSSION-DRUM SET (0.5-1)
MUAP 356. PERCUSSION-ORCHESTRA (0.5-1)
MUAP 357. STRINGS (0.5-1)
MUAP 358. IMPROVISATION (0.5-1)
MUAP 359. HARP (0.5-1)
MUAP 397. JUNIOR RECITAL (0.5-1)
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. WOMEN’S CAMERATA/MEN’S CHOIR (1)
Separate choral ensembles for men and women alone, covering literature from all periods of music history and occasionally performing joint works. Performance schedule includes campus and local performances. 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.

MUEN 385. GAMELAN ENSEMBLE (1)
Emphasis is placed on multiple-percussive techniques and literature. Permission of the instructor.

Music Courses
**For sophomore standing in music, students must have completed at least 24 credits including MUSC 100, 103, 104, 105, and 106 with a grade of C or better.**

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. Prerequisite: Admission to the music department as a music major or minor.

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: Declared music major or music minor or permission of instructor. Students must take a theory placement exam. Concurrent enrollment in MUSC 103 and MUSC 104 is required.

MUSC 102. FUNDAMENTALS OF MUSIC EDUCATION (2)
Study of basic fundamentals of music, especially melody and rhythm, and including harmony, texture, form, dynamics, timbre (particularly the classroom instrumentarium), and listening, studied through active participation, improvisations, composition, reading, writing, listening, movement, and speech, with an emphasis on elementary school music literature (particularly folk song) through the Kodály and Orff Schulwerk approaches. Two hours of class and one hour of lab per week.

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: Declared music major or music minor or permission of instructor. Students must take a theory placement exam.

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. Prerequisite: Declared music major or music minor or permission of instructor. 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. In addition
to one hour of class instruction, students will be required to attend one hour of supervised
laboratory time. 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. In addition to one hour of class instruction, students will be required to attend
one hour of supervised laboratory time. Prerequisite: MUSC 138, keyboard placement exam, or
permission of instructor.

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. In addition to one
hour of class instruction, students will be required to attend one hour of supervised laboratory
time. Prerequisite: MUSC 140, keyboard placement exam, or permission of instructor.

MUSC 142. CLASS GUITAR (2)
This course will provide students with techniques of tuning, maintenance, and care of the instru-
ment as well as fundamental strumming, picking, and bar-chording techniques. Chord patterns
and melodic devices are also included. May be repeated.

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:
Declared music major or music minor; MUSC 105 or permission of instructor.

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. Prerequisite: Declared music major or music minor; MUSC 106
or permission of instructor. Concurrent enrollment in MUSC 203 is recommended.

MUSC 205. MUSIC THEORY IV (2)
See MUSC 203. Prerequisite: Declared music major or music minor; MUSC 203 or permission
of instructor.
MUSC 206. AURAL SKILLS IV (1)
See 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. Prerequisite: MUSC 100.

MUSC 226. CLASSROOM MUSIC EDUCATION (2)
Methods and materials of teaching music and of integrating music in the elementary classroom. Emphasized are teaching rhythmic poetry and elementary songs (particularly folk songs), beginning music literacy, the classroom instrumentarium, and movement and folk dance, especially through the Kodály and Orff Schulwerk approaches. Prerequisites: MUSC 102 and EDUC 150.

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. Prerequisites: Sophomore standing** and completion of MUSC 100, 103, 104, 105, and 106 with a grade of C or better.

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: Declared music major or music minor or permission of instructor.

MUSC 231. WOODWIND TECHNIQUES II (1)
See MUSC 230. Prerequisites: MUSC 230; declared music major or music minor.

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: Declared music major or music minor or permission of instructor.

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: Declared music major or music minor or permission of instructor.

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: Declared music major or music minor or permission of instructor.
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. Prerequisite: Declared music major or music minor or permission of instructor.

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. This course may be repeated for credit. Prerequisite: Declared music major or music minor or permission of instructor.

MUSC 247. DICTION II (3)
This course will continue the exploration of the International Phonetic Alphabet and its application to foreign language diction for musicians. French, German, and Italian diction will be studied with an emphasis on successful understanding of pronunciation in a performance setting. Prerequisite: MUSC 237; declared music major or music minor or permission of instructor.

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. Prerequisite: Declared music major or music minor.

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: Declared music major or music minor or permission of instructor.

MUSC 303. FORM AND ANALYTICAL TECHNIQUES (3)
A multi-partite course segmented into sessions of study examining the following: 1) Pre-Classic era through Romantic era formal paradigms and their evolution; 2) a survey of pre-tonal contrapuntal techniques and the development of Baroque contrapuntal design; 3) an introduction to the principal axioms of reductive analysis, exemplified by the works of the theorist Heinrich Schenker and his followers; and 4) a primer in the analytical heuristics of post-tonal (set) theory. Prerequisites: Declared music major or music minor and successful completion of MUSC 103, 104, 105, 106, 203, 204, 205, and 206.

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: Declared music major or music minor; MUSC 207 and completion of Keyboard Proficiency Exam.

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. Prerequisites: Declared music major or music minor; MUSC 103 and 104.

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: Declared music major or music minor (with sophomore standing**) or permission of instructor.
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. Prerequisites: Declared music major or music minor (with sophomore standing**) or permission of instructor and MUSC 310.

MUSC 312. MUSIC HISTORY III: 20TH-CENTURY AND WORLD MUSIC (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. Prerequisites: Declared music major or music minor (with sophomore standing**) or permission of instructor and MUSC 310 and 311.

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: Declared music major or music minor; non-music majors must complete MUSC 111 with a grade of C or better.

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 special projects such as concerts into the course content. Prerequisite: Declared music major or music minor (with sophomore standing**).

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. Prerequisites: MUSC 103, 105, and permission of instructor.

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. Prerequisites: Declared music major or music minor or permission of instructor, and completion of or concurrent registration in MUSC 237.

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. Prerequisites: Declared music major or music minor or permission of instructor, and completion of or concurrent registration in MUSC 237.

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. Prerequisites: Declared music major or music minor or permission of instructor, and completion of or concurrent registration in MUSC 237.

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. Prerequisites: Declared music major or music minor or member of a touring ensemble.
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. Prerequisite: Declared music major or music minor (with sophomore standing**).

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: Declared music major or music minor (with sophomore standing** and completion of the Keyboard Proficiency Exam.

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: Declared music major or music minor (with sophomore standing**).

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. Prerequisites: Declared music major or music minor or permission of instructor, and completion of or concurrent registration in MUSC 237.

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. Prerequisites: Declared music major or music minor; two semesters of 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. Prerequisites: Declared music major or music minor (with sophomore standing**); one semester of a choral ensemble.

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: Declared music major or music minor (with sophomore standing**); EDUC 150, EDUC 200.

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: Declared music major or music minor; 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: Declared music major or music minor; 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. Prerequisites: Declared music major or music minor or permission of instructor; 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. Prerequisites: Declared music major or music minor or permission of instructor; MUSC 329.

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. Prerequisite: Declared music major or music minor or 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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).

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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).

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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).

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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).

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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).

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. Prerequisites: Declared music major or music minor or ensemble member; concurrent enrollment in the appropriate applied music section (MUAP).
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. Prerequisites: Declared music major or music minor (with sophomore standing**); non-music majors must complete MUSC 111 with a grade of C or better.

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. Prerequisites: Declared music major or music minor (with sophomore standing**); non-music majors must complete MUSC 111 with a grade of C or better.

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. Prerequisites: Declared music major or music minor (with sophomore standing**); non-music majors must complete MUSC 111 with a grade of C or better.

MUSC 343. SPECIAL TOPICS IN MUSICOCOIogy (1-3)
This course allows for in-depth focus on a particular musicological topic. Prerequisite: Declared music major or music minor (with sophomore standing** or permission of instructor.

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. Prerequisites: Declared music major or music minor (with sophomore standing**); non-music majors must complete MUSC 111 with a grade of C or better.

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. Prerequisites: Declared music major or music minor (with sophomore standing** or permission of instructor; MUSC 321, MUSC 314.

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. Prerequisite: Declared music major or music minor (with sophomore standing** or permission of instructor.

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. Prerequisites: Declared music major or music minor; completion of or concurrent enrollment in the culminating courses in the music core curriculum.

**For sophomore standing in music, students must have completed at least 24 credits including MUSC 100, 103, 104, 105, and 106 with a grade of C or better.
NURSING
The curriculum listing in the Programs of Study chapter of this Catalog represents the approved sequence of nursing course work. All courses in the sequence must be completed prior to moving to the next sequence of courses.

NURS 310. LIFESPAN HEALTH PROMOTION IN NURSING (3)
This theory course is designed to provide the student with a foundation for health promotion, disease prevention, and healthy lifestyle; respect and care about patients’ differences, values, preferences, and needs; and the importance of self-care as a professional nurse. Corequisite: FACS 328. Prerequisite: Sophomore standing.

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. Corequisites: NURS 313, 315, 317.

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. Corequisites: NURS 311, 315, 317; R.N.s with permission of department chair.

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. Corequisites: NURS 311, 313, 317.

NURS 316. NURSING II HEALTH CARE OF THE ADULT (3)
This course provides a knowledge and practice base for medical-surgical nursing. 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. Corequisite: NURS 326.

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: NURS 231 or permission of department chair. Corequisites: NURS 311, 313, 315.

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. Prerequisites: NURS 311, 313, 315, 317. 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, 317. Corequisite: NURS 322, 326.

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. Prerequisites: NURS 311, 313, 315, 317. 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. R.N.s with permission of department chair.

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. Prerequisite: NURS 317.

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 independent study, seminar, and clinical experiences. Prerequisites: NURS 324, 313, 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 an 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 324; R.N.s-NURS 410. Corequisite: NURS 413.

NURS 413. NURSING IV CLINICAL COMPONENT (3)
This 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. Prerequisite: NURS 324; R.N.s-NURS 410. Corequisite: NURS 411.

NURS 415. NURSING V HEALTH CARE OF CHILDREN AND FAMILIES (3)
This 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. The student will apply the nursing process utilizing critical thinking skills for the diverse health care alterations in the younger populations. Prerequisites: NURS 316, 318, 320, 322, 326. Corequisite: NURS 417.

NURS 417. NURSING V CLINICAL COMPONENT (2)
This 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. Prerequisites: NURS 320, 322, 326. Corequisite: NURS 415.

NURS 419. NURSING VI HEALTH CARE OF WOMEN (3)
This 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. The student will apply the nursing process utilizing critical thinking skills for the diverse health care alterations in the female population. Prerequisites: NURS 320, 322, 411, 413, 426, 428. Corequisite: NURS 421.

NURS 421. NURSING VI CLINICAL COMPONENT (2)
This clinical 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. Prerequisites: NURS 320, 322, 411, 413, 426, 428. Corequisite: NURS 419.

NURS 422. NURSING VII HEALTH CARE OF THE ADULT: GERONTOLOGY FOCUS (3)
This 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. Prerequisites: NURS 411, 413, 426, 428. Corequisite: NURS 424.

NURS 424. NURSING VII CLINICAL COMPONENT (3)
This clinical course is designed to provide opportunities for application and integrations of theory content of gerontological nursing. A variety of health care settings will be used to 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. Prerequisites: NURS 411, 413, 426, 428. Corequisite: NURS 422.

NURS 426. NURSING VIII HEALTH CARE OF THE ADULT WITH COMPLEX PROBLEMS (3)
This adult health nursing course 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. Prerequisites: NURS 316, 318, 320, 322, 324, 326. Corequisite: NURS 428.
NURS 428. NURSING VIII CLINICAL COMPONENT (2)
This medical-surgical clinical course of adult health care nursing focuses on 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. Prerequisites: NURS 316, 318, 320, 322, 324, 326. 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 is introduced to management principles and leadership roles and responsibilities within different health care organizations and settings. Prerequisites: NURS 415, 417, 426, 428.

NURS 436. SENIOR CAPSTONE SEMINAR (1)
Focus is on preparing for the National Council Licensure Examination-RN (NCLEX-RN). Emphasis will be placed on test-taking strategies and development of personalized plans of study to assist in preparing students for NCLEX-RN success. Prerequisite: last semester pre-licensure senior students.

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. Prerequisite: EDUC 200 or permission of department chair.

PHARMACEUTICAL SCIENCES
Coursework taken through WVU School of Pharmacy through a dual degree arrangement with Shepherd University. See curriculum for Chemistry, Biopharmaceutical Sciences Concentration.

PHAR 311. CHEMICAL PROPERTIES OF DRUGS (2)
Principles of chemical stability and chemical properties as they relate to drug molecules. Topics to be covered include functional group analysis, solubility, oil/water partitioning, organic acids and bases, and drug decomposition and metabolism.

PHAR 402. PHYSICAL PHARMACY (3)
Designed to teach students the basic principles related to physical phenomena and stability as well as introduce them to a variety of factors that influence drug dosage form design and stability.

PHAR 408. PHARMACEUTICS (3)
Pharmaceutics builds upon the concepts discussed in physical pharmacy and focuses on drug dosage forms and delivery systems, their design, drug delivery to the body through a variety of routes, and factors affecting drug delivery.

PHAR 409. IMMUNOLOGY AND BIOTECHNOLOGY (2)
Students will learn basic functions of the immune system, elements of the pharmaceutical applications of biotechnology, and be introduced to the chemotherapy of infections.

PHAR 431. GENERAL BIOCHEMISTRY (4)
This course is designed to be a general introduction to biochemical compounds, processes, and concepts for students in the pharmacy program. Topics such as enzyme mechanisms, therapeutic use of enzyme inhibitors, effects of drugs on various metabolic pathways, signal transduction, and biotransformation provide basic information for subsequent pharmacy courses in the training of students for the practice of pharmacy, including passage of the Pharmacy Board examination. (Four lectures per week.)

PHAR 443. FUNDAMENTALS OF PHYSIOLOGY (5)
Analysis of basic facts and concepts relating to cellular processes, organ systems, and their control. (Three lectures, one conference, one lab.)
PHILOSOPHY

PHIL 100. INTRODUCTION TO LIBERAL ARTS STUDY (3)
This course prepares students for a successful academic career through the cultivation of valued skills in the liberal arts such as critical reading and analysis; writing and discussion; and argument and debate. Students are exposed to a series of primary texts, compiled by the course faculty, dealing with a range of diverse creative, intellectual, and ethical ideas. Students are also introduced to many helpful campus resources as well as university transition strategies such as time management, study skills, information literacy, note-taking, technology usage, and test anxiety coping skills.

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 208. SURVEY OF PHILOSOPHY (3)
A survey of the classic philosophical texts from the ancient and classical traditions through the 21st century. Works will be drawn from both Western and non-Western cultures. Prerequisites: ENGL 102, 103, or 104.

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 (Contemporary) 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. Corequisite: ART 140.

PHOT 282. BLACK AND WHITE PHOTOGRAPHY II (3)
A continuation of Black and White I. Topics include fiber-based paper, working on a larger scale, and advanced printing techniques. Emphasis will be placed on the production of a cohesive body of work in terms of concept. 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 (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. Prerequisites: PHOT 281, PHOT 383, and ART 208.

PHOT 383. COLOR LIGHT IN PHOTOGRAPHY (3)
This course is an introduction to the digital techniques, images, and history of color photography. Topics include how theory relates directly to the practice of making color imagery and the exploration of conceptual ideas and techniques for photographic exploration. Prerequisites: PHOT 281 and PHOT 282.

PHOT 385. COMPUTER DIGITAL IMAGERY (3)
An introduction to computer imaging for visual artists, in which students will learn the fundamentals of image manipulation through digital means. This course also will address the relationship of manipulated images in context of our current culture. Prerequisite: PHOT 281.

PHOT 387. INTRODUCTION TO WEB ART (3)
Students will learn the fundamentals of using digitally manipulated text and images in conjunction with Web page design as a means for visual communication. There will be an emphasis on HTML, Web site functionality, page layout, navigation, and viewer interaction. Prerequisite: PHOT 385.

PHOT 388. MULTI-MEDIA FOR THE WEB (3)
An advanced level studio course with an emphasis on interactivity and the role of the Internet in contemporary art and culture. Students will explore various forms of digital media designed for the Internet including graphics, animation, video, and sound. Prerequisites: PHOT 385 and PHOT 387.

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 420. TIME-BASED MEDIA (3)
An introduction to video art and the relationship between image and sound in time-based media production. Emphasis is placed on the use of metaphor, sequencing, and linear/nonlinear narrative structures in regard to animation, video, and film. Prerequisite: PHOT 385.

PHOT 480. RESEARCH IN PHOTOGRAPHY I (3)
This course designed as a culminating experience within the concentration area of photography with emphasis on contemporary photographic issues. The development of a portfolio and artist’s statement as well as advanced standards of critical observation and analysis are expected. Prerequisites: PHOT 281, PHOT 282, and PHOT 383.

PHOT 482. PHOTOGRAPHY AND ADVERTISING (3)
This is an upper-division studio class that provides an insight into the concepts of creative thinking in photographic advertising and exposes students to new approaches in methods and techniques of producing single images for advertising, along with various components of advance studio work. Prerequisite: PHOT 381.

PHOT 483. ALTERNATIVE PROCESSES (3)
This class explores various photographic processes as a means of creating effects other than the standard rendition. Nonsilver, instant-print manipulations and other processes and techniques will be presented. Prerequisites: PHOT 281 and PHOT 282.
PHOT 486. ADVANCED PHOTOGRAPHY (3-6)
This course is designed as a continuing experience within the concentration area of photography with emphasis on research of contemporary issues. The development of a series of images that demonstrates a visual idea and a thorough exploration of a chosen process is expected. Prerequisites: PHOT 281, PHOT 282, and PHOT 383.

PHOT 487. THE EXTENDED IMAGE (3)
An advanced level studio course in which students will explore the relationship between the virtual space of a photograph and the physical space in which the viewer encounters the image. With an emphasis on presentation, students will extend the photograph beyond the confines of a frame. Prerequisite: PHOT 385.

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.

PHOT 489. RESEARCH IN PHOTOGRAPHY II (3)
This course is a continuing exploration of the visual experience within the concentration area of photography with emphasis on contemporary photographic issues. The development of a portfolio as well as advanced standards of critical observation, analysis, and written essays are required. Prerequisite: PHOT 480.

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 physical education.

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 physical education instructors the 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 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. Taught fall and spring semesters.

PHED 380. PERCEPTUAL MOTOR LEARNING (3)
Examines how people learn motor skills through the Shepherd University Teaching Model for skill acquisition. Student will also learn how to recognize deficiencies related to motor learning and adjust teaching procedures to cope with inherent disabilities. Taught fall and summer.

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 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. COLLEGE 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. COLLEGE 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. COLLEGE 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. COLLEGE 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 222. ELECTRICITY AND MAGNETISM (3)**
Principles of electricity and magnetism with practical applications. Prerequisites: PHYS 222 and MATH 208.

**PHYS 322. 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 320. 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 210. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 211. 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. Prerequisite: PSCI 210 or permission of instructor.

PSCI 300. STATE AND LOCAL GOVERNMENT (3)
A study of the functions and administration of the government on the state and county levels. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 303. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 307. THE U.S. PRESIDENCY (3)
Study of the U.S. presidency, focusing on constitutional powers, the processes of the presidency, and presidential behavior. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.
PSCI 312. PUBLIC OPINION AND POLITICAL BEHAVIOR (3)
An exploration of the role of public opinion, or the public will, in representative democracy. Topics include opinion formation and measurement, political knowledge, partisanship and ideology, attitude stability and change, the impact of public opinion on political behavior, and the relationship between elite and mass opinion. Particular emphasis is placed on an evaluation of the extent to which the public will is translated into governmental action within the political system. Prerequisites: PSCI 100 or 101; and MATH 314, BADM 224, PSYC 250, or PSCI 211; or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 324. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 325. COMPARATIVE GOVERNMENT: WESTERN EUROPE (3)
A comparative study of modern political institutions with particular attention to European government and politics. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 329. COMPARATIVE POLITICS OF THE MIDDLE EAST (3)
Examines the politics of the Middle East from a historical perspective. Provides a basic understanding of the political forces, figures, and events that have shaped the region throughout its long history. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.
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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 402. JURISPRUDENCE: THE PHILOSOPHY OF LAW (3)
A consideration of various philosophical problems and moral dilemmas in the law. Includes study of different legal theories and traditions. Prerequisite: PSCI 100 or 101 and sophomore standing; or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 405. INTERNATIONAL POLITICAL ECONOMY (3)
A theory-intensive study of today's increasingly interdependent and politicized global economy. Introduces students to the main institutions and actors in the international system. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 408. GLOBAL PROBLEMS (3)
A general survey of the major political problems confronting the world today. Explores the nature and complexities of the problems and how to address them. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 415. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 416. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 420. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 422. AMERICAN POLITICAL THOUGHT (3)
A study of the growth and development of American political concepts from the Colonial period to the present. Prerequisite: PSCI 100 or 101 or permission of instructor.

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: PSCI 100 or 101 or permission of instructor. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSCI 444. 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. Prerequisite: PSCI 100 or 101 or permission of instructor.

PSYCHOLOGY
PSYC 101. INTRODUCTION TO PSYCHOLOGY (3)
A survey course introducing the core areas of psychology, including biopsychology, learning and memory, intelligence, developmental psychology, stress and health, personality, abnormal psychology, psychotherapy, and social psychology.
PSYC 250. STATISTICS FOR THE SOCIAL SCIENCES (4)
Descriptive and inferential statistics in the design, analysis, and interpretation of social science research with practical application using computers in the laboratory. The statistical methods to be covered include frequency distributions and graphing, measures of central tendency, measures of variability and correlations, t-tests, analysis of variance, and several distribution-free tests. Prerequisites: MATH 101 or 105 and the introductory course in the major or permission of instructor.

PSYC 251. RESEARCH METHODS IN PSYCHOLOGY (3)
This course is an overview of research design in psychology. Topics covered include research ethics, reliability, and validity of psychological measures, observational and survey methods, quasi-experimental designs, and experimental design and control. Prerequisite: PSYC 250.

PSYC 309. ABNORMAL PSYCHOLOGY (3)
This course takes an integrative approach to the understanding of psychological disorders, exploring biological, psychological, and social influences and their interaction. Scientifically grounded methods of assessment and treatment are emphasized and cultural differences in psychological difficulties and their treatment will also be discussed. Prerequisite: PSYC 101.

PSYC 311. INTRODUCTION TO CLINICAL PSYCHOLOGY (3)
An introduction to theoretical systems and approaches to the prevention and treatment of psychological difficulties, with an emphasis on empirically supported interventions. Prerequisite: PSYC 309.

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. Prerequisite: Permission of the faculty.

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. Prerequisite: PSYC 309 or permission of the instructor.

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 101.

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. Prerequisite: PSYC 101 or BADM 310.

**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. Prerequisite: PSYC 101.

**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. Prerequisite: PSYC 101.

**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. Prerequisite: PSYC 309 or permission of instructor.

**PSYC 331. COUNSELING CHILDREN (3)**
This course focuses on the main components of an elementary school counseling program: counseling (both individual and small group), class guidance, and consultation. Included is information about how to use a variety of counseling techniques, an overview of relevant counseling approaches, childhood social-emotional developmental issues and situational concerns, evaluation and treatment planning, and legal and ethical issues specific to the elementary counseling setting. Prerequisite: PSYC 311 or permission of the instructor.

**PSYC 340. LIFESPAN DEVELOPMENTAL PSYCHOLOGY (3)**
This course consists of an introduction to the scientific study of human development over the lifespan. Prerequisite: PSYC 101.

**PSYC 341. INFANT/CHILD DEVELOPMENT (3)**
This course is designed to help students understand their own developmental past, present, and future which they may then use as parents or in their career paths involving infants and children. This course examines topics of classic and contemporary developmental theories, research, and concepts as they apply to the developing person from conception through childhood. These topics will focus on the biological, cognitive, and psychosocial perspectives of human development. Prerequisite: PSYC 340 or permission of instructor.

**PSYC 342. 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. Prerequisite: PSYC 340 or permission of instructor.

**PSYC 343. 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 340 or permission of instructor.
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. Prerequisite: PSYC 101.

PSYC 367. SOCIAL PERCEPTION (3)
Social perception is the process in which people form impressions of individuals. This course examines that process by exploring the array of information people use in impression formation and management including, but not limited to, attitudes, emotions, mood biases, and other environmental factors. Assorted social perception theories, relevant research, and real-world applications are also discussed through the course. Prerequisite: PSYC 101.

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 251 and ENGL 102, 103, or 104.

PSYC 371. MEMORY AND COGNITION (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. Prerequisites: PSYC 251 and ENGL 102, 103, or 104.

PSYC 372. 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. Prerequisites: PSYC 251 and ENGL 102, 103, or 104.

PSYC 381. SPORT PSYCHOLOGY (3)
This course is designed for students interested in learning theoretical as well as practical information as it relates to the psychology of sport. This class will introduce students to the areas of sport psychology and health psychology. Students will be presented with a number of effective mental training exercises that will help to enhance one’s level of athletic performance. Prerequisite: PSYC 101.

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 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. Repeatable with different topic, up to 6 credits.

**PSYC 405. 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 101.

**PSYC 410. PSYCHOLOGY OF PERSONALITY (3)**
This course reviews classical and contemporary theories of personality in some depth by evaluating each theory on its scientific and philosophical merits, as well as on its utility in application in clinical, educational, and business settings. Prerequisite: PSYC 101.

**PSYC 415. PSYCHOLOGICAL TESTS AND MEASUREMENTS (3)**
This course is a survey of the psychological instruments available for the measurement of human behavior, beliefs, and attitudes. Prerequisite: PSYC 101.

**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 101.

**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. Prerequisite: PSYC 101.

**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 and an understanding of the physiological correlates of many types of psychological pathology. Prerequisite: PSYC 101.

**PSYC 484. DIRECTED READINGS (3)**
As a first course in a series of two, the Directed Readings seminar is designed to prepare students for the senior thesis capstone course. In collaboration with a faculty mentor, the student will develop an idea for an original research project, conduct a review of the relevant literature, and generate an appropriate research design. The final product of the class will be an APA format paper describing the final design. Prerequisites: A Group I elective and senior standing.

**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 484.

**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 201. SPORT FINANCE (3)
This course provides students with principles of sport finance, basic accounting for sport managers, economics of leisure and sport organizations (including schools, universities, club programs, and professional sport organizations), budget development, and financial accountability. Case studies and projects will be included in the course.

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 211. LEADERSHIP IN LEISURE STUDIES (3)
This course will provide students with the foundations of recreation leadership and group interaction. The course will cover theories, techniques, styles, and communication. Experiential activities will allow a better understanding of the concepts of leadership and group dynamics in a recreation setting.

RECR 226. SPORT PROMOTION/MARKETING/FUND RAISING (3)
Emphasizes policies, procedures, and administrative skills to organize and develop both internal and external techniques.

RECR 227. SPORT BROADCASTING (3)
Students will learn the art of the play-by-play, how to host weekly coaching shows, how to create a sports personality, and how to create their own sports talk shows. Sports broadcasting technology has changed and with it the growth of sports business and sports broadcasting. Sports radio and sports talk shows are available in every part of the world, and talented and trained sports broadcasters are in high demand. This course will train students with the skill set and experience that network affiliates and professional sports are requiring.

RECR 228. SPORT MANAGEMENT (3)
Focuses on areas of leadership with emphasis on functions of management, time management, and decision making as they relate to a career in sport and event management.

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 321. RECREATION AND SPORT MANAGEMENT TECHNOLOGY (3)
This class will examine the implication of information technology on the recreation and sport management business and how to manage information technology resources within a company to maximize operation efficiency and productivity. Students will learn to be information technology professionals in the industry who can manage, develop, and lead organizational information systems based on the integration of core business concepts and ever-changing knowledge about information and technology.

RECR 323. HUMAN RESOURCE MANAGEMENT IN SPORT (3)
This course provides an introduction to the field of personnel/human resources management as it relates to sport and recreation and investigates the role of the personnel manager in the public, nonprofit, and private sectors. A variety of personnel functions and procedures is examined including HR planning, job analysis, performance appraisal, personnel selection, orientation, training and development, compensation and benefits, labor-management relations, civil service systems, EEO/AA, and the impact of legislation on the personnel function.

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 326. ADVERTISING AND PUBLIC RELATIONS FOR SPORT PROFESSIONALS (3)
This course introduces strategies, issues, and effective practices of communication in the sports field and its constituencies. It includes the study of public opinion research, media relations, public communication campaigns, consumer identity, advertising, and representational ethics. Students gain practical experience in writing sports-related news releases, conducting surveys, and designing integrated campaigns.

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 336. INCLUSIVE RECREATION (3)
This course introduces students to issues related to characteristics of special needs populations as well as recreational and sports strategies for instruction of diverse populations. Students will also be introduced to the legal issues related to adults and children with special needs.

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 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 400. PERSONAL TRAINER REVIEW COURSE (3)
The purpose of this course is to provide students in the recreation and sports studies program with the skills, knowledge, and abilities necessary to be exercise leaders to promote fitness programs for health participants in a fitness/wellness setting. Specifically, students will obtain the skills needed to evaluate health behaviors and risk factors; administer fitness assessments; and assess, design, and implement exercise programs for apparently healthy individuals and individuals with controlled diseases, as well as skills needed in instruct various cardiorespiratory, resistance, and flexibility exercises. This course also prepares students for the various personal trainer certification exams.

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 444. DESIGN AND ANALYSIS RESEARCH IN RECREATION AND SPORT (3)
This course is designed to survey the basic types of research methods often found in recreation and sport science. A variety of research designs and computerized statistical analyses are studied to help students understand the systematic nature of problem solving. Various research problems as they relate to recreation and sport are discussed for the purpose of identifying the broad and diverse nature of research in the movement, leisure, sport, and health professions.

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 451. READING IN RECREATION AND SPORT (3)
An examination of a selected topic in recreation and sport devoted to extensive reading of classic, standard, and/or contemporary monographs, articles, and/or books. Prerequisite: Permission of 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.

SIGN LANGUAGE

SIGN 101. 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.

SIGN 102. 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. Prerequisite: SIGN 101.

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 101, 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 biopsychosocial 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 101.

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 biopsychosocial 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 101.

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 101 or permission of instructor.

SOWK 404. SOCIAL WORK CAPSTONE (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.

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-solving 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 the 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-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, thorough, broad experience in direct service to people in need. Prerequisite: senior majors only.

**SOWK 412. FIELD EXPERIENCE IV (3)**
The final semester of the social work students’ field instruction in which the student will be expected to continue applying theory to practice through direct delivery of human 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 Shepherd campus. The University faculty and the agency supervisor work closely to insure the student undergoes an intense, thorough, 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. DEMOGRAPHY (3)
This course is concerned with the study of human populations and their interaction with the physical environment. It examines how societies are affected by changes in the size, composition, and distribution of their populations, as well as how those population trends affect the organization of social life. The course will introduce students to the procedures demographers use to collect, analyze, and interpret population data such as birth, death, and migration rates.

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. 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 IN SOCIAL SCIENCES (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 409. CONTEMPORARY THEORY (3)
This course focuses on the European influence upon intellectual thought in American sociology. The impact of Marx through the Frankfurt School, neo-Marxists, and critical theory is introduced. The development of symbolic interaction is presented in an examination of dramaturgy, ethnomethodology, and phenomenological sociology. Structural-functionalist, systems theory, and exchange theory are also presented. In addition, contemporary feminist theory as well as critical theories of race are discussed. The course ends with a overview of modern theories of modernity and globalization.

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 I (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 of the instructor.

SPAN 302. ADVANCED CONVERSATION AND COMPOSITION II (3)
A continuation of SPAN 301, this course is designed to help students continue to 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 of the instructor.

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 306. PENINSULAR CULTURE AND CIVILIZATION (3)
Based on current documentation (literature and film) of contemporary society in Spain, the course strives to give students an understanding of these cultures from a political, historical, social, and literary perspective. This is also an important course for business majors interested in a minor in Spanish to enhance their employment prospects. Prerequisite: SPAN 301/302 or permission of the instructor.

SPAN 307. LATIN AMERICAN CULTURE AND CIVILIZATION (3)
Based on current documentation (literature and film) of contemporary society in Latin America, the course strives to give students an understanding of these cultures from a political, historical, social, and literary perspective. This is also an important course for business majors interested in a minor in Spanish to enhance their employment prospects. Prerequisite: SPAN 301/302 or permission of the instructor.

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 367. SPANISH AND LATIN AMERICAN FILM STUDIES (3)
An in-depth critical study of selected films. Course content will be determined by the individual instructor, but can cover any aspect of Spanish and Latin American cinema, i.e., films of any time period, any genre, or any Spanish-speaking country. The language of instruction is Spanish. Prerequisites: SPAN 101, SPAN 102, SPAN 203, and SPAN 204.

SPAN 400. SURVEY IN SPANISH I: HISPANIC SHORT STORY (3)
This course is a study of the short story (cuento) in Spain and Latin America from its beginnings to the contemporary period with representative readings. Prerequisite: SPAN 310 or 311 or 312 or 313 or permission of the instructor.

SPAN 401. SURVEY IN SPANISH II: HISPANIC DRAMA (3)
This course is a study of drama in Spain and Latin America from its beginnings to the contemporary period with representative readings. Prerequisite: SPAN 310 or 311 or 312 or 313 or permission of the instructor.

SPAN 402. SURVEY IN SPANISH III: HISPANIC NOVEL (3)
This course is a study of the novel in Spain and Latin America from its beginnings to the contemporary period with representative readings. Prerequisite: SPAN 310 or 311 or 312 or 313 or permission of the instructor.

SPAN 403. SURVEY IN SPANISH IV: HISPANIC POETRY (3)
This course is a study of poetry in Spain and Latin America from its beginnings to the contemporary period with representative readings. Prerequisite: SPAN 310 or 311 or 312 or 313 or permission of the instructor.

SPAN 404. SPANISH LINGUISTICS (3)
This course provides an in-depth examination of Spanish linguistics as applied to the Spanish language with a concentration in phonetics, morphology, syntaxes, and semantics. Prerequisite: Permission of the instructor.

SPAN 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 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. Prerequisites: SPAN 310 or 311 or 312 or 313 and permission of the instructor.

SPAN 406. SEMINAR IN LITERATURE II (3)
A seminar course with the same format and requirements as SPAN 405 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 of the instructor.

SPAN 407. SEMINAR IN LITERATURE III (3)
A seminar course with the same format and requirements as SPAN 405 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 of the instructor.

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 411. STUDY ABROAD (3)
Shepherd University will offer a series of study abroad opportunities during the summer. The department has scheduled trips to Argentina and Peru, and future offerings will likely include other Spanish-speaking countries. Students will produce a paper upon their return in order to get credit for this course. Repeatable to 9 hours.

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.

SPAN 485. CAPSTONE PRESENTATION (1)
Under the supervision of a faculty mentor of the student’s choice, the student will propose a project, have the proposal approved by the mentor, and execute the project. Students should 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 Spanish; and participation in a dramatic performance. Students in SPAN 485 will also develop a portfolio of written work submitted in the major and take a major field achievement test. Prerequisite: Permission of the department chair and of the instructor.

SPAN 486. SPANISH EDUCATION CAPSTONE (1)
This Spanish education capstone presentation serves as a complementary component for the student teaching experience. Working under the supervision of the Spanish specialization coordinator and drawing from experiences encountered in the student teaching assignment or other departmental service or activity related to the teaching profession, the apprentice teacher will participate in the end-of-semester Department of Modern Languages capstone presentations, sharing a teaching unit, a lesson series, a project initiated during the field experience, or a project or activity completed in the Department of Modern Languages that relates to the teaching profession. Prerequisite: Permission of the instructor.

THEATER (CONTEMPORARY)
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 350. SEMINAR IN WOMEN’S STUDIES (3)
This course will vary in content with each offering as areas of particular interest not covered by the regular curriculum are explored. This course may be repeated for credit when the course content is changed.

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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SIMPSON, PHILLIP D., Professor of Biology and Chair, Department of Biology. B.S., St. Mary's College of Maryland, 1972; Ph.D., University of Maryland, 1977. (1978)
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DEANS
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School of Education and Professional Studies.................................................. Dr. Virginia Hicks
School of Natural Sciences and Mathematics....................................................Dr. Colleen Nolan
Libraries and Information Sciences....................................................................Vacant
Teaching, Learning, and Instructional Resources..............................................Dr. Laura Renninger
Graduate Studies and Continuing Education......................................................Dr. Russell Porter
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Institute of Environmental Studies ..................................................... Dr. Edward Snyder, Chair

FACULTY EMERITI

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JEAN A. ELLIOTT, Librarian Emerita, 1961-96.
DR. GUY FRANK, Professor Emeritus of Music, 1950-84.
BEVERLY K. HOLDEN, Associate Professor Emerita of Physical Education, 1966-98.
DR. LEE KEEBLER, Professor Emeritus of English, 1966-86.
ANNE L. KERFOOT, Assistant Professor Emerita of Computer and Information Sciences, 1982-2002.
FLOYD W. MILLER, Associate Professor Emeritus of Library Science and Librarian, 1962-81.
CHARLES F. PRINTZ, Professor Emeritus of Business Administration, 1947-81.
JAY N. STenger, Assistant Professor Emeritus of Music, 1969-98.
DR. FRANKLIN W. STURGES, Professor Emeritus of Biology, 1972-90.
GEORGE A. WILSON, Assistant Professor Emeritus of Communications, 1970-98.
DR. JOHN E. WINTERS, Associate Professor Emeritus of English, 1970-98.
DR. DENIS J. WOODS, Associate Professor Emeritus of Political Science, 1992-2010.
CHARLES H. WOODWARD, Associate Professor Emeritus of Biology, 1964-98.
MELVIN C. WYLER, Assistant Professor Emeritus of Speech, 1968-80.

CLASSIFIED AND NONCLASSIFIED EMPLOYEES
Sharika Abdul-Muhaimin.......................................................... Administrative Assistant
John Adams .................................................................................. Assistant VP for Student Affairs/Dean of Students
Joan Albright ................................................................................... Food Service Assistant I, Dining Services
Esperanza Alzona........................................................................ Operations Manager
Scott Anderson .............................................................................. Assistant Director, Dining Services
Jayne Angle .................................................................................... Accounting Assistant I
Kathy Armstrong ................................................................. Administrative Secretary-Sr.
Tracey Ashton ........................................................................... Campus Service Worker
William Astle ................................................................................ Food Service Leader Worker II
Robert Avery .............................................................................. Campus Service Worker
Tracey Banjoman ........................................................................ Administrative Secretary
Amelia Barber ............................................................................... Program Assistant I
Virginia Barnett ............................................................................ Campus Service Worker
Scott Beckner ................................................................................ University Police Chief
Kris Bell ........................................................................................... Financial Aid Assistant III
Connie Bivens ............................................................................. Administrative Associate
Rosalind Black ............................................................................. Accountant
Rebecca Boehler ........................................................................... Staff Nurse
Jeffery Bond .................................................................................. Food Service Assistant I
Brandon Bowers ................................................................---------- Admissions Counselor
Carol Boyd ........................................................................................ Program Associate
Rebecca Boyer .............................................................................. Program Assistant I
Marsha Branch ........................................................................... Human Resources Assistant III
Richard Brandfass ..................................................................... Manager, Application Support
Brenda Branson-Johnson ............................................................ Human Resources Assistant III
Bonita Brooks ................................................................................ Food Service Lead Worker II
John Brown .................................................................................. Campus Police Officer-Supervisor
Paula Brown .................................................................................. Food Service Supervisor
Julie Buckingham ........................................................................ Admissions Assistant II
Peggy Burger ............................................................................ Assistant Director of Dining Services/Retail
Patricia Burkette ........................................................................ Administrative Associate
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calvin Burks</td>
<td>Campus Service Worker</td>
</tr>
<tr>
<td>David Bush</td>
<td>Campus Service Worker</td>
</tr>
<tr>
<td>Barbara Byers</td>
<td>Director of Counseling</td>
</tr>
<tr>
<td>Joyce Cabral</td>
<td>Associate Director, Financial Aid</td>
</tr>
<tr>
<td>Warren Calderone</td>
<td>Director, Foundation, Government, and Corporate Relations</td>
</tr>
<tr>
<td>Dana Cifala</td>
<td>Program Assistant I</td>
</tr>
<tr>
<td>Ricky Clark</td>
<td>Food Service Supervisor</td>
</tr>
<tr>
<td>Sherry Clem</td>
<td>Administrative Secretary-Sr.</td>
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<tr>
<td>Beth Ann Cole</td>
<td>Program Assistant I</td>
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<tr>
<td>Helena Cole</td>
<td>Retention Specialist</td>
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<tr>
<td>David Cole</td>
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<td>Sandra Collier</td>
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<td>Connie Cotta</td>
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<td>Nancy Cowherd</td>
<td>Library Associate</td>
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<tr>
<td>Delbert Cox</td>
<td>Materials Handler</td>
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<td>Kimberly Cross</td>
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<td>Christopher Cyhanick</td>
<td>Electrician</td>
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<td>Donald Dechalus</td>
<td>Database Administrator</td>
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<td>Debra Dehaas</td>
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<tr>
<td>Bernard Demartini</td>
<td>Senior Accountant</td>
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<tr>
<td>Marie Dewalt</td>
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<tr>
<td>Joshua Disalvo</td>
<td>Library Tech Assistant II</td>
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<tr>
<td>W. Larry Dowdy</td>
<td>Director/Media Center/Instructor</td>
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<tr>
<td>Michelle Dronsfield Craig</td>
<td>Assistant to the President</td>
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<tr>
<td>Karin Dunn</td>
<td>Assistant Project Manager</td>
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<tr>
<td>James Dunn, Jr.</td>
<td>Campus Police Investigator I</td>
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<tr>
<td>Daryn Dymond</td>
<td>Project Coordinator Sr./Aquatics Coordinator</td>
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<td>Sharon Earl</td>
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<td>Betty Ecton</td>
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<td>Judith Eggleston</td>
<td>Budget Analyst</td>
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<td>Tracie Ellis</td>
<td>Associate Director, Residence Life</td>
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<td>Katherine Fasulo</td>
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<td>Brenda Feltner</td>
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<td>Teresa Flora</td>
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<td>Cheryl Fogle</td>
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<td>Randall Friend</td>
<td>Director, Admissions</td>
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<td>Nina Fritz</td>
<td>Purchasing Assistant II</td>
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<td>Holly Frye</td>
<td>Program Manager</td>
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<td>Susan Gant</td>
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<td>Nell (Renee) Gibbs-Lankford</td>
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<td>David Giffin</td>
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<td>Ardyth Gilbertson</td>
<td>Director, Health Center</td>
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<td>Melody Gillespie</td>
<td>Painter-Lead</td>
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<td>John Goff</td>
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<td>Todd Grantham</td>
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<td>Bridget Grantham</td>
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<td>Jacqueline Grantham</td>
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<td>David Grove</td>
<td>Assistant Director Physical Plant II</td>
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<tr>
<td>Timothy Haines</td>
<td>Web Manager, External Affairs</td>
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<tr>
<td>Fred Hammer</td>
<td>Trade Specialist Lead II</td>
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<tr>
<td>Geraldine Hammond</td>
<td>Campus Service Worker</td>
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<tr>
<td>Brian Hammond</td>
<td>Information Systems Manager</td>
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<tr>
<td>Kenneth Harbaugh</td>
<td>Printing Services Manager</td>
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<tr>
<td>Christie Harshman</td>
<td>Certified Grounds Supervisor</td>
</tr>
<tr>
<td>Karen Hart</td>
<td>Administrative Secretary-Sr.</td>
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</tbody>
</table>
Elydia Haynes ................................................................. Food Service Worker
Deedia Henry ................................................................. Food Service Worker
Vincente Hernandez .......................................................... Campus Service Worker
Lynee Hess ................................................................. Clinical Skills and Simulation Lab Coordinator
Elizabeth Hess ................................................................. Telephone Operator
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Lay Huor ................................................................. Landscape Worker
Saman Huor ............................................................... Campus Service Worker
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Lexa Long ................................................................. Library Associate
Sara Maene ............................................................... Director, Institutional Research
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Lori Maraugha ............................................................. Campus Police Investigator I
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Tracy Mattern  Campus Service Worker
Judi McIntyre  FYEX Director
Ricci McIntyre  Campus Service Worker
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Bryan Mehalko  HVAC Tech
Denise Messinger  Program Assistant I
Tina Miller  Program Manager
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Carolyn Moler  Administrative Secretary
Rebecca Moore  Admissions Counselor
Stanley Morton  Campus Service Worker
Jo Mullikin  Accountant-Sr.
Robin Murphy  Administrative Associate
Teresa Newcome  Program Manager/Purchasing Card Coordinator
Carolyn Noll  Food Service Worker
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Valerie Owens  Executive Director, External Affairs
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Kelly Pannill  Associate Director/Admissions B
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Zachary Pope  Campus Service Worker
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Sandra Pounds  Campus Service Worker
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Gregory Prutzman  Campus Service Worker
Charles Ransom III  Sports Information Director
Jacquelyn Read  Food Service Assistant I
Alexis Reed  Program Specialist (Assistant Director, Alumni Relations)
Michael Reese  Data Network Specialist I
Judith Reichardt  Campus Manager
Steven Reneker  Project Manager/Electrician
Allen Rhodes  HVAC Mechanic
Erin Rhodes  Landscape Worker
Bradley Ring  Electrician
Kenneth Riser  Butcher Center Manager/Head Coach
Sotiroulla Rivera  Food Service Supervisor
Dustin Robbins  Safety Technician
Lisa Robertazza  Administrative Associate
Delores Robinson  Campus Service Worker
Steven Robinson  Trades Specialist I
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Julie Rohlf  Buyer
Eric Roper  Certified Landscape Worker Lead
Aaron Ryan  Director, Major Gifts
Danny Santiago  Campus Service Worker
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Michelle Schley  Campus Service Worker
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Paul Schwan  Materials Handler
Veronica Scott  Food Service Assistant I
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Jennifer Seeley ........................................................... Program Manager Group Exercise/Wellness Coordinator
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Donna Semler ........................................................................................................... Student Records Assistant
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John Shaw .............................................................................................................. Director, Dining Services
Elizabeth Sheets ................................................................................................... Director, Career Planning and Placement
Michael Sheinall .......................................................... Food Service Worker
Diane Shewbridge .......................................................... Administrative Associate
Donna Shipley ............................................................ Manager, Custodial and Administrative Services
Sonya Sholley ......................................................................................................... Executive Secretary to the President
Julie Siler .............................................................................................................. Director, Alumni Relations
Johnna Simon ....................................................................................................... Residence Hall Associate
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Wanda Smith ........................................................................................................ Administrative Associate
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Cindy Snyder ......................................................................................................... Associate Registrar
Judith Soule ............................................................................................................ Financial Aid Counselor
Robert Spiker ...................................................................................................... Director, IT Services
James Sweeney ..................................................................................................... Director, Wellness Center
Peggy Swisher ........................................................................................................ Certification Analyst
Pamela Swope ........................................................................................................ Records Assistant II
Shelley Tharp ........................................................................................................ Comptroller
Christina Thompson .......................................................... Bookstore Assistant
Christine Toms ....................................................................................................... Library Associate
Theresa Tomsic ..................................................................................................... Purchasing Assistant II
John Turner ........................................................................................................ Network Administrator
Larry Turner ................................................................. Campus Police Investigator I
Molly Twine .......................................................................................................... Operations Coordinator
Donna Utterback .................................................................................................. Copy Center Operator I
Mary Valentine ...................................................................................................... Information Technology Assistant
James Vigil ............................................................................................................ Director, Auxiliary Enterprises
Kathy Virts ............................................................................................................. Food Service Worker
Patrick Wallace .................................................................................................. Theater Tech Director
Mary Walling ......................................................................................................... Administrative Assistant
Paula Wamsley ..................................................................................................... Administrative Assistant
Matthew Ware ....................................................................................................... Certified Landscape Worker Lead
Patrick Weber ....................................................................................................... Library Assistant
Patt Welsh ............................................................................................................... Administrative Secretary
James Welsh ......................................................................................................... Information Technology Assistant
Melissa Welsh ....................................................................................................... Administrative Secretary-Sr.
Texie-Jane Wendricks ........................................................................................ Data Business Clerk
Thomas White ...................................................................................................... Data Entry Operator
Orett White ........................................................................................................... Campus Service Worker
Marian Willauer .................................................................................................. Program Manager/Student Employment Coordinator
Edward Williams .................................................................................................. Security Guard
Deneatta Williams .............................................................................................. Food Service Worker
William Willingham Jr. ......................................................................................... Materials Handler
Emmy Wilson ......................................................................................................... Program Assistant I
Darlene Witt ........................................................................................................ Administrative Secretary-Sr.
Karl Wolf ............................................................................................................... Associate Dean, AD
Ellisa Woodbrey ................................................................. Associate Director, Residence Life
Keith Worrell .................................................................................. Program Coordinator
Dan Yanna .......................................................... Director, Facilities Management
Luann Yanna ................................................................... Information Systems Specialist
Kathryn Young ............................................. Editorial Assistant, External Affairs
Shannon Zimmerman .......................................................... Associate Director/Admissions B

STAFF EMERITI
HAYDON RUDOLF, Assistant Dean Emeritus of Student Affairs, 1973-99.
AGNES TABLER, Associate Registrar Emerita, 1960-2010.
SANDRA VAN METER, Associate Director Emerita of Admissions, 1983-2009.
HARRY YOUNG, Dean Emeritus of Student Affairs, 1969-2000.

SHEPHERD UNIVERSITY FOUNDATION
Ramon Alvarez ................................................................. President
Monica Lingenfelter ................................................................. Executive Vice President
Cathy Nevy .................................................................................. Director of Finance
Robert Shaw ................................................................................ Database Manager
Meg Peterson .............................................................. Accounting and Communications Specialist
Kristin Alexander .................. Executive Administrative Assistant and Communications Specialist
INDEX

A
Absence with Leave Policy  47
Academic Advisement  40
Academic Advisor, Responsibilities  41
Academic Common Market, Out-of-State Students  18
Academic Dishonesty  56
Academic Forgiveness Policy  54
Academic Information
   Academic Advisement  40
Academic Load  42
Academic Performance
   Academic Dishonesty  56
   Academic Forgiveness Policy  54
   Academic Probation  55
   Academic Suspension  55
   Assessment  53
   Attendance  51
   Dean's List  53
   McMurran Scholars  53
   Office of Student Academic Support Services  51
Academic Probation  55
Academic Progress Policy  38
Academic Support Center  51
Academic Suspension  55
Academic Work
   Final Examinations  41
   Schedule of Classes  41
Academic Year Calendars  6
Accounting
   Courses  159
   Major  67
   Minor  67
Accreditation  8
Administrative Officers  284
Admission
   Change of Residence  22
   DentSTEP Program  17
   Dependency Status  22
   Former Domicile  23
   Freshman Admission  12
   GED Test  13
   High School/University Concurrent Enrollment  16
   Home School  13
   Immunization Requirement  20
   International Student  14
   Limited Enrollment Programs  16
   MedSTEP Program  16
   Nondegree Student  15
   PharmSTEP Program  17
   Procedure  11
   Readmit  15
   Required Grade Averages and Test Scores  12
   Required Units  12
Requirements 12
Residency Appeal Process 23
Residency Status 21
Students with Disabilities 18
Transfer 13
  Credit Hours Transfer Policies 14
Advanced Placement Tests 19
Advisee, Responsibilities 41
Air Force ROTC 21
Americans With Disabilities Act (ADA) 26
Anthropology
  Courses 160
Anthropology/Geography
  Minor 68
Appalachian Studies
  Courses 161
  Minor 68
Appealing a Grade 49
Art
  Comprehensive Major 69
    Graphic Design Concentration 70
    Painting Concentration 70
    Photography/Computer Digital Imagery Concentration 71
    Printmaking Concentration 71
    Sculpture Concentration 72
  Courses 161, 162
  Minor 72
  Minor in Graphic Design 73
  Minor in Photography/Computer Imaging 73
Art Education
  Courses 166
    Teaching Field 72
Assessment 53
Athletic Coaching
  Courses 167
Attendance 51
Audit Fees 32
Auditing Courses 42

B
Baccalaureate Degrees 49
Biology
  Comprehensive Major
    Ecological Science Concentration 74
  Courses 168
  Major 74
  Minor 75
    Molecular Track 75
    Traditional Track 75
  Teaching Field 76
Board and Room 34
Board of Governors 284
Business Administration
  Courses 172
  Major
    Entrepreneurship and Small Business Management Concentration 78
Financial Planning Concentration 78
General Business Concentration 77
Hospitality Management Concentration 79
Human Resource Management Concentration 79
Management Concentration 80
Marketing Concentration 81
Minor
Business Administration 81
Hospitality Management 82
Marketing 82

Calendars 6
Cancellation Policy 52
Career Development Center 24
Change of Class Schedule 46
Change of Residence 22

Chemistry
Comprehensive Major
Biochemistry Concentration 84
Environmental Chemistry Concentration 85
Courses 176
Major
Biopharmaceutical Sciences Concentration 84
Traditional Concentration 83
Minor
Physical Analytical Track 86
Traditional Track 86
Teaching Field 86

Class Absences 51
Classification of Students 45
CLEP Tests 19
Communication and New Media
Major 88
Digital Filmmaking Concentration 88
New Media Concentration 88
Minor
Digital Filmmaking 89
New Media 89

Communications and New Media
Courses 181
Community College Collaborations 14

Computer and Information Sciences
Noncomprehensive Major
Computer and Information Technology
Biometrics and Information Security Concentration 92
Information Technology Concentration 92
Web Programming and Design Concentration 92

Computer and Information Technology
Courses 190
Computer Engineering
Courses 191
Co-op Program 62
Coaching (Athletic)
Minor 87
Community Services 26
Index • 301

Commuters 27
Computer and Information Sciences
    Comprehensive Major 90
        Computer Graphics and Games (CGG) Concentration 90
        Computer Programming and Information Systems (CPIS) Concentration 91
        Computer Science (CS) Concentration 91
        Networking and Security (NS) Concentration 91
Courses 185
Minor 92
Noncomprehensive Major 91
Computer Engineering
    Comprehensive Major 92
Concurrent Admissions Program 16
Conduct, Student 29
Cooperative Education 62
Core Values 9
Counseling Center 26
Course Numbering System 158
Courses Taken at Other Institutions 42
Credit
    CLEP Tests 19
    Courses Taken at Other Institutions 42
    General Studies Curriculum 43
    Military Service 21
    Special Examination 42
    Special Topics Courses 43
Credit Hours Minimum Requirement 49
Criminal Justice
    Courses 189, 193
Cross-counting 43

D
Dean’s List 53
Degrees 40
    Double Degrees 50
    Double Majors 51
Degrees and Programs of Study 64
Delayed Enrollment 12
DentSTEP Program 17
Department Chairs 290
Dependency Status 22
Digital Filmmaking Minor 89
Dining Hall 25
Disabilities, Services for Students 26
Discipline Number System 158
Dishonesty, Academic 56
Double Degrees 50
Double Majors 51

E
Early Action Plan 15
Economics
    Courses 194
    Major 93, 94
        Financial Economics Concentration 94
    Minor 94
Education
  Certification Areas 96
  Courses 196
  Elementary Education 99
  Minor 101
  Secondary Education 101
  Specializations 96
  Student Teaching 98
  Teaching Endorsement for Middle School 100
  Elementary Education 99
  Specialty Studies 99
  Teaching Endorsement for Early Education 100
  Emergency Cancellation
  Cancellation Policy 52
  Emeritus Faculty 291,297

Engineering
  Courses 202
  Minor 102

English
  Courses 204
  Major 102
    Creative Writing Concentration 102
    English Literature Concentration 102
  Minor 103
  Teaching Field
    English Education 5-Adult 103

Environmental Studies
  Comprehensive Major 104
    Aquatic Science Concentration 106
    Environmental Engineering Concentration 108
    Environmental Science Concentration 104
    Historic Preservation Concentration 107
    Resource Management Concentration 105
  Courses 212
    Environmental Sustainability Concentration (noncomprehensive) 109
  Minor 110
  Examinations 41

Fees
  Audit Per Semester 32
  Co-Curricular 32
College Operation  32
Intercollegiate Athletic  32
Medical  32
Per Semester  31
Recreation  32
Room and Board  34
Special  33
Student Activity  32
Student Union  32
Technology  32
Final Examinations  41
Financial Aid  35
Academic Progress Policy  38
Appeal Process  38
Application Process  35
Consortium Agreements  36
Employment  36
Loans  35
Refund and Repayment Policy  37
Scholarships  36
Study Abroad  36
Types of Financial Aid  35
Financial Assistance and Expenses  31
First-Year Experience  56
Courses  218
Food Services  25
Foreign Language Placement Test  45
Foreign Language Requirement  45
Former Domicile  23
French
Courses  218
Minor  123
Freshman Admission  12
G
GED Test  13
General Science
Courses  220
Minor  114
Teaching Field
General Science Grades 5-Adult  114
General Studies Curriculum  43
Foreign Language Requirement  45
Geography
Courses  223
German
Courses  224
Grades
60 Hour Repeat Rule  49
Appealing a Grade  49
Grade Point Average  47
Grade Reports  47
Grading System  47
Incomplete Grades  48
Minimum Grade Point Average  49
Pass/Fail  48
Repeating Courses 49
Graduation 49
Additional Requirements 50
Baccalaureate Degrees 49
Credit Hour Transfer Policies 49
Double Degrees 50
Double Majors 51
Minimum Grade Point Average 49
Minimum Semester Hours 49
Graduation with Honors 53
Graphic Design
Concentration 70
Courses 224
Minor 73

H
Health and Fitness Minor 115
Health Education
Courses 226
Teaching Endorsement
Health Education Grades 5-Adult 115
Health Services 25
High School/University Concurrent Enrollment 16
Historic Preservation
Minor 116
History
Courses 228
Major 117
Civil War and Nineteenth-Century America Concentration 118
Public History Concentration 117
Traditional Concentration 117
Minor 118
History of the University 9
Home School Admission 13
Honors, Graduation with 53
Honors Program 57
Courses 233
Directed Reading 59
Honors Capstone Project 59
International Study 59
Required Honors Courses 59
Scholars Program 60
Trips 59
Hospitality Management Minor 82

I
ID Cards 30
Immunization
Requirement for Admission 20
Inclement Weather
Cancellation Policy 52
Incomplete Grades 48
Independent Study Program 57
International Baccalaureate 20
International Student Admission 14
International Study 59
Internships 62
Intramurals 28

J
Journalism
  Courses 234
  Minor 119
Junior High Washington Gateway Program 61

L
Leadership Conference 28
Learning Communities 54, 56
Library 10
Library Science
  Courses 235
Limited Enrollment Programs 16
Location 8

M
Major and Minor
  Selecting 45
Marketing Minor 82
Mathematics
  Comprehensive Major
    Engineering Concentration 120
    Industrial Mathematics Concentration 121
    Traditional Concentration 119
  Courses 235
  Major
    Traditional 119
  Minor
    Applied Track 122
    Traditional Track 122
Teaching Field
  Grades 5-9 General Mathematics through Algebra I 123
  Grades 5-Adult 122
McMurran Scholars 53
MedSTEP Program 16
Middle School Education
  Professional Studies Core 100
Military 22
  Military Service Credit 21
Minimum Shepherd University Credit Hours Requirement 49
Mission Statement 9
Modern Languages 123
  French Minor 123
  Spanish Education Teaching Field 124
  Spanish Major 124
  Spanish Minor
    Literary Track 125
    Nonliterary Track 125
Multicultural Student Affairs 27
Music
  Courses 240
  Major
    Composition Concentration 128
Performance Concentration  
- Guitar performance 128  
- Music theater performance 128  
- Orchestral instrument performance 127  
- Piano performance 127  
- Voice performance 127  
- Piano Pedagogy Concentration 128  
Minor 129  
Teaching Field 129

N  
New Media Minor 89  
Nondegree Student 15  
Nondiscrimination Policy 3  
Nursing  
- Comprehensive Major 136  
- Courses 251  
- R.N.-to-B.S.N. Plan 138

O  
Organizational and Business Communications  
- Minor 89  
- Organizations 29  
- Orientation 24

P  
PASS 28  
Pass/Fail 48  
Payment, Tuition and Fees 31  
Performing Arts Series at Shepherd 28  
Pharmaceutical Sciences  
- Courses 254  
- PharmSTEP Program 17  
Philosophy  
- Courses 255  
Photography/Computer Imagery  
- Concentration 71  
- Courses 255  
- Minor 73  
Physical Education  
- Courses 257  
- General Courses 221  
- Teaching Field 138  
Physics  
- Courses 258  
- Minor 140  
Plagiarism 56  
Political Science  
- Courses 260  
- Major 140  
  - International Concentration 140  
- Minor 141  
Pre-Professional Studies 141  
- Pre-Dentistry 142  
- Pre-Law 142  
- Pre-Medicine 142
Pre-Veterinary Medicine 142
Probation  
Academic 55  
Program Board 28
Psychology  
Courses 263  
Major 143  
Minor 143

R  
RamblerCard 30
Rates  
Room and Board 34
RBA Degree 148
Readmit Admissions 15
Recreation and Leisure Studies  
Comprehensive Major 145  
Athletic Coaching/Officiating Concentration 145
Commercial Recreation/Tourism Concentration  
Leisure Management Option 146
Fitness/Exercise Science Concentration 146
Sport and Event Management Concentration 147
Sport Communication Concentration 146
Sport Marketing Concentration 147
Therapeutic Recreation Concentration 147  
Courses 267  
Minor 148
Reduced Tuition 33
Refund Policy 32
Regents Bachelor of Arts Degree 148
Religion  
Courses 272  
Religious Life 28
Repeating Courses 49
Residence Determined by Domicile 22
Residence Hall Contract 11
Residence Life 25  
Residency Appeal Process 23
Residency Status 21
RN to BSN Admission Process 135
RN Track Program 135
Room and Board 34  
Room Rates Summer Terms 34
ROTC, Air Force 21
Russian  
Courses 272

S  
Schedule of Classes 41
Scholars Program 60  
Secondary Education 101  
Selecting a Major and Minor 45
Selective Service Requirement 20  
Senior Citizen  
Reduced Tuition and Fee Program 33
Service-members Opportunity College 20
Services for Students With Disabilities 26
Sign Language
  Courses 272
Sixty Hour Repeat Rule 49
Snow
  Cancellation Policy 52
Social Studies
  Teaching Field 149
Social Work
  Comprehensive Major 153
  Courses 272
Sociology
  Courses 275
  Major
    Criminal Justice Concentration 155
    Traditional Concentration 155
  Minor 156
Spanish
  Courses 278
  Major 124
  Minor 125
  Teaching Field in Spanish Education 124
Special Programs
  Co-op 62
  Cooperative Education 62
  Junior High Washington Gateway Program 61
  Washington Gateway 60
  Washington Semester 61
Special Topics Courses 43
Student Activities 28
  Organizations, Groups, Committees 29
Student Center 27
Student Community Services 26
Student Conduct 29
Student Life 24
Students with Disabilities 18
Student Teaching 98
Study Abroad 60
  Financial Aid 36
Summer School 10
Suspension 55

T
Theater
  Courses 281
  Minor 156
Transcripts
  24-Hour Faxed 63
  Transcript Requests 63
Transfer Admission 13
Transfer Policies
  Community and Junior College 49
Transient Student Admission 16
Tuition
  Enrollment Fees 31
  Refund Policy 32
Special Fees  33

U
Undecided Majors  45

W
Washington Gateway  60
Washington Gateway Program
   Junior High  61
Washington Semester  61
   Courses  282
Withdrawal  46
Women’s Studies
   Courses  282
   Minor  157