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LONGWOOD

2009-2010 UNDERGRADUATE CATALOG

This Web catalog is the official catalog of Longwood University. It describes Longwood's academic programs, including course numbers, descriptions, and standards for student progress and retention at the time of publication. However, the provisions of this publication are not to be regarded as an irrevocable contract between the student and Longwood. There are established procedures for making changes which protect the institution's right to make changes deemed appropriate. A change of curriculum or graduation requirement is not made retroactive unless the alteration is to the student's advantage and can be accommodated within the span of years normally required for graduation.

Longwood University reserves the right to require a series of student proficiency assessment tests prior to graduation. The purpose of these assessment tests is to help individual students develop to their fullest potential and to improve the educational programs of the institution. Students are required to participate; students who fail to participate may lose their priority ranking for registration and housing. The institution may withhold transcripts for three months for graduating seniors who fail to participate.

Longwood adheres to the principle of equal opportunity without regard to race, sex, creed, color, disability, national origin, age, or religion. This policy extends to all programs and activities supported by the institution and to all employment opportunities at the institution. Anyone with questions concerning access or accommodations should contact Disability Support Services at 434.395.2391 (V); TRS: 711.

The Longwood Undergraduate Catalog was published in June, 2009. The Catalog and related announcements remain in effect until August 1, 2010. Longwood University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4097; Telephone number 404-679-4501) to award bachelors and masters degrees. Longwood is also accredited by the National Council for Accreditation of Teacher Education; Virginia State Board of Education; National Association of Schools of Music; the undergraduate Social Work Program is accredited by the Council on Social Work Education; the undergraduate Therapeutic Recreation Program is accredited by the National Recreation and Park Association in cooperation with the American Association for Leisure and Recreation; the undergraduate Business Administration Program is accredited by AACSB - The International Association For Management Education; Longwood is an accredited institutional member of the National Association of Schools of Theatre. The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Accreditation documents may be viewed during normal business hours in the Office of Academic Affairs.

This document is provided as a convenience to faculty and staff and should not be considered the official copy of the catalog. This document may contain errors. The official copy of the catalog resides on the Longwood website.

Academic Calendar 2009-2010

FALL SEMESTER 2009

August 2009 —	20	New students arrive
	21	Final registration
	22	Continuing students arrive
	24	Classes begin at 8 a.m.
	31	Last day add/drop - 5 p.m.
September 2009 —	7	Labor Day holiday -- no classes, University closed
	8	Classes resume 8 a.m., last day add/drop
	8	Spring 2010 schedule due
	10	Convocation
October 2009 —	5	Grade estimates due 12 noon, Pass/Fail deadline
	12-13	Fall Break - No classes
	14	Classes resume 8 a.m.
		Deadline to withdraw with grade of "W" - 5:00 p.m.
		All undergraduate incompletes due for Spring and Summer 2009
	17	Graduate Comprehensive Examination
November 2009 —	29	Summer 2010 schedule due
	2	Advising and registration begin - Spring 2010
	13	Advising ends - Spring 2010
	25-27	Thanksgiving holiday - no classes, University closed
December 2009—	30	Classes resume 8 a.m.
	4	Last day of classes, Graduate incompletes due for Spring 2009
	5	Reading Day
	7-11	Examinations
	14	All grades due at 8:30 a.m.

SPRING SEMESTER 2010

January 2010 —	11	Final registration, New Student Orientation, Classes begin at 4 p.m.
	18	Martin Luther King Jr. holiday - no classes, University closed
	19	Classes resume 8 a.m., last day add/drop
	25	Fall 2010 schedule due
February 2010 —	22	Grade estimates due 12 noon, Pass/fail deadline
March 2010 —	1	Deadline to withdraw with a "W" - 5:00 p.m.
		All undergraduate incompletes due for Fall 2009
	6	Graduate Comprehensive Examination
	8-12	Spring break - no classes
	8	University closed
	15	Classes resume at 8 a.m.
	18	Advising and registration begin - Fall and Summer 2010
April 2010—	31	Advising ends - Fall 2010
	23	Classes end, Graduate incompletes due for Summer and Fall 2009
	24	Reading Day
	26-30	Examinations
May 2010—	5	All grades due at 8:30 a.m.
	8	Commencement

Revised and approved for posting, July 18, 2007

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Academic Regulations

This section summarizes important information related to the academic work of the institution. Students must be familiar with the information in this section. It is the responsibility of each student to be certain that academic requirements necessary for graduation are completely fulfilled. The catalog for the year in which a student enters Longwood University governs academic regulations, general education, and graduation requirements. Transfer students may choose the catalog which applies to continuous full-time students at their class level. If a student re-enrolls in Longwood University after an absence of two or more semesters, the applicable catalog will be the one in effect at the time of re-enrollment.

Students may elect to graduate under the provisions of any subsequent catalog. In all cases, students must have been duly admitted to Longwood and an academic program of study and meet all of the requirements for graduation in *one* catalog. Students may not select partial requirements from more than one catalog. Students will be assumed to be under the catalog in effect at the time of admittance unless they notify the registration office, in writing, that they wish to adopt a subsequent catalog. Once a student has selected a subsequent catalog, they may not revert to an earlier catalog.

Catalogs are in effect for a six-year period. Students who do not complete the degree in six years may elect any subsequent catalog. If they fail to elect a particular catalog, they automatically become subject to the catalog in effect in their seventh year.

Assessment

The purpose of assessment at Longwood is (a) to help individual students develop to their fullest potential and (b) to improve the educational programs of the institution. In the case of both the student and the institution, we intend to assess how effectively consensually-developed goals are being achieved, and based on these assessment data, we intend to generate recommendations and plans of action that will help achieve these goals.

In 1986 the Virginia Senate adopted Joint Resolution 83 directing state institutions of higher education to "establish assessment programs to measure student achievement." Additionally, the Southern Association of Colleges and Schools requires for accreditation that an institution "must define its expected educational results and describe how the achievement of these results will be ascertained." (Criteria for Accreditation: Commission on Colleges, Section III: Institutional Effectiveness, 1989.)

Student participation is therefore required. Students who fail to participate may lose their priority ranking for registration and housing. The institution may withhold transcripts for three months for graduating seniors who fail to participate.

Academic Organization

For administrative purposes, Longwood University is divided into three colleges, each headed by a dean. Any academic rule or regulation making reference to a dean or specifying *with the Dean's permission* is referring to the dean of the college in which the student's major program of studies is associated. Students who have not declared a major are in the College of Arts and Sciences.

Academic Advising

Longwood's advising program provides informed academic counseling which makes effective use of the assessment, career planning, student development, and software resources available. Although course selection is important, advisors are trained and prepared to counsel or refer advisees on such matters as the following:

- assisting students in understanding their abilities, interests, and limitations;
- helping students clarify their values, developing an educational program consistent with these values, and relating their educational plans to their career plans;

- referring students to academic and student affairs support services;
- providing information about college and departmental policies, procedures, and resources;
- reviewing opportunities for academic involvement, internships, research with faculty, honorary societies, etc.;
- and, assisting students in evaluating their progress toward their educational goals.

Newly-admitted students who have declared their intention to pursue a degree in a particular discipline are assigned advisors in the appropriate college. The assignment of the advisor generally is not changed unless the student changes his/her degree program. Students who have not declared a major are advised by academic counselors in the Academic and Career Advising Center, located in Lancaster Hall, Room G08. Once students declare a major, they will be assigned an advisor within their major.

Prior to registration, students are required to consult with their assigned academic advisor regarding course selection, career goals, and relevant academic policies. Advisor signatures are required on all registration forms. *Note: Students who do not consult with their advisor prior to registering for class will be prohibited from using web registration.*

Although the academic advisor assists students with curriculum decisions and options, the student bears full responsibility for meeting graduation requirements.

Declaration of Major

Students may declare a major upon entering Longwood. Undeclared students who have completed at least 45 credit hours must declare a major prior to registration. To change a major, a student must complete a Change of Major form available in the Office of Registration.

Course Numbers

The courses listed in this catalog that are numbered between 100 and 199 are designed primarily for first and second year students; those between 200 and 299 are for first, second, and third year students; those between 300 and 399 are for second, third, and fourth year students; and those between 400 and 499 are for third and fourth year students. Courses numbered from 500 to 599 are for graduates and advanced undergraduates; courses numbered 600 to 699 are for graduates only.

Other courses offered: Internships (1-18 credits) – 292, 392, 492; Directed or Independent Study (1-18 credits) – 390, 391, 490; Seminar – 461; Honors Research – 498, 499; Special Topics (1-6 credits) – 295, 495, 595; Study Abroad (1-18) – 311, 312.

Selected undergraduate Honors courses carry the designation *Section 50* in the *Master Schedule of Classes*.

Student Load

Longwood University is organized on the semester plan whereby the credit hour, abbreviated as *credit*, is the semester hour. Freshmen normally carry 15 to 17 credits, but may carry 18 credits if they earned at least 2.0 on their previous semester's work. Upper class students normally carry 15 to 18 credits, but may carry up to 21 if they earned at least 2.0 on their previous semester's work. Students on probation or readmitted after suspension may not enroll in more than 15 credits per semester. A schedule beyond these limits requires special permission from the student's dean or department chair. Students must take at least 12 credits to maintain full-time status.

Intersession, an abbreviated session which begins after the end of the fall term and ends before the beginning of the spring term, is appended to the spring term for financial aid purposes. Credit hours in intersession do not count toward the maximum allowed for the normal spring session.

Registration Procedures

Undergraduate students are expected to register in person with their advisor, in person in the Office of Registration or via myLongwood during one of the opportunities provided during the academic year:

1. **Registration:** normally a two week period in November for the following spring semester or in March/April for the following fall semester and limited to currently-enrolled, degree-seeking students.
2. **Summer Registration:** normally begins in March/April with students required to register by Registration Deadline for the session in which the course is listed.
3. **Summer Preview:** special registration procedures are provided for new freshmen and new transfer students during summer orientation. New students who cannot attend one of these programs register on final registration day.
4. **Final Registration:** the day immediately preceding the first day of classes each semester.

Drop/Add Period

Students may make schedule adjustments (adds and/or drops) until the close of business on the sixth day of classes in the full session. Students enrolled in abbreviated sessions, such as intersession, or in off campus courses, or on-line classes must make a schedule adjustment no later than the first day of classes. A consultation with the advisor is encouraged for any change made during this period. Student athletes should not make any schedule changes without consulting with the Athletics Academic Support Coordinator. Courses dropped during this period do not appear on the transcript.

No Academic Penalty Withdrawal Period (Free "W")

Students may withdraw from individual classes with a grade of "W" (not computed in the GPA) through 5:00 p.m. on the 35th day of regularly scheduled classes. Residential students who fall below full-time status with such a withdrawal will be referred to the Vice President for Student Affairs for special permission to remain in the residence hall.

Deadlines

Appropriate dates for the last day to drop/add, and last day to withdraw without academic penalty are included in the official college calendar and in the *Master Schedule of Classes* for regular semesters.

Appropriate dates for last day to drop/add, and last day to withdraw without academic penalty are included in the summer school class schedule and in the appropriate descriptive literature for other classes not meeting on a regular semester pattern.

All registration and drop/add transactions for new students (both transfer and new admits) must have the approval of the academic advisor and must be processed through appropriate procedures by the deadline to become effective.

Class Attendance

Students are expected to attend all classes. Failure to attend class regularly impairs academic performance. Absences are disruptive to the educational process for others. This is especially true when absences cause interruptions for clarification of material previously covered, failure to assume assigned responsibilities for class presentations, or failure to adjust to changes in assigned material or due dates.

It is the responsibility of each instructor to give students a copy of his or her attendance policy in the course syllabus.

Instructors may assign a grade of "0" or "F" on work missed because of unexcused absences.

Instructors have the right to lower a student's course grade, but no more than one letter grade, if the student misses 10 percent of the scheduled class meeting times for unexcused absences.

Instructors have the right to assign a course grade of "F" when the student has missed a total (excused and unexcused) of 25 percent of the scheduled class meeting times.

Students must assume full responsibility for any loss incurred because of absence, whether excused or unexcused. Instructors should permit students to make up work when the absence is excused. Excused absences are those resulting from the student's participation in a college-sponsored activity, from recognizable emergencies, or from serious illness. Faculty may require documentation for excused absences in their attendance policy. Student Health Services can provide documentation only for students hospitalized locally or absent at the direction of Student Health Services personnel.

Examinations

Written comprehensive examinations are given at the end of each course. For the regular session, two and a half hour examination blocks are scheduled during the final examination period which is indicated as part of the official college calendar. This scheduling is based on the course meeting pattern and is published with the *Master Schedule of Classes* for the semester.

When students have in excess of two exams per day they may request that exams be rescheduled.

During the summer session and for courses not offered according to the traditional semester format, the examination is normally given at the time of the final class session.

Withdrawal Policy

Students may withdraw from individual classes with a grade of "W" until 5:00 p.m. on the 35th day of regularly scheduled classes. After that date, withdrawals from individual classes are not permitted except for medical or other non-academic emergencies. A student who withdraws, for medical reasons, from the College or from a class after the 35th day of regularly scheduled classes must, by noon of the last class day, have a letter sent to the Dean of the student's college by the student's personal physician, detailing the nature of the illness and recommending withdrawal for medical reasons. In extenuating circumstances not related to academic performance, the Dean may grant a withdrawal if a written request from the student is received by noon of the last class day. If the Dean approves the request, the Dean will send a copy of the request or letter to the Office of Registration and all affected grades for that semester will be noted as "W" on the student's transcript. The Dean will notify the student's faculty members of any grade changes.

Students withdrawing from the institution should go to the Dean's Office of their respective major to initiate the college withdrawal process. *Undeclared students and special undergraduate students should report to the Dean of the College of Arts and Sciences.*

For classes held in non-traditional time frames, such as summer school or for off-campus offerings, students may withdraw with no academic penalty during the first half of the course, but may not withdraw during the second half of the course except for medical or other non-academic emergencies.

The deadline to withdraw without academic penalty should not be confused with any deadline to withdraw and receive a full or partial refund of charges. Please see the "Expenses and Financial Aid Refunds and Charge Adjustments" section of the on-line catalog for information related to refunds and charge adjustments.

Voluntary Withdrawal

It is the responsibility of any student wishing to withdraw from Longwood (either during a semester or between semester periods) to initiate the official withdrawal process with the institution. Students withdrawing from the institution should go to the Dean's Office of their respective major to initiate the college withdrawal process. *Undeclared students and undergraduate special students should report to the Dean of the College of Arts and Sciences.* This procedure is necessary only for students voluntarily withdrawing, and does not apply to students being sus-

pending, graduating seniors, seniors going to off-campus field placements in their last semester before graduation, students who are participating in study abroad programs, or to students taking the final year at another institution under one of the cooperative degree programs. Any specific questions about withdrawal from the institution should be directed to the respective Dean's Office.

Students in cooperative programs must notify the Office of Registration of their acceptance at the participating institution in order to ensure accurate record keeping during the final year and to initiate any appropriate refunds.

Enforced Withdrawal

Longwood will suspend or expel any student who fails to meet the standards of the institution and the Student Government Association. In such a case, refunds may or may not be made at the discretion of the Vice President for Student Affairs. A student who is subject to an immediate disciplinary suspension shall receive a grade of "W" in all courses regardless of the time of the semester.

GRADING

The achievement of a student in a course is indicated by the grade that is received. Grades for courses taken for undergraduate credit are recorded as follows:

A: Superior work	4.000	RA: Superior work in repeated Course	4.000
B: Above average work	3.000	RB: Above avg work in repeated course	3.000
C: Average work	2.000	RC: Average work in repeated course	2.000
D: Below average, but passing work	1.000	RD: Below avg work in repeated course	1.000
F: Failure	0.000	RF: Failing work in repeated course	0.000
NP: Failure in Pass/Fail Classes	0.000		
P: Pass	0.000		
CR: Credit (Military Training)	0.000		

Plus and minus grades may, at the discretion of the instructor involved be recorded, but do not affect the computation of the grade point average.

Credits earned in repeated courses after the fifth repeat do not count in earned hours.

Special Grading

- CR: This grade is assigned for credit awarded to students who have met the PHED 101 requirement through military service.
- I: Incomplete. The grade of "I" indicates that because of illness or for other good reason the work of the semester has not been completed. When this work has been completed, a final grade will be reported. *A grade of "Incomplete" will revert automatically to a grade of "F" if the necessary makeup work has not been completed and the grade recorded by the published date in the middle of the subsequent regular semester.*
- NP: This grade indicates that the student has received no credit for the course on a pass/fail grading option. This option is generally limited to elective courses and to certain courses offered only on a pass/fail basis.
- P: This grade indicates that the student has received credit for the course on a pass/fail grading option. This option is generally limited to elective courses and to certain courses offered only on a pass/fail basis.
- AU: Audit. This grade indicates participation on a non-credit basis by students who meet certain minimum standards set by the course instructor. No academic credit is awarded for courses utilizing this grade. Students wishing to audit must have permission from the chair of the department in which the course is offered and are subject to the same tuition and fees as students enrolled for credit.

W: Withdrawal. This grade indicates withdrawal without academic penalty. It is automatically assigned for withdrawal from the end of the drop period (first six class days) through the 35th day of regularly scheduled classes of the semester and for other documented withdrawals (See paragraph on *Withdrawal Policy*.)

Pass/Fail

Students may take certain courses under the pass/fail system approved by the faculty in 1974. Pass/Fail courses are open to undergraduate students with 30 or more credit hours. A student may take a maximum of three courses; these courses may not be those which are required for general education or for major or minor requirements. Special non-degree students may also elect the pass/fail grading option.

The student must do satisfactory work in order to obtain a passing grade. Satisfactory work is defined as "C" work or better. Courses taken under the pass/fail option will not be included in the calculation of the grade point average. Students who wish to take a course for Pass/Fail credit must notify the Office of Registration of that fact by the end of the first six weeks of classes in the semester, or the equivalent portion of a summer session. Once this declaration is made, grading status cannot be changed.

In addition to the elective pass/fail grading option described above, certain courses in the college curriculum are designated for pass/fail grading. Such courses do not ordinarily satisfy general education, additional degree requirements, major or minor requirements (except for internships/practica which may, at the department's discretion, be graded pass/fail.) The students enrolled do not need to make any special declaration and are subject to no restrictions.

Audit

Class size permitting and with department approval, a student may register for a course on an audit basis. Auditing a course means that a student enrolls in a course but does not receive academic credit. A student who registers for audit may be subject to other course requirements at the discretion of the instructor. Audit students are charged the regular rate of tuition and fees, and an audit course is counted as part of the student's semester load. (For purposes of enrollment certification for VA benefits or other programs requiring "for credit" enrollment, audit courses will not count toward the minimum number of credits required for full-time status.)

The Registration Office must be notified by the end of the Drop/Add period for a change in registration status from "audit" to "credit" or from "credit" to "audit" to occur. A course taken for audit cannot be changed to credit at a later date, nor can a course taken for credit be changed at a later date to audit.

Quality Points/Quality GPA Hours

The quality of work completed by a student is recognized by the assignment of quality points to the various grades, commonly referred to as the Four-Point System.

Under this system, 4 quality points are awarded for a grade of "A", 3 quality points for a grade of "B", 2 quality points for a grade of "C" and 1 quality point for a grade of "D". No quality points are awarded for a grade of "F". Quality points are then multiplied by the credit hours to determine the total quality points earned in the course or overall.

The term GPA hours refers to the hours on which the grade point average is calculated. Courses that have GPA hours associated with them are courses which carry letter grades. Thus, GPA hours are the hours associated with graded course work. Courses taken for pass/fail credit or courses with a grade of "I", "W" or "AU" are excluded from GPA hours and the GPA calculation. Courses taken at the graduate level appear on the graduate transcript and do not appear on the undergraduate transcript. Therefore, graduate hours are not included in the undergraduate GPA hours.

Under the four point system, a student's grade point average is computed by dividing the total number of quality points by the total number of GPA hours. The grade point average is stated to the third decimal position and is not rounded but truncated.

A student's grade point average is based only on work taken at Longwood. Grades received in affiliate programs shall be counted in the student's GPA only if the student registered through Longwood.

Repeated Courses

Students may repeat courses for a higher grade. All enrollments and grades appear on the transcripts. For the first five repeats, the most recent grade will replace the original in grade point average calculations. After the fifth repeat, both the original and the new grade will be included in grade point average calculations, but only the second occurrence will count in earned hours. The letter "R" will be appended to the left of the original course grade (ex., RF, RD, etc.) to indicate a course that has been repeated which, because it is beyond the limit of five repeats, must count in the grade point average.

Grade Estimates

During the regular session, grade estimates are available to all first-year students, upperclass students making a "D" or "F", and students who are not making satisfactory academic progress (all students with a cumulative GPA less than 2.0). Estimate grades are due to the Office of Registration by noon on Monday of the sixth week of regularly scheduled classes and are available to students and advisors in **myLongwood** as soon as they are posted.

Estimates are not recorded as part of the student's permanent academic record. They are, however, an important indicator of academic risk to students. This early warning should give the student time to improve academic performance where needed.

Grade Appeals

The faculty of Longwood University is unequivocally committed to the principle that evaluation of student work and assignment of grades is a responsibility and a prerogative to be exercised solely by the individual instructor.

However, should a student feel the final course grade received was unfairly or inaccurately awarded, the student first should see the instructor involved, for an explanation of why the grade was assigned. If the student continues to feel the grade is unfair, the student may file a written appeal with the department chair giving the reasons why the grade should be changed, with any available supporting evidence. The Department Chair/Dean will forward a copy of the appeal to the faculty member and will invite the faculty member to make a written response. For grades awarded in the fall semester, the written appeal must be submitted no later than February 1; for grades awarded in the spring semester and in summer school, the appeal must be filed no later than September 15. Appeals filed later will not be considered.

The Department Chair/Dean will within two weeks hold a joint consultation with the student and the faculty member awarding the grade. If the matter cannot be resolved, the Department Chair/Dean will within one week of the joint consultation, request in writing that the Executive Committee of the Faculty Senate appoint a committee to review all matters pertinent to the appeal. The committee will consist of three members of the full-time faculty in the same or related discipline(s). The Department Chair/Dean will send a copy of the request to the Vice President for Academic Affairs. When the committee has been named, the Executive Committee of the Faculty Senate shall inform the Department Chair/Dean, who will forward to the committee members the student's original written appeal, a course syllabus, any written response from the faculty member, and all other materials pertinent to the appeal. Through the Department Chair/Dean, the committee may request other materials from the student or faculty member. The committee shall decide that the grade originally assigned will remain unchanged or that it will be changed to a grade decided on by the committee. The decision of the committee is final. The committee will report its decision in a letter signed by all three members and addressed to the Department Chair/Dean, with a copy to the Vice President for Academic Affairs, the appropriate Dean, the

faculty member, the student, and the Office of Registration, who will record the grade. The review must be completed so that the grade will be final by the end of the eighth full week of classes.

Should the appeal involve a grade assigned by a Department Chair, the Dean of the appropriate College will assume the role normally assigned to the Chair. Should the appeal involve a grade assigned by a Dean, the Vice President for Academic Affairs shall assume the role normally assigned to the Dean.

Students should be aware of the fact that the review procedure may result in a grade being raised, lowered, or remaining unchanged.

Policy on Modification of General Education or Additional Degree Requirements

Modification to an additional degree (e.g. BA or BS, etc.) requirement or general education requirement for any student is done through a petition submitted to the Faculty Petitions Committee through the Office of Registration. A standing committee of the Faculty Senate, the Faculty Petitions Committee is empowered to handle appeals from students for exemptions or variations from any university-wide academic rule or regulation.

A student petition must include the following:

1. A specific rationale for the exemption or variation
2. The plan for degree or general education modification
3. Supporting documents when appropriate
 - a. If the exemption or variation is sought for a general education or additional degree requirement that is specified by the major, the petition must include a letter of support from the department chair.
 - b. If the exemption or variation is sought due to the impact of a disability, the petition must include verification of the following:
 - i. The Director of Disability Support Services, in conjunction with the instructor or department representative, evaluated whether reasonable accommodations could be made to allow the student to complete the requirements of the course and determined that accommodations which would not alter the essential function of the course were not possible.
 - ii. Appropriate documentation is on file with Disability Support Services

The petition should be filed before an application for degree is submitted. All decisions of the Faculty Petitions Committee are final. Students may request a review based only on new information.

ACADEMIC HONORS

President's List

Longwood University recognizes superior scholarship through its President's List which is published at the end of each semester. Students whose names appear on it are those who have earned a semester grade point average of 4.0 on a minimum of 12 semester hours work taken. Students eligible for the President's List must complete all courses in the semester for which they are registered. A grade of "I" on a student's record prevents consideration for this honor.

Dean's List

Longwood University recognizes outstanding scholarship through its Dean's List which is published at the end of each semester. Students whose names appear on it are those who have earned a semester grade point average of 3.5 - 3.99 on a minimum of 12 semester hours work taken with no grade below "C-." Students eligible for the Dean's List must complete all courses in the semester for which they are registered. A grade of "I" on a student's record prevents consideration for this honor.

Academic Probation and Suspension Policy

Continued enrollment in Longwood is a privilege that is granted a student who is making satisfactory academic progress. A degree-seeking student enrolled in Longwood is in good standing unless placed on academic suspension.

Academic Probation

Students are placed on probation based on their cumulative grade point average at the end of the fall and spring semesters. Probation indicates serious academic difficulty and notice is placed on the student's academic record when the cumulative GPA is below 2.0. Students on academic probation may not take more than 15 credits per semester and are encouraged to seek assistance in the Learning Center.

Academic Suspension

Students will be suspended from Longwood University if:

1. They remain on academic probation for two consecutive regular semesters (fall and spring are considered regular semesters); or
2. Their cumulative grade point average falls below 1.0 with 1-23 GPA hours at Longwood; or
3. Their cumulative grade point average falls below 1.5 with 24 or more GPA hours at Longwood.

Students are suspended at the end of the fall and spring semesters. Students suspended at the end of fall semester may not take winter intersession courses. Students suspended after spring semester may not take summer courses.

The first academic suspension means required withdrawal from the institution for the semester (fall or spring) immediately following the semester in which the suspension occurs. A student who has sat out spring semester may apply for re-admission for summer term.

Under extenuating circumstances, appeals for readmission or other exceptions to academic policies may be presented to the Faculty Petitions Committee. Students must contact the Office of Registration for information and deadlines for submitting an appeal.

Readmission after Suspension

Suspended students may apply for readmission to Longwood for the semester following completion of the suspension period. The student must apply at least 60 days before enrollment to the Admissions Committee, which will review the student's record and citizenship at Longwood as well as courses taken elsewhere. A student denied readmission may appeal in writing through the Office of Admissions to the appropriate deans(s). Readmission to the institution is not automatic, even if the student has raised his/her cumulative grade point average.

A student readmitted after suspension must satisfy the following conditions until the student's cumulative grade point average is a minimum of 2.0:

1. Enroll under the status of academic probation,
2. Maintain a minimum semester grade point average of 2.0 in each semester, and
3. May not enroll in more than 15 credits.

If a student fails to achieve the minimum grade point average of 2.0 in any semester before achieving a cumulative grade point average of at least 2.0, the student will receive a second suspension.

LONGWOOD POLICY ON STUDENT RECORDS AND ANNUAL NOTIFICATION

Longwood student record policies comply fully with the Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, enacted as section 438 of the General Education Provisions Act. The accumulation, processing, and maintenance of student data by the institution is limited to that information, including grades, which is necessary and relevant to the purposes of the college. Personal data of students will be used only for the purpose for which it is collected.

Student data, whenever possible, shall be collected directly from the student; every effort will be made to ensure its accuracy and security. It shall be the express responsibility of the student to notify the Office of Registration of any changes in status. Any student who initially or subsequently refuses to supply accurate and complete personal information, as is legally allowed, may jeopardize their current student status. Falsification of records with the intent to give untrue information is a violation of the Longwood Honor Code.

Longwood University designates the following categories of student information as public or "Directory Information." Such information MAY be disclosed by the institution at its discretion.

1. Directory information may include the student's name, local address, Longwood e-mail address, local telephone number, major field of study, classification, participation in officially-recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and dates of field experience. A student may inform the Office of Registration in writing that any or all directory information may not be released without prior written consent. A student who desires to restrict directory information from the public must complete the Student Directory Information Restriction form (available in the Registration Office) at the time of registration for the current academic year. Forms received after the last day to add a class for any semester, including summer, will not become effective until the following semester.
2. To the students themselves.
3. To authorized Longwood personnel (administrative officers, faculty, or their designees) who have legitimate educational interests as determined by the institution, such as instruction, advising or educational research, or in performance of other duties promoting necessary functions and management of Longwood as approved by the records access control officer.
4. Parents may obtain information by written student consent or by presenting a copy of their most recent income tax return showing that the student is a dependent.
5. To a third-party agency as expressly designated in writing by the student.
6. As required by judicial order or court subpoena, or as may be required or permitted by law.
7. In a situation of emergency in which the knowledge of confidential student information is necessary to protect the immediate health or safety of a student or other persons.
8. Student arrest and charge information classified as public information.

Under FERPA, Longwood is not required to provide prior notification to a student when responding to a Federal grand jury subpoena or other law enforcement subpoena, which specifies that the student not be informed of the existence of the subpoena.

In cooperation with the State Council of Higher Education in Virginia and its efforts to support assessment, Longwood University will provide student transcripts to any public high school or community college in Virginia, which the student has previously attended, or to any agency charged with the responsibility for collecting and/or analyzing data for the purpose of educational assessment for such a unit. The receiving agency will be charged with responsibility for protecting the student's right to privacy and for appropriate disposition of the records.

Eligible students are permitted to inspect and review educational records of which the student is the sole subject. Longwood policy regarding the inspection and disclosure of educational records is in compliance with the federal statute. To obtain a copy of the Family Rights and Privacy Act of 1974 (Section 438) or a copy of the college's policy on student records, contact the Office of Registration, Longwood, 201 High Street, Farmville, VA 23909.

Student access to all personal records shall be permitted within 45 days of a written request, during normal office hours. Students may also obtain copies of most parts of their records for a nominal fee. All records shall be available and in a form comprehensible to the student, except for:

1. Medical records which, upon written authorization, shall be submitted to a psychologist or physician designated by the student.
2. Confidential financial statements and records of parents as excluded by law.
3. Third-party confidential recommendations when such access has been waived by the student. Where a waiver has been given, parents, as well as students, are excluded from viewing such confidential information.

During normal office hours, Longwood shall provide an opportunity, for a student either in person, or by mail with proper identification, to challenge information believed to be inaccurate, incomplete, inappropriate, or misleading. All personal data challenged by a student shall be investigated by Longwood officials. Completion of an investigation shall result in the following actions:

If Longwood concurs with the challenge, the student's records shall be amended or purged as appropriate; all previous record recipients shall be so notified by the institution.

If the investigation fails to resolve the dispute, the student shall be permitted to file a statement of not more than 200 words setting forth the student's position. Copies of the statement will be supplied, at the student's expense, to previous and subsequent recipients of the record in question.

If a student wishes to make an appeal of the decision, the student may do so in writing to the President of Longwood.

The names, dates of access, and purposes of all persons or agencies other than appropriate Longwood personnel given access to a student's personal records shall be recorded and maintained. Student records are retained by the institution for at least one year after completion of work at the institution. Permanent academic records from which transcripts are derived are maintained indefinitely. A student may request and receive information concerning the record of access to official Longwood records filed under the student's name.

Inquires concerning student records should be directed to the following departments.

When applicable, schedules of fees for copies of these records are available from that office.

Academic Records/Transcripts – Office of Registration, Barlow Hall

Disciplinary Records – Office of Honor and Judicial Programs, Lancaster Hall

Financial Records – Office of Student Accounts, Lancaster Hall

Financial Aid Records – Office of Financial Aid, Lancaster Hall

Medical/Health Records – Office of Student Health, Health and Fitness Center

Mental Health Records – Office of Counseling Services, Lancaster Hall

Access to Student Information

To comply with the provisions of the Family Educational Rights and Privacy Act of 1974 (as amended), Longwood University will not release education records or personally identifiable information contained therein without the student's written consent. Individuals seeking access to your records should include a copy of your written consent when requesting non-directory information.

Release of Transcripts

Requests for transcripts of academic records should be directed to the Office of Registration. Upon written request by the student, an official transcript of the academic record will be issued to the person or institution designated, provided that all the student's obligations to Longwood have been satisfactorily settled.

The only circumstances in which a student's transcripts are released in the absence of a written authorization are those specific exceptions stated in the preceding policy on student records.

Transcript requests generally require one week for processing.

Statement of General Transfer Policy

In general, credits are accepted from institutions that are accredited by the appropriate regional accreditation agency provided such credits carry a grade of "C" or better and are comparable to courses offered at Longwood University (see exceptions listed in *Specific Policies*). Transfer of credit does not necessarily imply applicability to specific degree requirements.

Transfer Articulation Agreement With The Virginia Community College System (VCCS), Richard Bland College (RBC), The Maryland Community College System (MCCS) and Other Approved Out-of-State Associate Degree Programs.

An accepted transfer student who has earned an Associate in Arts degree (AA), an Associate in Science degree (AS) or an Associate in Arts and Sciences degree (AA&S) from the VCCS, RBC, MCCS or other approved out-of-state associate degree program, prior to entering Longwood is considered to have all of their lower-division general education goals met, is guaranteed junior class status, and is guaranteed that all credit earned for that degree will transfer (including D grades unless otherwise restricted for native students). The student must then meet major and degree requirements, except where those requirements have been met as part of the two-year college curriculum. Re-admit students cannot enter under the Articulation Agreement.

NOTE: Students who complete a foreign language course at the 202 level or above as part of the Additional Degree Requirements are exempted from Goal 10.

Credits earned through examination (AP, IB, CLEP or DANTES) that were awarded credit by a VCCS institution will be treated on an equal basis as other credits earned at a VCCS institution.

All other associate degrees will be examined individually for applicability of transfer credit.

Specific Policies for Transfer of Credits

1. Students wishing to transfer VCCS "General Usage Courses" (such as cooperative education, seminar and project, and supervised study) will have to provide a college evaluator with additional information about the specific content of such courses.
2. No transfer credit is granted for developmental work.
3. No transfer credit is granted for orientation courses, or grades less than "C", unless the student has earned the AS, AA or AA&S from the VCCS, RBC, or MCCS.
4. Two courses with essentially the same content cannot both be counted toward the same degree.
5. Hours or fractions in excess of those carried by Longwood courses for which equivalency is made are counted as free electives. Hours or fractions waived in accepting course equivalences must be made up by elective credits to meet the total semester-hour requirements for a degree.

The cumulative grade point average of each student will be calculated only on work taken at Longwood. Transfer credit accepted from other institutions will be used to reduce the number of credits required for graduation, but it will not enter into the calculation of the grade point average.

Additional Transfer Policy for Current and Former Longwood Students Taking Courses for Credit at Other Institutions

Any regularly-enrolled undergraduate who wishes to take work at another institution to transfer to Longwood must secure permission from his/her Dean prior to enrolling in such courses. Prior approval provides the student the opportunity to have the course reviewed to determine:

1. whether the course will transfer;
2. whether the course will satisfy a particular requirement; and
3. whether the course might be considered a duplicate of a course already taken at Longwood.

Upon completion of work, official transcripts must be sent from the host institution to the Office of Registration.

Correspondence Courses

A maximum of 14 semester hours of correspondence course credit may be applied toward a degree.

WARNING: *Correspondence courses should not be started after the beginning of the senior year, and must be completed and documented by no later than April 15 of the senior year, since failure to complete correspondence work is a frequent cause of failure to meet graduation requirements. Longwood does not accept, for transfer, credits earned through correspondence courses in the natural and physical sciences and certain other subjects. Students must obtain approval to include in the degree program correspondence and extension courses prior to enrolling in them. Otherwise, Longwood can assume no responsibility for accepting such grades on transfer.*

The institution cannot grant a student permission to enroll in a correspondence course until after the student has attended this institution for at least one full summer session or a semester.

When a student is enrolled in Longwood University and also enrolls in a correspondence course, the credit to be earned in the course will be counted in the total load of work that the student is permitted to carry.

Graduate and Extended Studies

Anthony A. Koyzis, PhD, *Dean of Graduate and Extended Studies*

Kathy E. K. Charleston, *Assistant Dean*

Susan G. Finch, *Secretary*

(See Graduate Catalog <http://www.longwood.edu/graduatestudies/catalog2009> for further details)

Longwood offers graduate level programs leading to the degree of Master of Arts with a major in English, the degree of Master of Business Administration, and the degree of Master of Science with majors in Communication Sciences and Disorders, Education, and Sociology. Our graduate programs are designed to provide capable students with opportunities for individual inquiry, to develop knowledge and skills necessary to work efficiently and lead effectively, and to integrate academic knowledge with practical applied experiences. In the education major, areas of concentration include: Community and College Counseling, Curriculum and Instruction Specialist/K-8 Mathematics, Curriculum and Instruction Specialist/Modern Languages, Curriculum and Instruction Specialist/Music, Curriculum and Instruction Specialist/Special Education General Curriculum K-12, Educational Leadership, Literacy and Culture, School Counseling, and School Library Media. The Elementary Education PreK-6 Initial Licensure, Special Education General Curriculum K-12 Initial Licensure, and School Library Media PreK-12 Initial Licensure programs are available for persons with a baccalaureate degree in any discipline who wish to obtain a master's degree plus a teaching license in one of those three areas. The Modern Languages/ESL PreK-12 Initial Licensure program is available for people with a baccalaureate degree who wish to obtain a master's degree plus a teaching license in French, German, Spanish or English as a Second Language. In addition, licensure only programs in Educational Leadership/Administration and Supervision, Literacy and Culture/Reading Specialist, School Library Media and Special Education General Curriculum K-12 are available. In the English major, the areas of concentration include creative writing, literature, education and writing, and secondary (6-12) initial licensure. The Sociology major is a criminal justice based program. The Communication Sciences and Disorders major prepares individuals for entry level positions in speech-language pathology. The Business Administration major offers concentrations in Accounting, General Business and Retail Management.

A senior at Longwood may take up to six hours of graduate credit beyond the undergraduate degree requirements. Such graduate credit may be earned only in 500-level courses and, if it meets course requirements for the degree, may be counted toward a master's degree. The senior must have a "B" average in the major and must receive permission from the department chair of their major and then the Dean of Graduate and Extended Studies. In any case where an undergraduate student is registered for a 500-level course that is to be applied to a graduate degree, the Dean of Graduate and Extended Studies must notify the Office of Registration of this designation.

A student who holds a baccalaureate degree with a minimum 2.75 cumulative GPA from an accredited institution may apply for admission to graduate study in most of our programs. Applications for graduate study are reviewed by the graduate admissions committees once monthly around the middle of the month on a rolling basis, but adherence to the published deadlines is a good guideline for optimum consideration. The application deadline for the Education/Curriculum and Instruction Specialist in Music program is February 1st for a cohort that begins in the summer. Applicants to the Communication Sciences and Disorders program must have a minimum 3.00 cumulative GPA, scores from the General Test of the GRE and submit their applications by February 1st for the annual review for the subsequent fall semester. Applicants to the Business Administration program must have an admission score of 1100 calculated by a minimum GMAT score of 470 + GPA (200) \geq 1100.

For further information regarding admission to the graduate program, contact the Office of Graduate and Extended Studies, Longwood University, 434.395.2707 or graduate@longwood.edu or visit the web site at www.longwood.edu/graduatestudies. Individual program specific requirements for admission are outlined in the *Graduate Catalog* and on the website.

Academic Programs of Study

Longwood University awards the Bachelor of Arts, the Bachelor of Science, the Bachelor of Science in Business Administration, the Bachelor of Nursing, the Bachelor of Music and the Bachelor of Fine Arts to successful undergraduate students. *A minimum of 120 semester hours is required for graduation in each of the programs unless otherwise noted for a major degree program.*

In order to earn a degree from Longwood, each student must pursue and complete a concentrated course of study in a major area. These requirements must be met in addition to the completion of the general education and additional degree requirements. At the undergraduate level, Longwood offers majors in 22 fields of study. Detailed requirements for each major program are listed with the appropriate department. The programs of major study, with the degree options for each, are as follows:

<i>Major</i>	<i>Degree Options</i>
Anthropology	BA, BS
Athletic Training	BS
Biology	BA, BS
Business Administration	BSBA
Chemistry	BA, BS
Communication Studies	BA
Communication Sciences and Disorders	BS
Computer Science	BA, BS
Criminology and Criminal Justice	BS
Economics	BA, BS
English	BA
History	BA
Kinesiology	BS
Liberal Studies	BA, BS
Mathematics	BA, BS
Modern Languages	BA
Nursing	BSN
Physics	BA, BS
Political Science	BA, BS
Psychology	BS
Social Work	BA, BS
Sociology	BA, BS
Therapeutic Recreation	BS
Visual and Performing Arts	BA, BM, BFA
• Art	
• Music	
• Theatre	

Students may choose to minor in one of the following fields. Students choosing to minor in a field of study must have a 2.0 GPA in courses in that field of study.

Minors

Anthropology	Creative Writing	Health Education	Political Science
Art History	Criminology and	History	Pre-Professional
Art, General	Criminal Justice	Homeland Security	Clinical Studies
Biology	Earth Science	International Studies	Professional Writing
Business Administration	Environmental Studies	Leadership Studies	Psychology
Chemistry	Economics	Mathematics	Sociology
Coaching	English	Music	Spanish
Communications Studies	French	Outdoor Education	Special Education
Computer Science	Geography	Philosophy	Theatre
Computer Security,	German	Photography	Women's
Forensics, and Law	Graphic Design	Physics	Gender Studies

Cooperative Programs

Cooperative Dual-degree Program in Pre-Engineering

Longwood University has cooperative programs with Old Dominion University, Virginia Polytechnic Institute and State University, and the University of Tennessee, which make it possible for students to earn either a BS or BA degree in physics from Longwood and a BS degree in engineering from the cooperating university.

Longwood has cooperative programs with the University of Virginia and Old Dominion University, which make it possible for students to earn a BS or BA degree in physics from Longwood University and a MS in engineering from the cooperating university. Longwood has a cooperative program with Christopher Newport University, which makes it possible for a students to earn a BS or BA. in physics from Longwood and a MS in applied physics from cooperating university.

Cooperative Programs in the Medical Sciences

Longwood University has a cooperative program with the Medical College of Virginia, which makes it possible for students to earn a BS in Biology from Longwood and a MS in physical therapy from the cooperating university.

Longwood has cooperative programs with Roanoke Memorial Hospital and Fairfax Hospital, which make it possible for students to attend Longwood for three years and the fourth year in professional training in medical technology at the cooperating school. The students will earn a BS degree in biology with a concentration in medical technology from Longwood after the fourth year.

Pre-Professional Preparation for The Medical Sciences

This curriculum prepares students for admission to accredited schools of medicine, dentistry, veterinary medicine, medical technology, dental hygiene, physical therapy, occupational therapy, and pharmacy. Pre-professional advisors at Longwood will assist the student in selecting the appropriate courses to meet the admission requirements for any health related program.

Completion of the requirements of the Longwood pre-professional curriculum does not guarantee admission to the professional program. Admission to all professional programs is competitive. Admission is based on the student's performance during the pre-professional period, personal recommendations, related work experience, and a personal interview. A minimum GPA of 3.0 is usually required for transfer.

Southside Higher Education Consortium

The variety of courses available to Longwood students is increased by a cooperative arrangement with Hampden-Sydney College and with the Southside Higher Education Consortium which includes Longwood, Hampden-Sydney, Southside Virginia Community College, and Saint Paul's College. Under the terms of the arrangement, full-time degree program students in any one of the participating institutions may enroll in certain courses at any other of the participating institutions without added expense.

Students desiring to take advantage of this program must secure approval from their major advisor and from the Registrar at their home institution before they are enrolled at the other institution. Students are registered for courses based on enrollment limits at the host institution. Grades for courses taken under the consortium agreement are maintained only at the home institution. Transportation to the host institution must be arranged by each student.

Academic Requirements

GRADUATION REQUIREMENTS

Longwood University awards the bachelor's degree to students who have fulfilled the following requirements:

1. Completion of all study required in one of the six degree programs offered. (Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Nursing or Bachelor of Music).
2. Completion of 120 semester hours of credit for graduation in major programs unless otherwise noted for a major degree program.
3. A minimum average of *C* (grade point average of 2.0) on all work taken at Longwood and a minimum average of *C* (grade point average of 2.0) in those courses constituting the major subjects or field. These are minimum requirements, some programs may require higher levels of achievement. By definition, the major subject or field consists of all courses listed as "major requirements" in the major program curriculum plus all additional courses taken in the same discipline as the major, except those courses which may be specifically excluded by the major department. Students choosing to minor in a field of study must have a 2.0 GPA in courses in that field of study.
4. All students will earn a grade of "C-" or better in at least two writing-intensive courses beyond courses required for General Education.
5. All students will take at least two speaking-intensive courses beyond Goals 1 through 11.
6. A minimum of 25 percent of the degree credit must be earned at Longwood University, with 30 credit hours at the upper level. (Exceptions: A. Biology majors with a concentration in Medical Technology, pre-physical therapy, pre-medicine, pre-dentistry or pre-veterinary medicine who take 300-400 level courses at affiliated institutions will be allowed to count that course work toward fulfilling the 30 hours upper-level graduation requirement; B. students who participate in international exchange programs may request an exception to the 30 hour upper-level graduation requirement. Exceptions must be approved in writing by the student's college dean prior to the study abroad.)
7. Not more than 14 hours of credit by correspondence.
8. Approval of the individual by the general faculty as a candidate for graduation.
9. A formal Application for Degree. File an application for degree in the Office of Registration no later than the completion of 89 credit hours.

Freshman Year Requirements

Longwood Seminar (LSEM 100) is a one-credit orientation course required of all first-time entering freshmen and transfer students who are entering at the freshman level. Through Longwood Seminar, students can expect to learn academic strategies that will promote college success; become more aware of interpersonal strategies that will enhance personal and social success; explore the methods, techniques, and philosophies relevant to an academic field of study; identify personal strengths and values and their relationship to career goals; build a network of strong support relationships within the Longwood community. Students who enter Longwood with 25 or more credit hours are exempt from this requirement.

LSEM 100. *Longwood Seminar.* The goal of the Longwood Seminar is to help develop citizen leaders for the common good by promoting critical thinking and analysis in all aspects of the students' lives and by developing the knowledge and skills that lead to college success. 1 credit.

The General Education Program

The purpose of the General Education Program at Longwood University is the development of disciplined, informed, and creative minds. General Education is the foundation upon which all other learning is built and is therefore the central component of a Longwood education. The program comprises fifteen goals; students may choose among the core courses listed for each. Each core course is specifically designed to address the nine central General Education criteria that all core courses have in common and to help students achieve the outcomes required for a particular goal (see the General Education section of the Catalog for a complete description). Normally, a General Education course should be offered at least once per year. A total of 41 hours of core courses is required for the General Education Program.

Major programs may not require or specify courses to be used to satisfy general education goals, with the following exceptions:

- A major program may designate which Goal 12 course its students must take.
- A major program may designate which Goal 13 course its students must take.
- A major program may include the course that its students take to satisfy Goal 13 as a requirement of the major.
- Students who complete a required internship, guided field experience or directed research experience as part of their major course of study are exempted from Goal 15.

The Dean may authorize an exemption for any goal when a student, due to major requirements, must take at least two courses listed for that goal. *NOTE: Goals 12, 13, 14, and 15 comprise requirements that are not fulfilled through articulation agreements.*

Veterans who have served six months of active duty may be granted two semester hours of physical education credit (providing they have no previous credit in this area), satisfying Goal 11, based on the Report of Separation (DD214). Additional credit may be given for successful completion of selected service schools. This credit is determined on the basis of recommendations in *A Guide to the Evaluation of Educational Experience in the Armed Services*. In cases where there is a question regarding the applicability of credit to the student's program of study, the Dean of the appropriate College is consulted and the Dean may consult the appropriate Department Chair.

Additional Requirements for Specific Degrees

In addition to the 41 hours of core courses required for the General Education Program, students must fulfill the following requirements for specific degrees:

1. Bachelor of Arts Degree

Humanities (3 credits) – not in the discipline of the major.

Foreign Languages (3 credits) – at the 202 level or above

Modern Language majors must complete the degree requirement in a language other than their language of concentration.

Students who are not native speakers of English may be exempted from the B.A. language requirement and General Education Goal 10 provided that they have received their high school diploma, or its equivalent, from a school in their native land where the language of instruction was other than English.

2. Bachelor of Fine Arts Degree

Humanities (3 credits) – not in the discipline of the major

Foreign Language/Social Science (3 credits) – students must take one of the following courses: 3 credits at the 202 or above level in a foreign language; History 200, 320, 325, 354, 359, 360; Geography 241, 352; Political Science 314, 337, 375, 395.

3. Bachelor of Science Degree
Mathematics or Computer Science (3 credits)
Natural Science (4 credits)
4. Bachelor of Science in Business Administration Degree
Mathematics 181 or 261 or 267 (3 to 4 credits)
Natural Science (4 credits)
5. Bachelor of Music Degree
Humanities (6 credits) – in two disciplines and not in the discipline of the major

The following disciplines fall within the categories of *Humanities* or *Social Sciences*:

Humanities	Social Sciences
Art	Anthropology
Communication Studies	Economics
Dance	Geography
Literature	History
Modern Language	Political Science
Music	Psychology
Philosophy	Sociology
Religion	Criminology
Theatre	

Major Program Requirements

The specific major requirements of individual disciplines are listed separately in the Academic Programs section of this catalog. A few majors require a general education core course as part of their major program; in those cases, that core course satisfies a major program requirement and cannot be used to satisfy a general education requirement. The Dean may authorize an exemption for any general education goal when a student, due to major requirements, must take at least two courses listed for that goal.

The Writing Intensive Course Policy

All students will earn a grade of “C-” or better in at least two writing-intensive courses beyond courses required for General Education. Writing-intensive courses shall be designated in the Catalog, in the registration schedule, and on the course syllabus. Each major discipline should offer at least one writing-intensive course each year. Class sizes normally should not be larger than 25 to 30 students for writing-intensive courses. Transfer courses do not normally satisfy writing intensive requirements.

To qualify as *writing-intensive*, a course must meet the following guidelines:

1. Writing-intensive courses should require at least 10 pages of formal writing from each student, typically distributed over three or more papers so students have an opportunity to apply faculty feedback to future written work. (This does not include essay examinations.)
2. Instructors in writing-intensive courses are encouraged to require informal writing (reading journals, brief in-class writings, pre-writing for formal papers) to lead students to explore and articulate course content. Students could use this informal writing to develop ideas for formal papers.
3. Students in writing-intensive courses should be assigned and instructed in specific forms and processes of writing used in professions related to the course discipline.
4. Instructors in writing-intensive courses should give explicit instruction in how to complete the required writing assignments. This explicit instruction must include giving detailed written assignment sheets and a scoring guide showing the explicit criteria, including grading scale, used to score the assignment. If pos-

sible, this information should be attached to the course syllabus. Other explicit instruction might include discussing procedures for gathering and organizing information, providing models of appropriate forms, assigning and responding to drafts, and encouraging revision and editing. Instructors must return graded work before the next paper is due, noting areas of strength and weakness on the scoring guide along with the overall grade.

5. Students who have problems with their writing assignments should be encouraged to seek assistance at the Writing Center as early in their writing process as possible.
6. The demonstrated ability to communicate content knowledge effectively through writing must be a factor in the grading for a writing intensive course. Students must earn a grade of "C-" or better in the course in order to apply it toward their writing intensive course requirement. A statement to this effect must be included on the syllabus.

The Speaking Intensive Course Policy

All students will take at least two speaking-intensive courses beyond Goals 1 through 11 and 14. Speaking-intensive courses shall be designated in the *Catalog*, in the registration schedule, and on the course syllabus.

To qualify as speaking-intensive, a course must meet the following guidelines:

1. Speaking-intensive courses should require at least one formal speaking occasion for each student.
2. Instructors in speaking-intensive courses are encouraged to require informal speaking opportunities to lead students to explore and articulate course content.
3. Instructors in speaking-intensive courses should give explicit instruction in how to complete the required assignments. This explicit instruction must include giving detailed assignments and a scoring guide showing the explicit criteria, including grading scale, used to score the assignment. If possible, this information should be attached to the course syllabus. Other explicit instruction might include discussing procedures for gathering and organizing information, providing models of appropriate forms, and encouraging rehearsal and revision.

Transfer courses do not normally satisfy speaking intensive requirements.

Grade Level Progression

Freshman	1-24 credit hours
Sophomore	25-55 credit hours
Junior	56-88 credit hours
Senior	89+ credit hours

Responsibility

It is solely the responsibility of the candidate for graduation to meet all of the above requirements, including the completion of 120 semester hours, unless otherwise noted for that major degree program.

Graduation

Only those students who have completed the degree requirements established by Longwood will participate in commencement ceremonies. Diplomas will be mailed to students normally within eight weeks of commencement.

Graduation Honors

Those students who have earned 57 or more hours at Longwood and whose general averages for all Longwood credits offered for a degree are 3.35 or above are graduated with the following honors:

Cum Laude — 3.35-3.54

Magna Cum Laude — 3.55-3.74

Summa Cum Laude — 3.75-4.00

Longwood also recognizes graduating seniors who have successfully completed an honors program in a specialized academic area.

Second Baccalaureate Degree: A student who has earned a baccalaureate degree from Longwood or any other accredited institution may earn a second baccalaureate degree by satisfying the following requirements:

1. Submit an undergraduate Application for Admission, a non-refundable application fee, and all official college transcripts directly to the Office of Admissions.
2. Submit a completed undergraduate Application for Degree to the Office of Registration, along with the appropriate diploma fee to the Office of Cashiering and Student Accounts. In order to complete the Application for Degree, the student must meet with the appropriate Department Chair. (Note: The admission process will not be completed until this application has been filed.)
3. Complete, all coursework required by the second program to earn the degree specified for that program. At least 30 hours for the second degree must be completed at Longwood.
4. All general education requirements, and speaking and writing intensive course requirements are met by the first baccalaureate degree. Additional degree requirements are met by the first degree where applicable.
5. Maintain a minimum 2.0 grade point average cumulatively and in the major unless a higher minimum grade point average is specified for a particular major.

General Education

The General Education Program: Purpose, Criteria, Goals, Outcomes, and Core Courses

The purpose of the General Education Program at Longwood is the development of disciplined, informed, and creative minds. General Education is the foundation upon which all other learning is built and is therefore the central component of a Longwood education.

General Education Course Criteria

All core courses are specifically designed to satisfy the following nine criteria. Together, these criteria define what a General Education course is at Longwood University.

Courses satisfying all goals except Goals 12 and 15 will:

1. Teach a disciplinary mode of inquiry (e.g., literary analysis, statistical analysis, historical interpretation, philosophical reasoning, aesthetic judgment, the scientific method) and provide students with practice in applying their disciplinary mode of inquiry, critical thinking, or problem solving strategies.
2. Provide examples of how disciplinary knowledge changes through creative applications of the chosen mode of inquiry.
3. Consider questions of ethical values.
4. Explore past, current, and future implications (e.g., social, political, economic, psychological or philosophical) of disciplinary knowledge.
5. Encourage consideration of course content from diverse perspectives.
6. Provide opportunities for students to increase information literacy through contemporary techniques of gathering, manipulating, and analyzing information and data.
7. Require at least one substantive written paper, oral report, or course journal and also require students to articulate information or ideas in their own words on tests and exams.
8. Foster awareness of the common elements among disciplines and the interconnectedness of disciplines.
9. Provide a rationale as to why knowledge of this discipline is important to the development of an educated citizen.

General Education Goals, Outcomes, and Core Courses

The General Education Program comprises fifteen goals, most of which are addressed by a variety of core courses from which students may choose. A total of 41 hours of core courses is required.

Major programs may not require or specify courses to be used to satisfy general education goals, with the following exceptions:

- A major program may designate which Goal 12 course its students must take.
- A major program may designate which Goal 13 course its students must take.
- A major program may include the course that its students take to satisfy Goal 13 as a requirement of the major.

- Students who complete a required internship, guided field experience or directed research experience as part of their major course of study are exempted from Goal 15.

The Dean may authorize an exemption for any goal when a student, due to major requirements, must take at least two courses listed for that goal. *NOTE: Goals 12, 13, 14, and 15 comprise requirements that are not fulfilled through articulation agreements.*

In addition to addressing the general education criteria, all courses listed under each goal have also been designed to help students achieve the specific outcomes required for that goal.

Complete course descriptions can be found in the Academic Programs section of this Catalog. Normally, a General Education course should be offered at least once per year.

Lower-Division General Education Goals, Outcomes, and Courses

GOAL 1. The development of citizen leaders for the common good by promoting critical thinking and analysis in all aspects of the students' lives and by developing the knowledge and skills that lead to college success (one credit).

Note: Students who enter Longwood University with 25 credits or more are exempted from this goal.

Outcomes: Students will

- Understand the mission of Longwood University and how it applies to the college experience
- Understand the application of critical thinking skills to multiple situations
- Develop the knowledge and skills that lead to college success

LSEM 100 Longwood Seminar/1 Credit

GOAL 2. The ability to write and speak logically, clearly, precisely, and the ability, through accurate reading and listening, to acquire, organize, present, and document information and ideas (three credits).

Outcomes: Students will

- Understand and adapt to rhetorical and contextual differences in tasks involving writing, reading, speaking, and listening
- Engage in academic inquiry using and evaluating a variety of sources, incorporating and documenting source material appropriately, and avoiding plagiarism
- Develop flexible processes for engaging in academic writing
- Develop knowledge of conventions for different kinds of texts and demonstrate substantial control of the conventions of Edited American English
- Reflect on and make judgments about their own texts and writing processes

ENGL 150 Writing and Research/3 credits

GOAL 3. An understanding of our cultural heritage as revealed in literature, its movements and traditions, through reading, understanding, analyzing, and writing about the major works that have shaped our thinking and provide a record of human experience (three credits). *NOTE: ENGL 150 is a prerequisite for these courses*

Outcomes: Students will

- Understand major movements, themes, and values in one or more cultures as revealed in literature
 - Analyze literary texts as reflections of cultural movements, themes, and values
 - Develop and defend interpretations of literary texts through written discourse
- | | |
|----------|---|
| ENGL 201 | World Literature/3 credits |
| ENGL 202 | British Literature/3 credits |
| ENGL 203 | American Literature/3 credits |
| SPAN 341 | Survey of Spanish Literature I/ 3 credits |
| SPAN 352 | Survey of Spanish American Literature II/ 3 credits |
| FREN 341 | Survey of French Literature I/ 3 credits |
| FREN 342 | Survey of French Literature II/ 3 credits |
| GERM 341 | Survey of German Literature I/ 3 credits |
| GERM 342 | Survey of German Literature II/ 3 credits |

GOAL 4. An understanding of our cultural heritage as expressed in artistic achievements and an understanding of the contribution of the creative process to the life of the individual and to society (three credits).

Outcomes: Students will

- Recognize and discuss major achievements in the arts
- Use appropriate vocabulary to describe and discuss artistic expression
- Understand appropriate technology and techniques for the production of artistic achievements
- Explain the cultural and historical contexts of artistic achievements
- Recognize and discuss ethical issues associated with the content, exhibition, or performance of artistic works

ART 121	Environmental Design Issues/3 credits
ART 125	Introduction to Studio Art /3 credits
ART 160	Introduction to the Visual Arts/3 credits
ART 201	Architecture Appreciation and Design/3 credits
ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 316	Writing Fiction/3 credits
ENGL 317	Writing Poetry/3 credits
ENGL 318	Writing Nonfiction/3credits
MUSC 221	History of Jazz / 3 credits
MUSC 222	History of Rock/3 credits
MUSC 224	Music Appreciation / 3 credits
THEA 101	Introduction to the Theatre/3 credits
MUSC 102,103,104	Instrumental Ensemble/ 1 credit each

All 3 semesters in appropriate sequence (consecutive semesters preferable) are required in order to satisfy General Education Goal 4.

MUSC 105,106,107

Choral Ensemble/ 1 credit each

All 3 semesters in appropriate sequence (consecutive semesters preferable)are required in order to satisfy General Education Goal 4.

GOAL 5. An understanding of mathematical thought and the ability to conceptualize and apply mathematical logic to problem solving; (three credits at a commonly agreed upon skills level comparable to college algebra).

NOTE: Students who complete Calculus (MATH 260, 261, or 267) are exempted from this goal.

Outcomes: Students will

- Understand how mathematical and/or statistical models can be used to study real-world situations
- Understand the limitations of and assumptions behind typical mathematical models
- Use mathematical and statistical analysis to interpret such models by testing hypotheses, making predictions, drawing conclusions, checking results for plausibility, and finding optimal results
- Understand when technology might be helpful in mathematical or statistical analysis and apply technology when appropriate

CMSC 121	Introduction to Computer Science/3 credits
MATH 114	Mathematics for the Consumer/3 credits
MATH 121	Functions and Graphs/3 credits
MATH 131	Mathematical Thinking/3 credits
MATH 164	Precalculus/3 credits
MATH 171	Statistical Decision Making/3 credits

GOAL 6. The application of the methods of science to the acquisition of knowledge, and an appreciation of the major contributions of science to our cultural heritage and to the solution of contemporary problems (four credits).

Outcomes: Students will

- Understand the major methods of natural science inquiry
- Recognize and explain major contributions of science to our cultural heritage
- Understand how natural science has been used to address significant contemporary issues

BIOL 101	Biological Concepts and Applications/4 credits
CHEM 101	General Chemistry/4 credits
EASC 210	Physical Geology/4 credits
PHYS 101	General Physics/4 credits
PHYS 103	Conceptual Physics/4 credits
PHYS 105	General Astronomy/4 credits
PHYS 201	University Physics I/4 credits
GNED 162	Introduction to Environmental Science/4 credits
GNED 261	Exploring Science in Our World/4 credits

GOAL 7. The exploration of the foundations and history of western civilization in order to use the past as a model for understanding the present. (three credits)

Outcomes: Students will

- Understand the historical development of western civilization
- Relate the development of Western civilization to that of other regions of the world
- Discuss how historical cultural developments influence the present day

HIST 100	Foundations of Western Civilization/3 credits
HIST 110	Modern Western Civilization/3 credits

GOAL 8. An understanding of the forces shaping contemporary society as revealed in the social sciences (three credits).

Outcomes: Students will

- Understand the major methods of social science inquiry
- Recognize and explain major contributions of social science to our cultural heritage
- Understand how social science has been used to address significant contemporary issues

ANTH 106/WGST 106	Introduction to Women's Studies/3 credits
ECON 111	Economic Issues for the 21st Century/3 credits
HIST 221	United States History Colonial Times to 1877/3 credits
HIST 222	United States History 1877 to Modern Times/3 credits
POSC 150	American Government and Politics/3 credits
PSYC 101	Introduction to Psychology/3 credits
SOCL 101	Principles of Sociology/3 credits
SOCL 102	Contemporary Social Problems/3 credits
GEOG 201	Introduction to Geography/3 credits
HONS 250*	The Changing Social Landscape/3 credits

*GPA of at least 3.25 required for enrollment in HONS 250

GOAL 9. An understanding of the diversity of other cultures and societies (three credits).

NOTE: Students who complete an approved international experience are exempted from this goal.

Outcomes: Students will

- Understand the culture, society, and history of groups outside of the Western European tradition
- Employ an appropriate vocabulary and rational argument to discuss complex issues involving race, nationality, gender, ethnicity, class, or sexual orientation
- Understand the concept of ethnocentrism
- Differentiate between personal discomfort and intellectual disagreement in situations where cultures may conflict
- Distinguish between facts and cultural assumptions relating to issues of diversity

ANTH 101	Introduction to Anthropology/3 credits
HLTH 210	World Health Issues/3 credits
HIST 200	History of China/3 credits
HIST 202	History of Islamic Civilizations/3 credits
HIST 210	World History/3 credits
POSC 245	Gender and Politics/3 credits
POSC 255	Introduction to Comparative Politics/3 credits
RELI 242	World Religions/3 credits
SPAN 331	Latin American Civilization and Culture/3 credits
MUSC 225	Introduction to World Music/3 credits
GEOG 220	Geography of South America / 3 credits

GOAL 10. The ability to communicate and function in a globally interdependent world as developed through foreign language study (three credits). **NOTE:** Students who complete a foreign language course at the 202 level or above as part of the Additional Degree Requirements are exempted from this goal. Students who are not native speakers of English may be exempted from Goal 10 provided that they have received their high school diploma, or its equivalent, from a school in their native land where the language of instruction was other than English. Additionally, students may demonstrate proficiency in any of the following ways:

- With a score of 50 (French), 50 (German), 53 (Spanish) on the College-Level Examination Program (CLEP) test, a student would be awarded 4 credits for 102.
- With a score of 62 (French), 63 (German), 66 (Spanish) on the College-Level Examination Program (CLEP) test, a student would be awarded 3 credits for 202.
- With a score of 3 on the Advanced Placement (AP) Test to receive credit for 201, or earn a score of 4 or 5 to earn credit for 201 and 202.
- Completion of the necessary course at a community college.
- Completion of the necessary course as an appropriate dual-enrollment course in high school.
- Completion of an appropriate course through a study abroad program.

Outcomes: Students will

- Demonstrate the ability to understand, interpret, and produce both oral and written communication in a foreign language.
- Demonstrate an understanding of relationships among the products, perspectives, and practices of the culture(s) studied
- Develop insight into the nature of language and culture

Courses at Longwood which meet this goal:

SPAN 201	Intermediate Spanish I/3 credits
FREN 201	Intermediate French I/3 credits
GERM 201	Intermediate German I/3 credits

GOAL 11. An understanding of issues dealing with physical and mental well being through physical activity (two credits).

Outcomes: Students will

- Understand the importance of regular physical activity on wellness throughout one's lifetime
- Acquire skills that enable participation in lifetime physical activity
- Understand how individual decision making and behavior impact personal health
- Recognize the relationships among societal factors and personal health

PHED 101	Fitness Concepts/2 credits
RECR 101*	Fitness Concepts/Adaptive Activities/2 credits
*Permission of Instructor and Director of Disability Services Required	

Students may choose one of the following eight sections of this 2 credit course: Aerobic Exercise, Aerobic Dance, Cycling, Multiple Activities, Swimming, Water Aerobics, Weight Training, or Restricted Activity.

Note: PHED 101 and RECR 101 may be taken only once for credit toward the degree.

Upper-Division General Education Goals, Outcomes, and Courses

NOTE: Goals 12, 13, 14, and 15 comprise upper-division requirements that are not fulfilled through articulation agreements.

GOAL 12. The development, through upper-level study in the humanities or the social sciences, of specialized knowledge and skills relevant to the student's broad course of study (three credits). Degree programs may indicate specific requirements for satisfying this Goal.

Humanities Outcomes: Students will

- Understand connections between a specific area of the humanities and their own courses of study
- Consider how specialized knowledge and skills from a specific area of the humanities are relevant to a broad course of study

Social Sciences Outcomes: Students will

- Understand connections between a specific area of the social sciences and their own courses of study
- Consider how specialized knowledge and skills from a specific area of the social sciences are relevant to a broad course of study

GOAL 13. The ability to make informed, ethical choices and decisions and to weigh the consequences of those choices (three credits). This must be a junior- or senior- level course; degree programs may indicate specific requirements for satisfying this Goal.

Outcomes: Students will

- Identify the ethical issues implicit in personal behavior and in the operation of political, social, and economic institutions.
- Understand various approaches to making informed and principled choices
- Consider how these approaches might be applied to conflicts in their personal and public lives
- Understand the impact of individual and collective choices in society

CSDS 396	Ethics for Communication Disorders Professionals/3 credits
CMSC/MATH 350	Ethical Issues in Mathematics and Computer Science/3 credits
COMM 400	Communication Ethics/3 credits
KINS 398	Ethics in Sport and Physical Education
MANG 474	Business Ethics/3 credits
PHIL 308	Introduction to Ethics/3 credits
PHIL 315	Biomedical Ethics/3 credits
PHIL 316	Environmental Ethics/3 credits
POSC 331	Ancient/Medieval Political Philosophy/3 credits
POSC 332	Modern Political Philosophy/3 credits

GOAL 14. The ability to synthesize and critically analyze through written discourse and a common educational experience information pertaining to issues of citizen leadership (three credits).

The Goal is satisfied through an interdisciplinary advanced writing seminar under the ENGL prefix taken after the student has achieved Junior level status or obtained the permission of the Chair of the General Education Committee.

Outcomes: Students will

- Engage in the process of citizen leadership by investigating multiple perspectives on an important public issue
- Understand the nature of public discourse/debate as determined by purpose, audience, and context
- Choose appropriate formats in writing for a variety of purposes
- Analyze the effectiveness of their own texts and processes for specific rhetorical situations
- Understand how the knowledge, skills, and values learned in general education are interwoven and inter-related, and how they can contribute to the process of citizen leadership

ENGL 400	Active Citizenship: An Advanced Writing Seminar/3 credits
GNED 495	Special Topics: General Education/3 credits

GOAL 15. The application of knowledge and skills developed in the student's course of study through completion of an internship, guided field experience, or directed research (one credit).

Outcomes: Students will:

- Identify specific objectives to be achieved through the completion of the internship, field experience, or research project
- Evaluate their own progress toward those objectives

NOTE: Students who complete a required experience as part of their major course of study are exempted from this goal.

COOK-COLE COLLEGE OF ARTS AND SCIENCES

Charles D. Ross, BS, MS, PhD, *Dean*

Joanna H. Baker, MS, *Assistant Dean*

Cynthia Thompson, *Executive Secretary*

MISSION: The Cook-Cole College of Arts and Sciences is the largest and most comprehensive of Longwood's three colleges and touches the lives of everyone at Longwood. The extensive course offerings, research projects, and internships in Arts and Sciences provide the foundation of a broad-based education to all of Longwood's students and assist them in becoming educated citizens who are able to demonstrate creativity, critical thinking, and resiliency in addressing the issues of a diverse and interdependent world. Faculty-student collaboration drives every aspect of teaching and learning in the Arts and Sciences, allowing students to develop personal and professional relationships that last a lifetime.

Academic Departments:

Art

Biology & Environmental Sciences

Chemistry & Physics

Communication Studies & Theatre

English & Modern Languages

History, Political Science, & Philosophy

Mathematics & Computer Science

Music

Psychology

Sociology, Anthropology, & Criminal Justice Studies

Interdisciplinary Programs and Minors:

Homeland Security Minor

International Studies Minor

Liberal Studies (Major) Program

Women's and Gender Studies Minor

Homeland Security Program

John W. Barbrey, *Director of the Homeland Security Program*

Interdisciplinary Minor in Homeland Security

The Homeland Security Minor offers students an interdisciplinary program that incorporates a wide variety of course work relevant to the national needs regarding homeland security within the context of the global economic and political forces at work in the world today.

Requirements for 18-Credit Minor in Homeland Security:

In order to complete a minor in Homeland Security, students must:

- File a form of intention to pursue the minor at the Office of Registration.
- Complete the three courses (nine hours) listed below earning no less than a C- in each.

GEOG 352	World Regional Geography
POSC/HMSC 345	Terrorism and Homeland Security in a Global Age
POSC 441	International Relations
- Pass at least 9 hours from the courses listed below earning no less than a C- in each.

COMM 420	Intercultural Communication
COMM 481	Crisis Communication
CIMS 376	Intro to Computer Security, Forensics, and Law
CMSC 355	Introduction to Computer and Network Security
CRIM 305	White Collar Crime
ECON 307*	Econ Development and Transition to Free Markets
ECON 319*	International Economics
GEOG 241	Cultural Geography
GEOG 275	Introduction to Geographic Information Systems
HIST 202	History of Islamic Civilizations
HIST 308	United States Diplomatic History
POSC 338	Politics of the Middle East
POSC 343	American Foreign Policy
POSC 442	International Law and Organizations
SOCL 301	Sociology of Religion
SOCL 376	Sociology of Law

* These courses have pre-requisite requirements.

International Studies Program

The International Studies Program offers opportunities for students to gain an understanding of other cultures through study abroad, as well as through an interdisciplinary Minor in International Studies.

International Studies Minor

Longwood University offers a minor in International Studies, combining courses in the social sciences, humanities, arts, and sciences, for those students who wish to devote a part of their education to learning about societies other than their own. Many students combine their interdisciplinary focus in International Studies with a major in a field such as Political Science, Economics, Business, Foreign Language, History, or English, in preparation for careers in international service, business, non-governmental organizations, foreign service, the Peace Corps, and for pursuing graduate work. Students will pursue courses in the minor during study abroad in summer or semester programs, while acquiring first-hand experience with life and work in another culture.

Students who wish to participate in the International Studies minor should contact Dr. Lily Anne Goetz, Director of International Affairs, goetzla@longwood.edu.

Requirements for 21-Credit Minor in International Studies

In order to complete a minor in International Studies, students must:

1. File a form of intention to pursue the minor at the Office of Registration.

2. Complete 6 credit hours in a modern language to include 330 or 331.

Note:

Modern Language majors must take all 21 credits from the list below.

Non-native English speakers using TESL 309 or TESL 310 to complete this requirement may use any History class to fulfill the 330/331 requirement, including American History. See Director for approval of course choice.

3. Complete 15 credit hours chosen from the following: no more than two courses from any one discipline may be chosen.

ACCT 447	International Accounting
ANTH 204	Language and Culture
ANTH 316	People of Africa
ANTH 317	Peoples of the Pacific
ANTH 320	Folklore
ART 261	History of Western Art: Prehistoric to Medieval
ART 262	History of Western Art: Renaissance to Modern
ART 362	Modern Art
ART 365	Contemporary Art
COMM 420	Intercultural Communication
ECON 305	Economics of European Union
ECON 307	Transition and Development to Free Markets
ECON 319	International Economics
ECON/FINA413	International Financial Markets
ENGL 201	World Literature
ENGL 360	Genre Studies (when topic is appropriate)
ENGL 362	Literature of Diversity (when topic is appropriate)
FREN 335	French Cinema
FREN 341	Survey of French Literature I
FREN 342	Survey of French Literature II

FREN 411/412	Studies in Literary Genre
FREN 413/414	French Literary Movements
FREN 415/416	Major French Authors
GEOG 220	The Geography of South America
GEOG 241	Cultural Geography
GEOG 352	World Regional Geography
GEOG 403	Geography of Europe
GERM 341	Survey of German Literature I
GERM 342	Survey of German Literature II
GERM 411/412	Studies in Literary Genre
GERM 413/414	German Literary Movements
GERM 415/416	Major German Authors
HLTH 210	World Health Issues
HIST 200	History of China
HIST 202	Islamic Civilizations
HIST 308	United States Diplomatic History
HIST 314	Political History of Africa
HIST 355	Europe in the Nineteenth Century, 1815-1914
HIST 356	Europe in the Twentieth Century, 1900-present
HIST 358	France Since 1815
HIST 359	Russian History to 1894
HIST 360	History of the Soviet Union and Communist Eastern Europe
HIST 483	International Study in Africa
HIST484	International Study in Europe
MANG 368	Beyond the Silk Road: Sino-American Business
MARK481	International Business
MUSC 225	Introduction to World Music
PHED/DANC 136	International Folk Dance
POSC 255	Introduction to Comparative Politics
POSC 314	Political History of Africa
POSC 335	Western European Politics and Government
POSC 336	Russian and Eastern European Government and Politics
POSC 337	Asian Governments and Politics
POSC 375	Latin American Politics and Government
POSC 395	African Politics and Government
POSC 441	International Relations
POSC 442	International Law and Organizations
RELI 242	World Religions
SPAN 341	Survey of Spanish Literature I
SPAN 342	Survey of Spanish Literature II
SPAN 351	Survey of Spanish American Literature I
SPAN 352	Survey of Spanish American Literature II
SPAN 411/412	Studies in Literary Genre
SPAN 413/414	Hispanic Literary Movements
SPAN 415/416	Hispanic Authors

Other courses with a substantial international focus or study abroad component will be considered for substitution. See program director.

4. Complete an approved study abroad program awarding at least 3 credit hours.

Study Abroad

Study Abroad programs are available in the form of short-term group programs led by Longwood University faculty during summers or winter intersessions, one- or two-month summer programs, and semester and year programs. Students should work with their academic advisors to plan the courses to be taken abroad, and should begin planning at least a year ahead of the proposed program dates. Study abroad opportunities are open to all students; a cumulative grade point average of at least 2.5 is required for most study abroad programs. Modern Language majors are required to study abroad for at least one full semester. All federal, state and institutional financial aid, with the exception of Federal Work Study, may be applied toward the costs of approved study abroad programs. There are a limited number of scholarships available for students in programs abroad. For complete information on upcoming programs, requirements for participation, and application procedures, and for help in selecting a program and for program approval, please visit the Office of International Affairs in Ruffner 146. The International Affairs website contains information that will be helpful as you begin to plan study abroad: <http://www.longwood.edu/studyabroad/>

LIBERAL STUDIES

Dr. Patricia Lust, *Program Director*

LIBERAL STUDIES MAJOR AND TEACHER PREPARATION PROGRAM

The Liberal Studies program is designed for students seeking licensure to teach multiple subjects in Elementary, or Middle School or in Special Education. The major in Liberal Studies provides a solid background in the main content areas taught in Elementary and Middle Schools: the language arts, social sciences, mathematics, and the sciences. Arts and Sciences faculty and Education faculty have collaborated to provide an interdisciplinary program that leads to Elementary (K-6), Middle (6-8) and Special Education teaching licensure. The program is intended to develop broadly informed individuals who understand contemporary issues, and will provide civic and professional leadership.

*** Students who decide not to seek a teaching license after beginning the program can complete a major in Liberal Studies by adding a minor in any Arts and Sciences discipline or in Economics

Since the Liberal Studies major and most of the Education course sequence are required in common for both elementary and middle school endorsements, students wishing to teach are encouraged to consider seeking both endorsements simultaneously. Separate licensure is, however, available for either elementary (PK-6) or middle grades (6-8).

LIBERAL STUDIES PROGRAM

Faculty

William Abrams, PhD, *Professor of Mathematics*
Lee D. Millar Bidwell, PhD, *Professor of Sociology*
Susan Browder, MS, *Lecturer in Mathematics*
Don Butler, MA, *Assistant Professor of English*
David Coles, PhD, *Associate Professor of History*
Sharon Emerson-Stonnell, PhD, *Professor of Mathematics*
Larissa Fergeson, PhD, *Associate Professor of History*
Mark Fink, PhD, *Associate Professor of Biology*
Joseph Garcia, PhD, *Professor of Geography*
David Hardin, PhD, *Assistant Professor of Geography*
Timothy Holmstrom, PhD, *Assistant Professor of Physics*
Edward Kinman, PhD, *Associate Professor of Geography*
Heather Lettner-Rust, MA, *Lecturer in English*
Virginia Lewis, MS, *Lecturer in Mathematics Education*
Matthew Lucas, EdD, *Assistant Professor of Physical Education and Health*
Mark Lukas, PhD, *Assistant Professor of Philosophy*
Patricia Lust, DM, *Professor of Music*
Christopher McGee, PhD, *Assistant Professor of English*
Jason S. Milne, PhD, *Assistant Professor of Sociology*
Jennifer Miskec, PhD, *Assistant Professor of English*
Eric Moore, PhD, *Associate Professor of Philosophy*
Robin Smith, PhD, *Assistant Professor of English*
Wendy Smith, PhD, *Assistant Professor of Mathematics Education*
Gena Southall, EdD, *Assistant Professor of English*
William Thomson, EdD, *Assistant Professor of Physical Education*
Maria Timmerman, PhD, *Assistant Professor of Mathematics Education*
Deborah Welch, PhD, *Professor of History*

While every attempt has been made to state the major and minor requirements as clearly as possible, this is a complex program. Every student majoring in the program must maintain close communication with his/her academic advisor to plan and schedule the sequence of courses. Faculty advisors are happy to assist each student in this and in defining career goals and expectations.

The major in Liberal Studies is housed in the Cook-Cole College of Arts and Sciences. Students interested in discussing or enrolling in the program should consult with the Program Director.

*Note: The program does not guarantee that all of the courses listed will be offered every semester.

LIBERAL STUDIES MAJOR, BA, BS

A. General Education Core Requirements/41 credits

Goal 12: Sociology 320 required

Goal 13: Philosophy 308 required

Goal 15: Satisfied by EDUC 370 practicum or an internship in the minor.

POSC 150 will meet Goal 8 and is required for teaching licensure.

B. Additional Degree Requirements for the BA and BS are included in the major. Students seeking the BA may take Modern Language at the 202 level or above for the three-credit elective in the program.

C. LIBERAL STUDIES MAJOR, Elementary Endorsement (PK-6)/47-50 credits

ENGLISH/9 credits

Humanities/9 credits

ENGL 380

Children's Literature/3 credits

ENGL 382

Grammar: Theory and Practice/3 credits

ENGL 483

Writing: Theory and Practice in the Elementary School/3 credits

(See section E below for Middle School Concentration.)

PHIL 308

Introduction to Ethics

(Required for licensure and counts for General Education Goal 13)

NATURAL SCIENCES/11 credits

BIOL 114

Fundamentals Life Science/4 credits

CHEM 100

Chemistry for Educators/2 credits

PHYS 100

Physics for Educators/2 credits

EASC 300

The Dynamic Planet/3 credits

SOCIAL SCIENCES/9-12 credits

GEOG 241

Cultural Geography/3 credits

or GEOG 352

World Regional/3 credits

HIST 221

U.S. History to 1877/3 credits

HIST 222

U.S. History since 1877/3 credits

POSC 150

American Government/3 credits

(Required for licensure and satisfies General Education Goal 8)

SOCL 320

Sociology of Education/3 credits

(Required for the major and satisfies General Education Goal 12.)

MATHEMATICS/9-12 credits

MATH 121

Finite Mathematics/3 credits

or MATH 164

PreCalculus/3 credits

(Required for licensure and satisfies General Education Goal 5)

MATH 309

Numeration Systems/3 credits

MATH 310

Probability, and Statistics, and Programming/3 credits

MATH 313

Geometry and Reasoning/3 credits

FINE ARTS/ 3 credits

ART 448	Integrated Arts – Art/3 credits
MUSC 448	Integrated Arts – Music/3 credits
THEA 448	Integrated Arts – Theatre/3 credits

HEALTH / KINESIOLOGY/ 3 credits

KINS 389	Health and Physical Education Elementary for Classroom Teachers/3 credits
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Elective/three (3) credits from the following:

ART 341	Art Education in the Elementary Classroom/3 credits
ECON 115	Economics for Educators/3 credits (Required for Middle School Social Science Concentration)
MATH 330/SCED 330	Integration of Mathematics and Science Principles/3 credits
MATH 430	Teaching Middle School Mathematics/3 credits
MUSC 441	Elementary School Methods & Materials/3 credits
THEA 443	Creative Dramatics for the Classroom/3 credits
MOLA 202	(French, German, Spanish)/3 credits (for B.A. degree)

Any Arts and Sciences course at the 300 or 400 level.

EDUCATION/40 credits

Candidates for Elementary School (K-6) Licensure only must complete the following:

Required Courses/14 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 270	Practicum I - Primary or Middle School level/1 credit (First summer session at end of freshman or sophomore year)
EDUC 310	Foundations of Literacy Instruction/3 credits
EDUC 370	Practicum II – Primary or Middle School Level/3 credits (First summer session at end of sophomore or junior year)
EDUC 380	Classroom Assessment/2 credits

PARTNERSHIP SEMESTER/14 credits

Second semester junior or first semester senior year.

EDUC 440	Field Experience in Literacy Instruction/1 credit
EDUC 441	Elementary School Literacy Instruction/3 credits
EDUC 450	Principles of Instruction (K-8)/2 credits
EDUC 451	Curriculum in the Elementary School (K-6)/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
SPED 489	Survey of Exceptional Children/3 credits

* Note: Students must be admitted to the Teacher Prep program before they will be permitted to enroll in any 300-400 level EDUC courses.

Professional Semester:

EDUC 401	Directed Teaching in the Elementary School/12 credits
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D. LIBERAL STUDIES MAJOR, ENDORSEMENT TO TEACH BOTH ELEMENTARY (K-6) AND MIDDLE GRADES (6-8)/56-63 credits

Since most courses required for middle school endorsement are also required for elementary endorsement, students are encouraged to consider seeking both simultaneously. Students seeking the elementary endorsement who wish to add an endorsement to teach at the middle school level, grades 6-8, must complete the following in addition to the Liberal Studies and Education courses above:

Meet middle school add-on requirements in two of the following subject areas/3-20 additional credits:

Education 427	Teaching Reading and Language Arts in the Middle School Grades (6-8)/2 credits
Education 452	Curriculum in the Middle School (6-8)/2 credits

Designated courses in two of the following subject areas:

HUMANITIES/9 credits

ENGL 350	Introduction to Linguistics/3 credits
ENGL 381	Young Adult Literature/3 credits
ENGL 479	(Writing: Theory and Practice for the Middle, Secondary, and College Classroom/3 credits (Instead of, not in addition to ENGL 483 as listed above.)

MATHEMATICS/6-10 credits

MATH 260	Integrated CalculusII/4 credits (Exemption from General Education Goal 5)
or MATH 261	The Differential and Integral CalculusI/4 credits (Exemption from General Education Goal 5)
MATH 430	Teaching Middle School Mathematics/3credits (Can be counted as the approved elective in the Liberal Studies major)
MATH 160	Integrated Calculus I/3 credits
or MATH 164	Precalculus/3credits (Required for licensure and satisfies General Education Goal 5)
or MATH 262	Differential and Integral Calculus/4 credits (Exemption from General Education Goal 5)

NATURAL SCIENCE/0-4 credits

CHEM 101	General Chemistry/4 credits (Required for licensure and satisfies General Education Goal 6)
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SOCIAL SCIENCE/3 credits

HIST 110	Modern Western Civilization/3 credits
HIST 100	Foundations of Western Civilization/3 credits (Required for licensure and satisfies General Education Goal 7)
ECON 115	Economics for Educators (Should be selected in Elective category above.)

EDUCATION

Required Courses - Take two additional courses/4 additional credits

EDUC 442	Middle School Literacy Instruction/3 credits
EDUC 452	Curriculum in the Middle School (6-8)/2 credits

Professional Semester:

EDUC 400	Directed Teaching in the Elementary and Middle School/12 credits (Instead of, not in addition to EDUC 401 as listed above)
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E. LIBERAL STUDIES MAJOR, MIDDLE SCHOOL ENDORSEMENT ONLY

(Grades 6-8: Two subjects) 37-49 credits

Candidates for Middle School licensure only must have concentrations in two of the following areas: English, Mathematics, Natural Sciences, and Social Sciences. They must also have a required minimum number of courses in the areas in which they do not concentrate. The following lists requirements for candidates concentrating and not concentrating in each of the four areas:

HUMANITIES:

English Concentrators/12 credits

ENGL 350	Linguistics/3 credits
ENGL 381	Young Adult Literature/3 credits
ENGL 382	Grammar: Theory and Practice /3 credits
ENGL 479	Writing: Theory and Practice for the Middle, Secondary and College Classroom/3 credits

English Nonconcentrators/3 credits

ENGL 350	Linguistics/3 credits
or ENGL 382	Grammar: Theory and Practice/3 credits
or ENGL 479	Writing: Theory and Practice for the Middle, Secondary and College Classroom/3 credits

Mathematics Concentrator/19-23 credits

MATH 160	Integrated Calculus I/3 credits
or MATH 164	Precalculus/3 credits (Required for licensure and satisfies General Education Goal 5)
or MATH 262	The Differential and Integral CalculusII/4 credits (Exemption from General Education Goal 5)
MATH 260	Integrated CalculusII/4 credits (Exemption from General Education Goal 5)
or MATH 261	The Differential and Integral CalculusI/4 credits (Exemption from General Education Goal 5)
MATH 309	Numeration Systems/3 credits
MATH 310	Probability, and Statistics and Programming/3 credits
MATH 313	Geometry and Reasoning/3 credits
or MATH 335	Advanced Euclidean Geometry/3 credits
MATH 430	Teaching Middle School Mathematics/3 credits
CMSC 121	Introduction to Computer Science/3 credits
or CMSC 160	Intro to Algorithmic Design I/3 credits

Mathematics Nonconcentrator/3-6 credits

MATH 310	Probability, and Statistics and Programming/3 credits
MATH 164	Precalculus/3 credits (Required for licensure and satisfies General Education Goal 5)

Natural Science Concentrator/11-15 credits

BIOL 114	Fundamentals of Life Science/4 credits
PHYS 103	Conceptual Physics/4 credits
EASC 300	The Dynamic Planet/3 credits
CHEM 101	General Chemistry/4 credits (Required for licensure and satisfies General Education Goal 6)

Natural Science Nonconcentrator/7-8 credits

BIOL 114	Life Science/4 credits
CHEM 100	Chemistry for Educators/2 credits
and PHYS 100	Physics for Educators/2 credits
or EASC 300	Dynamic Planet/3 credits

Social Science Concentrator/15-18 credits

HIST 110	Modern Western Civilization/3 credits
GEOG 241	Cultural Geography/3 credits or
or GEOG 352	World Regional Geography/3 credits
HIST 221	U.S. History to 1877/3 credits
HIST 222	U.S. History since 1877/3 credits
ECON 111	Contemporary Issues and Social Policy or
ECON 115	Economics for Educators/3 credits
HIST 100	Foundations Western Civilization/3 credits (Required for licensure and satisfies General Education Goal 7)
POSC 150	American Government Systems/3 credits (Required for licensure and satisfies General Education Goal 8)
SOCL 320	Sociology of Education/3 credits (satisfies General Education Goal 12)

Social Science Nonconcentrator/6 credits

Six (6) credit hours beyond General Education from the list above.

EDUCATION/40 credits.

Candidates for Middle School (6-8) Licensure only must complete the following.

Required Courses/14 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2credits
EDUC 270	Practicum I/1 credit (First summer session at end of freshman and sophomore year)
EDUC 310	Foundations of Literacy Instruction/3 credits
EDUC 370	Practicum II/3 credits (First summer at end of sophomore or junior
EDUC 380	Classroom Assessment/2 credits

Partnership Semester/14 credits

Second semester junior or first semester senior year.

EDUC 440	Field Experience in Literacy Instruction/1 credit
EDUC 442	Middle School Literacy Instruction/3 credits
EDUC 450	Principles of Instruction (K-8) /2 credits
EDUC 452	Curriculum in the Middle School (6-8)/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
SPED 489	Survey of Exceptional Children/3 credits

- * Students must be admitted to the Teacher Prep program before they will be permitted to enroll in any 300-400 level EDUC course.

Professional Semester/12 credits

EDUC 405	Directed Teaching in the Middle School /12 credits
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F. SPECIAL EDUCATION/Liberal Studies General Curriculum Five Year K-12 (SLG) /41 credits.

Students desiring to teach Special Education on the K-12 level will need to complete the five-year Liberal Studies/Special Education degree programs. The Liberal Studies major for Special Education is the same as the major for Elementary Education, and students should follow the General Education and Liberal Studies major guidelines in the Elementary Education section. A BA or BS degree in Liberal Studies will be awarded upon completion of the fourth year and a MS degree in Special Education will be awarded upon completion of the fifth year. Students will not be endorsed to teach special education until the completion of the fifth year.

See Special Education requirements in the College of Education and Human Services section of this catalog.

G. MINOR/18-24 credits. Students who decide not to seek a teaching endorsement after beginning the program must select a minor in one of the Arts and Sciences disciplines or in Economics. Students selecting this option will follow the elementary track and may substitute a 3 credit Humanities course at the 300/400 level for ENGL 380 and a 3 credit Sociology course at the 300/400 level for SOCL 320. Electives 10-16 credits.

H. TOTAL/120-155 credits

Total credits required for a BA or BS with Elementary Teaching Endorsement/128-134

Total credits required for a BA or BS with Elementary and Middle School Teaching Endorsements/135-155

Total credits required for a BA or BS with Middle School Teaching Endorsement in two concentrations/120-133

Total credits required for a BA or BS with Special Education Teaching Endorsement/128-134

Total credits required for a BA or BS with a Minor in an Arts and Sciences discipline or Economics/120

Women's and Gender Studies Program

Dr. Carl Riden and Dr. Wade Edwards, *Co-Directors of Women's and Gender Studies*

The Women's and Gender Studies Minor at Longwood University offers students an interdisciplinary program that incorporates an understanding of gender perspectives in all areas of the curriculum. Women's and Gender Studies creates a framework for examining the historical, cultural, political, economic, and global conditions central to understanding both women as gendered beings and the processes of gender construction for all humans. It recognizes that not only gender, but race, class, ethnicity, age, ability and sexual orientation are crucial aspects of women's and men's experiences. Because issues of gender cut across most areas of knowledge, students can raise similar questions within different disciplines and by using various methodologies achieve a deeper understanding of the complexity and wholeness of human experience.

Students wishing to minor in Women's and Gender Studies should sign up in the Office of Registration.

Requirements for 18-Credit Minor in Women's and Gender Studies

In order to complete a minor in Women's and Gender Studies, students must:

1. File a form of intention to pursue the minor at the Office of Registration,
2. Earn a grade point average of 2.0 in those courses chosen to meet the minor requirements, and
3. Complete 18 hours of course work (including at least 9 hours at the 300 or 400 level) from the following courses.

ANTH/WGST 106	Introduction to Women's Studies/3 credits
ANTH 325	Gender and Society/3 credits
ART 360	Women in the Visual Arts/3 credits
COMM 470	Gender and Communication/3 credits
CRIM 323	Gender and Crime/3 credits
ECON 411	Economics of Labor and Discrimination/ 3 credits
ENGL 358	Women and Film/3 credits
ENGL 432	Women and Literature/3 credits
HLTH 430	Women's Health Issues/3 credits
HIST 321	The History of Women in America/3 credits
HIST 470	Women in World History/3 credits
POSC 245	Gender and Politics/3 credits
PSYC 350	Psychology of Sex and Gender/3 credits
SOCL 233	Race, Class, and Gender/3 credits
SOCL 241	Marriage and the Family/3 credits
SOCL 325	Gender and Society/3 credits
SOCL 351	Sociology of Family Violence/3 credits
SOWK 309	Human Sexual Adjustment/3 credits
SOWK 325	Human Diversity: Populations at Risk/3 credits
WGST 295	Selected Topics/1-3 credits
WGST 390	Directed or Independent Study/ 1-18
WGST 489	Directed Study/2-3 credits
WGST 490	Directed or Independent Study/1-18 credits
WGST 492	Internship in Women's Studies/1-6 credits
WGST 495	Special Topics/1-6 credits

(and other courses to be approved by the Women's and Gender Studies Committee)

In addition to the above courses, students are encouraged to participate in Women's and Gender Studies events on campus.

WOMEN'S AND GENDER STUDIES COURSE DESCRIPTIONS (WGST)

WGST 106. *Introduction to Women's Studies.* The course will introduce students to literature in the social sciences by and about women. We will explore key roles which women play in society, how they have questioned these roles, and contributions which women make in different societies. We will read about women in our own and other societies as a way to explore these questions. 3 credits.

WGST 295. *Selected topics in Women's and Gender Studies.* The topics will vary from semester to semester. May be repeated for credit when topics change.

WGST 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391.

WGST 489. *Directed Study.* Symposium in Women's Studies sponsored by the Washington Center. Forty to 60 hours of lectures, panel discussions, workshops, site visits, and bi-weekly discussion groups over a 2 to 3 week period in Washington, D.C. Prerequisites: two courses in Women's and Gender Studies, 2.5 GPA, and approval of the Directors of Women's and Gender Studies. The work done in the Symposium will be evaluated by a faculty member designated by the Program Directors, and cannot be *double-counted* at Longwood to meet the requirements of other disciplines. 2-3 credits.

WGST 490. *Directed or Independent Study.* Must be approved by the program directors. 1-18 credits.

WGST 492. *Internship in Women's and Gender Studies.* Directed practice in a public, private, or community agency or organization which has as one of its goals the improvement of the status of women. Students work with an on-site supervisor who guides their internship in collaboration with a faculty liaison appointed by the Directors of Women's and Gender Studies. Prerequisites: two courses in Women's and Gender Studies, 2.5 GPA, and permission of the Longwood Women's Studies Committee. 1-6 credits.

WGST 495. *Special Topics.* Selected topics in Women's and Gender Studies. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-6 credits.

The Cormier Honors College

Dr. Geoffrey C. Orth, *Director*

The Cormier Honors College for Citizen Schools is designed to offer attractive and challenging opportunities for intellectual growth to well-prepared and highly-motivated students. Its theme is citizen service, which students demonstrate through their commitment to their community both inside and beyond the classroom. The emphasis in Honors courses is on teaching students to articulate an understanding of a given field, to relate that field of knowledge to others, to think independently, and to write and speak clearly and cogently. Honors classes are generally small in size and provide opportunities for intensive class discussion and innovative teaching.

Some honors classes are specially designated sections of courses required for general education; others are especially created for honors students and may be team-taught and interdisciplinary in nature. Many upper-level courses which do not have prohibitive prerequisites may be designated as honors courses. Moreover, students formally enrolled in the Honors College can arrange for up to three advanced courses in the major field to be enhanced for honors credit. Honors students who also elect to undertake Senior Honors Research may count six hours of that work in place of two of the three upper-level courses.

Entering students are invited to join the Honors College based on a screening of their high school records and their SAT scores. Those offered honors admission typically have SATs totaling in the mid-1200s and above and, minimally, an unweighted grade point average of 3.5 for academic core courses. The Honors College welcomes applications from students at the second-semester level or beyond who attain a cumulative grade point average of 3.25 and from incoming transfer students with a grade point average of 3.25. Any Longwood student who meets the qualifications for admission to the Honors College, but who does not wish to take a full range of honors work, may register for one or more classes.

Fifteen competitive honors scholarships are available for those entering the program and they may be retained as long as the recipient makes satisfactory progress toward completing honors requirements, and maintains honors grades. To remain in the Honors College a student must maintain an average of 3.25 in honors courses and an overall GPA of 3.25, computed at the end of each year. Honors graduates are recognized at graduation (cum honore) and their honors standing is permanently recorded on their transcripts. Requirements for successful completion of the program are as follows:

- Maintenance of a minimum grade point average of 3.25, both overall and for all honors courses.
- The successful completion of eight honors courses, including either Honors Longwood Seminar 100 or Honors 202, and Honors English 400. Three of the eight courses must be numbered 300, and above.
- Completion of a credit-bearing study abroad program of at least two weeks in length.
- Completion of a senior-level, honors research project of at least one credit hour.

Students enrolled in the Honors College have available to them in their first year housing on the honors floor of Wheeler Hall; upper-level students may elect to stay on in Wheeler.

All Honors students are eligible to apply to make presentations at state, regional, and national honors conferences, and, at the third-year level, to participate in the National Honors Semester, held each semester at a designated campus in the U.S. or abroad.

Longwood Honors Courses

Honors sections of many of the general education courses are offered frequently. Introductory and upper-level courses in most academic disciplines are also offered, and interdisciplinary, team-taught, and special topics courses are scheduled either in specific departments or as Honors 295 or Honors 495. A student may elect to enhance a course for honors credit if it is not being offered as an honors course.

HONORS COURSE DESCRIPTIONS (HONS)

HONS 201. *Education for Social Change.* The course will focus on the process of building community and fostering participatory democracy. The course will provide knowledge and skills that enable students to become effective advocates/facilitators of community efforts towards social change. The course design is based on the premise that learning occurs in a variety of ways including direct experience, reflection, theory, and application. 2 credits.

HONS 202. *Fundamentals of Citizen Leadership.* This course will investigate the responsibilities of citizens to their communities in confronting and acting on common needs, such as protection of the environment and the provision of adequate food, shelter, and medical care to those living in it. Students focus on a single need in the local community, investigate the nature of that need, and, working with an appropriate local agency, develop a plan to direct their own personal effort as well as community efforts to address that need. 1 credit.

HONS 250. *The Changing Social Landscape.* This course is designed to help students understand changes in American society through interdisciplinary analysis. Students will explore the historical, economic, political, demographic, and social shifts that have occurred in American society by examining U. S. census data, national public opinion polls, and other statistical indicators of cultural change. 3 credits.

HONS 300. *Freudian Themes In Fairy Tales.* An exploration of fairy tales and related literature as a literary form. An emphasis will be placed on the role of fairy tales in psychological development through an examination of their structure, themes, motifs and symbols. Basic elements of literary and psychological perspectives will provide a basis for in-depth discussion and analysis of specific stories within their literary, psychological, cultural, historical and personal contexts. 2 credits.

HONS 350. *Surviving Hard Times.* This course is designed to foster a deeper and more profound understanding of the elements involved in surviving a "hard time." Students will examine the lives of people who have survived hard times and will develop basic living and survival skills to endure a range of the most challenging circumstances one needs to confront in life. 2 credits.

HONS 400. *The Civil Rights Movement in Prince Edward County (1951-65).* This lecture/discussion class examines Prince Edward County's place in the national civil rights movement. The focus is on school desegregation issues, including the Supreme Court's Brown decision and the subsequent closing of public schools for five years. Local participants in the events of this era will be guest lecturers. Students will collect oral histories and use primary documents in their research. 2 credits.

Department of Art

Erin Devine, *Chair*

Janet McQueen, *Administrative and Program Specialist III*

The Department of Art at Longwood is located in the Bedford Art Building, one building in the Fine Arts Complex. The building contains eight multi-purpose studios, a computer lab, an outdoor work area, exhibition galleries and an auditorium seating 176.

The Department of Art also provides aesthetic and cultural enrichment opportunities for the academic community through lectures, workshops and demonstrations by well-known artists and art educators, presents exhibits of student and professional work in two galleries and offers opportunities for members of the community to take courses in studio art, art education and art history. The faculty also supports and encourages aesthetic and cultural opportunities, as well as programs sponsored by the Central Virginia Arts area affiliate of the Virginia Museum and Longwood Center for the Visual Arts.

ART PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

Mark S. Baldridge, MFA, *Professor of Art*

John S. J. Burke, EdD, *Professor of Art*

Anna Cox, MFA, *Assistant Professor of Art*

Kerri Cushman, MFA, *Assistant Professor in Art*

Erin Devine, MA, ABD, *Instructor of Art History & Chair*

Randall W. Edmonson, MFA, *Professor of Art*

Amos P. Kennedy, Jr., *Visiting Professor, Barbara Bishop Endowed Chair in Art*

Andrea Keys, *Assistant Professor of Art*

Wade Lough, *Assistant Professor of Art*

Kelly Nelson, MFA, MAE, *Associate Professor of Art*

Christopher M. Register, MFA, *Associate Professor of Art*

The primary educational objective of the Department of Art is to provide quality baccalaureate degree programs in art education, graphic design, and the fine arts, with concentrations in art history or studio; to offer a variety of courses that fulfill general education requirements.

While a foundation in art techniques, theory and art history is essential, creative expression and development of concepts, values and critical judgment are expected and encouraged. Students choose a field of specialization or concentration, form their own concepts and develop individual methods and directions. The Department of Art emphasizes the humanities and aesthetic judgment, the development of personal expression and the relationship of art in the nature of learning and human development essential for a liberal arts education.

The Department encourages students to be creative with ideas, techniques and materials in every aspect of their daily lives. We want our students to be knowledgeable about art history, current art activities, techniques, media, design, the value of art and its role in society and their own personal artistic direction. We expect our students to be productive, self-motivated and to develop discipline and responsibility concerning professional obligations and expectations in the workplace. Finally, we expect our students to be enlightened people, to be appreciative of life, to contribute to the well-being of others and society in general.

STUDENT ASSESSMENTS

As a graduation requirement, all students must participate in, and pass, four annual portfolio assessments.

- First Portfolio Assessment: This assessment will determine the student's eligibility to continue in the Art Department.
- Second Portfolio Assessment: Students must also pass this assessment to continue in their area of concentration and/or the Art Department
- Third Portfolio Review: Students must pass this assessment to participate in the fourth portfolio review.
- Fourth Portfolio Review: Students must pass this assessment to graduate.

These assessments will be conducted annually. Any student failing an assessment will be eligible to retake it the following year. Students may only participate in one assessment per year. Students are permitted only one failed assessment.

TRANSFER STUDENTS

In order to graduate in a minimum of two years, students must have completed the following foundations studio courses prior to admission to the university.

- Art 120 Foundations of Contemporary Design
- Art 130 Drawing I
- Art 131 Life Drawing
- Art 223 Three Dimensional Design

All other transfer students should expect to graduate in a minimum of three years.

Field trips in some lecture and studio classes may involve a nominal cost for the students. Students are required to furnish all necessary supplies and some tools, however, many items are purchased with a studio fee, which allows students to benefit from bulk purchases and also have the convenience of the materials being readily available. Fees range from \$10 to \$70, depending on the class and the materials supplied. A list of these fees is available from the Dean's Office and the Department of Art office. Any student enrolled in an art class after the end of the "add period" must pay this fee. To avoid the fee, it is imperative that the student be officially withdrawn from the class prior to this deadline. This rule will be strictly enforced and no exceptions made since these funds must be spent early in the semester to insure the availability of student supplies for the classes. Students who withdraw after the deadline will have the option of obtaining their share of the purchased materials.

COURSE REQUIREMENTS

All art majors will receive a Bachelor of Fine Arts Degree. The General Education Requirements will be identical for each concentration. Art Department requirements will vary slightly.

The Department also offers tailored programs of study for students who wish to minor in studio art or art history. Students interested in a minor in general art or art history should contact the Department Chair for advising.

To satisfy major requirements for graduation, students majoring or minoring in art must earn a grade no less than C in all art courses. Any exception to these graduation requirements must be referred to the Department Chair. The student bears full responsibility for meeting all graduation requirements.

Additionally, as a graduation requirement, all students must participate in, and pass, four annual portfolio assessments.

Every attempt has been made to state the major and minor requirements as clearly as possible. However, it is strongly recommended that every student majoring or minoring maintain close communication with the academic advisor assigned in order to plan their program in a fashion best suited to the student's individual goals and needs. The faculty stands ready to assist any student in this regard.

ADDITIONAL REQUIREMENTS

Field trips in some lecture and studio classes may involve a nominal cost for the students. Students are required to furnish all necessary supplies and some tools. However, many items are purchased with a studio fee, which allows students to benefit from bulk purchases and also have the convenience of the materials being readily available.

Fees range from \$10 to \$70, depending on the class and the materials supplied. A list of these fees is available from the Dean's Office and the Department of Art office. Any student enrolled in an art class after the end of the "add period" must pay this fee. To avoid the fee, it is imperative that the student be officially withdrawn from the class prior to this deadline. This rule will be strictly enforced and no exceptions made since these funds must be spent early in the semester to insure the availability of student supplies for the classes. Students who withdraw after the deadline will have the option of obtaining their share of the purchased materials.

BACHELOR OF FINE ARTS DEGREE

Visual and Performing Arts

Concentrations: Art History, Art Education
(Leading to Teacher Endorsement), & Art Studio

A. General Education Core Requirement/41 credits

Art Majors must take Art 362 to satisfy Goal 12

Art Majors must take Art 462 to satisfy Goal 15

(NOTE: Art Majors cannot use ART 125, or ART 160 for General Education.)

B. Additional Degree Requirements/6 credits

Bachelor of Fine Arts Degrees require the following requirements along with General Education

HUMANITIES (3 credits) not in the discipline of the major.

SOCIAL SCIENCES (3 credits) Students must take one of the following courses:

History 200, 354 or 360;

Geography 241;

or 3 credits at the 202 or above level foreign language.

C. Major Requirements

Art History/47 credits

Art Education/59 credits

Art Studio/62 credits

Major Requirements for All Concentrations:

ART 120 Foundations of Contemporary Design/3 credits

ART 130 Drawing I/3 credits

ART 131 Life Drawing/3 credits

ART 223 Three-Dimensional Design/3 credits

ART 261 History of Western Art: Prehistoric to Medieval /3 credits

ART 262 History of Western Art: Renaissance to Modern/3 credits

ART 461 Senior Seminar/2 credits

TOTAL 20 credits

Additional Major Requirements – Art History Concentration

ART 155 Basic Processes and Principles of Photography/3 credits

ART 270 Painting: Acrylic and Water-Based Media/3 credits

Plus seven art history courses at the 300 or 400 level/21 credits

TOTAL 27 credits

Additional Major Requirements – Art Studio Concentration

ART HISTORY at the 300 or 400 level – 3 credits

Choose any ONE field of concentration:

Crafts, Painting & Drawing, Photography/24 credits

Artist's Books & Printmaking/27 credits

Graphic Design/30 credits

Crafts:

Required

ART 155 Basic Processes and Principles of Photography/3 credits

ART 213 Ceramics I/3 credits

ART 217 Fabrics: Surface Design/3 credits

ART 218 Design in Stained Glass/3 credits

ART 224 Design in Wood/3 credits

ART 313 Jewelry and Metal Work/3 credits

ART 324 Papermaking/3 credits

Choice of 3 credits from this list:

ART 214 Ceramics II/3 credits

ART 309 Enamels/3 credits

ART 318 Advanced Stained Glass I/3 credits

ART 325 Advanced Design in Wood/3 credits

ART 411 Enamels II/3 credits

ART 412 Ceramics Studio II/3 credits

ART 413 Jewelry II/3 credits

ART 414 Metalsmithing/3 credits

ART 416 Advanced Casting/3 credits

ART 417 Gem Stone Cutting and Setting/3 credits

ART 418 Metal Electroforming/3 credits

ART 419 Advanced Jewelry III/3 credits

TOTAL 24 credits

Artist's Books and Printmaking:

ART 252 Instaprint/3 credits

ART 324 Papermaking/3 credits

ART 350 Bookbinding/3 credits

Choice of 15 credits from this list

ART 250 Printmaking: Relief/3 credits

ART 351 Printmaking: Serigraphy & Digital/3 credits

ART 352 Printmaking: Intaglio & Lithography/3 credits

ART 353 Artists' Books/3 credits

ART 450 Printmaking Studio/3 credits

ART 457 Editions/3 credits

Choice of 3 credits from this list

ART 217 Surface Design /3 credits

ART 230 Experimental Media in Drawing/3 credits

ART 326 Typography

ART 354 Alternative Photographic Processes/ 3 credits

TOTAL 27 credits

Graphic Design

ART 155	Basic Processes and Principles of Photography/3 credits
ART 221	Graphic Design I/3 credits
ART 225	Graphic Art Production I/3 credits
ART 256	Digital Photography/3 credits
ART 322	Graphic Design and Production II/3 credits
ART 326	Typography/3 credits
ART 421	Graphic Design III/3 credits
ART 425	Graphic Design for the Web and Multimedia/3 credits

Choice of 6 credits from this list

ART 250	Printmaking: Relief/3 credits
ART 252	Instaprint/3 credits
ART 254	Color Photography/3 credits
ART 270	Painting: Acrylic & Water-Based Media/3 credits
ART 330	Illustration/3 credits
ART 370	Watercolor/3 credits
ART 426	Time-Based Media/ 3 credits

TOTAL 30 credits

Painting and Drawing

ART 155	Basic Processes and Principles of Photography/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 271	Painting: Oil Media/3 credits
ART 370	Watercolor/3 credits

Choice of 9 credits from this list

ART 330	Illustration/3 credits
ART 371	Advanced Painting/3 credits
ART 430, 432, 433	Drawing studio
ART 471, 472, 473	Painting Studio

TOTAL 24 credits

Photography

ART 155	Basic Processes and Principles of Photography/3 credits
ART 254	Color Photography/3 credits
ART 255	Digital Photography/3 credits
ART 256	Intermediate Photography/3 credits
ART 355	Advanced Photography/3 credits
ART 456	Photography Studio/3 credits

Choice of 6 credits from this list:

ART 221	Graphic Design/3 credits
ART 250	Printmaking: Relief/3 credits
ART 351	Printmaking: Serigraphy & Digital/3 credits
ART 352	Printmaking: Intaglio & Lithography/3 credits
ART 354	Alternative Photographic Processes/3 credits

TOTAL 24 credits

Additional Major Requirements -- Art Education Concentration:

ART 155	Basic Processes and Principles of Photography/3 credits
ART 213	Ceramics I/3 credits
ART 217	Fabrics: Surface Design/3 credits
ART 252	Instaprint/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 313	Jewelry and Metal Work/3 credits

ART 366	Survey of Non-Western Art/3 credits
ART 381	Sculpture I/3 credits
ART 441	The Teaching of Art in the Secondary Schools/3 credits
ART 442	The Teaching of Art in the Elementary Schools/3 credits
TOTAL 30 Credits	

Plus Mini-concentration/9 credits from any ONE category.

ART HISTORY: 301, 302, 360, 365, 369, 400, 401
 CRAFTS: 110, 214, 218, 224, 309, 318, 324, 325, 406, 411, 412, 413, 414, 416, 419, 420, 422
 ARTIST'S BOOKS AND PRINTMAKING: 250, 324, 350, 351, 352, 353, 450, 453
 GRAPHIC DESIGN: 221, 225, 322, 326, 421, 425, 426
 PAINTING AND DRAWING: 230, 271, 330, 370, 371, 430, 471
 PHOTOGRAPHY: 254, 255, 256, 354, 355, 456

D. Additional Requirements

Art Education

Teacher Endorsement Requirements/15 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 432	Content Area Literacy/3 credits
EDUC 455	Principles of Secondary Education/1 credit
EDUC 473	Inquiry into the Classroom Community/3 credits
EDUC 487	Classroom Management/3 credits

Art Education

Practicum Requirements/13 credits

EDUC 270	Practicum I/1 credit
EDUC 410	Directed Elementary/Secondary Teaching for Art & Music/12 credits

****** Students must be admitted to the Teacher Preparation Program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

E. General Electives

Art History/26 credits
 Art Studio
 Crafts, Painting & Drawing, Photography/15 credits
 Artist's Books & Printmaking/12 credits
 Graphic Design/9 credits

F. Total Credits

BFA with a concentration in Art History – 120

BFA with a concentration in Art Studio - 120

BFA with a concentration in Art Education
 (Leading to Teacher Endorsement) - 134

MINORS

Minor in Art History

ART 261	History of Western Art: Prehistoric to Medieval /3 credits
ART 262	History of Western Art: Renaissance to Modern/3 credits
Four (4) ART HISTORY courses at 300 or 400 level/12 credits	
TOTAL 18 credits	

Minor in General Art

ART 120	Foundations of Contemporary Design/3 credits
ART 130	Drawing I/3 credits
<i>Choose one of the following:</i>	
ART 223	Three-Dimensional Design/3 credits
ART 224	Design in Wood/3 credits
<i>Choose one of the following:</i>	
ART 250	Printmaking I/3 credits
ART 251	Printmaking II/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 271	Painting: Oil Media/3 credits
<i>Choose one of the following:</i>	
ART 155	Basic processes and Principles of Photography/3 credits
ART 254	Color Photography/3credits

Choose one of the following:

ART 110	Crafts/3 credits
ART 213	Ceramics I/3 credits
ART 216	Fibers: Weaving/3 credits
ART 217	Fabrics: Surface Design/3 credits
ART 218	Design in Stained Glass/3 credits
ART 309	Enamels/3 credits
ART 313	Jewelry and Metal Work/3 credits
ART 324	Papermaking/3 credits

Choose one of the following:

ART 160	Introduction to the Visual Arts/3 credits
ART 261	History of Western Art: Prehistoric to Medieval /3 credits
ART 262	History of Western Art: Renaissance to Modern/3 credits
or any 300-400 level ART HISTORY course/3 credits	
TOTAL 21 credits	

Minor in Graphic Design

ART 125	Introduction to Studio/3 credits
ART 155	Basic processes and Principles of Photography/3 credits
ART 221	Graphic Design I/3 credits
ART 225	Graphic Art Production I/3 credits
ART 322	Graphic Design and Production II/3 credits
ART 425	Graphic Design for the Web and Multimedia/3 credits
TOTAL 18 credits	

Minor in Photography

ART 120	Foundations of Contemporary Design/3 credits
ART 155	Basic Processes and Principles of Photography/3 credits
ART 254	Color Photography/3 credits
ART 256	Digital Photography/3 credits
ART 354	Alternative Photographic Processes/3 credits
ART 255	Intermediate Photography/3 credits
TOTAL 18 credits	

Minor in Painting and Drawing

ART 130	Drawing 1/3 credits
ART 131	Life drawing/3 credits
ART 270	Painting: Water-based media 1/3 credits
ART 271	Painting: Oil 1/3 credits

Choose 6 credits from the following:

ART 120	Found. Of Cont. Design/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 330	Illustration/3 credits
ART 370	Watercolor
ART 371	Advanced Painting
TOTAL 18 credits	

Minor in Artist's Books and Printmaking

ART 120	Found. Of Cont. Design/3 credits
ART 250	Printmaking: Relief/3 credits
ART 324	Papermaking/3 credits
ART 353	Artists' Books/3 credits

Choose 6 credits from the following:

ART 252	Instaprint/3 credits
ART 324	Papermaking/3 credits
ART 351	Printmaking: Serigraphy & Digital/3 credits
ART 352	Printmaking: Intaglio & Lithography/3 credits
ART 353	Artists' Books/3 credits
ART 450	Printmaking Studio/3 credits
TOTAL 18 credits	

ART COURSE DESCRIPTIONS (ART)

†A special fee is charged for all studio courses.

*General Education Courses **

Writing Intensive Courses WR

Speaking Intensive Courses SP

NOTE: We do not guarantee that all courses listed will be offered every year. Many classes are offered every third or fourth semester. For a five-year list of offerings, please go to the Department of Art web site at www.longwood.edu/art or contact the Art Department.

ART 110. Crafts. An understanding of the basic principles and techniques of functional and decorative handicrafts in various cultures and their humanistic relationship to society. Exploration of a variety of techniques, materials and tools utilized in the production of craft objects. 3 credits.

ART 120. Foundations of Contemporary Design. Understanding the basic principles, vocabulary and visual elements of two-dimensional design through inquiry into the historical sources and terms of creative expression of art in the 20th Century. 3 credits. SP

ART 121. Introduction to Environmental Design Issues. The course will examine variables in built-environmental problems and solutions in our society and the effect that the built-environment has upon the quality and meaning of life. Built-environmental issues will be illustrated with industrial design, interior design, architecture, landscape architecture and urban design/planning. 3 credits. * Fulfills General Education Goal 4.

ART 125. Introduction to Studio Art. An introduction to basic processes, principles and historical methods of creating 2 and 3 dimensional art. Exploration of a variety of techniques, materials and tools utilized in the production of works of art. 3 credits. * Fulfills General Education Goal 4.

ART 130. *Drawing I.* An introduction to the history, appreciation and fundamentals of drawing as an expressive vehicle. 3 credits. SP

ART 131. *Life Drawing.* Development of concepts, skills and drawing techniques utilizing the human figure. Spring only. 3 credits.

ART 155. *Basic Processes and Principles of Photography.* An introduction to the basic processes, principles and history of black and white still photography. Students must furnish their own adjustable 35mm cameras. Every semester. 3 credits.

ART 160. *Introduction to the Visual Arts (Art Appreciation).* An introduction to the basic elements of painting, sculpture, architecture and crafts and their respective roles and contributions to our civilization. 3 credits.
* Fulfills General Education Goal 4.

ART 201. *Architecture Appreciation and Design.* Introduction to processes and principles of architecture history, theory, design, practice and understanding and evaluating architecture through reading, lectures, field trips, design exercises and in-class critiques. 3 credits. * Fulfills General Education Goal 4.

ART 213. *Ceramics I.* Forming, decorating, glazing and firing pottery. 3 credits.

ART 214. *Ceramics II.* Opportunities for deeper involvement with, and exploration of, wheel throwing techniques, hand building processes, as well as glazing and firing of creative ceramic work. Prerequisite: ART 213 or permission of instructor. 3 credits.

ART 217. *Fabrics: Surface Design.* Exploration and investigation of traditional and contemporary fabric surface design techniques, including tie-dye, batik, block printing, stencil and stitchery. 3 credits.

ART 218. *Design in Stained Glass.* Construction of functional and non-functional objects with emphasis on original design and basic forming techniques utilizing stained glass. 3 credits.

ART 221. *Graphic Design I.* Introduction to the elements of graphic design explored through the print media of newspapers, magazines, outdoor display systems, and direct mail literature. Emphasis is on format, the dynamics of composition and layout of visual images and typography. Computer design technology in graphic design is emphasized. Prerequisite: ART 120. 3 credits.

ART 223. *Three-Dimensional Design.* Investigation and construction of three-dimensional forms in such media as paper, wire, wood, metal, plastics, rope, and twine. Understanding and designing of forms as they relate to architecture, sculpture and industrial design. Spring only. 3 credits.

ART 224. *Design in Wood.* Construction of functional and non-functional wood objects with emphasis on original design and basic working techniques, including use of power tools. 3 credits.

ART 225. *Graphic Art Production I.* Introduction to the technical production of printing visual matter. Emphasis is placed on development of dexterity in electronic layout and reproduction processes through theoretical problem solving. The current computer design applications are used and explored. Prerequisite: ART 221. 3 credits.

ART 230. *Experimental Media in Drawing.* Exploration of novel and exciting color media suitable for contemporary drawings. Prerequisite: ART 130 and 131 or permission of instructor. 3 credits.

ART 250. *Printmaking: Relief.* Exploration of traditional and contemporary printmaking techniques, processes and materials. Hand and press printing. 3 credits.

ART 252. *Instaprint.* Create instant prints. Explore image creation through historic and contemporary hand pulling and press work as well as photographic and computer manipulated imagery. 3 credits.

ART 254. *Color Photography.* An introduction to color photography with an emphasis on technical skills and creative image making. This course will use traditional color materials in combination with digital input and output devices. Students will develop a working knowledge of basic digital color correction tools. 3 credits
Prerequisites: Art 155 or permission of instructor.

ART 255. *Intermediate Photography.* This is further study of exposure and printing techniques for high quality black and white darkroom photography. Students will also explore methods for alternative darkroom processes in black and white photographic prints. Prerequisite: Art 155.

ART 256. *Digital Photography.* An introduction to digital still photography. This course focuses on the creative application of digital photography as a fine art medium. Students will use Adobe Photoshop to explore a wide range of image editing possibilities. Through critiques, lectures, demonstrations and experimentation students will gain a critical and technical understanding of the medium. 3 credits. Prerequisites: Art 155 or permission of instructor.

ART 261. *History of Western Art: Prehistoric to Medieval.* This course is a chronological survey of western art and architecture of ancient cultures and through the thirteenth century. 3 credits. WR

ART 262. *History of Western Art: Renaissance to Modern.* This course is a chronological survey of western art and architecture from the fifteenth through the late nineteenth century. Prerequisite: ART 261, or permission of instructor. 3 credits. WR

ART 270. *Painting: Acrylic and Water-Based Media.* Fundamentals of painting involved in subject matter, composition, and materials through the use of acrylics and water-based media. Investigation into backgrounds of contemporary painting. Emphasis on individual growth. Open to beginners. 3 credits.

ART 271. *Painting: Oil Media.* Fundamentals of painting involved in subject matter, composition, and materials through the use of oil-based media. Investigation into backgrounds of contemporary painting. Open to beginners. 3 credits.

ART 292. *Internship in Art.* A semester-long, on-the-job learning experience designed to apply the principles of art. 1-18 credits.

ART 295. *Special Topics in Visual Arts.* The topics and descriptions will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

ART 301, 302. *Survey of Western Art in Europe.* A 5-week study tour of London, Amsterdam, Paris, Venice, Florence, and Rome designed to provide an in-depth awareness of the great works of art which, stand as visual expressions of the intellectual and spiritual aspirations and achievements of man. 9 hours daily; offered every 3 years during summer session. 3 credits each.

ART 306. *Computer & Construction Documentation in Interior Architecture.* A comprehensive and systematic overview of construction systems, technologies, materials and computer application in interior architecture. 3 credits.

ART 309. *Enamels.* The design and production of vitreous enamels using copper as the metal base. 3 credits.

ART 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on Art. 1-18 credits.

ART 313. *Jewelry and Metal Work.* Construction of jewelry and objects of silver and other metals with emphasis on original design and basic techniques. 3 credits.

ART 318, 319, 320. *Advanced Stained Glass I, II, III.* Continued exploration of functional and non-functional stained glass objects with strong emphasis on original designs and independent study. Unique and creative combinations of other media and techniques are encouraged. Each course builds on preceding one depending on individual needs and progress. Prerequisite: ART 218 and permission of instructor. 3 credits.

ART 322. *Graphic Design and Production II.* A hands on problem solving approach to the production of printed matter, from idea to finished product, designed to provide the serious student with practical experience in graphic art design and production. Emphasis is on the development of ideas, concepts, graphic impact and creativity and use of technology in the production of printed and digital media. 3 credits. Prerequisite: ART 120, 221, 225.

ART 324. *Papermaking.* The art of papermaking employs a set of techniques, materials and equipment that vary from one culture to the next. This course introduces all students to the basic techniques, but will explore western and non-western approaches in any given semester. Focus will be on sheet forming, casting, and creating sculptural paper designs emphasizing a variety of materials via processes. 3 credits. (Course can be repeated for up to six credits.)

ART 325. *Advanced Design in Wood.* Advanced construction of functional objects with emphasis on original design and advanced woodworking techniques. Prerequisite: ART 224. 3 credits.

ART 326. *Typography.* Communication problem solving through the visual media of language. The fundamentals of typography and type design are explored in experimental and practical projects. Prerequisite: ART 221, 225. 3 credits.

ART 330. *Illustration.* The history and techniques of illustration as an art form. Prerequisites: ART 130 and 131 or permission of instructor. 3 credits.

ART 341. *Art Education in the Elementary Classroom, N, K-8.* Lectures, readings and media explorations to introduce students to the importance of art in the integrated program of today's elementary school. Emphasis will be placed on quality programs for grades K-8 using drawing, painting and three-dimensional design, as well as experience in sequential planning and organization. For non-art majors only. 3 credits.

ART 350. *Bookbinding.* Learn the essentials of creating a book in this basic hand binding class. This course will include creating a variety of blank book structures, developing sound construction methods, and mastering binding skills. From the pamphlet stitch to a flatback sketchbook, a variety of fundamental books will be constructed. Bookbinding is designed to compliment all concentrations offered in the art program. 3 credits. (Course can be repeated for up to six credits.)

ART 351. *Printmaking: Serigraphy & Digital.* Exploration of traditional and contemporary serigraphy and digital printmaking techniques as aesthetic expression through the making of multiples. Prerequisite: ART 250 or ART 252 or permission of instructor. 3 credits.

ART 352. *Printmaking: Intaglio and Lithography.* Exploration of traditional and contemporary intaglio and lithography printmaking techniques as aesthetic expression through the making of multiples. Prerequisite: ART 250 or ART 252 or permission of instructor. 3 credits.

ART 353. *Artists' Books.* An introduction to bookmaking designed to provide basic vocabulary, tools, and bindings necessary to construct traditional and contemporary book forms. Focus will be placed on exploring a variety of materials, mastering basic bindings and developing creative self-expression. This course will take an interdisciplinary approach to melding text, image and structure. 3 Credits. Course can be repeated for up to six credits.

ART 354. *Alternative Photographic Processes.* Introduction to basic techniques and principles of alternative photographic processes. This course focuses on technical experimentation and creative possibilities inherent in these processes. Prerequisites: Art 155 or permission of instructor. 3 credits.

ART 355. *Advanced Photography.* This advanced level photography course focuses on contemporary photographic genres and themes. Students are exposed to a range of work by contemporary photographers as well as theoretical writings by critics, curators and photographers. Students develop work based on topics discussed in class, readings and lectures. Prerequisites: ART 155, 254, 256 or permission of instructor. 3 credits.

ART 360. *Women in the Visual Arts.* A survey of the important role women have played in the history of art from the Middle Ages to the current. 3 credits.

ART 362. *Modern Art.* A study of the movements associated with 20th century modernism, including post-impressionism, surrealism, cubism and abstract expressionism. 3 credits. WR

ART 365. *Contemporary Art.* This course is an introduction to major art movements since 1945. Through this course, the complex conditions that have produced a visual art, such as war, feminism consumerism, identity, the power structures of representation and visual culture, and the nature of art itself will be investigated. 3 credits. SP WR

ART 366. *Survey of Non-Western Art.* This course is designed to introduce the student to the artistic genres and the resulting significant artifacts of non-Western cultures. From a brief survey of the arts of Asia, Africa, Oceania, and the Americas the student will gain knowledge of artistic mediums and traditions of every era and culture in the history of the non-Western world. 3 credits, SP, WR

ART 369. *American Art.* Survey from Colonial to 20th Century, including painting, sculpture, architecture and crafts. 3 credits. WR

ART 370. *Watercolor.* An introduction to the fundamentals of painting with watercolor including history, materials and techniques using transparent watercolor and gouache. Emphasis on individual growth. Open to beginners. 3 credits.

ART 371. *Advanced Painting.* Advanced painting with emphasis on the exploration of individual style using oils, acrylics, watercolor and mixed media. Prerequisites: ART 270 and 271 and permission of instructor. 3 credits.

ART 381. *Sculpture I.* Study of fundamental sculpture principles. Work with a variety of materials. 3 credits.

ART 382. *Sculpture II.* Continuation of various sculpture techniques in a variety of materials. Prerequisite ART 381. 3 credits.

ART 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

ART 392. *Internship in Art.* A semester-long, on-the-job learning experience designed to apply the principles of art. 1-18 credits.

ART 400. *History of Photography.* This course will survey the history of photography from its origins in the early 19th century through its use both primarily and as a multi-disciplinary tool in contemporary art. The course will proceed chronologically, while exploring major styles, influential photographers, technical developments, and important criticism regarding the medium. 3 credits. WR

ART 401. *History of Graphic Design.* Overview of the history of graphic design and its relationship to American and world cultures. Key works of graphic design will be investigated and discussed, along with less canonical, yet important works. 3 credits.

ART 405. *Senior Interior Architecture Synthesis.* Emphasis on development of self expression and philosophy of interior architecture. Student-initiated interior architecture problems that involve conceptualization as well as programming problems. Application through final design and selective detailing of each project. Prerequisites: ART 101, 121, 304, 404. 3-6 credits.

ART 406. *Ceramics Studio I.* Independent problems in ceramics. May be continued as 407, 408. Prerequisites: ART 213, 214 and permission of instructor. 3 credits.

ART 411. *Enamels II.* Continued exploration of the design and production of vitreous enamels using copper or other metals as a base. May be continued as ART 426, 427, 428, etc., with permission of instructor. Prerequisite: ART 311 and permission of instructor. 3 credits.

ART 412. *Ceramics Studio II*. Continued independent problems in ceramics. Prerequisite: Art 213, 214, 406, 407, 408 and permission of instructor. 3 credits.

ART 413. *Jewelry II*. Continued exploration of various metals and techniques with strong emphasis on design. May be continued as Art 419, 420 with permission of instructor. Prerequisites: ART 313 and permission of instructor. Every semester. 3 credits.

ART 414. *Metalsmithing*. Independent exploration of functional and decorative objects using various metals and forming techniques with strong emphasis on design. Prerequisite: ART 313 and permission of instructor. 3 credits.

ART 416. *Advanced Casting*. Continued exploration of the casting process with strong emphasis on design and experimentation. May be continued as ART 422, 423 and 424. Prerequisite: ART 313. Every semester. 3 credits.

ART 417. *Gem Stone Cutting and Setting*. Continued exploration of cutting, polishing, and setting stones with strong emphasis on design. Prerequisite: ART 313. 3 credits.

ART 418. *Metal Electroforming*. Exploration of functional and decorative application of electroforming in lieu of, or in combination with, additional metal forming techniques. Strong emphasis will be given to design. Prerequisite: ART 313 or permission of instructor. 3 credits.

ART 419. *Advanced Jewelry III*. Continued exploration of various metals and techniques with strong emphasis on design. Prerequisite: ART 413 and permission of instructor. 3 credits.

ART 421. *Graphic Design III*. Continued concentrated study and exploration of graphic design, resulting in the development and execution of a professional level portfolio. Students will execute solutions to graphic design problems and themes developed in conjunction with the instructor, while covering topics related to job search and employment opportunities. 3 credits. Prerequisites: ART 120, 221, 225, 322.

ART 422. *Advanced Casting II*. Continued exploration of the casting process with strong emphasis on design and experimentation. Prerequisite: ART 416 and permission of instructor. 3 credits. Offered on demand.

ART 425. *Graphic Design for the Web and Multimedia*. Introduction to the elements of website design. Emphasis is on technical proficiency, creative communication and creative self-expression. Using industry standard software, students will learn to design, code and implement a website. 3 credits Prerequisites: ART Majors 120, 221, 225. ART Minors 125, 221, 225.

ART 426. *Time-Based Media*. Introduction to time-based media, such as Flash, After Effects, and others. The course will examine the basic principles of time-based media such as narration, sequencing, pacing, motion, story-boarding and other procedures leading to the creation of 4-Dimensional visual communication. 3 credits

ART 430. *Drawing Studio*. Open to students who have completed Art 130, 131, 230 and 330. The student will select an area of concentration and problems of specialization in media and technique. Permission of instructor required for enrollment. May be continued as ART 431, 432, 433, with permission of instructor. 3 credits.

ART 441. *The Teaching of Art in the Secondary Schools*. A concentrated study of contemporary practices, theory, technology and materials necessary for the formulation of a meaningful art program in the secondary school. 3 credits. For art majors only. Prerequisites: ART 442, EDUC 265, EDUC 299 or permission of instructor.

ART 442. *The Teaching of Art in the Elementary Schools*. 3 credits. A concentrated study of theory, methods and materials necessary for the formulation of a meaningful, creative art program in the elementary school. For art majors only. Prerequisite: Entrance to Teacher Preparation Program or permission of instructor.

ART 448/548. *Integrated Arts/Visual Arts.* A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the plastic arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of visual arts, music, drama, movement, and theatre. Prerequisite: Thea 101, Musc 224, or Musc 225. 3 Credits.

ART 450. *Printmaking Studio.* The student will select an area of concentration and problems of specialization in printmaking media and technique. May be continued as ART 451, 452, and 453. Prerequisites: ART 250, 252, 351 or 352. Permission of instructor required for enrollment. 3 credits.

ART 456. *Photography Studio.* Self directed work in photographic media with emphasis on experimentation and artistic expression. Students work independently and meet for regularly scheduled group discussions and critique sessions. May be repeated for credit. Prerequisites: ART 155, 254, 256, 355. 3 credits.

ART 457. *Editions.* This course integrates papermaking, printmaking, bookbinding, image and text. Students will develop content, form paper, create images, and produce multiples resulting in contemporary book forms or sculptural installations. Emphasis is on sequential design and examining alternative possibilities to conceptualizing the artist book form. Editions offers a continued exploration in the diverse medium of the contemporary print world. 3 Credits. Course can be repeated for up to six credits.

ART 461. *Senior Seminar.* Designed specifically for and required of all art major seniors, this course is intended to review, assess and bring into focus the past art experiences and instruction. 2 credits. SP

ART 462. *Senior Professional Project.* Application of the student's education in the visual arts, art education, or art history which displays their technical and conceptual skills through informed choices of art making and final presentation skills (studio concentration); through the ability to plan and execute an actual art lesson in the classroom (art education); through the demonstration of research and presentation skills at a judged presentation (art history). 1 credit. SP

ART 465, 466, 467. *Advanced Crafts I, II, III.* Continued exploration of functional and non-functional craft objects with strong emphasis on original designs and independent study. Students will focus on a specific media or combine unique and creative solutions of a variety of media. Each course builds on the preceding course depending on the student's needs and progress. Prerequisites: ART 110, 120 and permission of instructor. 3 credits.

ART 471. *Painting Studio.* Open to students who have completed 270 or equivalent. May be continued as ART 472, 473, etc. Permission of instructor required for enrollment. 3 credits.

ART 480. *Sculpture Studio.* Open to students who have completed ART 381 and 382. The student will select media and techniques and set up individual problems. Permission of instructor required for enrollment. May be repeated as ART 481, 482, etc. 3 credits.

ART 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits. Fulfills General Education Goal 15.

ART 492. *Internship in Art.* A semester-long, on-the-job learning experience designed to apply the principles of art. 1-18 credits. Fulfills General Education Goal 15.

ART 495. *Special Topics.* Selected topics in Art. The topics may vary from semester to semester. Descriptions are available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

ART 496. *Art/Craft Apprenticeship Program.* An individually tailored program similar to student teaching that allows a student to gain valuable on-the-job experience in any non-teaching art environment. Student must have an art faculty sponsor, approval of department head and apply one semester in advance. Prerequisite: 75 credit hours and a 2.5 GPA. 3, 6, or 9 credits.

ART 497. *Research Projects in Art.* This course provides students with an opportunity for independent original research in art. 1-3 credits.

ART 498. *Honors Research in Art.* Students conduct research in art under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

Department of Biological and Environmental Sciences

Degree Programs

Biology BA or BS

Biology (Medical Technology) BS

Biology (Health Related Preparation) BS

Health-Related Programs

Health Pre-Professional Programs

Earth Science Program

Minors

Biology

Environmental Studies

Earth Science

Geography

Teacher Preparation

6-12 Biology

Joseph E. Garcia, *Chair*

Debbie M. Johnson, *Fiscal Manager*

Raymond T. Heinrich, *Director of Laboratory Services and Hazardous Waste Manager*

The Department of Biological and Environmental Sciences at Longwood provides fundamental training for students interested in biological science, environmental science, geography, and earth science. Students interested in biology can earn a bachelor's degree or a minor while those interested in environmental science, geography, and earth science can earn minors in those respective areas. The Department also offers curricula that prepare students to transfer to professional schools in a number of health-oriented professions.

The Department further contributes to the University's mission of developing Citizen Leaders through its commitment to coursework in multiple goals in the General Education program as well as the curriculum in Liberal Studies. In addition to helping students become scientifically literate, the Department also seeks to help its students develop both critical and independent thinking skills through coursework and student research opportunities.

The Department's commitment to excellence in the major and minor programs as well as its contributions to General Education and Liberal Studies is evident in its commitment to institutional assessment. Senior biology majors are required to take a comprehensive achievement test appropriate for their major. The purpose of the test, given in both the spring and fall terms, is to assess the progress of the majors and the effectiveness of the program. Additionally, courses contributing to the University's General Education program are assessed each semester.

BIOLOGY PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

Thomas S. Akre, PhD, *Assistant Professor of Biology*

Consuelo J. Alvarez, PhD, *Associate Professor of Biology*

David W. Buckalew, PhD, *Associate Professor of Biology and Director of Health Pre-Professional Programs*

Alix D. Dowling Fink, PhD, *Associate Professor of Biology*

Mark L. Fink, PhD, *Associate Professor of Biology*

G. Edward Hooks, III, PhD, *Associate Professor of Biology*

Mary E. Lehman, PhD, *Associate Professor of Biology*

Amanda J. Lentz, PhD, *Lecturer of Biology*

Donald A. Merkle, PhD, *Professor of Biology*

Brett Szymik, PhD, *Assistant Professor of Biology*

Glenn E. White, PhD, *Associate Professor of Biology*

The biology major at Longwood provides training in many areas of the biological sciences so that graduates may pursue graduate study or careers in research, industry, teaching, medicine, dentistry, or allied health fields. To ensure that students have a broad background in the diverse field of biological sciences, each student must take the following courses: The Unity of Life, The Diversity of Life, Evolution, Genetics, General Ecology, and Unifying Biological Principles. In addition, students must choose a specialization in one of the following concentrations: ecology and evolutionary biology, general biology, health/biomedical. Students who plan to pursue careers in medicine, dentistry, veterinary medicine, or other health-related areas may wish to consider the health track concentration.

Students may take a maximum of 4 credits total in internship (BIOL 292, 392, 492, 494) and research (BIOL 496, 497) courses for quality points (A, B, and C grades). Beyond 4 credits, such courses must be taken on a pass/fail basis and will not count toward requirements for the major or minor. No grade below C- in biology courses is accepted for graduation requirements in the biology major or minor.

A student may seek a secondary teaching endorsement in biology. This program consists of courses required for the biology major as well as EASC 300; EDUC 245, 260, 265, 370, 380, 430, 455, 484, 487; SCED 352; SPED 489; and the professional semester consisting of 12 hours in the senior year. If an additional endorsement in chemistry or physics is desired, the student must minor in that discipline and meet all state-mandated core requirements for that endorsement. Interested students should meet with secondary science education faculty for advising on preparation for secondary science teaching.

BIOLOGY MAJOR, BA, BS DEGREE

A. General Education Core Requirement/41 credits

PHYS 101 or PHYS 201 is recommended for General Education Goal 6.

PHIL 315 or 316 is required for General Education Goal 13.

B. Additional Degree Requirements

For BA Degree - 6 credits

Foreign Language/3 credits

Humanities/3 credits

For BS Degree - 7 credits

Mathematics/Computer Science/3 credits

CHEM 111/4 credits

C. Major Requirements/58 credits

Core Curriculum (required of all biology majors)

BIOL 121 The Unity of Life/4 credits

BIOL 122 The Diversity of Life/4 credits

BIOL 324 Genetics/4 credits

BIOL 341 General Ecology/4 credits

BIOL 399 Evolution/3 credits

BIOL 400 Unifying Biological Principles/3 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

(satisfied by Additional Degree Requirements)

CHEM 112 Fundamentals of Chemistry II/4 credits

CHEM 305 Organic Chemistry I/3 credits

CHEM 306 Organic Chemistry II/3 credits

CHEM 307 Organic Chemistry Laboratory I/1 credit

CHEM 308 Organic Chemistry Laboratory II/1 credit

PHYS 101 General Physics I/4 credits (satisfied if taken as General Education Goal 6)

OR PHYS 201 University Physics I/4 credits (satisfied if taken as General Education Goal 6)*

PHYS 102 General Physics II/4 credits

OR PHYS 202 University Physics II/4 credits

*PHYS 101 is a prerequisite for PHYS 102. PHYS 201 is a prerequisite for PHYS 202.

Biology majors must choose one of the following concentrations:

Ecology and Evolutionary Biology Concentration/20 credit hours

Choose three courses from the following:

BIOL 303	Vertebrate Morphology/4 credits
BIOL 306	Vertebrate Physiology/4 credits
BIOL 308	Plant Form and Function/4 credits
BIOL 361	Aquatic Ecology/4 credits
BIOL 430	Conservation Biology/4 credits
BIOL 435	Advanced Ecology/4 credits

Choose an additional 8 credits of biology electives from BIOL 206-498.

General Biology Concentration/20 credit hours

Choose 20 credits of biology electives from BIOL 206-498.

Health/Biomedical Concentration/20 credit hours

Choose three courses from the following:

BIOL 206	Human Anatomy and Physiology I/4 credits
BIOL 207	Human Anatomy and Physiology II/4 credits
BIOL 304	Microbiology/5 credits
BIOL 404	Immunology/4 credits
BIOL 412	Biochemistry/4 credits
BIOL 426	Cell Biology/4 credits

Choose at least 7 credits of biology electives from BIOL 206-498.

The health/biomedical concentration is designed for students planning further study leading to a health career, such as in medicine, dentistry, veterinary medicine, nursing, physical and occupational therapy, and medical technology, or for those planning to pursue graduate education in the biomedical sciences.

D. General Electives BA Degree (non-teaching majors)/15 credits

General Electives BS Degree (non-teaching majors)/14 credits

E. Secondary Teaching Endorsement, Grades 6-12/44 credits

Must take SCED 352/3 credits and EASC 300/3 credits EDUC 473/3credits in addition to Professional Education requirements.

* For additional endorsement to teach Chemistry
Minor in Chemistry/24 credits.

* For additional endorsement to teach Physics
Minor in Physics/24 credits.

* Students seeking endorsement in these areas must meet criteria established by the State Department of Education.

F. Total Credits Required for BA or BS in Biology/120

Total Credits Required for BA in Biology with Secondary Teaching Endorsement /153

Total Credits Required for BS in Biology with Secondary Teaching Endorsement /150

BIOLOGY MINOR

Students who are interested in pursuing a biology minor should contact the chair of the Department of Biological and Environmental Sciences. The minor must include:

- BIOL 121 The Unity of Life/4 credits
- BIOL 122 The Diversity of Life/4 credits
- 8 semester hours of biology at the 200 level or above.
- 4 semester hours of biology at the 300 level or above.
- 4 semester hours of biology electives
- TOTAL/24 credits

ENVIRONMENTAL STUDIES MINOR

This interdisciplinary minor serves those students majoring in any subject who are interested in environmental science. Environmental science imparts an integrative scientific view of our world by focusing on the interactions of biology, geology, hydrology, and atmospheric sciences. Additionally, environmental science provides critical insight into human interactions with these components. Grades below C- will not apply toward the fulfillment of minor requirements. Students choosing this minor must make appropriate selections from each of the following groups:

*Group A/8 credits

Select one of the following blocks:

- BIOL 101 Biological Concepts/4 credits
- or BIOL 121 The Unity of Life/4 credits
- BIOL 341 General Ecology/4 credits
- or
- CHEM 112 Fundamentals of Chemistry II/4 credits
- CHEM 351 Instrumental Analysis I/4 credits

Group B/3 credits

Choose one of the following:

- HLTH 310 Environmental Health/3 credits

Group C/4 credits

Choose one of the following:

- CHEM 101 General Chemistry/4 credits
- CHEM 111 Fundamentals of Chemistry I/4 credits

Group D/3 credits

Choose one of the following:

- ECON 314 Environmental and Resource Economics/3 credits
- EASC 354 Hydrology/3 credits
- EASC 355 Climatology/3 credits

Group E/Take 6 credits from the following:

- BIOL 405 Field Mammology/6 credits
- BIOL 410 Field Ornithology/6 credits
- BIOL 441 Field Ecology/6 credits
- BIOL 443 Field Botany/6 credits

Total required hours: 24

- * Biology majors seeking this minor must take CHEM 112 and 351; Chemistry majors seeking this minor must take Biology 101/341. All other majors may choose one of the two options indicated in Group A.

BIOLOGY COURSE DESCRIPTIONS (BIOL)

A special fee is charged for all courses with laboratories.

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

BIOL 101. *Biological Concepts and Applications.* This course introduces students to the nature, methods, and applications of biology. Conceptual topics include methods of biological investigation, molecular and cellular features of living things, mechanisms for the evolution and continuity of life, and ecological interactions among individuals, populations and their environment. Issues of contemporary and historical importance will be used to illustrate conceptual topics and demonstrate biology's relevance to the quality of human life and history and future of human civilizations. This course does not fulfill requirements for the biology major. 3 lecture and one 2-hour lab periods. 4 credits. * Fulfills General Education Goal 6.

BIOL 114. *Fundamentals of Life Science.* An inquiry into the common features of life at the molecular, cellular, and organismic levels. Emphasis on classification, life cycles, metabolic processes, genetics, ecology, evolution, and importance in society. For Liberal Studies majors or students seeking licensure. Does not meet the requirements for a biology major or minor. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 121. *The Unity of Life.* The first of a two-semester introduction to Longwood-level study of biology for biology and health pre-professional majors. Major topics include the molecular and cellular basis of life, energy and life, photosynthesis and cellular respiration, classical and molecular genetics, mechanisms of evolution, and classification schemes. Open only to biology majors and minors, environmental sciences minors, and health pre-professional majors. Biology majors must earn at least a C- in this course before taking advanced courses. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 122. *The Diversity of Life.* The second of a two-semester introduction to Longwood-level study of biology for biology and health pre-professional majors. Major topics include eubacteria and archaea; protists; fungi; plant structure, reproduction and development; major animal phyla; animal reproduction and development; and ecological relationships, populations, communities, and ecosystems. Open only to biology majors and minors, environmental sciences minors, and health pre-professional majors. Biology majors must earn at least a C- in this course before taking advanced courses. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 126. *Essential Laboratory Techniques (CHEM 126, EASC 126, PHYS 126).* Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

BIOL 206, 207. *Human Anatomy and Physiology I and II.* Basic physiological principles and integrated anatomy and physiology of the integumentary, digestive, respiratory, cardiovascular and lymphatic systems (BIOL 206) and the skeletal, muscular, nervous, endocrine, excretory and reproductive systems (BIOL 207). BIOL 206 is recommended as a prerequisite for 207. 3 lecture and one 2-hour lab periods. 4 credits each semester.

BIOL 292. *Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. 1-4 credits

BIOL 295. *Special Topics in Biology.* Specialized courses on a variety of topics that may be offered periodically. 1-6 credits.

BIOL 300. *Biostatistics and Experimental Design.* This course focuses on identifying and using proper statistical analysis techniques to solve biological problems. Scientifically valid methods of experimental design will also be emphasized. Students will learn how to apply a broad range of statistical tests commonly used in biology and other scientific disciplines, including but not limited to parametric and nonparametric analysis of variance, simple and multiple linear regression, and principal component analysis. Laboratory exercises will involve extensive use of computer software to conduct statistical analyses. 3 lecture and one 2-hour lab periods. 4 credits. SP

BIOL 303. *Vertebrate Morphology.* A comparative study of embryonic development, anatomy and evolution in representative vertebrate groups. Prerequisite: BIOL 122. 2 lecture and two 2-hour lab periods. 4 credits.

BIOL 304. *Microbiology.* A study of the structure, physiology and activities of micro-organisms as related to their role in nature, disease, immunological interactions, industrial processes and human affairs. Basic concepts and fundamental techniques for isolation, growth, identification and immunological reactions are stressed. Prerequisites: BIOL 121 and 122. 3 lecture and two 2-hour lab periods. 5 credits. SP

BIOL 306. *Vertebrate Physiology.* The principal functional processes in vertebrate organs and organ systems including respiration, circulation, hormonal coordination, water balance, thermoregulation, nervous coordination, and responses to special environments. Prerequisites: CHEM 111 and BIOL 122. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 308. *Plant Form and Function.* The investigation of the relationship of morphology and anatomy to physiological processes in vascular plants. Emphasis on structure and metabolism of plant cells, the interactive functions of plant tissues, and the detailed structure and development of plant organs. Prerequisite: BIOL 122. 3 lecture and one 2-hour lab periods. 4 credits. SP

BIOL 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in biology. 1-18 credits.

BIOL 321. *Plant Taxonomy.* The morphology, classification and systematics of the vascular plants with emphasis on family characteristics. The laboratory stresses the identification and herbarium preparation of local plants collected during weekly field trips. Prerequisite: BIOL 122. 2 lecture and two 2-hour lab periods. 4 credits.

BIOL 324. *Genetics.* A study of classical and modern genetics, including the mechanisms for the replication, continuation, variation of regulation and expression of genetic information. Prerequisites: BIOL 121 and BIOL 122 or permission of instructor. 3 lecture and one 3-hour lab periods. 4 credits.

BIOL 341 (EASC 341). *General Ecology.* The principles underlying the interrelations of groups of organisms with their environments, including the population, community and ecosystem levels of organization. The lab normally includes local field trips. Prerequisite: BIOL 122. 3 lecture and one 3-hour lab periods. 4 credits. WR

BIOL 342 (EASC 342). *Terrestrial Biogeography.* Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals. 2 lecture periods and 1 two hour lab period. 4 credits.

BIOL 361. *Aquatic Ecology.* A study of lakes, ponds and streams including their origin, development, morphometry, geochemistry, energy balance, productivity, and the dynamics of plant and animal communities. Laboratory includes a field trip within Virginia. Prerequisites: BIOL 122 and a semester of Chemistry is recommended. 2 lecture and two 3-hour lab periods. 4 credits.

BIOL 390. *Directed or Independent Study.* Must be approved by the head of the department. 1-8 credits.

BIOL 392. *Internship in Biology.* A semester long on-the-job learning experience designed to apply the principles of biology. 1-4 credits.

BIOL 399. *Evolution.* A study of the basic processes of organic evolution including the historical development of evolutionary theory, sources of variation, adaptation, natural selection, speciation, the fossil record, biogeography and major steps in evolution. Prerequisites: BIOL 324 and BIOL 341. 3 lecture periods. 3 credits. WR

BIOL 400. *Unifying Biological Principles.* An integrative study of phenomena common to all living creatures: metabolism, homeostasis, reproduction, development, inheritance, life's interactions and the environment through time and space. Themes are studied from the perspective of both cellular and organismic levels of complexity. Open only to junior and senior biology majors and minors. Prerequisites: BIOL 324 and 341. 3 lecture periods. 3 credits. WR and SP

BIOL 404. *Immunology.* This course focuses on the specific and non-specific immune responses with particular emphasis on the human system. Relative to each category of immune response, the interplay between immune signaling molecules and relevant cells, tissues, and organs are discussed. Specific topics include: antigen recognition, processing, and presentation, B/T lymphocyte maturation, activation, and differentiation, humoral immunity, cell-mediated immunity, inflammation, hypersensitivity, acute and chronic disease responses, vaccines, and the immunology of cancer. Prerequisite: BIOL 304 Microbiology or permission of instructor. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 405. *Field Mammalogy.* A field course emphasizing identification of common mammals in Virginia's mountain, coastal, and Piedmont regions. Students will also gain an understanding of general habitat associations, breeding behavior, and conservation issues. Additional emphasis will be placed on learning to employ standard census techniques such as small mammal and bat trapping and radio telemetry. Students will have the opportunity to contribute to a long-term research project on small mammal populations. Activities focused on Southside Virginia with additional required extended trips to other areas. Offered during summer session. 6 credits.

BIOL 410. *Field Ornithology.* A field course emphasizing identification of birds by sight and sound in Virginia's mountain, coastal, and Piedmont regions. Students will also gain an understanding of general habitat associations, breeding behavior, and conservation issues. Census and monitoring techniques will be studied to emphasize the development of practical skills. Activities focused on Southside Virginia with additional required extended trips to other areas. Lab work, field activities, and independent study required. Offered during summer session. 6 credits.

BIOL 412 (CHEM 412). *Biochemistry.* A study of the chemistry of proteins, carbohydrates, lipids and nucleic acids in biological systems. Prerequisites: CHEM 305 and CHEM 306 with a minimum grade of C- in both courses. 3 lecture and one 3-hour lab periods. 4 credits.

BIOL 425. *Modern Genetics.* A study of the structure and function of hereditary material at the molecular level. Topics include DNA-RNA structure and replication, protein synthesis, and homeostasis. Prerequisite: BIOL 324. 3 lecture and one 3-hour lab periods. 4 credits.

BIOL 426. *Cell Biology.* A study of the structure and function of prokaryotic and eukaryotic cells, including plant and animal cell types. Emphasis on the structure and function of membranes, genes, ribosomes, proteins, signaling pathways, cytoskeleton, cell cycle, junctions, membrane trafficking, mitochondria, endoplasmic reticula, plastids, nuclei and nucleoli. Prerequisites: BIOL 121 and 122. 3 lecture and one 3-hour lab periods. 4 credits. WR

BIOL 430. *Conservation Biology.* A multifaceted course focused on the application of basic ecological principles to complex conservation problems. Successful conservation efforts require that biological solutions be meshed with political, social, and economic realities, and thus conservation biology is an interdisciplinary field. Class discussions and projects will apply basic concepts to the high-stakes field of endangered species management as well as local, regional, and global biodiversity conservation. Students will be required to complete research assignments independently and as a part of a functional team. 3 lecture and one 2-hour lab periods. 4 credits. SP

BIOL 435. *Advanced Ecology.* Advanced ecological concepts will be emphasized through readings and discussions of primary literature. Various forms of scientific writing will also be taught and practiced through multiple writing assignments. Other miscellaneous topics related to scientific research and career preparation will also be considered. This course is primarily designed for ecology track biology majors who plan to pursue graduate studies. Prerequisite: BIOL 341 or BIOL 441 or permission of instructor. 3 lecture and one 2-hour lab periods. 4 credits. WR and SP

BIOL 441. *Field Ecology.* A field course studying the fundamental concepts, principles, and terminology of ecology at the population, community, and ecosystem levels. Major emphasis is placed on learning various field sampling techniques for plants and animals in both terrestrial and aquatic environments. Students will also develop skills for using field instrumentation to measure abiotic factors. Expert consultants from other institutions and from federal and state agencies provide additional exposure to other scientific research and management perspectives and allow students to explore various career options. Overnight field trips required. Offered during summer session. Prerequisite: BIOL 122 or permission of instructor. 6 credits.

BIOL 443. *Field Botany.* A field course emphasizing the ecology and taxonomy of local plants in their natural habitats. Daily trips are made to local biological communities where specimens are examined and collected to enhance future recognition of the plants. Students are expected to learn the scientific names and classification of the most common bryophytes, pteridophytes, wildflowers, shrubs and trees of the Virginia Piedmont, coast, and mountains. Additional emphasis is placed on the development of skills for using plant keys to determine species identity. Overnight field trips required. Offered during summer session. 6 credits.

BIOL 461. *Biological Seminar.* Short oral presentations by students on selected, researched biological topics. May be repeated. Open to junior and senior biology majors and minors. 1 lecture period. 1 credit.

BIOL 471. *Ornithology.* A study of the ecology and evolution, form and function and, classification and identification of birds of the world, with an emphasis on Virginia species. Weekend field trips. Prerequisites: BIOL 121 and 122. 3 lectures and one 3-hour lab period. 4 credits.

BIOL 474. *Entomology.* A study of insects: morphology, ecology, evolution, physiology, or taxonomy of the class or of a particular order. Prerequisites: BIOL 122 and permission of instructor. 3 lecture and one 2-hour lab periods. 4 credits.

BIOL 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-8 credits. Fulfills General Education Goal 15

BIOL 492. *Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. 1-4 credits. Fulfills General Education Goal 15

BIOL 494. *Advanced Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. May be a continuation of BIOL 492 or a new internship experience that involves advanced responsibilities and application of knowledge. May be repeated. 1-4 credits.

BIOL 495. *Special Topics in Biology.* Specialized courses on a variety of topics that may be offered periodically. 1-6 credits.

BIOL 496. *Research Projects in Biology.* With the approval of a faculty member and the department chair, a student may carry out an individual research project. The nature of the project must be determined between the student and faculty member and approved by the department chair before the student may register for the course. May be repeated. 1-4 credits. Fulfills General Education Goal 15

BIOL 497. *Advanced Research Projects in Biology.* With the approval of a faculty member and the department chair, a student may carry out an individual research project. May be a continuation of BIOL 496 or a new research project that involves advanced application of knowledge and skills. Students are encouraged to share the findings of their research through a poster or oral presentation. May be repeated. 1-4 credits.

BIOL 498. *Honors Research in Biology.* Students conduct research in biology under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR Fulfills General Education Goal 15

HEALTH-RELATED PROGRAMS

Most students interested in pursuing health-related professions will be best served by the health/biomedical concentration option of the biology major program (described earlier in this catalog), however it should be noted that a biology degree is not an entrance requirement for most professional school programs. The health/biomedical concentration is designed for students planning post-graduate study leading to a health career, such as in medicine, dentistry, veterinary medicine, and physical and occupational therapy. As a general rule, students applying to professional school programs will complete their four-year degree at Longwood before matriculating at the professional school.

Each student should become familiar with selected professional school(s) early in his/her academic career as course requirements for individual schools vary. Typical courses required for admission into most professional schools include: BIOL 121, BIOL 122, CHEM 111, CHEM 112, CHEM 305, CHEM 307, CHEM 306, CHEM 308, PHYS 101, PHYS 102, ENGL 150, MATH 261, and MATH 262. The four-year health/biomedical concentration in the biology major curriculum will prepare students with the foundation courses necessary for the required admissions exams (MCAT, DAT, or GRE) usually taken during their junior year. As minimal preparation, students should complete the required courses listed above by the end of their junior year.

For admission into graduate or professional school, students should have a strong GPA and score competitively on the admissions exam. To be a viable candidate for admission to a medical/dental/veterinary/allied health professions school, students must also demonstrate firsthand experience in their chosen area of study. This can be accomplished by "shadowing" a clinician whereby a pre-professional student observes and assists practicing health professionals or through volunteer or paid work in a hospital, clinic, or other health setting. Course credit can be obtained for these experiences by registering for BIOL 292, 392, or 492 Internship in Biology.

In addition to the four-year health/biomedical concentration biology major, the Department offers an additional option for exceptional students who are accepted for matriculation in professional school programs (e.g., medical, dental, veterinary) prior to their Longwood graduation. For these students the "Preparation in Pre-Dentistry, Pre-Medical, Pre-Occupational Therapy, Pre-Physical Therapy, or Pre-Veterinary Medicine BS degree" described below is an appropriate course of study.

The Department of Biological and Environmental Sciences also offers some specialized curricula for students interested in particular health-related specializations such as medical technology, nursing, and dental hygiene. These curricula require transfer to another institution for part of the undergraduate program of study. Information is provided later in this catalog, and interested students should contact Dr. David Buckalew, Director of Health Pre-Professional Programs, for guidance.

BIOLOGY MAJOR, BS DEGREE

Medical Technology Concentration

(Carilion Medical Center (CMC) School of Clinical Laboratory Science, Roanoke, Inova Fairfax Hospital Medical Technology Program, Falls Church)

Representatives of our Affiliated Institutions

C. Barrie Cook, MD, *Medical Director, School of Medical Technology, Inova Fairfax Hospital, Falls Church*

Amy Shoemaker, MBA, MT (ASCP) DLM *Program Director, Medical Technology Program, Inova Fairfax Hospital*

Samuel F. Vance, MD, *Medical Director, CMC School of Clinical Laboratory Science, Roanoke*

Randall (Randy) G. Vandevander, *Interim Program Director, CMC School of Clinical Laboratory Science, Roanoke*

A. General Education Core Requirement/41 credits

PHYS 101 or PHYS 201 is recommended for General Education Goal 6.

B. BS Degree Additional Degree Requirements/7 credits

Mathematics/3 credits

CHEM 111

Fundamentals of Chemistry I/4 credits

C. Major Requirements/44 credits

BIOL 121	The Unity of Life/4 credits
BIOL 122	The Diversity of Life/4 credits
BIOL 206	Human Anatomy and Physiology/4 credits
BIOL 207	Human Anatomy and Physiology/4 credits
BIOL 304	Microbiology/5 credits
Biology elective (300-400 level)/4 credits	
CHEM 111	Fundamentals of Chemistry I/4 credits (satisfied in Additional Degree Requirements)
CHEM 112	Fundamentals of Chemistry II/4 credits
CHEM 305	Organic Chemistry I/3 credits
CHEM 306	Organic Chemistry II/3 credits
CHEM 307	Organic Chemistry Laboratory I/1 credit
CHEM 308	Organic Chemistry Laboratory II/1 credit
PHYS 101	General Physics I/4 credits (satisfied if taken for General Education Goal 6)
Or PHYS 201	University Physics I/4 credits (satisfied if taken for General Education Goal 6)
PHYS 102	General Physics II/4 credits
PHYS 202	University Physics II/4 credits
Electives/3 credits	

Major Requirements (affiliated schools)

Inova Fairfax Hospital/36 credits

CMC School of Clinical Lab Science/42.5 credits

* PHYS 101 is a prerequisite for PHYS 102. PHYS 201 is a prerequisite for PHYS 202.

D. Total Credits Required for BS in Biology with Medical Technology Concentration affiliated with Inova Fairfax Hospital/130

Total Credits Required for BS in Biology with Medical Technology Concentration affiliated with CMC, Roanoke/136.5

Students should take the biology assessment test in their junior year unless they plan to take their senior year at Longwood. Information concerning curriculum at the hospitals, expenses, financial aid, etc. is available.

BIOLOGY MAJOR, BS DEGREE

**Preparation in Pre-Dentistry, Pre-Medical, Pre-Occupational Therapy,
Pre-Physical Therapy, or Pre-Veterinary Medicine**

This major allows exceptional students to complete 3 years of study at Longwood prior to matriculation in professional school programs (e.g., medical, dental, veterinary). Hours earned in the first year of a professional school program are used to complete the B.S. degree at Longwood.

Most students interested in pursuing health-related professions will be best served by the four-year health/bio-medical concentration option of the biology major program (described earlier in this catalog).

A. General Education Core Requirement/41 credits.

B. BS Degree Additional Degree Requirements/7 credits

MATH 171 or 261/3-4 credits

CHEM 111/4 credits

C. Major Core Requirements/51 credits.

BIOL 121	The Unity of Life/4 credits
BIOL 122	The Diversity of Life/4 credits
BIOL 206	Human Anatomy and Physiology/4 credits

BIOL 207	Human Anatomy and Physiology/4 credits
BIOL 304	Microbiology/5 credits
BIOL 324	Genetics/4 credits
BIOL 412	Biochemistry/4 credits
Biology elective at 300-400 level/4 credits	
CHEM 111	Fundamentals of Chemistry I/4 credits (satisfied in Additional Degree Requirements)
CHEM 112	Fundamentals of Chemistry II/4 credits
CHEM 305	Organic Chemistry I/3 credits
CHEM 306	Organic Chemistry II/3 credits
CHEM 307	Organic Chemistry Laboratory I/1 credit
CHEM 308	Organic Chemistry Laboratory II/1 credit
PHYS 101	General Physics I/4 credits (satisfied if taken as General Education Goal 6)
OR PHYS 201	University Physics I/4 credits (satisfied if taken as General Education Goal 6)
PHYS 102	General Physics II/4 credits
Or PHYS 202	University Physics II/4 credits
Elective/2 credits	

Major Requirements from Professional Schools

30 semester hours credit of 300-400 level courses taken at the professional school (with grades of C or better) will be accepted as transfer credit by Longwood.

NOTE: 120 hours are required for graduation from Longwood with a cumulative average of 2.0, a 2.0 average in all major courses, and no grade below C- in biology courses required for the major. Candidates for this degree must also arrange to take the departmental comprehensive achievement test for assessment purposes. Students should plan to take this test in their junior year if they are to be enrolled at a professional school in their senior year.

HEALTH PRE-PROFESSIONAL PROGRAMS

Faculty

David W. Buckalew, PhD, *Associate Professor of Biology and Director for Health Pre-Professional Programs*

Through its health pre-professional curriculum, the Department of Biological and Environmental Sciences is successful in guiding students for careers in medical technology, dental hygiene, and nursing. By working closely with the Director of Health Pre-Professional Programs, students can prepare for transfer into programs at a professional institution. Students in these programs typically have the option of taking courses at Longwood for one to three years prior to matriculation in a professional program. Admission to these programs is highly competitive and is based on the student's academic performance during the pre-professional period as well as personal recommendations and related experiences. A minimum GPA of 3.0 is usually required for transfer. Completion of Longwood's pre-professional curriculum does not guarantee admission to the professional program. Links to professional schools and specific requirements may be found on the Department's website.

PRE-DENTAL HYGIENE (VCU-MCV, ODU)

Requirements:

BIOL 121	The Unity of Life/4 credits
BIOL 206	Human Anatomy and Physiology/4 credits
BIOL 207	Human Anatomy and Physiology/4 credits
BIOL 304	Microbiology/5 credits
CHEM 111	Fundamentals of Chemistry I/4 credits
ENGL 150	Writing and Research/3 credits
MATH 171	Statistical Decision Making/3 credits
PSYC 101	Introduction to Psychology /3 credits

PSYC 251	Introduction to Biological Psychology/3 credits
SOCL 101	Principles of Sociology/3 credits
COMM 101	Public Speaking/3 credits

Choose three credits from the following:

ENGL 201	World Literature/3 credits
ENGL 202	British Literature/3 credits
ENGL 203	American Literature/3 credits

Electives/22 credits (MCV)*

TOTAL 64 credits

* For transfer to ODU, these electives must include 6 hours of humanities, 6 hours of history, 3 hours of philosophy, 3 hours of computer science, and CHEM 112.

PRE-NURSING (MCV AND UVA)

Changes in the nursing curricula at both Medical College of Virginia's School of Nursing and the University of Virginia's School of Nursing have changed the programs to 1+3 programs where students should transfer to the professional nursing program after only one year at another college. This has made it very hard for students to transfer, and, therefore, Longwood no longer recruits pre-nursing students. Any student at Longwood that wishes to transfer to any nursing program should contact Dr. Donald Merkle for assistance.

EARTH SCIENCE PROGRAM

Faculty

Daniel L. Druckenbrod, PhD, *Assistant Professor of Environmental Science*

Joseph E. Garcia, PhD, *Professor of Geography and Department Chair*

David S. Hardin, PhD, *Associate Professor of Geography*

Edward L. Kinman, PhD, *Associate Professor of Geography*

The Earth Science Program is designed to meet the general education of all students by strengthening their knowledge of the physical environment. The program also provides a solid foundation for those planning to pursue careers in environmental science.

EARTH SCIENCE MINOR

Students interested in pursuing an earth science minor should contact the Area Coordinator. Grades below C- are not accepted for the minor. The minor must include:

EASC 300 The Dynamic Planet/3 credits

15 credits of 300 level or higher Earth Science electives

TOTAL 18 credits

EARTH SCIENCE COURSE DESCRIPTIONS (EASC)

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

EASC 126. *Essential Laboratory Techniques.* (BIOL126, CHEM 126, PHYS 126). Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

EASC 275 (GEOG 275). *Introduction to Geographic Information Systems.* Introduces concepts related to geographic information systems (GIS). Topics include cartography, coordinate systems and map projections, data classification and generalization, methods of thematic map symbolization, GIS application do-mains, data models and sources, analysis methods and output techniques. Lectures, readings and hands-on experience with GIS software. 3 lecture and one 1-hour lab periods. 4 credits.

EASC 292. *Internship in Earth Science.* A semester-long, on-the-job learning experience designed to apply the principles of earth science. 1-18 credits.

EASC 300. *The Dynamic Planet.* This course explores the major principles of the earth sciences, including geology, oceanography, meteorology and astronomy. The course focuses on earth-shaping processes, atmospheric dynamics, oceanographic circulation, and earth's place in the solar system. It is designed to develop an awareness and appreciation for these geosystems and their important interrelationships, as well as an understanding of the scientific approach to problem solving. Emphasis will be placed on interactions between systems in order to better understand the earth as a single, multidimensional system. For liberal studies majors and others seeking teaching endorsement. Prerequisite: CHEM 101, or PHYS 101, or PHYS 105, or GNED 162 or GNED 261. 2 lecture and one 2-hour lab period. 3 credits.

EASC 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in earth science. 1-18 credits.

EASC 341 (BIOL 341). *General Ecology.* The principles underlying the interrelations of groups of organisms with their environments, including the population, community, and ecosystem levels of organization. The lab normally includes local field trips. 3 lecture and one 3-hour lab periods; 4 credits.

EASC 342 (BIOL 342). *Terrestrial Biogeography.* Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals. 2 lecture periods and 1 two hour lab period. 4 credits.

EASC 353 (GEOG 353). *Geography of Virginia.* Geographical appraisal of Virginia, including the geology, land-forms, soils, climate, economic minerals, original vegetation, and human geography of Virginia, emphasizing settlement of population, agriculture, industries and transportation. 3 lecture periods. 3 credits. SP

EASC 354 (GEOG 354). *Hydrology.* This course is an introductory survey of hydrology. Emphasis is on the general physical and chemical principles which govern hydrologic processes. Approaches to hydrologic measurements and the application of hydrologic analyses to water-resource management issues will be examined. A basic understanding of elementary mathematics, physics, physical geography, and chemistry is assumed. 3 lecture periods. 3 credits.

EASC 355 (GEOG 355). *Climatology.* A study of the dynamics of the atmosphere as an energy system, its interactions with other parts of the Earth's physical system, and the effects of these interactions on human life and activity. Climate variations on global, regional, and local scales are investigated including methods of climate classification and techniques used to model future climatic conditions. 3 lecture periods. 3 credits.

EASC 358 (Geography 358). *Map Design and Analysis.* Emphasis is focused on construction of thematic maps at the preprofessional level and their incorporation in presentations of research. Modern techniques and processes are stressed along with rudimentary geographic information system design. Prerequisites: permission of instructor. 3 lecture and one 2-hour lab period; 4 credits.

EASC 363. *Physical Oceanography.* An introduction to the historical, geological, chemical and physical aspects of the oceans. 3 lecture and one 2-hour lab periods. 4 credits.

EASC 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

EASC 392. *Internship in Earth Science.* A semester-long, on-the-job learning experience designed to apply the principles of earth science. 1-18 credits.

EASC 410 (GEOG 410). *Geomorphology.* An introduction to the major landform shaping processes that affect the surface of the earth. Human impact on these geomorphic processes, particularly the effects of urbanization and erosive land use, will be discussed with regard to current models of geomorphic change. 3 lecture periods. 3 credits.

EASC 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits. Fulfills General Education Goal 15.

EASC 492. *Internship in Earth Science.* A semester-long, on-the-job learning experience designed to apply the principles of earth science. 1-18 credits. Fulfills General Education Goal 15.

EASC 495. *Special Topics in Earth Science.* Specialized courses on a variety of topics that may be offered periodically. 1-4 credits.

EASC 498. *Honors Research in Earth Science.* Students conduct research in earth science under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

GENERAL EDUCATION COURSE DESCRIPTIONS (GNED)

GNED 162. *Introduction to Environmental Science.* An interdisciplinary science course designed to introduce students to scientific study focused on the environment. Fundamental concepts addressed by this course include ecosystems, plate tectonics, nutrient and water cycles, energy flow, and climate. This course emphasizes the interrelationships of physical and biological components, the importance of the environment as a resource across cultures, and current challenges to understanding and maintaining our environment. 4 credits.* Fulfills General Education Goal 6.

GNED 261. *Exploring Science in Our World.* An interdisciplinary science course designed to involve students in learning science concepts related to world problems and studying issues important to our local community. 4 credits.* Fulfills General Education Goal 6.

GEOGRAPHY MINOR

Students interested in pursuing a geography minor should contact Dr. Hardin. Grades below C- are not accepted for the minor. The minor must include:

GEOG 201	Basic Elements of Geography/3 credits
GEOG 275	Introduction to Geographic Information Systems/4 credits

Choose minimum of 3 credits from the following:

GEOG 241	Cultural Geography/3 credits
GEOG 354	Hydrology/3 credits
GEOG 355	Climatology/3 credits
GEOG 358	Map Design and Analysis/4 credits
GEOG 410	Geomorphology/3 credits

Choose minimum of 3 credits from the following:

GEOG 220	Geography of South America/3 credits
GEOG 352	World Regional Geography/3 credits
GEOG 353	Geography of Virginia/3 credits
GEOG 403	Geography of Europe/3 credits
GEOG 404	Geography of the U.S. and Canada/3 credits

6 credits of Geography electives

GEOGRAPHY COURSE DESCRIPTIONS

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

GEOG 201. *Basic Elements of Geography.* The scope and nature of geographic inquiry are treated. Special emphasis is placed on the significance of man, environment, and cultural processes in the organization of space on the earth's surface. 3 lecture periods. 3 credits. * Fulfills General Education Goal 8

GEOG 220. *The Geography of South America.* An examination of the natural and cultural landscape in the regional development of South America. 3 lecture periods. 3 credits. * Fulfills General Education Goal 9

GEOG 241. *Cultural Geography.* A study of the interaction between man and the land. Spatial and time elements are interwoven with selected topics such as man's religions, settlement patterns, political organization, economics, and population characteristics. 3 lecture periods. 3 credits.

GEOG 275 (EASC 275). *Introduction to Geographic Information Systems.* Introduces concepts related to geographic information systems (GIS). Topics include cartography, coordinate systems and map projections, data classification and generalization, methods of thematic map symbolization, GIS application domains, data models and sources, analysis methods and output techniques. Lectures, readings and hands-on experience with GIS software. 3 lecture and one 1-hour lab periods. 4 credits.

GEOG 292. *Internship in Geography.* A semester-long, on-the-job learning experience designed to apply the principles of geography. 1-18 credits.

GEOG 295. *Special Topics in Geography.* Specialized courses on a variety of topics that may be offered periodically. 1-3 credits.

GEOG 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in geography. 1-18 credits.

GEOG 342 (BIOL 342, EASC 342). *Terrestrial Biogeography.* Investigates the past and present geographic distribution of organisms on land. This broad, interdisciplinary course will combine insights from biology, ecology, geography, and geology to examine changes in species distribution over space and time. The course will address topics including: 1) biological patterns across the globe, 2) underlying physical factors controlling these patterns, 3) the role of earth's history in developing these patterns, 4) and implications for the conservation of plants and animals. 2 lecture periods and 1 two hour lab period. 4 credits.

GEOG 352. *World Regional Geography.* Analysis of the geography of major world regions, emphasizing the physical, cultural, and economic factors affecting life in each. Special consideration is given to current problems involving natural hazards, political developments, and cultural attributes of countries around the world. 3 lecture periods. 3 credits.

GEOG 353 (EASC 353). *Geography of Virginia.* Geographical appraisal of Virginia, including the geology, landforms, soils, climate, economic minerals, original vegetation, and the human geography of Virginia, emphasizing settlement and population, agriculture, industries and transportation. 3 credits. SP

GEOG 354 (EASC 354). *Hydrology.* This course is an introductory survey of hydrology. Emphasis is on the general physical and chemical principles which govern hydrologic processes. Approaches to hydrologic measurements and the application of hydrologic analyses to water-resource management issues will be examined. A basic understanding of elementary mathematics, physics, physical geography, and chemistry is assumed. 3 lecture periods. 3 credits.

GEOG 355 (EASC 355). *Climatology.* A study of the dynamics of the atmosphere as an energy system, its interactions with other parts of the Earth's physical system, and the effects of these interactions on human life and activity. Climate variations on global, regional, and local scales are investigated including methods of climate classification and techniques used to model future climatic conditions. 3 lecture periods. 3 credits.

GEOG 358 (EASC 358). *Map Design and Analysis.* Emphasis is focused on the construction of thematic maps at the preprofessional level and their incorporation in presentations of research. Computer-based techniques and processes are stressed along with rudimentary geographic information system design. Prerequisite: permission of instructor. 3 lecture periods. 4 credits.

GEOG 360. *Cultural Ecology.* A seminar that explores the theoretical and practical considerations of human decision-making and adaptive management of resources in complex social-ecological systems. We will address such critical issues as fisheries, watershed planning, wilderness, forest management, geosource extraction, and environmental services from a holistic perspective that acknowledges historical drivers, dynamics of ecosystems, changing markets, and public perceptions and values. 3 credits SP and WR

GEOG 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

GEOG 392. *Internship in Geography.* A semester-long, on-the-job learning experience designed to apply the principles of geography. 1-18 credits.

GEOG 403. *Geography of Europe.* Regional analysis of peninsular, western and central Europe and the Mediterranean Basin. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOG 404. *Geography of the U.S. and Canada.* Regional analysis of the United States and Canada, emphasizing the physical, cultural, and economic factors affecting the utilization of the several regions. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOG 490. *Directed or Independent Study.* Students will carry out study or research projects under supervision of an instructor. Six credits total may be earned. 1-3 credits. Fulfills General Education Goal 15.

GEOG 492. *Internship in Geography.* A semester-long, on-the-job learning experience designed to apply the principles of geography. 1-18 credits. Fulfills General Education Goal 15.

GEOG 495. *Special Topics in Geography.* Specialized courses on a variety of topics that maybe offered periodically. 1-3 credits.

GEOG 498. *Honors Research in Geography.* Students conduct research in geography under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

Cooperative Programs

Cooperative Programs in the Medical Sciences

Longwood has cooperative programs with Roanoke Memorial Hospital and Fairfax Hospital, which make it possible for students to attend Longwood for three years and the fourth year in professional training in medical technology at the cooperating school. The students will earn a BS degree in biology with a concentration in medical technology from Longwood after the fourth year.

Pre-Professional Preparation for the Medical Sciences

This curriculum prepares students for admission to accredited schools of medicine, dentistry, veterinary medicine, medical technology, dental hygiene, physical therapy, occupational therapy, and pharmacy. Pre-professional advisors at Longwood will assist the student in selecting the appropriate courses to meet the admission requirements for any health related program.

Completion of the requirements of the Longwood pre-professional curriculum does not guarantee admission to the professional program. Admission to all professional programs is competitive. Admission is based on the student's performance during the pre-professional period, personal recommendations, related work experience, and a personal interview. A minimum GPA of 3.0 is usually required for transfer.

Department of Chemistry and Physics

Melissa C. Rhoten, *Chair*

Betty J. Woodie, *Fiscal Manager*

Raymond Heinrich, *Director of Laboratory Services and Hazardous Waste Manager*

The Department offers majors and minors in chemistry and physics. A student may major or minor in more than one area with the appropriate selection of courses. The department also offers degrees in cooperation with institutions in dual-degree engineering; pre-professional health programs prepare students for professional schools in a number of health-oriented professions. Students may elect to pursue a secondary teaching endorsement with successful completion of additional science, education, science education, and special education courses. The Department of Chemistry and Physics offers courses that satisfy the science requirements for general education in all degree programs of Longwood.

The aim of study in this department is to develop an interest in the natural world and to acquire the scientific habits of problem solving through experimentation, accurate observation, exact statements, and independent thought.

ASSESSMENT: The Department of Chemistry and Physics requires chemistry majors to take standardized exams distributed by the American Chemical Society in all areas of study (i.e., general, organic, inorganic, analytical, and physical chemistry). Senior physics majors take a comprehensive achievement test (MFAT). The purpose of these tests is to assess the progress of departmental majors and the effectiveness of departmental programs.

CHEMISTRY PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

Christopher G. Gulgas, PhD, *Assistant Professor of Chemistry*

Sarah G. Porter, PhD, *Assistant Professor of Chemistry*

Melissa C. Rhoten, PhD, *Associate Professor of Chemistry*

Keith B. Rider, PhD, *Associate Professor of Chemistry*

The chemistry major at Longwood provides fundamental training in general, analytical, organic, physical, and inorganic chemistry so that graduates may pursue graduate study or careers in research, industry, teaching, or a health-related profession. All students majoring in chemistry are required to complete 49 credits of chemistry, mathematics, and physics. Those students wishing to prepare for dental, medical, or pharmacy school complete an additional 30 credits to satisfy pre-professional requirements. Students are encouraged to enroll in research courses in chemistry in order to increase their competence in working in the laboratory. The program in chemistry is rigorous, but it is flexible enough for students to take a second major.

Students majoring in other areas may elect to minor in chemistry. The chemistry minor requires 23-24 semester hours: general chemistry (8 hours), organic chemistry (8 hours), quantitative analysis (4 hours), and a chemistry elective (3-4 hours). No grade below C- in chemistry courses is accepted for the graduation requirements for the major or minor in chemistry.

Students may take a maximum of four credits total in Internship (CHEM 292, 392, 492) and Research (Chemistry) courses for quality points (A, B, C, and D grades). Beyond four credits, such courses must be taken on a Pass/Fail basis.

A student may seek a secondary teaching endorsement in chemistry. This program consists of courses required for a chemistry major and BIOL 121, EASC 300, EDUC 245, 260, 265, 370, 380, 430, 455, 484, 487, SCED 352, SPED 489, and the professional semester consisting of 12 hours in the senior year. If an additional endorsement in biology or physics is desired, the student must minor in that discipline and meet all state-mandated core

requirements for that endorsement. Interested students should meet with Secondary Science Education faculty for advising on preparation for secondary science teaching.

CHEMISTRY MAJOR, (BS DEGREE)

A. General Education Core Requirement/41 credits

MATH 260 or 261 is strongly recommended for General Education Goal 5.

PHYS 201 is strongly recommended for General Education Goal 6.

B. Additional Degree Requirements/8 credits

MATH 262/4 credits

CHEM 111/4 credits

C. Major Requirements/41 credits

CHEM 112 Fundamentals of Chemistry II/4 credits

CHEM 270 Inorganic Chemistry/3 credits

CHEM 305 Organic Chemistry I Lecture/3 credits

CHEM 306 Organic Chemistry II Lecture/3 credits

CHEM 307 Organic Chemistry Laboratory I/1 credit

CHEM 308 Organic Chemistry Laboratory II/1 credit

CHEM 350 Quantitative Analyses/4 credits

CHEM 351 Instrumental Analysis/3 credits

CHEM 400 Thermochemistry/3 credits

CHEM 401 Quantum Mechanics/3 credits

CHEM 402 Advanced Laboratory Problem Solving I/2 credits

CHEM 403 Advanced Laboratory Problem Solving II/2 credits

PHYS 202 University Physics II/4 credits

MATH 260 Integrated Calculus II/4 credits

OR

MATH 261 Differential and Integral Calculus/4 credits

(3 of these 4 credits satisfy General Education Goal 5)

Non-teaching majors choose at least one credit from the following

(satisfies Goal 15 general education requirement)

CHEM 492 Internship in Chemistry/1-15 credits

CHEM 496 Research Projects in Chemistry/1-4 credits

CHEM 498 Honors Research in Chemistry/3 credits

Chemistry Electives - choose from CHEM 371-373, CHEM 375, CHEM 390 (no more than 2 credits),

CHEM 412, CHEM 467 (no more than 2 credits), CHEM 495/4 credits

D. General Electives for non-teaching majors/30 credits

Students wishing to prepare for a health-related professional school (medical, pharmacy, dental, etc.) are strongly encouraged to choose the following courses: BIOL 121/4 credits, BIOL 122/4 credits, BIOL 206/4 credits, BIOL 207/4 credits, BIOL 304/5 credits, CHEM 412/4 credits, COMM 101/3 credits, ECON 217(or 218) OR MATH 171(or 270)/3 credits.

E. Secondary Teaching Endorsement, Grades 6-12/48 credits

Must take SCED 352/3 credits, EDUC 473/3 credits BIOL 121/4 credits, and EASC 300/3 credits in addition to Professional Education requirements

* For additional endorsement to teach Biology

Minor in Biology/24 credits

* For additional endorsement to teach Physics

Minor in Physics/24 credits

* Students seeking endorsement in these areas must meet criteria established by the State Department of Education.

F. Total credits required for BS in Chemistry/120

Total credits required for BS in Chemistry with secondary teaching endorsement/138

CHEMISTRY MINOR

Students interested in pursuing a chemistry minor should contact the director of the chemistry program. Grades below C- are not accepted for the minor. The minor must include:

8 semester hours general chemistry

8 semester hours organic chemistry

4 semester hours analytical chemistry (CHEM 350)

3-4 semester hours chemistry electives (CHEM 270, 351, 371-376, 400, 401, 412)

CHEMISTRY COURSE DESCRIPTIONS (CHEM)

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive WR

Speaking Intensive SP

CHEM 100. *Chemistry for Educators.* This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. This course presents basic concepts in chemistry including the structure of the atom, classification of matter, physical/chemical properties, and discussion of different types of chemical reactions. 3 lecture and one 2-hour lab period.

CHEM 101. *General Chemistry.* A study of the basic concepts of chemistry, including the structure of matter and the historical development that led to that understanding. Designed for students with no previous education in chemistry. Does not fulfill requirements for biology, chemistry or physics majors. 3 lecture and one 2-hour lab periods. 4 credits. * Fulfills General Education Goal 6.

CHEM 111. *Fundamentals of Chemistry I.* An introduction to Chemistry that provides the foundation for further chemistry courses by focusing on the structure of matter (including nuclear chemistry, orbital theory, and stoichiometry), acid-base theory, concepts of chemical bonding and the periodic law. The importance of chemistry in everyday life as well as being the basis for other sciences will be outlined. 3 lecture, one 2-hour lab periods. Prerequisites: High School Chemistry or Placement test Chemistry majors must make at least a C- in this course before taking advanced chemistry courses. 4 credits.

CHEM 112. *Fundamentals of Chemistry II.* A continuation of CHEM 111 that examines the mechanisms by which chemists obtain information about reacting systems. Major concepts include: chemical equilibrium, thermodynamics, kinetics, gas laws, and electrochemistry. 3 lecture, one 2-hour lab periods. Prerequisite: No grade lower than C- in CHEM 111 or permission of instructor. 4 credits.

CHEM 270. *Inorganic Chemistry and Qualitative Inorganic Analysis.* This course provides an extensive description of the chemical elements and their compounds, occurrences, manufacture, reactions, and relevance for society. How atomic and molecular electronic structure influence chemical properties will be discussed. Students will be introduced to theories of bonding, symmetry, group theory, and coordination chemistry. 3 lecture periods. Prerequisite: CHEM 112. 3 credits.

CHEM 295. *Special Topics in Chemistry.* Specialized courses on a variety of topics that may be offered periodically. 1-4 credits.

CHEM 305. *Organic Chemistry I.* First semester of a two-semester course designed to provide a sound foundation in the fundamental principles and basic reactions of organic chemistry. The course illustrates how three-dimensional structure effects the physical properties and the reactivity of organic compounds. Simple hydrocarbons (alkanes, alkenes, and alkynes) and alkyl halides are used to introduce the concepts of structural isomerism,

stereoisomerism, reaction kinetics, thermodynamics, reaction mechanisms, and limited synthetic strategies. Prerequisite: No grade lower than C- in CHEM 112. The course consists of three 1-hour lecture periods per week (3 credits). A one-credit laboratory class (CHEM 307) is also required to complete the organic chemistry requirement.

CHEM 306. *Organic Chemistry II.* Second semester of a two-semester course designed to provide a sound foundation in the fundamental principles and basic reactions of organic chemistry. Increasingly complex compounds like alcohols, amines, substituted aromatic compounds, carboxylic acids and carboxylic acid derivatives are used to provide a heightened emphasis on reaction mechanisms and synthetic strategies. Structural elucidation techniques (^1H NMR, ^{13}C NMR, IR, and MS) are introduced and are used to identify organic compounds. Prerequisite: CHEM 305 The course consists of three 1-hour lecture periods per week (3 credits). A one-credit laboratory class (CHEM 308) is also required to complete the organic chemistry requirement.

CHEM 307. *Organic Chemistry Laboratory I.* First semester of a two-semester laboratory course designed to provide a sound foundation in the basic methods of performing organic chemical reactions. The course introduces glassware and reaction techniques used in synthetic organic chemistry. The course further illustrates methods used for monitoring chemical reactions, and for isolation and purification of reaction products. Prerequisite: CHEM 112. The course consists of one 3-hour laboratory period per week (1 credit). The course may be taken concurrently with or after CHEM 305.

CHEM 308. *Organic Chemistry Laboratory II.* Second semester of a two-semester laboratory course designed to provide a sound foundation in the basic methods of performing organic chemical reactions. The course strongly emphasizes NMR, IR and MS spectral analysis/identification of organic compounds and introduces multi-step chemical reactions. Prerequisite: CHEM 307 and concurrently or after 306. The course consists of one 3-hour laboratory period per week (1 credit).

CHEM 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in chemistry. 1-18 credits.

CHEM 350. *Quantitative Analysis* This course is designed to provide a sound physical understanding of the principles of analytical chemistry and show how these principles are applied in chemistry and related disciplines. Topics covered include statistics, chemical equilibrium, acid-base chemistry, titrimetry, potentiometry, and introduction to analytical separations. The laboratory component of this course focuses on gravimetric and volumetric methods of chemical analysis. 2 lecture, one 4-hour laboratory periods. Prerequisite: CHEM 112. 4 credits. WR

CHEM 351. *Instrumental Analysis.* The theory of instrumental techniques in analytical chemistry, including optical and electrochemical methods of analysis. Develops familiarity with both instrument physics and the physical chemistry of measurement. Prerequisite: CHEM 350, 3 lecture. 3 credits.

CHEM 371. *Advanced Organic.* An advanced study of organic reactions and mechanisms. Prerequisites: CHEM 305 and 306. 3 lecture periods; 3 credits.

CHEM 372. *Environmental.* A study of the fundamental problems of chemistry pollution of the soil, water, and atmosphere. Prerequisite: CHEM 305 or permission of instructor. 2 lecture and one 3-hour laboratory periods; 3 credits.

CHEM 373. *Advanced Inorganic.* The structures, properties, reactions and uses of inorganic compounds. Prerequisite: CHEM 270 or permission of instructor. 3 lecture periods; 3 credits.

CHEM 375. *Polymer.* A study of chemical reactions used to synthesize modifications in polymer properties, techniques to characterize polymers, and natural polymers. 3 lecture periods; 3 credits.

CHEM 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

CHEM 392. *Internship in Chemistry.* A semester-long, on-the-job learning experience designed to apply the principles of chemistry. 1-15 credits

CHEM 400. *Thermochemistry.* A study of thermodynamics, equilibria, kinetics, and statistical mechanics. Prerequisite: CHEM 350 and MATH 262. 3 credits. 3 lecture periods.

CHEM 401. *Quantum Mechanics.* A study of elementary quantum mechanics, atomic and molecular structure, spectroscopy, and statistical mechanics. Prerequisites: MATH 262 or 267; or permission of instructor. 3 lecture periods. 3 credits. WR

CHEM 402. *Advanced Chemical Laboratory Problem Solving I.* The first course of a two-semester capstone research sequence. This course is designed to instruct students in searching, reading, and using chemical literature in the preparation of research proposals. Problems will be presented that do not have an obvious method or solution. Students must research and develop their own path to solving each problem. Students will develop several mini-research proposals, which will be carried out in CHEM 403. Prerequisite: CHEM 351. Co-requisite: CHEM 400. 2 lecture periods. WR

CHEM 403. *Advanced Chemical Laboratory Problem Solving II.* The second course of a two-semester capstone research sequence. Laboratory practice involving the use of instruments and other techniques to solve chemical problems. Students will conduct experiments based on the research plans they developed in CHEM 402. Prerequisite: CHEM 351 & 400. Two 3-hour laboratory periods. WR SP

CHEM 412 (BIOL 412). *Biochemistry.* A study of the chemistry of proteins, carbohydrates, lipids, and nucleic acids in biological systems. Prerequisite: CHEM 305 and CHEM 306 with a minimum grade of C- in both courses. 3 lecture and one 3-hour lab period. 4 credits.

CHEM 467. *Scientific Instrument Design and Fabrication.* Design and actual fabrication of scientific instruments including glass, metal, wood, plastic, and electronic instruments. Course involves one or more of the following: glass working techniques, precision milling machine and lathe operations, machine shop techniques, electronic testing of circuits, and breadboard and hardwiring electronic circuits. Each semester course will emphasize different projects. May be repeated for credit. One 3-hour lab period per credit. 1-4 credits.

CHEM 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits. Fulfills General Education Goal 15.

CHEM 492. *Internship in Chemistry.* A semester long, on-the-job learning experience designed to apply the principles of chemistry. 1-15 credits. Fulfills General Education Goal 15.

CHEM 495. *Special Topics in Chemistry.* Specialized courses on a variety of topics that may be offered periodically. 1-4 credits.

CHEM 496. *Research Projects in Chemistry.* Students will carry out research projects under individual supervision of an instructor. The nature of the project will depend on the interest and needs of the student. Consent of the instructor and approval of the department head are prerequisites for enrollment. May be repeated. One 3 hour lab period per credit. 1-4 credits. SP Fulfills General Education Goal 15.

CHEM 498. *Honors Research in Chemistry.* Students conduct research in chemistry under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

CHEM 500. *Chemistry of the Environment.* This course addresses the science of the complex interactions that occur among terrestrial, atmospheric, aquatic, living, and anthropological environments. Interactions are addressed from diverse perspectives including chemistry, biology, ecology, and governmental regulations. Emphasis is placed on the study of the sources, reactions, transport, effects and fates of chemical species in water, soil, air, and living environments. The role that technology plays in these systems is also discussed. Prerequisite: CHEM 551. 3 credits.

CHEM 551. *Instrumental Analysis Projects.* Theory of optical and electrochemical methods of chemical analysis applied to environmental, industrial, or medical problems. Practical laboratory methods emphasized. Prerequisite: Permission of instructor. 4 credits.

CHEM 552. *Chromatographic Analysis Projects.* Theory of chromatographic methods of separation and chemical analysis applied to environmental, industrial, or medical problems. Practical laboratory methods emphasized. Prerequisite: Permission of instructor. 4 credits.

PHYSICS PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

Rodney Dunning, PhD, *Assistant Professor of Physics*

Timothy Holmstrom, PhD, *Assistant Professor of Physics*

James C. Moore, PhD, *Assistant Professor of Physics*

Michelle Parry, PhD, *Associate Professor of Physics and Area Coordinator of Physics*

Charles D. Ross, PhD, *Professor of Physics and Dean, Cook-Cole College of Arts and Sciences*

The physics major at Longwood provides fundamental training in several areas of physics so that graduates may pursue graduate study or careers in research, industry, teaching, or engineering. Those who wish to major in physics may choose from the following options:

1. traditional physics major for students interested in preparation for graduate work or careers in research, industry, or teaching.
2. pre-medical/biophysics concentration for students interested in preparation for medical school or graduate work in biophysics.
3. pre-engineering for students interested in cooperative engineering programs.

A minimum of 31 semester hours credit in physics is required for all physics majors. Many physics majors elect to double major in both physics and some other discipline. Also, a student majoring in another field may choose to minor in physics. The minor program requires 24 semester hours in physics. No grade below C- in physics courses is accepted for the major or minor in physics.

Students may take a maximum of four credits total in Internship (Biology/Chemistry/Physics 292, 392, 492) and Research (Biology/Chemistry/Physics 496) courses for quality points (A, B, C, and D grades). Beyond four credits, such courses must be taken on a Pass/Fail basis.

A student may seek a secondary teaching endorsement in physics. This program consists of courses required for a physics major, and BIOL 121, EASC 300, EDUC 245, 260, 265, 370, 380, 430, 455, 484, 487, SCED 352, SPED 489, and the professional semester consisting of 12 hours in the senior year. If an additional endorsement in biology or chemistry is desired, the student must minor in that discipline and meet all state-mandated core requirements for that endorsement. Interested students should meet with Secondary Science Education faculty for advising on preparation for secondary science teaching.

PHYSICS MAJOR, BA, BS DEGREE

A. General Education Core Requirement/41 credits

Physics Majors are strongly encouraged to take PHYS 201 to fulfill General Education Goal 6 Requirements.

B. Additional Degree Requirements for BA Degree/6 credits

Additional Degree Requirements for BS Degree/7 credits

MATH 261 The Differential and Integral Calculus/4 credits

OR MATH 260 Integrated Calculus II/4 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements/48 credits

CHEM 111	Fundamentals of Chemistry I/4 credits (satisfied by Additional Degree Requirements)
MATH 262	The Differential and Integral Calculus/4 credits
MATH 361	Calculus III/4 credits
MATH 362	Differential Equations/3 credits
PHYS 202	University Physics II/4 credits **
PHYS 260	Introduction to Experimental Design/2 credits
PHYS 305	Physics Seminar/1
PHYS 321	Modern Physics/3 credits
PHYS 331	AC/DC Circuits/4 credits
PHYS 332	Classical Electricity and Magnetism/4 credits
PHYS 352	Mechanics/4 credits
PHYS 400	Unifying Principles of Physics/4 credits
PHYS 401	Quantum Mechanics/3 credits

Physics Elective/8 credits

** Phys 201 is a prerequisite to Phys 202. Students are strongly encouraged to take it to fulfill General Education Goal 6.

Recommended elective for all physics majors: CMSC 160 Introduction to Programming/3 credits

D. General electives for non-teaching majors/24-25

E. Secondary Teaching Endorsement, Grades 6-12/48 credits

Must take SCED 352/3 credits, EDUC 473/3 credits BIOL 121/4 credits, and EASC 300/3 credits in addition to Professional Education requirements.

* For additional endorsement to teach Biology
Minor in Biology/24 credits.

* For additional endorsement to teach Chemistry
Minor in Chemistry/24 credits.

* Students seeking an endorsement in these areas must meet criteria established by the State Department of Education.

F. Total credits required for BS/BA in Physics/120

Total credits required for BA in Physics with Secondary Teaching Endorsement/141

Total credits required for BS in Physics with Secondary Teaching Endorsement/142

PHYSICS MAJOR, BA or BS DEGREE

Dual-Degree Engineering Concentration

A. General Education Core Requirement/41credits

Physics Majors are strongly encouraged to take PHYS 201 to fulfill General Education Goal 6 Requirements.

B. Additional Degree Requirements for BA Degree/6 credits

Additional Degree Requirements for BS Degree/7 credits

MATH 261 The Differential and Integral Calculus/4 credits

Or MATH 260 Integrated Calculus II/4 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements/52 credits

CHEM 111	Fundamentals of Chemistry I/4 credits (satisfies additional degree requirement)
CHEM 112	Fundamentals of Chemistry II/4 credits
MATH 262	The Differential and Integral Calculus/4 credits
MATH 361	Calculus III/4 credits
MATH 362	Differential Equations/3 credits
PHYS 202	University Physics II/4 credits
PHYS 260	Introduction to Experimental Design/2 credits
PHYS 305	Physics Seminar/1
PHYS 321	Modern Physics/3 credits
PHYS 331	AC/DC Circuits/4 credits
PHYS 332	Classical Electricity and Magnetism/4 credits
PHYS 341	Electronics/4 credits
PHYS 352	Mechanics/4 credits
Physics Elective/4 credits	
Engineering Electives/7 credits – fulfilled at transfer institution	

**** PHYS 201 is a prerequisite for PHYS 202. Students are strongly encouraged to take it to fulfill General Education Goal 6.**

Recommended elective for all physics majors: CMSC 160 Introduction to Programming/3 credits.

D. General electives for non-teaching majors/20-21

E. Secondary Teaching Endorsement, Grades 6-12/46 credits

Must take SCED 352/3 credits, EDUC 473/3 credits, BIOL 121/4 credits, and EASC 300/3 credits in addition to Professional Education requirements.

* For additional endorsement to teach Biology
Minor in Biology/24 credits.

* For additional endorsement to teach Chemistry
Minor in Chemistry/24 credits.

* Students seeking an endorsement in these areas must meet criteria established by the State Department of Education.

F. Total credits required for BS/BA in Physics/120

Total credits required for BA in Physics with Secondary Teaching Endorsement/141

Total credits required for BS in Physics with Secondary Teaching Endorsement/142

PHYSICS MAJOR, BS or BA DEGREE

Pre-Medicine and Biophysics Concentration

A. General Education Core Requirement/41 credits

Physics majors with concentrations in Pre-Medicine and Biophysics are strongly encouraged to take PHYS 201 to fulfill General Education Goal 6 requirements.

B. Additional Degree Requirements for BA degree /6 credits

BS Degree Additional Degree Requirements/7 credits

MATH 261 The Differential and Integral Calculus/4 credits

OR

MATH 260 Integrated Calculus/4 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements/77 credits

BIOL 121	The Unity of Life/4 credits
BIOL 122	Diversity of Life/4 credits
BIOL 304	Microbiology/5 credits
or BIOL 412	Biochemistry/4 credits
BIOL 306	Vertebrate Physiology/4 credits
BIOL 324	Genetics/4 credits
CHEM 111	Fundamentals of Chemistry I/4 credits (satisfied by Additional Degree requirements)
CHEM 112	Fundamentals of Chemistry II/4 credits
CHEM 305	Organic Chemistry I/3 credits
CHEM 306	Organic Chemistry II/3 credits
CHEM 307	Organic Chemistry I Lab/1 credit
CHEM 308	Organic Chemistry II Lab/1 credit
MATH 262	The Differential and Integral Calculus/4 credits
MATH 361	Calculus III/4 credits
MATH 362	Differential Equations/3 credits
PHYS 202	University Physics II/4 credits
PHYS 260	Introduction to Experimental Design/2 credits
PHYS 305	Physics Seminar/1 credit
PHYS 321	Modern Physics/3 credits
PHYS 331	AC/DC Circuits/4 credits
PHYS 332	Classical Electricity and Magnetism/4 credits
PHYS 352	Mechanics/4 credits
PHYS 400	Unifying Principles of Physics/4 credits
PHYS 401	Quantum Mechanics/3 credits
Physics Elective/4 credits	

** PHYS 201 is a prerequisite to PHYS 202. Students are encouraged to take it as General Education Goal 6.

Recommended elective for all physics majors:

CMSC 160 Introduction to Programming/3 credits.

D. Total credits required for a BA in Physics with Pre-Medicine or Biophysics Concentration/124

E. Total credits required for a BS in Physics with Pre-Medicine or Biophysics Concentration/125

PHYSICS COURSE DESCRIPTIONS (PHYS)

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

PHYS 100. *Physics for Educators.* This half semester course is designed for students seeking a K-8 teaching endorsement and does not fulfill requirements for any science major. Major physics concepts presented include motion, forces, energy, electricity & magnetism, light, and sound. 3 lecture and one 2-hour lab period. 4 credits.

PHYS 101. *General Physics I.* An introduction to the basic concepts of mechanics. 3 lecture and one 2-hour lab periods. 4 credits. Fulfills General Education Goal 6.

PHYS 102. *General Physics II.* A study of heat, sound, light, electricity and magnetism. Prerequisite: PHYS 101. 3 lecture and one 2-hour lab periods. 4 credits.

PHYS 103. *Conceptual Physics.* A survey of basic physics principles taught from a conceptual basis. A broad survey of physics will be demonstrated in this course with such topics as mechanics, fluids, heat, electricity, magnetism, and light. The course will apply basic physics principles to our daily lives. 3 lectures and one 2 hour lab period. 4 credits. Fulfills General Education Goal 6.

PHYS 105. *General Astronomy.* A broad survey of modern astronomy, emphasizing the concepts, methods, and technology used by professional astronomers to answer fundamental questions about the universe. 3 lecture and one 2-hour lab periods. 4 credits. Fulfills General Education Goal 6.

PHYS 126. *Essential Laboratory Techniques (BIOL 126, CHEM 126, EASC 126).* Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

PHYS 201. *University Physics I.* Similar to PHYS 101, but with the calculus used throughout. Physics majors and minors must make at least a C- in this course before taking advanced physics courses. 3 lecture and one 2-hour lab periods. 4 credits. * Fulfills General Education Goal 6.

PHYS 202. *University Physics II.* Similar to PHYS 102, but with the calculus used throughout. Prerequisite: PHYS 201. Prerequisite or corequisite: MATH 262. Physics majors and minors must make at least a C- in this course before taking advanced physics courses. 3 lecture and one 2-hour lab periods. 4 credits.

PHYS 260. *Introduction to Experimental Design.* This intermediate-level laboratory course involves the study of experimental design and measurement techniques, data reduction and analysis methods, and oral and written presentation skills. Experiments will vary with availability of equipment and technologies. Prerequisites: PHYS 202. 2 credits. SP and WR

PHYS 292. *Internship in Physics.* A semester-long, on-the-job learning experience designed to apply the principles of physics. 1-18 credits.

PHYS 295. *Special Topics in Physics.* Specialized courses on a variety of topics that may be offered periodically. 1-4 credits.

PHYS 305. *Physics Seminar.* This course is designed to instruct students in speaking, reading, and searching the physics literature in order to prepare for future endeavors in the physics, engineering, and science related fields. There will be a major emphasis placed on public speaking specifically related to current physics topics. Students must have at least junior status to enroll in this course or permission of instructor. 1 credit. SP and WR

PHYS 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in physics. 1-18 credits.

PHYS 321. *Modern Physics.* A survey of modern developments in electron, atomic, and nuclear physics. Prerequisites: PHYS 102, 202. Prerequisite or corequisite: MATH 261 or MATH 260. 3 lecture periods. 3 credits.

PHYS 322. *Nuclear and Particle Physics.* A continuation of PHYS 321. Prerequisites: PHYS 101, 102 or 201, 202, 321. Prerequisite or corequisite: MATH 262. 3 lecture and one 2-hour lab periods. 4 credits.

PHYS 324. *Thermodynamics.* A study of thermal properties of matter; phenomena involved in flow of heat and performance of work. Kinetic theory and statistical mechanics are included. Prerequisites: PHYS 101, 102 or 201, 202. Prerequisite or corequisite: MATH 262. 4 lecture periods. 4 credits.

PHYS 326. *Optics.* A study of the nature and behavior of light and other electro-magnetic radiation. Prerequisites: PHYS 101, 102 or 201, 202, MATH 261. 3 lecture and one 2-hour lab periods. 4 credits.

PHYS 331. *AC/DC Circuits*. This course is an introduction to electrical circuit theory and its application to practical direct and alternating current circuits. Topics include: Kirshhoff's laws, fundamental principles of network theorems, transient and steady-state response of RC, RL, and RCL circuits by classical methods, time-domain and frequency-domain relationships, phasor analysis and power. Prerequisites: PHYS 102 or 202. Prerequisite or corequisite: MATH 260 or 261. Three lectures and one two hour lab periods. 4 credits WR

PHYS 332. *Classical Electricity and Magnetism*. A study of electric and magnetic fields, potentials, resistance, inductance, and capacitance, polarization, magnetic materials, Maxwell's equations. Prerequisite: MATH 361, PHYS 102 or PHYS 202. 4 lecture periods. 4 credits.

PHYS 341. *Electronics*. This course covers the analysis, modeling and design of electrical circuits which contain electronic devices. Topics include: behavior of devices such as p-n junction diodes, field effect transistors and bipolar junction transistors, operational amplifiers, digital systems and data acquisition and conversion. Electronics design via a systems approach is emphasized. Students will learn to design analog circuits to specifications through laboratory problems, a design project and circuit simulation. Prerequisites: PHYS 331. 3 lectures and one 2-hour lab periods. 4 credits. WR

PHYS 342. *Electronics and Circuit Theory*. An introduction to electric circuits that includes Thevenin and Norton equivalent circuits and phasors, and an introduction to electronics that includes DC and A.C. analysis and synthesis of transistor amplifier circuits, OP amps, and elementary logic circuits. Prerequisite: PHYS 102 or PHYS 202 and MATH 261. 3 lecture and one 2-hour lab periods. 4 credits. WR

PHYS 352. *Mechanics*. A mathematical study of motion using Newtonian and Lagrangian techniques. Prerequisites: PHYS 101, 102 or 201, 202. Prerequisite or corequisite: MATH 460. 4 lecture periods. 4 credits.

PHYS 390. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

PHYS 392. *Internship in Physics*. A semester-long, on-the-job learning experience designed to apply the principles of physics. 1-18 credits.

PHYS 400. *Unifying Principles of Physics*. A course that unifies the topics covered in mechanics, electricity and magnetism, thermodynamics, and quantum mechanics by studying the principles that shape our understanding of the universe, the major contributions to physics will be revisited by examining multi-topic problems. Open only to junior and senior physics majors and minors. Prerequisites: PHYS 332, PHYS 352, PHYS 324, PHYS 401 or by permission of instructor. 3 lecture and one 2 hour laboratory periods. 4 credits. SP

PHYS 401. *Quantum Mechanics*. A study of elementary quantum mechanics, atomic and molecular structure, spectroscopy, and statistical mechanics. Prerequisites: PHYS 202, MATH 262 or 267; or permission of instructor. 3 lecture periods. 3 credits.

PHYS 490. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated. 1-18 credits. Fulfills General Education Goal 15.

PHYS 492. *Internship in Physics*. A semester-long, on-the-job learning experience designed to apply the principles of physics. Enrollment in the course is based on permission of the Director of Physics and Dual-degree Engineering Programs and the coordinator at the internship location, and is subject to availability. Prerequisites: 1-15 credits. WR

PHYS 495. *Special Topics in Physics*. Specialized courses on a variety of topics that may be offered periodically. 1-4 credits. Fulfills General Education Goal 15.

PHYS 496. *Research Projects in Physics*. Students will carry out research projects under individual supervision of an instructor. The nature of the project will depend on the interest and needs of the student. Consent of instructor and approval of department head is prerequisite for enrollment. May be repeated. 1-4 credits. SP Fulfills General Education Goal 15.

PHYS 498. *Honors Research in Physics.* Students conduct research in physics under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

DUAL-DEGREE ENGINEERING PROGRAM

BS in Physics Granted by Longwood and a second degree:

MS Degree in Engineering Granted by University of Virginia or Old Dominion University

or

MS Degree in Applied Physics Granted by Christopher Newport University

or

BS Degree in Engineering Granted by Virginia Polytechnic Institute & State University, Old Dominion University, or The University of Tennessee

Students in the Dual-Degree Engineering Program attend Longwood for the first three years to complete courses listed under A, B and C of the Longwood Physics degree requirements. The student's work in these three years will also fulfill the requirements of the first two years of the BS degree at ODU and Virginia Tech. At the beginning of the fourth year, provided the appropriate academic requirements have been met (see following note), the student transfers to the second institution and takes appropriate engineering (or physics at CNU) courses as designated by the adviser at the second institution. When the necessary Longwood requirements are taken at the second institution and the credit hours are transferred back, the student will be awarded the BS degree in Physics from Longwood. When all prescribed courses are fulfilled at the second institution, the student is awarded the second degree by that institution. Normally, in roughly a five-year period, the student receives two degrees, one from each institution.

The course requirements for the Dual-Degree Engineering Program are identical to Longwood Physics major for the first 3 years, except for the specific electives below:

Required Electives:

CNU:

CMSC 160	Introduction to Programming/3 credits
CMSC 162	Data Structures in Advanced Programming/3 credits

Solid State Physics Option:

CHEM 400	Thermochemistry/3 credits
PHYS 326	Optics/4 credits

Instrumental and Advanced Computer Systems Option:

CMSC 301	Computer Organization and Assembler Language Programming/3 credits
CMSC 306	Computer Organization/3 credits
CMSC 310	Introduction to Operating Systems and Computer Architecture/3 credits

Recommended Electives:

ODU:

MATH 343	Linear Algebra/3 credits
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UVA:

CMSC 160	Introduction to Computer Programming/3 credits
MATH 300	A Transition to Advanced Mathematics/3 credits
MATH 343	Linear Algebra/3 credits
MATH 371	Introduction to Probability and Statistics/3 credits
MATH 461	Senior Seminar/1 credit
MATH 481	Complex Analysis/3 credits

NOTES: 120 hours are required for graduation from Longwood with a cumulative average of 2.0 and with no grade below C- in a physics course. General elective hours for the Longwood physics requirements that are not fulfilled at the time of transfer will be taken at the second institution. Longwood will award transfer credit for courses passed with grades of C or above at the second institution.

Students transferring to UVA or CNU may elect to remain at Longwood for seven semesters before transferring.

The ODU BS program will only accept certain Longwood General Education courses for transfer. Students electing this option should see their academic advisor for details.

In the MS programs, the student's Longwood academic average must be B or better (a grade point average of 3.25 or better is recommended for UVA), both overall and in mathematics and physics, to be eligible for transfer. The student applies to the second institution for admission as a conditional graduate student. At the second institution, the student completes a sufficient number of appropriate undergraduate courses to fulfill Longwood's 120 hour degree requirement. Providing that the average in this course work is B or better and that a satisfactory score has been obtained on the Graduate Record Examination (which may be taken at any time prior to the awarding of the Longwood physics degree), the student is admitted unconditionally into the graduate program at the second institution.

For the Virginia Tech and University of Tennessee BS programs, a student must have a 3.0 academic average at Longwood (both overall and in mathematics and physics) to be eligible for transfer.

For transfer to UVA and Virginia Tech., all coursework listed under A, B, and C of the Longwood physics degree requirements must be completed at Longwood before transfer. At the other institutions, some of this coursework may be taken at the second institution with prior permission of authorities at both institutions.

PHYSICS MINOR

Students interested in pursuing a physics minor should contact the Area Coordinator of the physics program. No grade below C- is acceptable in minor courses.

The minor must include:

8 semester hours general physics

16 semester hours advanced physics courses

TOTAL/24 hours

NOTE: MATH 261, 262 required in most of these courses.

Cooperative Programs

Cooperative Dual-degree Program in Engineering

Longwood University has cooperative programs with Old Dominion University, Virginia Polytechnic Institute and State University, and the University of Tennessee, which make it possible for students to earn either a BS or BA degree in physics from Longwood and a BS degree in engineering from the cooperating university.

Longwood has cooperative programs with the University of Virginia and Old Dominion University, which make it possible for students to earn a BS or BA degree in physics from Longwood University and a MS in engineering from the cooperating university. Longwood has a cooperative program with Christopher Newport University, which makes it possible for a students to earn a BS or BA in physics from Longwood and a MS in applied physics from cooperating university.

Pre-Professional Preparation for the Medical Sciences

This curriculum prepares students for admission to accredited schools of medicine, dentistry, veterinary medicine, medical technology, dental hygiene, physical therapy, occupational therapy, and pharmacy. Pre-professional advisors at Longwood will assist the student in selecting the appropriate courses to meet the admission requirements for any health related program.

Completion of the requirements of the Longwood pre-professional curriculum does not guarantee admission to the professional program. Admission to all professional programs is competitive. Admission is based on the stu-

dent's performance during the pre-professional period, personal recommendations, related work experience, and a personal interview. A minimum GPA of 3.0 is usually required for transfer.

Southside Higher Education Consortium

The variety of courses available to Longwood students is increased by a cooperative arrangement with Hampden-Sydney College and with the Southside Higher Education Consortium which includes Longwood, Hampden-Sydney, Southside Virginia Community College, and Saint Paul's College. Under the terms of the arrangement, full-time degree program students in any one of the participating institutions may enroll in certain courses at any other of the participating institutions without added expense.

Students desiring to take advantage of this program must secure approval from their major advisor and from the registrar at their home institution before they are enrolled at the other institution. Students are registered for courses based on enrollment limits at the host institution. Grades for courses taken under the consortium agreement are maintained only at the home institution. Transportation to the host institution must be arranged by each student.

SCIENCE EDUCATION COURSE DESCRIPTIONS (SCED)

SCED 330 (MATH 330). *Integration of Mathematics and Science Principles.* An inquiry into the basic principles involved in the study of mathematics and science. Emphasis on measurement, use of manipulatives, inferences, prediction, data analysis, and hypothesizing. For Liberal Studies Majors only. Students are required to take these courses simultaneously. 1.5 credits each. Corequisite: MATH 330.

SCED 352. *Science for Secondary Teachers.* A comprehensive methods course for teaching sciences in middle or high school. Based on national and state teaching standards. The class meets for a weekly seminar on campus and students also observe each week in a secondary classroom. To be taken in the senior year prior to Student Teaching. 3 credits.

SCED 482. *Directed Teaching in the Secondary School (Science).* This course is required of all students seeking Secondary Science Teaching Licensure. Each student is assigned to work with a qualified cooperating teacher in a selected school setting. The student teacher will follow the schedule of the cooperating teacher for 14 weeks. Prerequisite: Admission to Student Teaching. 11 credits. SP

Department of Communication Studies and Theatre

Ramesh Rao, *Chair*
Cecelia Culler, *Secretary*

Faculty

Pamela Arkin, MFA, *Associate Professor of Theatre*
Jeff Halliday, MA, *Assistant Professor of Communication Studies*
Naomi Johnson, PhD, *Assistant Professor, Communication Studies*
Eric Koger, MFA, *Associate Professor of Theatre*
Gene Muto, MFA, DA, *Professor of Theatre*
Melissa Panzarello-Koger, MFA, *Assistant Professor of Theatre*
Ramesh Rao, PhD, *Professor of Communication Studies*
William Stuart, PhD, *Associate Professor of Communication Studies*
Pamela Tracy, PhD, *Associate Professor of Communication Studies and Director of Longwood Seminar*

COMMUNICATION STUDIES PROGRAM

MISSION STATEMENT

Longwood's Communication Studies program engages students in the study of how human beings communicatively enact their own lives and the world around them. Our students explore how we create meaning, connect with others, enact culture, organize, manage conflict, and exert influence through interaction. Students and faculty work together in a collaborative environment. Our studies reflect a core belief that the integration of theory and practice is vital for academic, professional, and personal success.

Areas of study include public relations, print and broadcast journalism, the influence of popular media, conflict resolution, written and spoken professional communication, organizational communication, interpersonal communication, and intercultural communication. The Communication Studies community respects diverse voices and strives to build critical awareness of the ethical and practical ramifications of our everyday communication choices.

Students are required to select one of the two concentrations that follow:

Concentration in Mass Media

In conjunction with the core curriculum in Communication Studies, the Mass Media Concentration is designed to prepare students to become effective critics and consumers of mass media, and to prepare students for careers in a marketplace increasingly dominated by convergent media. To this end, students learn skills in print reporting, writing and production, broadcast writing, production, and editing, creation of digital communication.

Concentration in Organizational Communication and Public Relations

In conjunction with the core curriculum in Communication Studies, in Organizational Communication and Public Relations Concentration is designed to cultivate in students an understanding of the processes through which human beings organize themselves to accomplish goals. To this end, students explore ways in which organizations communicate with internal and external publics, and the ways in which organizations are enacted at the interpersonal communication level. Students pursuing the Organizational Communication and Public Relations Concentration may choose to enter careers such as Public Relations, Event Planning, and Human Resources.

COMMUNICATION STUDIES MAJOR, BA DEGREE

Mass Media Concentration

A. General Education Requirements/41 credits

The Department requires COMM 400 for the satisfaction of Goal 13.

B. Additional Requirements for the BA Degree/6 credits

C. Major Requirements/44 credits

1. Communication Studies Core: 20 credits

COMM 101	Public Speaking/3 credits
COMM 200	Communication Theory/3 credits
COMM 210	Media & Society/3 credits
COMM 310	Interpersonal Communication/3 credits
COMM 460	Communication Research Methods/3 credits
COMM 461	Senior Seminar/3 credits
COMM 492	Communication Internship/3 credits*
(*One credit from COMM 492 satisfies General Education Goal 15)	

2. Concentration: 24 credits

ART 221	Graphic Design I/3 credits*
COMM 241	Basic Media Reporting and Writing/3 credits
COMM 322	Media Law/3 credits
COMM 325	Media Criticism/3 credits
COMM 341	Advanced Media Reporting and Writing/3 credits
COMM 343	Broadcast Production/3 credits
COMM 410	Computer-Mediated Communication/3 credits
COMM 443	Advanced Broadcast Production/3 credits
(*Pre-requisite for ART 221: ART 120)	

D. General Electives/29 credits

E. Total credits required for BA in Communication Studies/120

(Mass Media Concentration)

COMMUNICATION STUDIES MAJOR, BA DEGREE

Organizational Communication and Public Relations

A. General Education Requirements/41 credits

The Department requires COMM 400 for the satisfaction of Goal 13.

B. Additional Requirements for the BA Degree/6 credits

(Humanities -- 3 credits, and 3 credits in a foreign language at the 202 level or above)

C. Major Requirements/44 credits

1. Communication Studies Core: 20 credits

COMM 101	Public Speaking/3 credits
COMM 200	Communication Theory/3 credits
COMM 210	Media & Society/3 credits
COMM 310	Interpersonal Communication/3 credits
COMM 460	Communication Research Methods/3 credits
COMM 461	Senior Seminar/3 credits
COMM 492	Communication Internship/3 credits*
(One credit from COMM 492 satisfies General Education Goal 15)	

2. Concentration: 24 credits

COMM 280	Fundamentals of Public Relations/3 credits
COMM 350	Persuasion Theory /3 credits
COMM 362	Organizational Communication/3 credits
COMM 364	Applied Organizational Communication /3 credits
COMM 366	Conflict Resolution/3 credits
COMM 420	Intercultural Communication/3 credits
COMM 470	Gender and Communication/3 credits
COMM 481	Crisis Communication/3 credits

D. General Electives/29 credits

E. Total credits required for BA in Communication Studies/120
Organizational Communication and Public Relations Concentration

MINOR COMMUNICATION STUDIES

18 Credit hours including:

COMM 101	Public Speaking/3 credits
COMM 200	Communication Theory/3 credits

And a selection of 12 credit hours from among the following courses:

COMM 210	Media and Society/3 credits
COMM 241	Basic Media Reporting and Writing/3 credits
COMM 280	Fundamentals of Public Relations/3 credits
COMM 310	Interpersonal Communication/3 credits
COMM 322	Media Law/3 credits
COMM 325	Media Criticism/3 credits
COMM 330	Small Group Communication/3 credits
COMM 340	Nonverbal and Visual Communication/3 credits
COMM 341	Advanced Media Reporting and Writing/3 credits
COMM 343	Broadcast Production/3 credits
COMM 350	Persuasion Theory/3 credits
COMM 362	Organizational Communication/3 credits
COMM 364	Applied Organizational Communication/3 credits
COMM 366	Conflict Resolution/3 credits
COMM 382	PR Cases/3 credits
COMM 386	PR Campaigns/3 credits
COMM 410	Computer-Mediated Communication/3 credits
COMM 420	Intercultural Communication/3 credits
COMM 443	Advanced Broadcast Production/3 credits
COMM 460	Communication Research Methods/3 credits
COMM 461	Senior Seminar/3 credits
COMM 470	Gender and Communication/3 credits
COMM 481	Crisis Communication/3 credits
COMM 495	Special Topics in Communication Studies/3 credits

COMMUNICATION STUDIES COURSE DESCRIPTIONS (COMM)

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

ENGL 150, COMM 101 and COMM 200 (with grades of C or better in each) are prerequisite to all 300- and 400-level Communication Studies Courses

COMM 101. *Public Speaking.* Introduces students to the basic concepts of human communication, with special emphasis placed on competencies in public speaking. 3 credits. SP

COMM 200. *Communication Theory.* Introduces students to communication as an academic discipline by exploring how meaning is created and shared in multiple contexts such as: intrapersonal, interpersonal, small group, organizational, public, mass mediated, and intercultural. Fundamental theories from each context are covered. Prerequisite: COMM 101 (with a grade of "C-" or better) 3 credits.

COMM 210. *Media and Society.* This course examines the economic and social organization of mass media, the content of media messages, the relationship between media and the public, the growth of new media technologies, and current dilemmas facing media policy makers. Prerequisite: COMM 101 (with grade of "C" or better). 3 credits.

COMM 241. *Basic Media Reporting and Writing.* Introduction to basic reporting and writing skills for use in print, broadcast, and online media. Includes news and feature reporting and writing, as well as writing for promotional and public relations purposes. Prerequisite: COMM 101 (with grade of "C" or better). 3 credits.

COMM 280. *Fundamentals of Public Relations.* This course is an introduction to public relations principles and concepts. Students are introduced to the history and development of public relations as a profession, to the range of responsibilities and functions that public relations practitioners assume in a variety of organizations, and to the significant issues and trends that influence the practice of public relations. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 292. *Internship in Communication Studies.* A semester-long, on-the-job learning experience designed to apply the principles of communication studies. 1-18 credits.

COMM 295. *Special Topics in Communication Studies.* Selected topics in communication studies. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

COMM 310. *Interpersonal Communication.* This course will examine various communication patterns including nonverbal and intercultural communication. Students will study theories and concepts through text readings, class activities, and lectures. Students will understand that people, even if witnessing similar sights, may have different perspectives. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits. WR

COMM 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in communications studies. 1-18 credits.

COMM 322. *Media Law.* This course examines the impact of law on public communication, with emphasis on ethics and law regarding broadcast, print, and online media. Prerequisite: COMM 101 and 210 (with grades of "C" or better). 3 credits.

COMM 325. *Media Criticism.* A critical examination of the influence of mass media through reading, viewing and discussion to build awareness of the influence of media in personal life and develop media literacy skills. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits. WR

COMM 330. *Small Group Communication.* Examines the complex personal and communication dynamics of small groups. Topics include leadership, influence, conflict, task management, organization, interdependence,

and others. Students actively participate in group projects and meetings to demonstrate successful small group techniques. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 340. *Nonverbal and Visual Communication*. Theory, research, and practice into the realm of intentional and unintentional nonverbal communication. Study of unspoken communication genres includes kinesic, affective, ocular, haptic, paralinguistic, proxemic, environmental, chronemic, and artifactual. Exploration of semiotics and other visual communication areas. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 341. *Advanced Media Reporting and Writing*. Advanced practices of the news gathering process with an emphasis on examining records, interviewing news sources, evaluating credibility of Internet sources and analyzing newsworthiness of information. Students will write news stories for print and broadcast media. Prerequisite: COMM 241 (with grade of "C" or better). 3 credits.

COMM 343. *Broadcast Production*. The purpose of this course is to introduce students to the world of broadcasting, providing both hands-on experience in front and behind the microphone and camera, and a working knowledge of the important theoretical and practical issues related to a broadcasting career. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 350. *Persuasion Theory*. This course is designed to promote the understanding of the fundamental principles and theories of persuasive communication. Theories are considered for application in producing and consuming persuasive discourse. Prerequisite: COMM 101 and 200 (with grade of "C" or better). 3 credits.

COMM 362. *Organization Communication*. Explores the communication processes humans use to organize themselves to accomplish goals. Theoretical approaches to organizing are considered, including classical, systems, cultural, critical, and postmodern approaches. Organizational communication processes such as entry, learning, planning, and evaluation are examined in their relation to common organizational outcomes such as satisfaction, productivity and commitment. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 364. *Applied Organizational Communication*. Development of advanced communication skills with a special focus on business and professional life. Students will learn advanced public speaking skills including business report presentations, persuasive speaking, collaborative meeting management, team presentations, and speech writing. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 366. *Conflict Resolution*. This course introduces students to the origins of the field of conflict and to current communication-oriented perspectives in a wide range of arenas – from intimate relationships to group, inter-group, organizational and negotiation settings. Students will understand the opportunities for conflict management through negotiation, mediation, and arbitration. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 382. *Public Relations Cases*. Provides an in-depth look at a wide variety of public relations challenges and opportunities that face public relations practitioners. Students examine actual case studies to evaluate the context, goals, strategies, and outcomes in each case. Particular attention is given to whether clients and/or their PR practitioners made ethical choices. Prerequisite: COMM 280 (with grade of "C" or better). 3 credits.

COMM 386. *Public Relations Campaigns*. Students learn phases and steps involved in creating a public relations campaign, including research, planning, budgets, scheduling, implementation and evaluation. Special attention is paid to primary research methods. Students plan a campaign for an actual client. Prerequisite: COMM 280 (with grade of "C" or better). 3 credits.

COMM 390. *Directed or Independent Study* Must be approved by the head of the department. Maybe repeated as 391. 1-18 credits.

COMM 392. *Internship in Communication Studies*. A semester-long, on-the-job learning experience designed to apply the principles of communication studies. 1-18 credits.

COMM 400. *Communication Ethics.* This course is a survey designed to provide an understanding of the ethical and philosophical framework of decision-making. We will examine contemporary and classic case studies from all areas of the communication discipline. Ethics are relevant in all communication arenas: interpersonal communication, organizational communication, mass communication, and related fields, and we shall try and understand the practice and relevance of ethical behavior in all these areas. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits. WR Fulfills General Education Goal 13. Communication Studies majors are required to take COMM 400 to fulfill Goal 13 requirements.

COMM 410. *Computer-mediated Communication.* Theory, research, and practical application of new communication technologies. Explores the impact of various communication technologies on individuals and society. Students also are trained in the use of communication technologies in order to complete an applied project. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 420. *Intercultural Communication.* A study of intercultural communication in the classroom and business worlds, defining and identifying the different cultures at work in our society, exploring the problems resulting from poor intercultural communication, and finding ways to improve communication between differing cultures. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits. WR

COMM 443. *Advanced Broadcast Production.* The purpose of this course is to explore editorial issues, aesthetic principles and professional standards and practices of broadcast news, field producing and reporting. Students will learn advanced skills in producing, viewing, listening to, and analyzing videotapes and radio newscasts. Prerequisite: COMM 241 and COMM 343 (with grade of "C" or better in each). 3 credits.

COMM 460. *Communication Research Methods.* Explores communication research processes including philosophical underpinnings, qualitative and quantitative methods, and data analysis. Students learn to become competent researchers and critics of scholarship. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits.

COMM 461. *Senior Seminar.* A capstone course designed to help students prepare for commencement. It is structured as a seminar/tutorial, culminating in the creation of an undergraduate thesis or equivalent project. Prerequisite: COMM 460 (with grade of "C" or better). 3 credits. WR and SP

COMM 470. *Gender and Communication.* Study of advanced communication theories and research focusing on the relationships among gender identity and communication in the following communication contexts: organizations, interpersonal relationships, family, mass media and popular culture, education and health. Prerequisite: COMM 101 and 200 (with grades of "C" or better). 3 credits. WR

COMM 481. *Crisis Communication.* Introduces students to the study of crisis communication. The course addresses key issues including threat assessment, crisis plans, and strategies for handling crises when they occur. Prerequisite: COMM 280 (with a grade of "C" or better). 3 credits.

COMM 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits. Fulfills General Education Goal 15.

COMM 492. *Communication Internship.* Directed practicum of experiential learning in a professional setting. Students perform relevant task to the discipline and profession. An internship contract must be agreed upon by the professional supervisor, faculty advisor, and student. Prerequisite: Completion of 24 credits in Communication Studies with a minimum GPA of 2.5. 3 credits. Fulfills General Educator Goal 15.

COMM 495. *Special Topics in Communication Studies.* Selected topics in communication studies. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: COMM 101 & 200 (with grades of "C" or better). 1-3 credits.

COMM 498. Honors Research in Communication Studies. Students conduct research in communications studies under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

300 and 400 level Communication Studies Electives (Please see the Undergraduate Catalog for descriptions of Communication Studies Electives in other departments.)

THEATRE PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Accredited by the National Association of Schools of Theatre

MISSION STATEMENT

In order to provide a cohesive body of knowledge in the various fields of performance art, the Department of Communication Studies and Theatre at Longwood is committed to excellence in teaching, advancement of knowledge, and cultural enrichment. To this end, the Department provides two programs of study: Traditional Liberal Arts Studies in Theatre and Pre-professional Training for Theatre Practitioners.

Theatre in the Liberal Arts

BACHELOR OF ARTS

VISUAL AND PERFORMING ARTS

Concentration in Theatre

Applied Theatre Generalist

That the study of Theatre is integral to the Liberal Arts is beyond question. Before there were studies in history, language, technology, or psychology, there was theatrical performance. Through song, dance, and mimesis prehistoric peoples sought to explain the relationship between their cultures and the universe. Theatre is one of the most ancient and, therefore, one of the most traditional of studies. Concepts of history and tradition, development of language, human behavior, multiculturalism, psychological development, and even emerging technologies have traditionally been the subjects and themes of dramatic literature and performance from prehistory to today. With the broad array of theatre course offerings at Longwood students have the opportunity to achieve a traditional and holistic view of the world through the study of literature, performance art, and technological development. At the end of their studies, students in the B.A. program will be prepared for graduate study in a wide variety of traditional liberal arts fields and other areas (including law, communication studies, and business) and for careers in education, production, and performance.

Pre-professional Training Program

BACHELOR OF FINE ARTS

VISUAL AND PERFORMING ARTS

Concentration in Theatre

Specialist in Performance

Specialist in Technology and Stage Management

A faculty and staff of theatre historians, theoreticians, and professional artists mentor students who desire pre-professional training in Theatre Arts. The function of these mentors is to provide excellence in teaching and training through a sequence of theory, performance, and technical courses and through a program of main stage and studio theatrical productions. Students may opt for one of three tracks within the BFA. Specialist program: Performance, Technology or Theatre Management. Longwood students are invited into the BFA program through auditions and examination of portfolios and are then evaluated and adjudicated by the faculty at the end of each year. Continuation in the BFA program is competitive, and rigorous professional standards are applied.

DESCRIPTION OF DEGREE TYPES

I. **Bachelor of Arts in Visual and Performing Arts with a Concentration in Theatre** is a traditional liberal arts degree.

There are two tracks in this degree program:

A.) **Applied Theatre**

This specialization is designed for students who want to pursue careers in the field of theatre in education. (An Education Endorsement is required in this track and substitutes for a minor field of study.)

B.) **Generalist**

This specialization is designed for students who want to study theatre (history, literature, theory, criticism, and aesthetics) in its broadest sense. As in any liberal art, the study of theatre provides students with a holistic curriculum and a broad background in thought, critical thinking, writing skills, analysis, and a general knowledge of literature, philosophy, and technology, all of which prepares them with a wide variety experiences and potential. Students who wish to pursue the M.A. or PhD in theatre work closely with their advisor to design a curriculum that combines a solid basis in theatre aesthetics and a strong background in another field, which would likely indicate a minor in an appropriate field, such as English, History, Anthropology, or Philosophy.

II. **Bachelor of Fine Arts in Visual and Performing Arts with a Concentration in Theatre** is a pre-professional degree designed for students who, upon graduation, wish to work in the professional theatre as performers, technicians, or managers or who want to prepare for application to MFA programs in graduate schools.

There are two tracks in this program:

A.) **Performance**

This specialization is designed for students who want to pursue careers as actors in professional theatres and for those who want to prepare for application to MFA programs in graduate schools. Students work closely with the theatre performance faculty, who act as mentors. Performance students are required to audition each semester for each main stage production. This track is selective and competitive; students' work and competencies are reviewed each semester.

B.) **Technology and Stage Management**

This specialization is designed for students who want to pursue careers as stage designers, lighting designers, technical directors, or costumers and for those who want to prepare for application to MFA programs at graduate schools. Technology students work closely with the theatre design faculty and staff, who act as mentors. Students are required to work in all design and technology areas each semester. This track is selective and competitive; students' work and capabilities are reviewed each semester.

GRADUATION REQUIREMENTS

CORE COURSES — REQUIRED OF ALL THEATRE STUDENTS

THEA 113	Acting I/3 credits
THEA 225	Elements of Design/3 credits
THEA 230	Theatre Aesthetics/3 credits
THEA 240	Technical Theatre/3 credits
THEA 320	Directing/3 credits
THEA 330	Theatre History I/3 credits
THEA 331	Theatre History II/3 credits
ENGL 365	Shakespeare/3 credits

THEA 430	Modern Drama/3 credits
THEA 431	American Drama/3 credits
THEA 461	Senior Thesis/3 credits
THEA 492	Internship/3 credits

Upper Division Theatre elective/3 credits
(one credit of THEA 492 satisfies General Education Goal 15)

BA Students take six credits from the following:

THEA 102	Theatre Performance/5 credit
THEA 103	Theatre Production/5 credit

(All students must take at least one credit from each, 102 and 103,
with the remaining 2-5 credits distributed as students wish)

TOTAL CREDITS IN THEATRE (BA)/45

BACHELOR OF ARTS DEGREE

Bachelor of Arts Degree

Visual and Performing Arts, Theatre Concentration

- A. General Education Core Requirements/41 credits
- B. Additional Degree Requirements/6 credits
(Humanities -- 3 credits, and 3 credits in a foreign language at the 202 level or above)
- C. Major Requirements/45 credits
(Theatre Core/42 credits and one upper-division theatre electives/3 credits)
- D. General Electives for BA in Visual and Performing Arts, Theatre Concentration/28 credits
- E. Total credits required for BA in Visual and Performing Arts
Theatre Concentration/120 credits
Applied Theatre:
Theatre Core/36 credits
Upper division theatre electives/6 credits

Generalist:
Theatre Core/36 credits
Upper division theatre electives/6 credits
- F. BACHELOR OF ARTS: Educational Licensure Requirements (Theatre Arts: PK – 12)
(For those who are seeking careers in educational theatre and who seek the Educational Endorsement, see professional education requirements. Those students will also be carefully advised, both in CMTH and in EDUC, to aid in timely matriculation. Student teaching is substituted for Goal 15: THEA 492)

Theatre Core Courses:

THEA 113	Acting I/3 credits
THEA 225	Elements of Design/3 credits
THEA 230	Theatre Aesthetics/3 credits
THEA 240	Technical Theatre/3 credits
THEA 320	Directing/3 credits
THEA 330	Theatre History I/3 credits
THEA 331	Theatre History II/3 credits
ENGL 365	Shakespeare/3 credits

THEA 401	Methods of Teaching Theatre/3 credits
THEA 431	American Drama/3 credits
THEA 461	Senior Thesis/3 credits

BA Students with Education Endorsement take six credits from the following:

THEA 102	Theatre Performance/1-5 credits
THEA 103	Theatre Production/1-5 credits

(All students in this track must take at least one credit from each, 102 and 103, with the remaining 2-5 credits distributed as students wish)

BA Students with Education Endorsement take three credits from the following:

THEA 443	Creative Dramatics for the Classroom/3 credits
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OR

THEA 402	Methods of Teaching Technical Theatre/3 credits
Total 42 credits (BA/Education) in Theatre	

College of Education Requirements:

Teacher Endorsement Requirements (PK – 12)/17 credits

EDUC 245	Human Growth & Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 381	Media Technology/1 credit
EDUC 430	Teaching Reading in the Content Area/2 credits
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management & Systems/3 credits
SPED 489	Survey of Exceptional Children/3 credits

* Students must be admitted to the Teacher Preparation Program before they will be permitted to enroll in and subsequent 300-400 level EDUC course.

Practicum Requirements/18 credits

EDUC 265	Practicum I/3 credits
EDUC 370	Practicum II/3 credits
EDUC 402	Directed Teaching in the Secondary School/11 credits
EDUC 488	Education Seminar/1 credit

Bachelor of Arts Degree

Visual and Performing Arts

Theatre Education

A. General Education Core Requirements/41 credits

B. Additional Degree Requirements/6 credits

(Humanities -- 3 credits, and 3 credits in a foreign language at the 202 level or above.)

C. Major Requirements/42 credits

D. Teaching Endorsement/35 credits

E. Total Credits Required of BA in Visual and Performing Arts,
Educational Licensure Theatre Arts (PK – 12)/124 credits

Bachelor of Fine Arts Degree
Visual and Performing Arts
Theatre Concentration: Specialist in Performance

A. General Education Core Requirements/41 credits

B. Additional Degree Requirements/6 credits

(Humanities – (3 credits) not in the discipline of the major Foreign Language/Social Science (3 credits) students must take one of the following courses: 3 credits at the 202 or above level in a foreign language or HIST 200, 320, 325, 336, 354, 359, 360; GEOG 241, 352; POSC 314, 336, 337, 375, 395, 469.)

C. Major Requirements/63 credits

Theatre Core/36 credits

THEA 113	Acting I/3 credits
THEA 225	Elements of Design/3 credits
THEA 230	Theatre Aesthetics/3 credits
THEA 240	Technical Theatre/3 credits
THEA 320	Directing/3 credits
THEA 330	Theatre History I/3 credits
THEA 331	Theatre History II/3 credits
ENGL 365	Shakespeare/3 credits
THEA 430	Modern Drama/3 credits
THEA 431	American Drama/3 credits
THEA 461	Senior Thesis/3 credits
THEA 492	Internship/3 credits

Upper Division Theatre elective/3 credits

(one credit of THEA 492 satisfies General Education Goal 15)

Specialist in Performance (Additional Theatre Requirements/27 credits):

THEA 214	Stage Makeup for the Actor/3 credits
THEA 215	Voice and Movement I/3 credits
THEA 315	Voice and Movement II/3 credits
THEA 316	Acting II/3 credits
THEA 317	Acting III/3 credits
THEA 339	Fashion History and Décor/3 credits
THEA 413	Acting IV/3 credits
THEA 414	Voice and Movement III/3 credits

BFA students take 3 credits from:

THEA 103 Theatre Production/3 credits

D. General Electives/10 credits

**E. Total Credits required for BFA in Visual and Performing Arts,
Specialist in Performance/120 credits**

Bachelor of Fine Arts Degree
Visual and Performing Arts
Theatre Concentration: Specialist in Technology and Stage Management

A. General Education Core Requirements/41 credits

B. Additional Degree Requirements/6 credits

(Humanities – (3 credits) not in the discipline of the major Foreign Language/Social Science (3 credits) students must take one of the following courses: 3 credits at the 202 or above level in a foreign language or HIST 200, 320, 325, 336, 354, 359, 360; GEOG 241, 352; POSC 314, 336, 337, 375, 395, 469.)

C. Major Requirements/67 credits

Theatre Core/36 credits

THEA 113	Acting I/3 credits
THEA 225	Elements of Design/3 credits
THEA 230	Theatre Aesthetics/3 credits
THEA 240	Technical Theatre/3 credits
THEA 320	Directing/3 credits
THEA 330	Theatre History I/3 credits
THEA 331	Theatre History II/3 credits
ENGL 365	Shakespeare/3 credits
THEA 430	Modern Drama/3 credits
THEA 431	American Drama/3 credits
THEA 461	Senior Thesis/3 credits
THEA 492	Internship/3 credits

(one credit of THEA 492 satisfies General Education Goal 15)

Specialist in Technology and Stage Management (Additional THEA requirements/31 credits):

THEA 241	Drafting for Theatrical Design/3 credits
THEA 275	Stage Management/3 credits
THEA 306	Stage Properties/3 credits
THEA 337	Costume Technology I/3 credits
THEA 338	Costume Technology II/3 credits
THEA 339	Fashion History and Décor/3 credits
THEA 340	Scene Design/3 credits
THEA 342	Lighting Design/3 credits
THEA 344	Scene Painting/3 credits
THEA 345	Costume Design/3 credits

BFA students take one credit:

THEA 102 Theatre Performance/1 credit

D. General Electives/6 credits

**E. Total Credits required for BFA in Visual and Performing Arts,
Specialist in Technology and Stage Management/120 credits**

MINOR IN THEATRE

20 credit hours including:

THEA 102	Theatre Performance/1 credit
THEA 103	Theatre Production/1 credit
THEA 113	Acting I/3 credits
THEA 240	Technical Theatre/3 credits
THEA 330	Theatre History I/3 credits
THEA 331	Theatre History II/3 credits
Theatre ELECTIVES/6 credits	

THEATRE COURSE DESCRIPTIONS (THEA)

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

THEA 101. *Issues in Theatre.* This course is designed for students who are interested in exploring modern society in the context of performing arts. Through a series of readings, videos, and live performances, students will see how theatre is an integral part of human culture. 3 credits. * Fulfills Goal 4.

THEA 102. *Theatre Performance.* This practicum course is open to students who are cast in Longwood Theatre productions. May be repeated for credit four times. Prerequisite: Audition. 1 credit.

THEA 103. *Theatre Production.* This practicum course is open to students who work in technical and management areas of Longwood Theatre productions. May be repeated for credit four times. Prerequisite: Portfolio/permission. 1 credit.

THEA 113. *Acting I.* This studio course is an introduction to the art of performance in the theatre. 3 credits.

THEA 214. *Stage Makeup for the Actor.* Through a combination of lecture and laboratory demonstration, students learn the basic skills of stage makeup application and design. 3 credits.

THEA 215. *Voice and Movement I.* This studio course is an introductory exploration of the physical and vocal skills required for effective performance. Emphasis is placed on developing self-awareness and control of the actor's instrument through relaxation and tension-release, proper breathing techniques, the improvement of resonance, articulation and projection. 3 credits.

THEA 225. *Elements of Theatrical Design.* This is an introductory course in the elements of theatrical design. This course is the foundation of knowledge for all design courses in the theatre including scenic, lighting and costume. It will apply basic principles of visual design and provide the vocabulary necessary to analyze all aspects of theatrical design. 3 credits.

THEA 230. *Theatre Aesthetics.* This is an introductory course in the aesthetics, which is to say the study of the art, of theatre and drama. It is an exploration into the theatrical theories, dramaturgical structures, and types of dramatic literature, which have influenced playwriting and theatrical practice from the ancient Greek to Modern periods. 3 credits. WR

THEA 240. *Technical Theatre.* This course will give the student a basic understanding and appreciation of the technical side of theatre. It will provide a knowledge of the safe and proper way to handle scene shop equipment. 3 credits. SP

THEA 241. *Drafting for Theatrical Design.* This is a lecture-studio course that deals with the fundamentals of theatrical drafting and mechanical drawing for those students who will be taking scene design, scene painting, and/or lighting design. Prerequisite: THEA 240 - minimum grade of C or permission. 3 credits.

THEA 275. *Stage Management*. This lecture-studio course explores the role and responsibilities of the stage manager in academic, community, regional, and professional theatre settings. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 292. *Internship in Theatre*. A semester-long, on-the-job learning experience designed to apply the principles of theatre. 1-18 credits.

THEA 295. *Special Topics in Theatre*. This directed study opportunity geared toward freshmen and sophomores who want to explore a special course of study in Theatre Arts. 1-3 credits.

THEA 306. *Stage Properties*. This course is for students who will learn how to design and create stage properties. Course content will include hands-on projects, research, resources, and discussion of period styles. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 311, 312. *Studies Abroad*. This course is intended for transfer of credit earned abroad in the study of theatre. Prerequisite: Permission. 1-18 credits.

THEA 315. *Voice and Movement II*. This studio course is a continued exploration of the physical and vocal skills required for effective stage performance. Emphasis is placed on the development of the actor's instrument through the study of period movement and the use of heightened language and verse. Classes are a combination of lecture, demonstration, and experiential exercises. Content is directed toward the specific needs of the actors. Prerequisite: THEA 215 - minimum grade of C. 3 credits.

THEA 316. *Acting II*. This studio course is designed to develop fundamental acting skills through classroom exercises, scene study, and character analysis. Prerequisite: THEA 113 - minimum grade of C. 3 credits. SP

THEA 317. *Acting III*. A practicum course in acting designed to further develop the actor's analytical, vocal, and physical skills. Emphasis will be placed on exploring advanced performance concepts in a variety of dramatic styles. Prerequisite: THEA 316 - minimum grade of C. 3 credits.

THEA 320. *Directing*. This course introduces the student to the tools and techniques used by the interpretative artist in the production of a play. Training involves workshop exercises and scene studies. Prerequisite: THEA 316 - minimum grade of C. 3 credits. WR

THEA 330. *History of Theatre I*. This course is a study of the dramatic literature and the history of stage practices during the time of the Ancient Greeks to the time of Shakespeare. Prerequisite: ENGL 150 - minimum grade of C. 3 credits. WR

THEA 331. *History of Theatre II*. This course is a study of the dramatic literature and the history of stage practices from the time of the English Restoration to the Modern Period. Prerequisite: ENGL 150 - minimum grade of C. 3 credits. WR

THEA 337. *Costume Technology I*. This is a hands-on course in costume technology for the stage. Topics included in the course are basic sewing, identification and use of costume shop tools and equipment, safety, and wardrobing. Work on the department productions is required. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 338. *Costume Technology II*. This is an advanced extension of THEA 346, with a particular emphasis on costume crafts. Work on department productions is required. Prerequisite: THEA 240, THEA 337 - minimum grade of C. 3 credits.

THEA 339. *Fashion History and Décor*. This course is a survey of clothing and ornament from ancient time to present day. Historical events, social influences, art, music, and home furnishings of each period will also be addressed. 3 credits.

THEA 340. *Scene Design.* This is a lecture/studio course in which students analyze scripts for scenic needs and create scenic designs. Work on department productions required. Prerequisite: THEA 240 - minimum grade of C or permission. 3 credits.

THEA 342. *Lighting Design I.* A lecture/studio course dealing with the basic skills necessary to the beginning lighting designer. Work on department productions required. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 344. *Theory and Practice of Scene Painting.* This is a lecture/studio course dealing with the fundamentals of scene painting, color theory, and their practical application. Work on department productions required. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 345. *Costume Design.* This is a course in costume design for the stage. Topics include script analysis, research, sketching and rendering, basic elements of design, costume history, and production. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

THEA 399. *Theatre Management.* This course is designed to acquaint students with the problems and challenges facing producers and administrators who work in not-for-profit organizations, such as LORT theatres, dance companies and symphonies. Students explore concepts and procedures for staffing, fundraising, financing, marketing, planning, scheduling, and front-of-house management. Prerequisites: ENGL 150; ACCT, 240, 242; CIMS 170 - minimum grades of C. 3 credits.

THEA 401. *Methods of Teaching Theatre.* This is a concentrated study of contemporary practices, theory, and methods of teaching theatre in the secondary school. Emphasis will be placed on curriculum development, creating lesson plans, and formulating effective assessment guidelines. This is a reading intensive course. Prerequisite: Theatre Core - minimum grade of C or permission of instructor. 3 credits.

THEA 402. *Teaching Technical Theatre.* A concentrated study of contemporary practices, theory and methods of teaching technical theatre in the secondary school. Emphasis will be placed on scenic, lighting and technical design. Prerequisite: THEA 240 - minimum grade of C. 3 credits.

THEA 408. *Directing for the Teacher.* In this course students are introduced to the methods, techniques, and vocabulary of the educational director. Students will learn how to use space, create stage pictures, learn stage composition, and learn how to break down and interpret the text. In addition, students will develop skills in planning, rehearsal procedures, and working with young adults. Prerequisite: THEA 250 - minimum grade of C. 3 credits.

THEA 413. *Acting IV.* This course is an advanced practicum for actors, designed to address individual needs and interests. Emphasis is placed on preparing for professional auditions. Prerequisite: Permission of instructor; GPA 2.5 minimum. 3 credits.

THEA 414. *Voice and Movement III.* This course is a continued exploration of the physical and vocal skills required for effective stage performance. Emphasis is placed on the development of the actor's instrument through the study of mask, mime, and period movement. Classes are a combination of lecture, demonstration, and experiential exercises. This study will include the use of the International Phonetic Alphabet. Content of the course will be directed toward the specific needs of the actors. Prerequisite: THEA 315 - minimum grade of C. 3 credits. SP

THEA 430. *Modern Drama.* In this course students will explore a catalog of traditional and avant-garde plays of the modern period and are required to read a significant body of modern dramatic criticism. Texts will be analyzed in the context of social and political movements, genre, and style. Prerequisite: ENGL 150 - minimum grade of C. 3 credits. WR

THEA 431. *American Drama.* This course is a study of the major developments of American theatre and drama, essentially from the 1920s to today. Major playwrights, stylistic developments, and the history of staging practices during the modern period are studied. Also explored are areas such as the American musical theatre, Broadway, off-Broadway and regional theatre movements. Prerequisite: ENGL 150 - minimum grade of C. 3 credits. WR

THEA 432. *Elizabethan and Jacobean Theatre.* This course is a practical study of selected works by Shakespeare and his contemporaries and involves the interpretation of text and the gathering of research sources. Prerequisite: ENGL 150 - minimum grade of C. 3 credits. WR

THEA 433. *Creative Dramatics for the Classroom.* This studio course is a practical exploration of resources, technologies, and application of creative dramatic activities for the classroom.

THEA 447. *Design and Technology.* This is an advanced studies course in the technical aspects of theatrical production. Prerequisites: THEA 240 and permission of instructor. 3 credits.

THEA 448. *Integrated Arts/Theatre.* A study of the value and practical application of integrating the arts across all content areas of the elementary curriculum with a focus on theatre arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions, and images through the use of creative dramatics, music and visual arts. Prerequisite: One course from ART 125, 160; MUSC 224, 225. 3 credits.

THEA 461. *Senior Seminar.* This is a capstone course, requiring a final creative/theoretical thesis, portfolio, resume, and exit exam in Theatre History and Literature, and the creation of personal Web site. Prerequisite: Senior standing; GPA minimum 2.5. 3 credits. WR and SP

THEA 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits. Fulfills General Education Goal 15.

THEA 492. *Internship in Theatre.* A semester-long, on-the-job learning experience designed to apply the principles of theatre. 1-18 credits. Fulfills General Education Goal 15.

THEA 495. *Special Topics in Theatre.* In this course, topics will vary from semester to semester, according to the expertise of the guest artist. Specific descriptions are available from academic advisors at the time of each offering. The course may be repeated for credit when topics change. Prerequisites: Permission and standing as a junior or senior. 1-3 credits.

THEA 498. *Honors Research in Theatre.* Students conduct research in theatre under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

Department of English and Modern Languages

Rhonda Brock-Servais, *Chair*

Lisa Seamster, *Secretary*

ENGLISH PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

The English program of the Department of English and Modern Languages offers courses leading to the BA and MA. degrees.

Every attempt has been made to state the major and minor requirements as clearly as possible. However, we recommend that every student majoring or minoring in the program maintain close communication with the academic advisor assigned by the department in order to plan a program suited to the student's needs.

NOTE: The department does not guarantee that all courses listed will be offered every year.

Assessment

The Department requires student outcomes assessment testing prior to graduation.

Faculty

Rhonda Brock-Servais, PhD, *Associate Professor of English*

Don Butler, MA, *Assistant Professor of English*

Mary Carroll-Hackett, MFA, *Assistant Professor of English*

Craig A. Challenger, PhD, *Professor of English*

Steven Faulkner, PhD, *Assistant Professor of English*

Lara Golden, MA, *Lecturer in English*

Letitia Guran, PhD, *Lecturer in English*

Chene Heady, PhD, *Assistant Professor of English*

Brett Hursey, PhD, *Assistant Professor of English*

Heather Lettner-Rust, MA, *Lecturer in English*

Michael C. Lund, PhD, *Professor of English*

Robert L. Lynch, Jr., PhD, *Associate Professor of English*

Chris McGee, PhD, *Assistant Professor of English*

John Miller, PhD, *Assistant Professor of English*

Jennifer Miskec, PhD, *Assistant Professor of English*

Matthew Prickett, MA, *Lecturer in English*

Karen Rogers, PhD, *Lecturer in English*

Robin Smith, PhD, *Assistant Professor of English*

Shawn Smith, PhD, *Associate Professor of English*

Gena Southall, EdD, *Assistant Professor of English*

Susan Stinson, MFA, *Lecturer in English*

Derek Taylor, PhD, *Associate Professor of English*

Larissa Tracy, PhD, *Assistant Professor of English*

Gordon Van Ness, PhD, *Professor of English*

Andrea Verschaeve, MA, *Lecturer in English*

Amanda Walton, MA, *Lecturer in English*

Kristen D. Welch, PhD, *Assistant Professor of English*

The major in English requires a minimum of 39 hours of coursework in the discipline. Graduates from the program enter a variety of careers requiring skill in communication; research; and the analysis or production of texts, including teaching, journalism, law, publishing, creative writing, technical writing, and business management. The relatively low number of required hours for the major gives students flexibility either to develop further their background in writing and literature further or to add expertise in a related field. The concentration in Creative Writing requires an additional 25 hours of coursework and a portfolio; the concentration in Rhetoric and Professional Writing requires an additional 24 hours of coursework.

Majors seeking licensure for teaching secondary English should add to the major requirements ENGL 350, 381, 382, 479, and 480. In addition, they must be formally admitted to the Education Department and should therefore complete EDUC 245 and EDUC 260 and pass the Praxis 1 examination preferably during their freshman year. They also need to join a professional organization, S-LATE, (Students of Longwood Association of Teachers of English). Before being admitted for student teaching, teaching candidates should complete the required education courses and all required major courses and maintain a minimum of 2.5 GPA cumulatively and in the major. Finally, students must complete before graduation the Praxis 2 examination, the VCLA (Virginia Communication and Literacy Assessment), and student teaching.

In addition to the English major, the concentrations in Rhetoric and Professional Writing and Creative Writing, and secondary licensure, the department offers a minor in English, a minor in Rhetoric and Professional Writing, a minor in Children's Literature and a minor in Creative Writing.

ENGLISH MAJOR, BA DEGREE

A. General Education Core Requirements/41 credits

See General Education Requirements

Goal 3 cannot be satisfied with ENGL 202 or 203.

Goal 4 cannot be satisfied with ENGL 315-318

The Department requires PHIL 308, 315, or 316 for the satisfaction of Goal 13.

B. Additional Degree Requirements/6 credits

See Additional Degree Requirements for Bachelor of Arts

C. Major Requirements/39 credits (plus 1 credit included in General Education)

ENGL 209	Introduction to Literary Analysis/3 credits
ENGL 325	British Literature: Medieval to Renaissance/3 credits
ENGL 326	British Literature: Restoration to Romanticism/3 credits
ENGL 327	British Literature: Victorian to Contemporary/3 credits
ENGL 335	American Literature: Colonial to Realism/3 credits
ENGL 336	American Literature: Naturalism to Contemporary/3 credits
ENGL 365	Shakespeare/3 credits

One 300- or 400-level course in a literature of diversity/3 credits

Literature of diversity—a literature that has been historically marginalized or underrepresented, such as ethnic literature, queer studies, postcolonial literature, or women's literature (ENGL 362, 441, 432, 443, and other 300- and 400-level courses that fall into the categories described above, subject to the approval of the department chair)

Three 400-level courses (ENGL 411-452, 470, 490, 495, 498)/9 credits

ENGL 461 Literary Criticism: Senior Seminar/3 credits

Three elective credits. May be satisfied with any 300-400 level English course/3 credits

Note: Students in the Creative Writing concentration should choose from the following to satisfy these three elective credits: ENGL 350 Linguistics/3 credits or ENGL 382 Grammar: Theory and Practice/3 credits

Additional Note: Students in the Creative Writing concentration who also desire secondary licensure should contact the English Education director at the beginning of their program for additional requirements and help scheduling credits.

A minimum of one hour from ONE of the following:

(satisfies General Education Goal 15)

EDUC 370	Practicum I /1 credit
ENGL 482	Directed Teaching in the Secondary Classroom/ 1 credit
ENGL 490	Independent Study/ 1 credit
ENGL 492	Internship/ 1 credit
ENGL 498	Honors Research in English/ 1 credit

D. Secondary Teaching Licensure, grades 6-12/50 credits (plus 3 credits included in General Education)

Additional requirements for English:

ENGL 201	World Literature/3 credits (will satisfy General Education Goal 3)
ENGL 350	Linguistics/3 credits
ENGL 381	Literature for Young Adults/3 credits
ENGL 382	Grammar: Theory and Practice/3 credits
ENGL 479	Writing: Theory and Practice for the Middle, Secondary, and College Classroom/ 3 credits
ENGL 480	The Teaching of English/4 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 380	Classroom Assessment/2 credits*
EDUC 381	Media and Technology/1 credit
EDUC 430	Teaching Reading in the Content Area/2 credits
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management and Systems/3 credits
SPED 489	Survey of Exceptional Children/3 credits

* Students must be admitted to the Teacher Preparation program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

For endorsements to teach journalism, theatre, economics, geography, history or political science, or ESL, see these fields.

Practica:

Take in First Summer School Session at end of sophomore or junior year:

EDUC 370 Practicum II (middle school or secondary level)/3 credits

Take in First Semester of Senior Year in conjunction with ENGL 480:

EDUC 473 Inquiry into Classroom Community/3 credits

Professional Semester:

ENGL 482 Directed Teaching in the Secondary Classroom/11 credits

EDUC 488 Education Seminar/1 credit

E. General Electives for BA in English without secondary teaching licensure/34 credits

F. Creative Writing Concentration Requirements/25 credit hours and a senior portfolio

Required Professional Courses for all Creative Writing tracks/4 credits

Required: ENGL 485 Practical Issues for the Working Writer/1 credit

Choose one of the following:

ENGL 479	Writing: Theory and Practice for the Middle, Secondary, and College Classroom/3 credits
ENGL 470	Professional Writing/3 credits

Literature Core Requirements: 6 credits

Choose two courses from the following:

ENGL 356	The Art of Film I/3 credits
ENGL 357	The Art of Film II/3 credits
ENGL 358	Women and Film/3 credits
ENGL 360	Genre Studies/3 credits
ENGL 361	Literature of Places and Spaces/3 credits
ENGL 362	Literature of Diversity/3 credits
ENGL 380	Children's Literature/3 credits
ENGL 381	Literature for Young Adults/3 credits
ENGL 411	Epic/3 credits
ENGL 412	Poetry/3 credits
ENGL 413	The Novel/3 credits
ENGL 414	The Short Story/3 credits
ENGL 415	Drama/3 credits
ENGL 421, 422	Major Figures in Fiction/3 credits
ENGL 423, 424	Major Figures in Poetry/3 credits
ENGL 425	Shakespeare/3 credits
ENGL 431	Arthurian Literature/3 credits
ENGL 432	Women and Literature/3 credits
ENGL 442	Regional Literature/3 credits
ENGL 443	Postcolonial Literature/3 credits
ENGL 444	Literature and Culture/3 credits
ENGL 445	Studies in Children's Literature/3 credits
ENGL 451	Continental Literature I/3 credits
ENGL 452	Continental Literature II/3 credits
ENGL 495	Special Topics/3 credits

Writing Core Requirements (5 workshop courses)/15 credit hours

NOTES:

All writing core courses must be workshop courses. One introductory course must be in the primary genre; at least two additional introductory workshops should be in disparate genres, e.g. fiction writers should take a non-prose course, preferably poetry or dramatic writing, rather than creative nonfiction.

Prerequisite: The introductory workshop in a specific genre must be completed for entrance into the advanced level workshop.

One advanced workshop outside the student's primary genre is required.

Choose from the following tracks:

The flexible six credits required after completion of core nine must be outside the student's primary genre, e.g., prose writers must take poetry and drama; poets must take prose and drama.

Poetry Track

Required Core Courses: (9 credit hours)

ENGL 317 Writing Poetry/3 credits

ENGL 477 Advanced Poetry Writing (will be repeated once for credit)/6 credits

Choose from the following, including at least one advanced workshop (6 credits):

ENGL 316 Writing Fiction/3 credits

ENGL 318 Writing Non-Fiction/3 credits

ENGL 315 Introduction to Dramatic Writing/3 credits

ENGL 475 Advanced Dramatic Writing/3 credits

ENGL 476 Advanced Fiction Writing/3 credits

ENGL 478 Advanced Creative Nonfiction Writing/3 credits

Fiction Track

Required Core Courses: (9 credit hours)

ENGL 316 Writing Fiction/3 credits

ENGL 476 Advanced Fiction Writing (will be repeated once for credit)/6 credits

Choose from the following, including at least one advanced workshop (6 credits):

ENGL 315 Introduction to Dramatic Writing/3 credits

ENGL 317 Writing Poetry/3 credits

ENGL 318 Writing Non-Fiction/3 credits

ENGL 475 Advanced Dramatic Writing/3 credits

ENGL 477 Advanced Poetry Writing/3 credits

ENGL 478 Advanced Creative Nonfiction Writing/3 credits

Creative Nonfiction Track

Required Core Courses: (9 credit hours)

ENGL 318 Writing Non-Fiction/3 credits

ENGL 478 Advanced Creative Nonfiction Writing
(will be repeated once for credit)/6 credits

Choose from the following, including at least one advanced workshop (6 credits):

ENGL 315 Introduction to Dramatic Writing/3 credits

ENGL 316 Writing Fiction/3 credits

ENGL 317 Writing Poetry/3 credits

ENGL 475 Advanced Dramatic Writing/3 credits

ENGL 476 Advanced Fiction Writing/3 credits

ENGL 477 Advanced Poetry Writing/3 credits

Dramatic Writing Track

Required Core Courses: (9 credit hours)

ENGL 315 Introduction to Dramatic Writing/3 credits

ENGL 475 Advanced Dramatic Writing (will be repeated once for credit)/6 credits

Choose from the following, including at least one advanced workshop (6 credits):

ENGL 316 Writing Fiction/3 credits

ENGL 317 Writing Poetry/3 credits

ENGL 318 Writing Non-Fiction/3 credits

ENGL 476 Advanced Fiction Writing/3 credits

ENGL 477 Advanced Poetry Writing/3 credits

ENGL 478 Advanced Creative Nonfiction Writing/3 credits

Concentration Portfolio:

Students must submit a final portfolio before official completion of the concentration will be granted. Specific requirements for the portfolio are as follows:

Portfolio Contents:

A. Examples of the student’s beginning body of work from workshop courses: two in primary genre, one in another genre. One piece from primary genre should include drafts, illustrating process and revision practices.

B. A personal narrative examining their own “writing and reading life.”

Portfolio Length Requirements:

Poetry—20 pages; Prose—30 pages; Combination of Poetry and Prose—25 pages; Play or Screenplay—40 pages; Combination of Drama and Poetry—30 pages; Combination of Drama and Prose—40 pages

Portfolio Narrative Requirements:

Five double-spaced pages addressing (1) how their reading life led them to writing; (2) writers the student considers to have had an impact on their own work and how, (3) elements of their writing that have improved through their reading and writing, including specific craft examples; (4) elements of their writing that provide the most challenge and how they go about revising to address these elements, and (5) what, if any, plans they have to continue their writing life.

Portfolio completion:

Student will submit three copies of a completed portfolio to the Director of Creative Writing, who will then pass copies on to be read and approved by a minimum of three departmental faculty members. Two of these readers will be assigned members of the Creative Writing faculty, while the third—chosen by the student—may be from any concentration in the department. With signatures from at least two of the three readers, the portfolio will be considered approved and the concentration completed.

G. Rhetoric and Professional Writing Concentration Requirements/24 credits

ENGL 301	Rhetorical Criticism/3 credits
ENGL 302	History of Rhetoric/3 credits
ENGL 303	Visual Rhetoric and Document Design/3 credits
ENGL 305	Advanced topics in Rhetoric and Professional Writing/3 credits
ENGL 318	Creative Writing Non-Fiction/3 credits
ENGL 319	Technical Writing/3 credits
ENGL 470	Professional Writing Skills/3 credits
ENGL 492	Internship in Rhetoric/Professional Writing/3 credits

H. Total Credits Required for BA in English/120

Total Credits Required for BA in English/Creative Writing Concentration/120

Total Credits Required for BA in English with Secondary Teaching Endorsement/136

Total Credits Required for BA in English/Rhetoric and Professional Writing Concentration/120

MINORS

Minor in English/18 credits

ENGL 209 Introduction to Literary Analysis/3 credits

Choose one of the following:

ENGL 325 British Literature: Medieval to Renaissance/3 credits
ENGL 326 British Literature: Restoration to Romanticism/3 credits
ENGL 335 American Literature: Colonial to Realism/3 credits

Choose one of the following:

ENGL 327 British Literature: Victorian to Contemporary/3 credits
ENGL 336 American Literature: Naturalism to Contemporary/3 credits

One 400-level course/3 credits

English electives, 200-level* and above/9 credits

* Note: ENGL 201, 202, 203, and 400 are designed to fulfill General Education Goals. These courses may not be used as English electives for the English minor or to fulfill degree requirements for Humanities courses.

Minor in Rhetoric and Professional Writing/18 credits

ENGL 303 Visual Rhetoric and Document Design/3 credits
ENGL 319 Technical Writing/3 credits
ENGL 470 Professional Writing Skills/3 credits

Rhetoric and Professional Writing electives/9credits must be selected from the following:

ENGL 301 Rhetorical Criticism/3 credits
ENGL 302 History of Rhetoric/3 credits
ENGL 305 Advanced topics in Rhetoric and Professional Writing/3 credits
ENGL 318 Creative Writing Non-Fiction/3 credits
ENGL 382 Grammar: Theory and Practice/3 credits
ENGL 478 Advanced Creative Writing Non-Fiction/3 credits
ENGL 492 Internship in Professional Writing/3 credits

TOTAL 18 credits

Minor in Creative Writing/22 credits and a minor portfolio

Require Course/3 credits

Requirement

ENGL 209 Introduction to Literary Analysis/3 credits

Literature Core Requirements

ENGL 327 British Literature: Victorian to Contemporary/3 credits
ENGL 336 American Literature: Naturalism to Contemporary/3 credits

Literature elective/ 3 credits must be selected from the following:

ENGL 356 The Art of Film I/3 credits
ENGL 357 The Art of Film II/3 credits
ENGL 358 Women and Film/3 credits
ENGL 360 Genre Studies/3 credits
ENGL 361 Literature of Places and Spaces/3 credits
ENGL 362 Literature of Diversity/3 credits
ENGL 380 Children's Literature/3 credits
ENGL 412 Poetry/3 credits
ENGL 414 The Short Story/3 credits
ENGL 415 Drama/3 credits

ENGL 431	Women and Literature/3 credits
ENGL 442	Regional Literature/3 credits
ENGL 443	Postcolonial Literature/3 credits
ENGL 444	Literature and Culture/3 credits

Writing Core Requirements/9 credits

6 credit hours (2 courses) in introductory level workshops

3 credit hours (1 course) in advanced level workshop

Required Course for all Tracks/1 credit

ENGL 485 Practical Issues for the Working Writer/1 credit

Note: All writing core courses must be workshop courses. One introductory course must be in the primary genre; the additional introductory workshop should be in a disparate genre, e.g. fiction writers should take a non-prose course—preferably poetry or dramatic writing, rather than creative nonfiction.

Choose from the following tracks:

Poetry Track

Required Core Courses:

ENGL 317	Writing Poetry/3 credits
ENGL 477	Advanced Poetry Writing/3 credits

Choose one of the following:

ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 316	Writing Fiction/3 credits
ENGL 318	Writing Non-Fiction/3 credits

Fiction Track

Required Core Courses:

ENGL 316	Writing Fiction/3 credits
ENGL 476	Advanced Fiction Writing/ 3 credits

Choose one of the following:

ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 317	Writing Poetry/3 credits

Creative Nonfiction Track

Required Core Courses:

ENGL 318	Writing Non-Fiction/3 credits
ENGL 478	Advanced Creative Nonfiction Writing/3 credits

Choose one of the following:

ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 317	Writing Poetry/3 credits

Dramatic Writing Track

Required Core Courses:

ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 475	Advanced Dramatic Writing/3 credits

Choose one of the following:

ENGL 316	Writing Fiction
ENGL 317	Writing Poetry
ENGL 318	Writing Non-Fiction

Required Course for all Tracks:

ENGL 485 Practical Issues for the Working Writer/1 credit

Minor Portfolio: Students must submit a final portfolio before official completion of the minor will be granted. Specific requirements for the portfolio are as follows:

Portfolio Contents:

- A. Examples of the student's beginning body of work from workshop courses: two in primary genre, one in another genre. One piece from primary genre should include drafts, illustrating process and revision practices.
- B. A personal narrative examining their own "writing and reading life."

Portfolio Length Requirements:

Poetry—10 pages; Prose—25 pages; Combination of Poetry and Prose—20 pages; Play or Screenplay—30 pages; Combination of Poetry and Drama—20 pages; Combination of Prose and Drama—25 pages

Portfolio Narrative Requirements:

Three double-spaced pages addressing (1) writers the student considers to have impacted their work, (2) elements of their writing that have improved over course of study, (3) elements of their writing that provide the most challenge and how they go about revising to address these elements, and (4) what, if any, plans they have to continue their writing.

Portfolio completion: Student will submit three copies of a completed portfolio to the Director of Creative Writing, who will then pass copies on to be read and approved by a minimum of three departmental faculty members. Two of these readers will be assigned members of the Creative Writing faculty, while the third—chosen by the student—may be from any concentration in the department. With signatures from at least two of the three readers, the portfolio will be considered approved and the minor completed.

Minor in Children's Literature/18 credits.

Requirements:

ENGL 209	Introduction to Literary Analysis/3 credits
ENGL 380	Children's Literature/3credits
ENGL 381	Literature for Young Adults/3 credits
ENGL 383	History of Literature for Young Readers/3 credits
ENGL 384	Diversity in Literature for Young Readers/3 credits

Choose one of the following:

ENGL 325	British Literature: Medieval to Renaissance/3 credits
ENGL 326	British Literature: Restoration to Romanticism/3 credits
ENGL 327	British Literature: Victorian to Contemporary/3 credits
ENGL 335	American Literature: Colonial to Realism/3 credits
ENGL 336	American Literature: Naturalism to Contemporary/3 credits
ENGL 445	Studies in Children's Literature/3 credits

Or another 300- or 400-level literature course that contains content in children's and/or young adult literature, subject to the approval of the chair.

TOTAL 18 credits.

ENGLISH COURSE DESCRIPTIONS

Note: ENGL 150, which satisfies Goal 2 of the General Education requirements, is prerequisite to all other English courses.

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Course SP

ENGL 150. *Writing and Research.* Writing and reading for a variety of academic purposes including in-depth research. Oral presentation required. Prerequisite to all other English courses. 3 credits. Fulfills General Education Goal 2.

ENGL 201. *World Literature.* A theme-centered study of selected movements and traditions (exclusive of United States and British literature) by major world writers such as Homer, the author of *Gilgamesh*, Murasaki, Li Po, Cervantes, Molière, Goethe, Tolstoy, Garcia Marquez, Soyinka, Mahfouz, Rushdie, and Duras. **May not be used to satisfy the Humanities requirement for the BA, BM, or BFA degree.** Prerequisite: ENGL 150. 3 credits.* Fulfills General Education Goal 2.

ENGL 202. *British Literature.* A theme-centered study of significant movements and traditions in fiction and poetry by major British authors such as the author of *Beowulf*, Chaucer, Shakespeare, Milton, Wordsworth, Keats, Austen, George Eliot, Tennyson, and Yeats. **May not be used to satisfy the Humanities requirement for the BA, BM, or BFA.** Prerequisite: ENGL 150. 3 credits.* Fulfills General Education Goal 3.

ENGL 203. *American Literature.* A theme-centered study of significant movements and traditions in fiction and poetry by major United States authors such as Bradstreet, Emerson, Melville, Douglass, Dickinson, Hemingway, Faulkner, Hughes, Eliot, and Morrison. **May not be used to satisfy the Humanities requirement for the BA, BM, or BFA.** Prerequisite: ENGL 150. 3 credits.* Fulfills General Education Goal 3.

ENGL 209. *Introduction to Literary Analysis.* Sustained study of reading and writing skills necessary to the student of literature, including close reading, the ability to conduct research, and an overview of major critical approaches. Emphasis on a variety of poetic, dramatic, and fictional forms from a range of cultures and historical eras. Corequisite or prerequisite: completion of General Education Goal 3 or permission of instructor. 3 credits.

ENGL 292. *Internship in English.* A semester-long, on-the-job learning experience designed to apply the principles of English. 1-18 credits.

ENGL 295. *Special Topics.* Selected topics in English. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

ENGL 301. *Rhetorical Criticism.* Fundamental principles of rhetorical study. Emphases on approaches to analyzing non-literary texts using various rhetorical theoretical approaches. Prerequisite: ENGL 150. 3 credits. WR

ENGL 302. *History of Rhetoric.* A history of the major figures, texts, and rhetorical movements from Gorgias to the 20th century. Prerequisite: ENGL 150. 3 credits. WR

ENGL 303. *Visual Rhetoric and Document Design.* Examination of the theories, research, and practices of visual rhetoric and document design. Emphasis on ways in which images and other visual methods of communication influence audiences. Prerequisite: Goal 2. 3 credits. WR

ENGL 305. *Advanced Topics in Rhetoric and Professional Writing.* Advanced study featuring a particular aspect of rhetoric and professional and/or technical writing, such as a time period, genre, or theoretical perspective. May be repeated for credit if topic changes. Prerequisite: Goal 2. 3 credits. WR

ENGL 311, 312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad. 1-16 credits per semester.

Writing Courses

ENGL 315. *Introduction to Dramatic Writing*. Writing the screenplay, play, and other forms of drama. Prerequisite: ENGL 150. 3 credits. * Fulfills Goal 4.

ENGL 316. *Writing Fiction*. Writing the short story and other forms of fiction. Prerequisite: ENGL 150. 3 credits. * Fulfills Goal 4.

ENGL 317. *Writing Poetry*. Traditional and contemporary techniques in poetry. Prerequisite: ENGL 150. 3 credits. * Fulfills Goal 4.

ENGL 318. *Writing Non-Fiction*. Narrative nonfiction, article and feature writing, and other forms of literary journalism. Prerequisite: ENGL 150. 3 credits. WR Fulfills Goal 4.

ENGL 319. *Technical Writing*. A study and application of writing techniques for the dissemination of scientific and technical information. Prerequisite: ENGL 150. 3 credits. WR

Courses in the Major Literary Periods

Note: These courses are designed primarily for English majors and minors.

ENGL 325. *British Literature: Medieval to Renaissance*. Medieval and Renaissance literature (the beginnings to 1660), with an emphasis on such major works and writers as Beowulf, Gawain and the Green Knight, Chaucer, Malory, Wyatt, Sydney, Marlowe, Spenser, Jonson, Donne, Marvell, and Milton. Prerequisite: completion of Goal 3. Corequisite or prerequisite: ENGL 209 or by permission of the instructor. 3 credits.

ENGL 326. *British Literature: Restoration to Romanticism*. Restoration, Enlightenment, and Romantic literature (1660 to 1832), with an emphasis on such major authors as Dryden, Behn, Swift, Pope, Defoe, Richardson, Fielding, Johnson, Wollstonecraft, Blake, Wordsworth, Charlotte Smith, Coleridge, Byron, Percy and Mary Shelley, Keats, and Austen. Corequisite or prerequisite: ENGL 209 or by permission of the instructor. 3 credits.

ENGL 327. *British Literature: Victorian to Contemporary*. Victorian, modern, and postmodern literature (1832 to the present), with an emphasis on such major authors as Dickens, Tennyson, Browning, George Eliot, Wilde, Shaw, Hardy, Conrad, Yeats, Woolf, Joyce, Lawrence, T. S. Eliot, Beckett, Stevie Smith, Heaney, Barnes, and Rushdie. Prerequisite: completion of Goal 3. Corequisite or prerequisite: ENGL 209 or by permission of the instructor. 3 credits.

ENGL 335. *American Literature: Colonial to Realism*. Neoclassical and Romantic literature and the age of Realism (the beginnings through 1890), with an emphasis on such major authors as Bradstreet, Franklin, Emerson, Hawthorne, Melville, Stowe, Douglass, Whitman, Dickinson, Twain, and James. Prerequisite: completion of Goal 3. Corequisite or prerequisite: ENGL 209 or by permission of the instructor. 3 credits

ENGL 336. *American Literature: Naturalism to Contemporary*. The age of naturalism, and modern and postmodern literature (1890 to the present), with an emphasis on such major authors Dreiser, Crane, Chopin, Chesnutt, Wharton, Eliot, Frost, Cather, Hemingway, Hughes, Faulkner, Wright, Rich, Morrison, O'Neill, Wilson, Albee, Cisneros, and Harjo. Prerequisite: completion of Goal 3. Corequisite or prerequisite: ENGL 209 or by permission of the instructor. 3 credits.

Other 300-level courses

ENGL 350. *Linguistics and Language Learning*. A study of the historical and current trends in first and second language acquisition, sociolinguistics, and English as a Second Language through a Global English perspective. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 356. *The Art of Film I*. Introduction to theory and techniques of the motion picture through screenings of classic and contemporary feature films. Prerequisite: ENGL 150. 3 credits.

ENGL 357. *The Art of Film II*. A study of major directors of film genres. Prerequisite: ENGL 150. 3 credits.

ENGL 358. *Women and Film*. A study of women directors and the history and conventions of portraying women in film. Prerequisite: ENGL 150. 3 credits.

ENGL 360. *Genre Studies*. Study of literature in the context of a genre such as, but not limited to, the following: Humor, Mythology, Folk Literature, Detective Fiction, Science Fiction, Lyric Poetry, The Sonnet, Narrative Non-Fiction. May be repeated for credit when the topic changes. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 361. *Literature of Places and Spaces*. Study of literature that is shaped by its setting or place of origin. Could include, but not limited to, the literature of Ireland, West Africa, the American West. May be repeated for credit when the topic changes. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 362. *Literature of Diversity*. Study of a literature that has been historically marginalized or underrepresented, such as ethnic literature, queer studies, postcolonial literature, or women's literature. May be repeated for credit when the topic changes. Prerequisite: ENGL 209 or by permission of the instructor. 3 credits.

ENGL 365. *Shakespeare*. An introductory study of Shakespeare's works. Prerequisite: ENGL 209, THEA 230, or by permission of the instructor. For theatre majors Goal 3 and THEA 230 are both prerequisites. 3 credits

ENGL 380. *Children's Literature*. A survey of poetry, prose, and other media appropriate for elementary students. Primarily for those preparing for careers in elementary education and library science. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 381. *Literature for Young Adults*. A survey of young adult literature from 1967 to the present. Selection and evaluation of books, poetry, short stories, and other media. Instruction in and practice with response theory using written assignments and oral presentations. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 382. *Grammar: Theory and Practice*. A study of the various aspects of English grammar for elementary, middle, and secondary level pedagogical purposes. Includes two mutually informed focuses: (1) the descriptive review of the fundamentals of English grammar and (2) the discussion of the theoretical and pedagogical issues and best practices related to the teaching of English grammar. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGL 383. *History of Literature for Young Readers*. An introduction to British and American literature for children, from its roots in the oral tradition and medieval literature through contemporary works. Prerequisite: Completion of General Education Goals 2 and 3. 3 credits.

ENGL 384. *Diversity in Literature for Young Readers*. This course provides opportunities for investigating children's literature that is representative of a variety of ethnic and religious groups. We will discuss major issues of multiculturalism, the history of multicultural children's books, stereotyping, authenticity of perspective, as well as criteria for selecting and evaluating these books. Prerequisite: Completion of General Education Goals 2 and 3. 3 credits.

ENGL 390. *Directed Study or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

ENGL 392. *Internship in English*. A semester-long, on-the-job learning experience designed to apply the principles of English. 1-18 credits.

ENGL 395. *Special Topics.* Selected topics in English. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite: completion of General Education Goal 3. 1-3 credits.

ENGL 400. *Active Citizenship: An Advanced Writing Seminar.* Develops rhetorical skills needed for citizenship in a democracy. Includes interdisciplinary inquiry into and analysis of at least one significant public issue across all sections. Prerequisite: Fulfillment of General Education Goals 2 and 3; 75 credit hours or permission of the Chair of the General Education Committee. 3 credits. Fulfills General Education Goal 14.

Genre Courses

Prerequisite: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor.

ENGL 411. *Epic.* Study in the tradition and qualities of the epic as a unique genre with emphasis on one or more forms or a period in which the genre flourishes. 3 credits. WR and SP

ENGL 412. *Poetry.* Study in the tradition and qualities of poetry as a unique genre with emphasis on one or more specific forms or a period in which the genre flourishes. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 413. *The Novel.* Study in the tradition and qualities of the novel as a unique genre with emphasis on one or more forms or a period in which the genre flourishes. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 414. *Short Story.* Study in the tradition and qualities of the short story as a unique genre with emphasis on one or more forms or a period in which the genre flourishes. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 415. *Drama.* Study in the tradition and qualities of drama as a unique genre with emphasis on one or more forms or a period in which the genre flourishes. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 416. *The Bible as Literature.* This course will both study the Bible as a work of literature and glance at its appropriation in later literary works. Students will examine the Bible itself primarily through the lens of the principal genres of biblical literature: wisdom writings, liturgical poetry, theological history, prophecy, gospel, epistle, and apocalypse. Students will also look at how the Bible is treated in later literature as both a generally accepted source of literary authority and a contested site of interpretive debate. 3 credits. WR and SP

ENGL 421, 422. *Major Figures in Fiction.* Extended study in the work of from one to three major English or American writers. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 423, 424. *Major Figures in Poetry.* Extended study in the work of from one to three major English or American writers. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 425. *Shakespeare.* Extended study of specific themes and topics in Shakespeare's works. Topics may include, but will not be limited to: studies of a specific genre (comedy, tragedy, history), studies of Shakespeare's Roman plays or history plays, or studies in Shakespearean stage on film history. 3 credits. WR and SP

Other 400-level courses

Prerequisites: Completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor.

ENGL 431. *Arthurian Literature*. Comparative study of Arthurian material of various countries from the medieval through the modern periods. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 432. *Women and Literature*. Comparative study of the tradition of literature by and about women. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 440. *Studies in Literary History*. This course engages students in advanced study of a specific literary period or movement. May be repeated for credit when topic changes. Completion of Goal 3, and either one 300-level course in a literary period or permission of the instructor. 3 credits. WR and SP.

ENGL 441. *Ethnic Literature*. Comparative study of the literary tradition of an ethnic group such as Afro-American, Jewish, Chicano, or Native American peoples. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 442. *Regional Literature*. Comparative study of the literary tradition of a region, such as the American South, or Ireland. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 443. *Postcolonial Literature*. Study of literature written in English from countries during and after colonial contact with Britain, excluding the United States. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 444. *Literature and Culture*. Extended study of British or American literature and culture at a particular point in time or of a literary theme over time. Emphasis on the relationship of literature to its cultural context, including politics, social organization, art, and music. Prerequisite: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of instructor. May be repeated for credit when topic changes. 3 credits. WR and SP

ENGL 445. *Studies in Children's Literature*. Advanced study featuring a particular aspect of Children's Literature, such as a time period, a genre, or a theoretical perspective. Prerequisite: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of instructor. 3 credits. WR and SP

ENGL 451. *Continental Literature I*. Study of ancient, medieval, and Renaissance European classics in translation. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 452. *Continental Literature II*. Study of European literature of the neo-classical, romantic, and modern periods in translation. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

ENGL 461. *Literary Criticism: Senior Seminar*. Study of the history and aims of literary criticism from Plato and Aristotle to the present, including oral and written criticism of literary works. Capstone course for English majors. Enrollment limited to seniors and those with permission of instructor. 3 credits. WR and SP

ENGL 470. *Professional Writing Skills.* Intensive reading and writing workshop focused on developing professional expository prose within the student's field of endeavor. The last half of the course will be devoted to writing workshops critiquing "works" in progress of some "real world" writing project. Prerequisite: completion of General Education Goal 3. 3 credits. WR and SP

ENGL 475. *Advanced Dramatic Writing.* An advanced workshop in writing forms of drama. Prerequisite: ENGL 315: Introduction to Dramatic Writing with a grade of C or higher. 3 credits.

ENGL 476. *Advanced Fiction Writing.* An advanced workshop in writing the short story. Prerequisite: ENGL 316: Writing Fiction with a grade of C or higher. 3 credits.

ENGL 477. *Advanced Poetry Writing.* An advanced workshop in writing poetry. Prerequisite: ENGL 317: Writing Poetry with a grade of C or higher. 3 credits.

ENGL 478. *Advanced Creative Non-Fiction Writing.* An advanced workshop in writing various forms of creative non-fiction. Prerequisite: ENGL 318: Writing Non-Fiction with a grade of C or higher. 3 credits.

ENGL 479. *Writing: Theory and Practice for the Middle, Secondary, and College Classroom.* A study of theories and strategies for improving writing. Includes a discussion of analyzing subject matter, determining purpose and audience, drafting, revising, editing (including using correct mechanics), and evaluating the elements of effective writing instruction at the middle, secondary, and college levels. This course will also contain a field-based component in a classroom setting when students will examine current pedagogical practices in the teaching of writing. Prerequisites: ENGL 350 and 382. 3 credits. WR and SP

ENGL 480. *The Teaching of English.* Prospective English teachers will examine the principles of content planning, effective methods for teaching content that reflects best practices, and will demonstrate the alignment of curriculum and assessment. Participants must complete a 75 hour minimum Teacher Work Sample project prior to the Professional Internship. Co-requisite: EDUC 473. 4 credits. WR and SP

ENGL 482. *Directed Teaching in the Secondary Classroom.* Required of all students seeking Secondary Teaching Licensure in English. Each student is assigned to work with a qualified cooperating teacher in a selected school setting off-campus. The student teacher goes to the school setting and follows the schedule of the cooperating teacher(s) for a ten to eleven week period. This schedule involves a minimum teaching day of six hours for five days each week for ten/eleven weeks (300 hours total). Prerequisite: Completion of all methods courses with ENGL 479 and 480 having been taken within two years of student teaching. All educational requirements on page 65 must be completed before candidate can register for student teaching. Minimum cumulative and major GPA of 2.50. 11 credits. SP

ENGL 483. *Writing: Theory and Practice for the Elementary Classroom.* A study of theory and practice relating to writers at emergent, early, and developing stages. Includes discussion of the complex factors involved in literacy acquisition at the elementary level, along with exploration of effective ways to address these factors through writing instruction. Also includes extensive experience with writing: processes, strategies, and evaluation. Prerequisite: ENGL 382. 3 credits. WR and SP

ENGL 484. *Evaluating and Tutoring Writing.* Instruction in diagnosing and evaluating writing, and practice in giving individualized instruction in writing through the Writing Center. May be repeated twice for credit. 1 credit.

ENGL 485. *Practical issues for the Working Writer.* An introduction to practical issues beginning writers face, including but not limited to manuscript preparation, researching journals and markets, preparation for and giving public readings, and imaginative ways to deal with rejection. Prerequisite: ENGL 315 or 316 or 317 or 318, with a grade of C or higher. 1 credit.

ENGL 490. *Independent Study.* A directed reading and/or research program administered by qualified specialists in the department. One option is to do an extended research project in conjunction with a 300- or 400-level English course for an additional one-hour credit. The student must secure the director's approval prior to registering for the course. 1-3 credits per semester. Fulfills General Education Goal 15.

ENGL 492. *Internship in English*. Directed practicum in an applied setting that permits supervised experiential learning. Students perform meaningful tasks related to the discipline in professional environments, such as publishing and journalism on and off campus. The student will complete a practicum agreement established with the department chair, department adviser, and work supervisor. 1-6 credits. Fulfills General Education Goal 15.

ENGL 495. *Special Topics*. Selected topics in English. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits. WR and SP

ENGL 498. *Honors Research in English*. Students conduct research in English under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

MODERN LANGUAGES PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

The Modern Languages program offers courses in French, German, Spanish, English as a Second Language, and comparative literature. The major in Modern Languages requires a concentration in one of these areas. The concentrations in French, German, and Spanish require courses in the language of the concentration (30 or 33 hours beyond 202) and a second modern language (3 hours at the 202-level or above). No grade below C in the language of the concentration is accepted for graduation requirements for the major or minor in that language. The concentration in comparative literature focuses on the study of literature from different cultures, nations, and genres, as well as relationships between literature and other forms of cultural expression.

Students preparing to teach must take 33-36 semester hours of modern foreign language, including courses in advanced grammar and composition, conversation, culture and civilization, literature, applied linguistics, and methods. Students meeting endorsement requirements will be certified to teach a modern language at all levels from Pre-Kindergarten through twelfth grade. Second language endorsement requires 24 semester hours (at least 12 of which must be beyond intermediate level). Advanced placement reduces proportionately the number of hours required by the Commonwealth of Virginia for endorsement. Majors must have a 2.50 GPA, both cumulatively and in the major, prior to student teaching.

Modern Language majors are required to complete at least one regular semester in a Longwood-approved study abroad program. Students must have a cumulative grade point average of at least 2.5 to be eligible for study abroad. Longwood sponsors regular semester study abroad programs with the University of Salzburg in Austria, with Heidelberg College at the University of Heidelberg in Germany, with the VENUSA program in Merida, Venezuela, and with the Institute of Spanish Studies in Valencia, Spain. Longwood also offers regular semester abroad programs sponsored by the Council on International Educational Exchange at various universities in France and a direct exchange with the University of Geneva. Summer programs are available in France, Spain, Venezuela, and with the University of the Antilles in Martinique. Supporting courses are recommended in the other humanities.

ASSESSMENT

The Department requires student outcomes assessment testing prior to graduation. All students will take the ACTFL Oral Proficiency Interview, which forms part of the Senior Seminar course.

FRENCH

Faculty

B. McRae Amoss, PhD, *Professor of French*
Raymond Cormier, PhD, *Visiting Professor of French*
Heather Mueller Edwards, MA, *Adjunct Instructor of French*
Wade Edwards, PhD, *Associate Professor of French*

The French concentration of the Modern Language major requires the completion of a minimum of 30 credit hours in French beyond FREN 202 and the completion of a minimum of three credit hours of work in a second language at the 202-level or higher. Students are required to complete the equivalent of one semester study abroad in a Longwood-approved program, such as affiliate programs in France sponsored by the Council on International Educational Exchange or the direct exchange with the University of Geneva.

GERMAN

Faculty

Geoffrey C. Orth, PhD, *Professor of German*
John F. Reynolds, PhD, *Professor of Modern Languages*
Wayne Stith, PhD, *Adjunct Instructor of German*

The German concentration of the Modern Language major requires the completion of a minimum of 30 credit hours in German beyond GERM 202 and the completion of a minimum of three credit hours of work in a second language at the 202-level or higher. Students are required to complete the equivalent of one semester study abroad in a Longwood-approved program, such as the Longwood affiliate programs at the University of Salzburg and with Heidelberg College at the University of Heidelberg.

SPANISH

Faculty

Donna Brown, MA, *Lecturer in Spanish*
Ruth Budd, PhD, *Associate Professor of Spanish*
Francisco Javier Fernández, PhD, *Assistant Professor of Spanish*
Lily Anne Goetz, PhD, *Professor of Spanish*
Luis Guzmán, MA, *Lecturer in Spanish*
Kate Neff, MA, *Lecturer in Spanish*
Laura Sánchez, MA, *Senior Lecturer in Spanish*
Jon Sirko, MA, *Lecturer in Spanish*
Nancy Tucker, MA, *Adjunct in Spanish*

The Spanish concentration of the Modern Language major requires the completion of a minimum of 33 credit hours of work beyond SPAN 202 and the completion of three credit hours of work in a second language at the 202-level or higher. Students are required to complete the equivalent of one semester study abroad in a Longwood-approved program, such as the affiliate program in Valencia, Spain at the Institute of Spanish Studies or with the VENUSA program in Merida, Venezuela.

MODERN LANGUAGES MAJOR, BA DEGREE

A. General Education Core Requirements/41 credits

See General Education Requirements

The Department requires PHIL 308, 315, or 316 for satisfaction of Goal 13.

B. **Additional Degree Requirements/6 credits**
See Degree Requirements for Bachelor of Arts degree

C. **Major Requirements/29-33 credits (may include 1 credit that counts in General Education)**

FRENCH CONCENTRATION/29 credits (Plus 1 credit included in General Education)

Successful completion of Longwood-approved study abroad program

FREN 330 Civilization and Culture/3 credits

FREN 341 A Survey of French Literature I:
The Middle Ages Through the Enlightenment/3 credits

FREN 342 Survey of French Literature II: Romanticism Through the New Novel/3 credits

FREN 401 Advanced Grammar/3 credits

FREN 402 Advanced Conversation and Phonetics/3 credits

One 400-level literature course/ 3 credits

FREN 461 Senior Seminar: Literature in Cultural/Historical Context/2 credits

FREN 490 Directed Study/1 credit (satisfies General Education Goal 15)

French electives numbered 300 and above/9 credits

GERMAN CONCENTRATION/29 credits (Plus 1 credit included in General Education)

Successful completion of Longwood-approved study abroad program

GERM 330 Civilization and Culture/3 credits

GERM 341 Survey of German Literature I: The Age of Goethe/3 credits

GERM 342 Survey of German Literature II: Realism to the Present/3 credits

GERM 401 Advanced Grammar and Composition/3 credits

GERM 402 Advanced Conversation and Phonetics/3 credits

One 400-level literature course/ 3 credits

GERM 461 Senior Seminar: Literature in Cultural/Historical Context/2 credits

GERM 490 Directed Study/ 1 credit (satisfies General Education Goal 15)

German electives numbered 300 and above/ 9 credits

SPANISH CONCENTRATION/32 credits (Plus 1 credit included in General Education)

Successful completion of Longwood-approved study abroad program

SPAN 320 Advanced Spanish/3 credits

SPAN 330 Spanish Civilization and Culture/3 credits

SPAN 331 Latin American Civilization and Culture/3 credits

SPAN 341 Survey of Spanish Literature I: Medieval, Renaissance and Baroque/3 credits

SPAN 342 Survey of Spanish Literature II: Neoclassicism to the Present/ 3 credits or

SPAN 351 Survey of Spanish American Literature I:
The Age of Discovery and the Colonial Period/3 credits

SPAN 352 Survey of Spanish American Literature II:
The Era of Independence to the Present/3 credits

SPAN 401 Advanced Grammar and Composition/3 credits

SPAN 402 Advanced Conversation and Phonetics/3 credits

One 400-level literature course/ 3 credits

SPAN 461 Senior Seminar: Literature in Cultural/Historical Context/2 credits

SPAN 490 Directed Study/ 1 credit (satisfies General Education Goal 15)

Spanish electives numbered 300 and above/ 3 credits

TEACHING ENGLISH AS A SECOND LANGUAGE CONCENTRATION/ 33 credits

(may include 1 credit that counts in General Education)

Successful completion of Longwood-approved study abroad program in a non-English-speaking country

ENGL 350	Introduction to Linguistics/3 credits
ENGL 382	Grammar: Theory and Practice /3 credits
CSDS 285	Language Development Across the Lifespan/3 credits
FREN/GERM/SPAN 401	Advanced Grammar and Composition/3 credits
FREN/GERM/SPAN 402	Advanced Conversation and Phonetics/3 credits

Choose two of the following:

ANTH 204	Language and Culture/3 credits
COMM 420	Intercultural Communication/3 credits
PSYC 384	Cross-Cultural Psychology/3 credits
SPED 375	Language and Language Disorders/3 credits
OR CSDS 314	Phonology and Language Disorders/3 credits

Also Required:

English electives, 300 and 400 level/6 credits

French, German, or Spanish electives, 300 and 400 level/6 credits

COMPARATIVE LITERATURE CONCENTRATION/ 29 credits

(Plus 1 credit included in General Education)

Successful completion of Longwood-approved study abroad program in a country where the language of the primary literature (French, German, or Spanish) is spoken.

Courses in Comparative Literature and Theory/9 credits as below:

MLAN 301	Introduction to Comparative Literature/3 credits
MLAN 451	Continental Literature I/3 credits
MLAN 452	Continental Literature II/3 credits

Courses in the Primary Literature: Literature in French, German, or Spanish in courses from a single language as listed below/15 credits

FREN/GERM/SPAN 341	Survey of Literature I/3 credits*
FREN/GERM 342 or SPAN 352	Survey of Literature II/3 credits*
FREN/GERM/SPAN 461	Senior Seminar/2 credits*
FREN/GERM/SPAN 490	Directed Study/1 credit* (satisfies General Education Goal 15)

*must be taken on campus

French, German or Spanish electives from the following:

FREN 335, FREN/GERM/SPAN 411-416, FREN/GERM/SPAN 495/6 credits

Courses in the Secondary Literature: Literature in English, French, German, or Spanish in courses from a second language as listed below/6 credits

ENGL 322-362, ENGL 411-452, FREN 335, FREN/GERM/SPAN 341, FREN/GERM 342, SPAN 352, FREN/GERM/SPAN 411-416, FREN/GERM/SPAN 495/6 credits

D. Pre K-12 Teaching Endorsement/40-43 credits

(Students will have three field experiences — EDUC 265, 370, and one placement in FREN/GERM/SPAN /TESL 482. In accordance with state licensure regulations, these experiences must include settings at the elementary or middle school settings, and at the secondary levels. Each student must make appropriate arrangements with the Office of Professional Services in the Department of Education to ensure that this requirement is met.)

FRENCH CONCENTRATION/43 credits

FREN 320	Advanced French/3 credits
FREN 400	Approaches to Teaching French/3 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to Teaching/2 credits
EDUC 265	Education Practicum I/3 credits
EDUC 370	Practicum II/3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 381	Media and Technology/1 credit
EDUC 430	Reading in Content Area/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
PSYC 453	Psycholinguistics/3 credits

Professional Semester:

FREN 482	Directed Teaching in the Elementary and Secondary French Classroom/11 credits (one credit satisfies General Education Goal 15)
EDUC 488	Education Seminar/1 credit

GERMAN CONCENTRATION/43 credits

GERM 320	Advanced German/3 credits
GERM 400	Approaches to Teaching German/3 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to Teaching/2 credits
EDUC 265	Education Practicum I/3 credits
EDUC 370	Practicum II/3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 381	Media and Technology/1 credit
EDUC 430	Reading in the Content Area/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
PSYC 453	Psycholinguistics/3 credits

Professional semester:

GERM 482	Directed Teaching in the Elementary and Secondary German Classroom/11 credits
EDUC 488	Education Seminar/1 credit

SPANISH CONCENTRATION/40 credits

SPAN 400	Approaches to Teaching Spanish/3 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 265	Education Practicum I/3 credits
EDUC 370	Practicum II/3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 381	Media and Technology/1 credit
EDUC 430	Reading in the Content Area/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
PSYC 453	Psycholinguistics/3 credits

Professional semester:

SPAN 482	Directed Teaching in the Elementary and Secondary Spanish Classroom/11 credits
EDUC 488	Education Seminar/1 credit

ENGLISH AS A SECOND LANGUAGE CONCENTRATION/40 credits

TESL 400	Approaches to Teaching English as a Second Language/3 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 265	Education Practicum I/3 credits
EDUC 370	Practicum II/3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 430	Reading in the Content Area/2 credits
EDUC 381	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
PSYC 453	Psycholinguistics/3 credits

Professional semester:

TESL 482	Directed Teaching in the Elementary and Secondary English as a Second Language Classroom/11 credits
EDUC 488	Education Seminar/1 credit

E. General Electives for BA degree/41-44 credits

General Electives for BA Degree with PK-12 Teaching Endorsement - 4

F. Total Credits Required for BA in Modern Languages/120

MINOR IN FRENCH, GERMAN, or SPANISH/18 credits

The minor in French, German, or Spanish requires 18 hours of concentration at the 200 level or above, to include:

French Minor:

FREN 330	Civilization and Culture/3 credits
FREN 341	A Survey of French Literature I: The Middle Ages Through the Enlightenment/3 credits
OR FREN 342	A Survey of French Literature II: Romanticism Through the New Novel/3 credits

French Electives/12 credits

German Minor:

GERM 330	Civilization and Culture/3 credits
GERM 341	Survey of German Literature I: The Age of Goethe/3 credits
OR GERM 342	Survey of German Literature II: Realism to the Present/3 credits

German Electives/12 credits

Spanish Minor:

SPAN 330	Spanish Civilization and Culture/3 credits
SPAN 331	Latin American Civilization and Culture/3 credits

Choose one of the following:

SPAN 341	Survey of Spanish Literature I: Medieval, Renaissance and Baroque/3 credits
SPAN 342	Survey of Spanish Literature II: Neoclassicism to the Present/3 credits

Choose one of the following:

SPAN 351	Survey of Spanish American Literature I: The Age of Discovery and the Colonial Period/3 credits
SPAN 352	Survey of Spanish American Literature II: The Era of Independence to the Present/3 credits

Spanish Electives/6 credits

FRENCH COURSE DESCRIPTIONS (FREN)

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

NOTE: FREN 101-202 constitute a sequence of courses. A student who has successfully completed a course in the sequence may not subsequently receive credit for any course that comes earlier in the sequence. A student who has successfully completed a course numbered 300 or higher may not take a 100 or 200 level course for credit. Students who have successfully completed more than two years of high-school French may not take FREN 101 for credit. Students who have completed more than two years of French, but who desire a stronger foundation of basic elements are encouraged to enroll in FREN 105.

FREN 101. *Elementary I.* Development of basic oral expression, listening and reading comprehension, and writing. Prerequisite: No previous formal instruction in French, or a limited amount of previous formal instruction in French. Followed by FREN 102. Three classes, one practical reinforcement session, and language lab work; 4 credits.

FREN 102. *Elementary II.* The skills of speaking, listening and reading comprehension, and writing are further developed. Prerequisite: FREN 101 or an appropriate placement test score. Followed by FREN 201. Three classes, one practical reinforcement session and language lab work; 4 credits.

FREN 105. *Intensive French I – II.* Development of basic oral expression, listening and reading comprehension, and writing, for students with a limited amount of previous formal instruction in French. Prerequisite: one or two years of high school French or other formal instruction not to exceed three years. Followed by FREN 201. Five classes and language lab work; 5 credits.

FREN 201. *Intermediate I.* A course designed to help students develop skills in speaking, listening comprehension, reading, and writing in French, and apply these skills in a context that recognizes and explores the particularities of French and Francophone culture. Prerequisite: FREN 102 or FREN 105 an appropriate placement test score. Followed by FREN 202. 3 credits.* Fulfills General Education Goal 10.

FREN 202. *Intermediate II.* Students will continue to develop the skills of listening, reading, speaking and writing at a higher level, integrating a wide variety of topics and materials from the target culture. Prerequisite: FREN 201 or appropriate placement test score. Successful completion of this course satisfies the foreign language requirement for the B.A. degree and is prerequisite for upper-level courses. 3 credits.

FREN 292. *Internship in French.* A semester-long, on-the-job learning experience designed to apply the principles of French. 1-18 credits.

FREN 295. *Special Topics.* Selected topics in French. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite FREN 202. 1-3 credits. Does not satisfy requirement for BA degree.

FREN 311, 312. *French Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on French language, civilization, or culture. 1-16 credits per semester.

FREN 320. *Advanced French.* Development of increased proficiency in all linguistic skills and a more extensive acquaintance with French and Francophone culture. This course will prepare students for more advanced culture and literature courses, but will also prepare students to use French to communicate effectively and to function in a foreign community. Prerequisite: FREN 202 or appropriate placement test score. Successful completion of this course is recommended before students take upper-level courses. 3 credits.

FREN 330. *Civilization and Culture.* A study of French civilization and culture with emphasis on social institutions of the current century. Prerequisite: FREN 202. 3 credits. SP

FREN 335. *French Cinema.* An introduction to cinema in French focusing on one of any number of particular topics within the broader subject. Topics may include the history of French cinema, great directors, films treating a specific subject matter (love, war, family), films and literature, films and history, a particular director (Renoir, Truffaut, Godard), or a group of directors (le réalisme poétique, "La Nouvelle Vague"), or films from a particular period. Students will learn the vocabulary required for describing and analyzing French films. Prerequisite: FREN 202 or equivalent. 3 credits.

FREN 341. *A Survey of French Literature I: The Middle Ages Through the Enlightenment.* A study of representative works and literary movements in French literature from the Middle Ages through the Enlightenment. Students will learn to use the methods and language of literary analysis. Prerequisite: FREN 202 or equivalent. 3 credits. * Fulfills General Education Goal 3.

FREN 342. *Survey of French Literature II. Romanticism Through the New Novel.* A study of representative works and literary movements in French literature of the nineteenth and twentieth centuries. Students will learn to use the methods and language of literary analysis. Prerequisite: FREN 202 or equivalent. 3 credits. * Fulfills General Education Goal 3.

FREN 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

FREN 392. *Internship in French.* A semester-long, on-the-job learning experience designed to reinforce language acquisition and communication in French as a second language. 1-18 credits.

FREN 400. *Approaches to Teaching French.* A study of theories of second language acquisition and their application to the teaching of languages in a communicative, interactive approach at the primary, middle, and secondary levels. Attention will be given to the teaching and testing of listening, reading, writing, speaking, and cultural understanding. Students will develop lesson plans, engage in peer-teaching, and integrate technology into teaching. Students should take this course in the semester prior to student teaching. 3 credits.

FREN 401. *Advanced Grammar and Composition.* Syntax and grammar through written work. Prerequisite: FREN 202 or equivalent. 3 credits. WR

FREN 402. *Advanced Conversation and Phonetics.* Theory and practice in the spoken language. Current techniques and their uses in attaining mastery of oral French. Prerequisite: FREN 202 or equivalent. 3 credits. SP

FREN 411, 412. *Studies in Literary Genre.* Study of a particular genre in French literature, such as the Nouveau Roman, short story, romantic theater, symbolist poetry. Prerequisites: FREN 341 and 342. 3 credits. WR

FREN 413, 414. *French Literary Movements.* Study of a particular movement or period in French literature, such as Realism, Neo-classicism, Naturalism, Surrealism, Existentialism. Prerequisites: FREN 341 and 342. 3 credits. WR

FREN 415, 416. *Major French Authors.* Study of a particular author of French literature, such as Montaigne, Sartre, Hugo, Voltaire, Valéry. Prerequisites: FREN 341 and 342. 3 credits. WR

FREN 461. *Senior Seminar: Literature in Cultural/Historical Context.* A seminar for senior modern language majors concentrating in French, designed to integrate knowledge of French and Francophone history and culture as a background for literary analysis. Must be taken concurrently with FREN 490 (1 credit). Prerequisites: FREN 341 and 342. 2 credits. WR and SP

FREN 482. *Directed Teaching in the Elementary and Secondary French Classroom.* Required of all students seeking PK-12 Teaching Licensure in French. Each student is assigned to work with qualified cooperating teachers in selected school settings off campus. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of the cooperating teacher and will take over all duties under the supervision of the cooperating teacher. The schedule involves a minimum teaching day of five to six hours for five days each week for (300 hours total). Prerequisite: completion of the Modern Language major (French concen-

tration), the Study Abroad requirement, and a minimum cumulative and major GPA of 2.50. 11 credits. Fulfills General Education Goal 15.

FREN 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum.

FREN 492. *Internship in French.* Directed practicum in an applied setting that permits experiential learning. Students learn through performance in meaningful tasks in a variety of professional environments, such as foreign trade missions, government agencies, or the travel industry. It is intended for seniors not seeking teacher certification. Prerequisite: Permission of the instructor. 1-16 credits. Fulfills General Education Goal 15.

FREN 495. *Special Topics.* Selected topics in French. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

FREN 498. *Honors Research in French.* Students conduct research in French under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

GERMAN COURSE DESCRIPTIONS (GERM)

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

NOTE: GERM 101-202 constitute a sequence of courses. A student who has successfully completed a course in the sequence may not subsequently receive credit for any course that comes earlier in the sequence. A student who has successfully completed a course numbered 300 or higher may not take a 100 or 200 level course for credit. Students who have successfully completed more than two years of high school German may not take GERM 101 for credit.

GERM 101. *Elementary I.* Development of basic oral expression, listening and reading comprehension, and writing. Prerequisite: No previous formal instruction in German, or a limited amount of previous formal instruction in German. Followed by GERM 102. Three classes, one practical reinforcement session, and language lab work. 4 credits.

GERM 102. *Elementary II.* The skills of speaking, listening and reading comprehension, and writing are further developed. Prerequisite: GERM 101 or one or two years of previous formal instruction in German and an appropriate placement test score. Followed by GERM 201. Three classes, one practical reinforcement session, and language lab work. 4 credits.

GERM 201. *Intermediate I.* A course designed to help students develop skills in speaking, listening comprehension, reading, and writing in German, and apply these skills in a context that recognizes and explores the particularities of German culture. Prerequisite: GERM 102 or an appropriate placement test score. Followed by GERM 202. 3 credits.* Fulfills General Education Goal 10.

GERM 202. *Intermediate II.* Students will continue to develop the skills of listening, reading, speaking and writing at a higher level, integrating a wide variety of topics and materials from the target culture. Prerequisite: GERM 201 or an appropriate placement test score. Successful completion of this course satisfies the foreign language requirement for the B.A. degree and is prerequisite for upper-level courses. 3 credits.

GERM 292. *Internship in German.* A semester-long, on-the-job learning experience designed to apply the principles of German. 1-18 credits.

GERM 295. *Special Topics.* Selected topics in German. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite: GERM 202. 1-3 credits. Does not satisfy requirement for B.A. degree.

GERM 311, 312. *German Studies Abroad*. Primarily intended for transfer of credit earned abroad in courses on German language, civilization, or culture. 3-16 credits per semester.

GERM 315. *German for Business*. A study of vocabulary, concepts and cultural topics related to basic business interactions in German countries for advanced-intermediate and advanced-level students. Participants receive oral and written situational practice necessary for successful integration into today's German-speaking business world. Prerequisite: GERM 202 or equivalent. 3 credits. SP

GERM 320. *Advanced German*. Development of increased proficiency in all linguistic skills and a more extensive acquaintance with German culture. This course will prepare students for more advanced culture and literature courses, but will also prepare students to use German to communicate effectively and to function in a foreign community. Prerequisite: GERM 202 or appropriate placement test score. Successful completion of this course is recommended before students take upper-level courses. 3 credits.

GERM 330. *Civilization and Culture*. A study of German civilization and culture with emphasis on social institutions of the current century. Prerequisite: GERM 202. 3 credits. SP

GERM 341. *Survey of German Literature I: The Age of Goethe*. A study of representative works and literary movements in German literature from the Enlightenment through Romanticism. Students will learn to use the methods and language of literary analysis. Prerequisite: GERM 202 or equivalent. 3 credits. * Fulfills General Education Goal 3.

GERM 342. *Survey of German Literature II: Realism to the Present*. A survey of 19th and 20th century German literature from Realism to the present with emphasis on dramatic and prose forms. Students will learn to use the methods and language of literary analysis. Prerequisite: GERM 202 or equivalent. 3 credits. * Fulfills General Education Goal 3.

GERM 390. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

GERM 392. *Internship in German*. A semester-long, on-the-job learning experience designed to reinforce language acquisition and communication in German as a second language. 1-18 credits.

GERM 400. *Approaches to Teaching German*. A study of theories of second language acquisition and their application to the teaching of languages in a communicative, interactive approach at the primary, middle, and secondary levels. Attention will be given to the teaching and testing of listening, reading, writing, speaking, and cultural understanding. Students will develop lesson plans, engage in peer-teaching, and integrate technology into teaching. Students should take this course in the semester prior to student teaching. 3 credits.

GERM 401. *Advanced Grammar and Composition*. Syntax and grammar through written work. Prerequisite: GERM 202 or equivalent. 3 credits. WR

GERM 402. *Advanced Conversation and Phonetics*. Theory and practice in the spoken language. Current techniques and their uses in attaining mastery of oral German. Prerequisite: GERM 202 or equivalent. 3 credits. SP

GERM 411, 412. *Studies in Literary Genre*. Study of a particular genre in German literature, such as the Novelle, lyric poetry, the German novel, modern drama, short story. Prerequisites: GERM 341 and 342. 3 credits. WR

GERM 413, 414. *German Literary Movements*. Study of a particular movement or period in German literature, such as Romanticism, the Age of Goethe, Sturm und Drang, Realism, Naturalism. Prerequisites: GERM 341 and 342. 3 credits. WR

GERM 415, 416. *Major German Authors*. Study of a particular German author such as Goethe, Schiller, Kleist, Kafka, Thomas Mann. Prerequisites: GERM 341 and 342. 3 credits. WR

GERM 461. *Senior Seminar: Literature in Cultural/Historical Context.* A seminar for senior modern language majors concentrating in German designed to integrate knowledge of German history and culture as a background for literary analysis. Must be taken concurrently with GERM 490 (1 credit). Prerequisites: GERM 341 and 342. 2 credits. WR and SP

GERM 482. *Directed Teaching in the Secondary German Classroom.* Required of all students seeking PK-12 Teaching Licensure in German. Each student is assigned to work with qualified cooperating teachers in selected school settings off campus. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of the cooperating teacher and will take over all duties under the supervision of the cooperating teacher. The schedule involves a minimum teaching day of five to six hours for five days each week (300 hours total). Prerequisite: completion of the Modern Languages major (German concentration), the Study Abroad requirement, and a minimum cumulative and major GPA of 2.50. 11 credits.

GERM 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum. Fulfills General Education Goal 15.

GERM 492. *Internship in German.* Directed practicum in an applied setting that permits experiential learning. Students learn through performance in meaningful tasks in a variety of professional environments, such as foreign trade missions, government agencies, or the travel industry. It is intended for seniors not seeking teacher certification. Prerequisite: Permission of the instructor. 1-16 credits. Fulfills General Education Goal 15.

GERM 495. *Special Topics.* Selected topics in German. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

GERM 498. *Honors Research in German.* Students conduct research in German under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

SPANISH COURSE DESCRIPTIONS (SPAN)

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

NOTE: SPAN 101-202 constitute a sequence of courses. A student who has successfully completed a course in the sequence may not subsequently receive credit for any course that comes earlier in the sequence. A student who has successfully completed a course numbered 300 or higher may not take a 100 or 200 level course for credit. Students who have successfully completed more than two years of high school Spanish may not take SPAN 101 for credit. Students who have completed more than two years of high school Spanish, but who desire a review of elementary material, are encouraged to enroll in SPAN 105.

SPAN 101. *Elementary I.* Development of basic oral expression, listening and reading comprehension, and writing. Prerequisite: No previous formal instruction or a limited amount of previous formal instruction in Spanish. Followed by SPAN 102. Three classes, one practical reinforcement session, and language lab work. 4 credits.

SPAN 102. *Elementary II.* The skills of speaking, of listening and reading comprehension, and writing are further developed. Prerequisite: SPAN 101 or an appropriate placement test score. Followed by SPAN 201. Three classes, one practical reinforcement session, and language lab work. 4 credits.

SPAN 105. *Intensive Elementary I-II.* Development of basic oral expression, listening and reading comprehension, and writing, for students with a limited amount of previous formal instruction in Spanish. Prerequisite: one or two years of high school Spanish or other formal instruction not to exceed three years. Followed by SPAN 201. Five classes and language lab work. 5 credits.

SPAN 201. *Intermediate I.* A course designed to help students develop skills in speaking, listening comprehension, reading, and writing in Spanish, and apply these skills in a context that recognizes and explores the partic-

ularities of Spanish and Latin American cultures. Prerequisite: SPAN 102 or SPAN 105 or an appropriate placement test score. Followed by SPAN 202. 3 credits.* Fulfills General Education Goal 10.

SPAN 202. *Intermediate II.* Students will continue to develop the skills of listening, reading, speaking and writing at a higher level, integrating a wide variety of topics and materials from the target culture. Prerequisite: SPAN 201 or appropriate placement test score. Successful completion of this course satisfies the foreign language requirement for the B.A. degree and is prerequisite for upper-level courses. 3 credits.

SPAN 292. *Internship in Spanish.* A semester-long, on-the-job learning experience designed to apply the principles of Spanish. 1-18 credits.

SPAN 295. *Special Topics.* Selected Topics in Spanish. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite: SPAN 202. 1-3 credits. Does not satisfy requirement for BA degree.

SPAN 302. *Conversation.* Practice in oral communication skills, including expansion of vocabulary and improvement of pronunciation and listening comprehension. A functional approach, emphasizing strategies for circumlocution, initiating and closing conversation, requesting and providing information, narrating, expressing wishes, complaints, and emotions, giving and receiving advice, and supporting opinions. Prerequisite: SPAN 202 or equivalent. 3 credits. SP

SPAN 311, 312. *Hispanic Studies Abroad.* Primarily intended for transfer of credit earned abroad in Hispanic language, civilization, or culture. Prerequisite: SPAN 202 or equivalent. 1-16 hours per semester.

SPAN 315. *Spanish for Business.* A study of vocabulary, concepts and cultural topics related to basic business interactions in Hispanic countries for advanced-intermediate and advanced-level students. Participants receive oral and written situational practice necessary for successful integration into today's Spanish-speaking business world. Prerequisite: SPAN 202 or equivalent. 3 credits. SP

SPAN 320. *Advanced Spanish.* Development of increased proficiency in all linguistic skills and a more extensive acquaintance with Hispanic culture. This course will prepare students for more advanced culture and literature courses, but will also prepare students to use Spanish to communicate effectively and to function in a foreign community. Prerequisite: SPAN 202 or appropriate placement test score. Successful completion of this course is recommended before students take upper-level courses. 3 credits.

SPAN 330. *Spanish Civilization and Culture.* A study of Spanish civilization with emphasis on social institutions of the current century. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits. SP

SPAN 331. *Latin American Civilization and Culture.* A study of the peoples and cultures of Latin America, with emphasis on the social institutions of the current century. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits. * Fulfills General Education Goal 9.

SPAN 341. *Survey of Spanish Literature I: Medieval, Renaissance and Baroque.* A study of representative works and literary movements in Spanish (Peninsular) literature from the Middle Ages through the Baroque era. Students will learn to use the methods and language of literary analysis. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits. * Fulfills General Education Goal 3.

SPAN 342. *Survey of Spanish Literature II: Neoclassicism to the Present.* A study of representative works and literary movements in Spanish (Peninsular) literature from Neoclassicism to the present. Students will learn to use the methods and language of literary analysis. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits. Fulfills General Education Goal 3.

SPAN 351. *Survey of Spanish American Literature I: The Age of Discovery and the Colonial Period.* A study of selected writings of major Spanish American authors up to the nineteenth century. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits.

- SPAN 352. *Survey of Spanish American Literature II: The Era of Independence to the Present*. A study of selected writings of major Spanish American authors from the nineteenth century to the present. Prerequisite: SPAN 202 or equivalent, SPAN 320 recommended. 3 credits. *
- SPAN 390. *Directed Study or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.
- SPAN 392. *Internship in Spanish*. A semester-long, on-the-job learning experience designed to reinforce language acquisition and communication in Spanish as a second language. 1-18 credits.
- SPAN 400. *Approaches to Teaching Spanish*. A study of theories of second language acquisition and their application to the teaching of languages in a communicative, interactive approach at the primary, middle, and secondary levels. Attention will be given to the teaching and testing of listening, reading, writing, speaking, and cultural understanding. Students will develop lesson plans, engage in peer-teaching, and integrate technology into teaching. Students should take this course in the semester prior to student teaching. 3 credits.
- SPAN 401. *Advanced Grammar and Composition*. Syntax and grammar through written work. Prerequisite: SPAN 202 or equivalent. 3 credits. WR
- SPAN 402. *Advanced Conversation and Phonetics*. Theory and practice in the spoken language. Current techniques and their uses in attaining mastery of oral Spanish. Prerequisite: SPAN 202 or equivalent. 3 credits. SP
- SPAN 411, 412. *Studies in Literary Genre*. Study of a particular genre in Hispanic literature, such as Golden Age Drama, contemporary Hispanic novel. Prerequisites: SPAN 341 and 352. 3 credits. WR
- SPAN 413, 414. *Hispanic Literary Movements*. Study of a particular movement or period in Hispanic literature such as Romanticism, Realism, Naturalism, Modernism, and the Generation of '98. Prerequisites: SPAN 341 and 352. 3 credits. WR
- SPAN 415, 416. *Hispanic Authors*. Study of a particular Hispanic author. Prerequisites: SPAN 341 and 352. 3 credits. WR
- SPAN 442. *Latin American Novel*. A survey of the main innovative trends in the Latin American novel especially after 1945. Prerequisites: SPAN 341 and 352. 3 credits. WR
- SPAN 461. *Senior Seminar: Literature in Cultural/Historical Context*. A seminar for senior modern language majors concentrating in Spanish, designed to integrate knowledge of Spanish and Spanish American history and culture as a background for literary analysis. Must be taken concurrently with SPAN 490 (1 credit). Prerequisites: SPAN 341 and 352. 2 credits. WR and SP
- SPAN 482. *Directed Teaching in the Elementary and Secondary Spanish Classroom*. Required of all students seeking PK-12 Teaching Licensure in Spanish. Each student is assigned to work with qualified cooperating teachers in selected school settings off campus. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of the cooperating teacher and will take over all duties under the supervision of the cooperating teacher. The schedule involves a minimum teaching day of five to six hours for five days each week (300 hours total). Prerequisite: completion of the Modern Languages major (Spanish concentration), the Study Abroad requirement, and a minimum cumulative and major GPA of 2.50. 11 credits. Fulfills General Education Goal 15.
- SPAN 484. *Teaching Spanish in the Elementary School*. A directed practicum designed to give students first-hand experience teaching Spanish in the elementary school. Students attend weekly sessions with the instructor throughout the semester, as well as observe, assist and instruct the Spanish for Kids class at PECES for eleven weeks. May be taken twice for credit. Prerequisite: 6 credits in Spanish at the 300-level or higher. 1 credit.

SPAN 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum. Fulfills General Education Goal 15.

SPAN 492. *Internship in Spanish.* Directed practicum in an applied setting that permits experiential learning. Students learn through performance in meaningful tasks in a variety of professional environments, such as foreign trade missions, government agencies, or the travel industry. It is intended for seniors not seeking teacher certification. Prerequisite: Permission of the instructor. 1-16 credits. Fulfills General Education Goal 15.

SPAN 495. *Special Topics.* Selected topics in Spanish. The topics will vary each semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

SPAN 498. *Honors Research in Spanish.* Students conduct research in Spanish under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

TEACHING ENGLISH AS A SECOND LANGUAGE COURSE DESCRIPTIONS (TESL)

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

TESL 309. *Advanced English Grammar in Context I.* Designed for the advanced non-native English speaker to address advanced-level grammar concepts in a culturally situated context. Provides development of increased proficiency in all linguistic skills in American English and a more extensive acquaintance with the U.S. culture. This course will prepare students to use English to communicate effectively and to function in English-speaking communities. Not for native English speakers or TESL students. 3 credits.

TESL 310. *Advanced English Grammar in Context II.* Designed for the advanced non-native English speaker to address advanced-level American English grammar concepts in an academic context on the textual level. Provides development of increased proficiency in all linguistic skills with a focus on American English academic discourse skills. This course will prepare students to use English to communicate effectively in the U.S. academic community. Not for native English speakers or TESL students. 3 credits.

TESL 400. *Approaches to Teaching English as a Second Language.* A study of theories of second language acquisition and their application to the teaching of languages in a communicative, interactive approach at the primary, middle, and secondary levels. Attention will be given to the teaching and testing of listening, reading, writing, speaking, and cultural understanding. Students will develop lesson plans, engage in peer-teaching, and integrate technology into teaching. Students should take this course in the semester prior to student teaching. 3 credits. WR

TESL 482. *Directed Teaching in the Elementary and Secondary Classroom.* Each student is assigned to work with qualified cooperating teachers in selected school settings off campus. Settings will be chosen among elementary, middle, and secondary levels. The student teacher follows the schedule of the cooperating teacher and will take over all duties under the supervision of the cooperating teacher. The schedule involves a minimum teaching day of five to six hours for five days each week for fourteen weeks (300 hours total). Prerequisite: completion of the TESL concentration, the Study Abroad requirement, and a minimum cumulative and major GPA of 2.50. 11 credits. SP Fulfills General Education Goal 15.

COMPARATIVE LITERATURE COURSE DESCRIPTIONS

General Education Course*

Writing Intensive Course WR

Speaking Intensive Course SP

MLAN 301. *Introduction to Comparative Literature.* A required introductory course for students in the comparative literature program, MLAN 301 is a course that introduces students to the concepts and methodologies of comparative literatures. The course also serves as an introduction to literary theory from an international perspective. The course will help student appreciate various cultural traditions, and will aid in the development of professional reading, writing, and analytical skills. Prerequisite: FREN/GERM/SPAN 202 or higher, and ENGL 201. 3 credits

MLAN 451. *Continental Literature I.* Study of ancient, medieval, and Renaissance European classics in translation. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

MLAN 452. *Continental Literature II.* Study of European literature of the neo-classical, romantic, and modern periods in translation. Prerequisites: completion of Goal 3 of the General Education requirements, and either one 300-level course in a literary period, or permission of the instructor. 3 credits. WR and SP

RELIGION

RELIGION COURSE DESCRIPTIONS (RELI)

General Education Courses *

RELI 242. *World Religions.* An investigation of the nature and development of religious practices and traditions in other cultures, their teachings, rituals, institutions and ethics. The course includes prehistoric religion, the major traditions of Hinduism, Buddhism, Judaism, Christianity, Islam and some other traditions which have contributed to their development. This course is recommended for students in the sophomore level and above. 3 credits. * Fulfills General Education Goal 9.

Note: Other religion courses may be available at Hampden-Sydney College.

Department of History, Political Science and Philosophy

David J. Coles, *Chair*

Pearl W. Agee, *Secretary*

The Department of History, Political Science and Philosophy offers major programs culminating in the Bachelor of Arts for History majors and either the Bachelor of Arts or the Bachelor of Science for Political Science majors. History majors may elect the optional concentration in public history, and majors in both fields who are interested in careers in the law may choose the optional pre-law concentrations. Political Science majors may also pursue the optional global politics concentration. Minor programs in history, political science, philosophy, and leadership studies are open to all students.

For students who wish to teach at the secondary school level, the Department offers a concentration in Teacher Preparation in History and the Social Sciences. Our program meets all Collegiate Professional licensure requirements for teaching in Virginia. Additional requirements for admission to the Teacher Education Program are cited elsewhere in this catalog.

The Department requires Internships or Directed Research for all History and Political Science majors. Qualified majors may avail themselves of Congressional District Office Internships around the state, internships with the Washington Center and Institute for Experiential Learning in Washington, D.C., and internships with national and state historical associations, museums, and historical parks. The Department also sponsors internships with businesses in addition to a wide variety of state and local government offices.

Qualified students have the chance to participate in the Honors Program and the International Studies Program and prestigious student research opportunities such as the Senior Honors Research Program and the Marshall Scholars Program are available. Students may also participate in the study abroad courses offered by Department faculty. Recently, students have traveled to Africa, Greece, France, and China.

The Department is committed to full participation in the Longwood program for the assessment of student outcomes. History and political science majors are required to complete a comprehensive departmental examination demonstrating academic proficiency in major subjects. Accordingly, majors in both history and political science are required to complete all assessment requirements in the program.

The Department also houses a minor in Leadership Studies for those students who are interested in exploring the theoretical foundations of leadership.

HISTORY PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

Phillip A. Cantrell, PhD, *Assistant Professor of History*

David J. Coles, PhD, *Associate Professor of History*

Larissa Smith Ferguson, PhD, *Associate Professor of History*

David A. Geraghty, MA, *Lecturer in History*

William C. Holliday, PhD, *Assistant Professor of History*

Steven W. Isaac, PhD, *Associate Professor of History*

James R. Munson, PhD, *Associate Professor of History*

Melissa Pine, PhD, *Assistant Professor of History*

Deborah Welch, PhD, *Professor of History*

Majors in history seeking an endorsement for secondary teaching in Virginia should be thoroughly familiar with the professional education requirements listed elsewhere in this catalog. Those interested in a secondary education endorsement must complete coursework in history, political science, geography, economics, psychology, and sociology. To qualify for the secondary student teaching practicum, majors must complete HIST 100 or 110 and HIST 221 and 222 with no less than a grade of C in each course. Majors seeking secondary endorsement in history and social science are required to have a cumulative grade point average and departmental major average of at least 2.5 before student teaching. Students must also complete HIST 300: Teaching History and the Social Sciences in the Secondary School in the spring semester before the year they will complete their student teaching. Students must complete PRAXIS I exam during their sophomore year and PRAXIS II exam during their senior year.

The optional pre-law concentration requires completion of HIST 100 or 110 (whichever is not selected for General Education) and HIST 221 and 222, and designated courses in political science, accounting, psychology, economics, and philosophy.

History majors with the pre-law concentration are required to take POSC 331 to fulfill General Education Goal 13. Other History majors are encouraged to take POSC 331 or 332 to fulfill General Education Goal 13, but may take any approved Ethics course listed under Goal 13.

MINOR IN HISTORY

HISTORY MAJOR, BA DEGREE

B. Additional Degree Requirements/6 credits

(Credits earned in HIST 490 or HIST 492 may not count in the previous 18 credits of area electives)

Additional History Electives/12 credits

(Only three credits of HIST 490 or HIST 492 may count as History Electives.)

HIST 461	Senior Seminar/1 credit
One credit from the following three courses (satisfies General Education Goal 15):	
HIST 490	Directed or Independent Study/1-18 credits
HIST 492	Internships in History/1-18 credits
HIST 498	Honors Research in History/3 credits
(must be approved by the Senior Honors Committee)	

D. General Electives/33 credits

E. Total credits required for BA in History/120

HISTORY MAJOR, BA DEGREE

Public History Concentration

A. General Education Core Requirements/41 credits

B. Additional Degree Requirements/6 credits

C. Major Requirements/57 credits (plus 4 hours included in General Education)

HIST 100	Foundations of Western Civilization/3 credits (satisfies General Education Goal 7)
HIST 110	Modern Western Civilization/3 credits
HIST 221	United States History/3 credits
HIST 222	United States History/3 credits
HIST 316	Public History/3 credits
HIST 317	Historic Editing and Preservation/3 credits
HIST 318	Museum Studies/3 credits
HIST 319	Archival Management/3 credits
HIST 405	Virginia History/3 credits
POSC 216	American State and Local Government/3 credits
HIST 461	Senior Seminar/1 credit
HIST 492	Internship in Public History/3 credits
(one credit satisfies General Education Goal 15)	

American History Electives/6 credits at 300 level or above

European History Electives/6 credits at 300 level or above

Non-Western History Electives/6 credits at 200 level or above

Choose nine credits from the following courses:

ANTH 202	Archaeology/3 credits
ANTH 296	Field Methods in Archaeology/6 credits
ANTH 320	Folklore/3 credits
ART 121	Introduction to Environmental Design Issues/3 credits
ART 261	History of Western Art: Ancient to Medieval/3 credits
ART 262	History of Western Art: Renaissance to Modern/3 credits
CIMS 170	Computer Applications/3 credits
CIMS 275	Web Design for Beginners/3 credits

D. General Electives/16 credits

It is recommended that students take electives in a field related to their major, such as Anthropology, Political Science, or Art History.

E. Total credits required for BA in History with concentration in Public History/120

HISTORY MAJOR, BA DEGREE

Pre-Law Concentration

A. General Education Core Requirements/41 credits

Students must take POSC 331 to satisfy Goal 13.

B. Additional Degree Requirements/6 credits

C. Major Requirements/43 credits. (plus 4 hours included in General Education)

HIST 100	Foundations of Western Civilization/3 credits (satisfies General Education Goal 7)
HIST 110	Modern Western Civilization/3 credits
HIST 221	United States History/3 credits
HIST 222	United States History/3 credits
HIST 455	Constitutional History of the United States/3 credits
HIST 461	Senior Seminar/1 credit
POSC 150	American Government and Politics/3 credits
POSC 216	American State and Local Government/3 credits
POSC 230	Administration of Criminal Justice/3 credits
POSC 332	Political Philosophy/3 credits
PSYC 101	Introduction to Psychology/3 credits
ACCT 240	Principles of Accounting I/3 credits
PHIL 300	Logic/3 credits

Choose one of the following two courses:

POSC 355	Constitutional Rights and Liberties I/3 credits
or POSC 356	Constitutional Rights and Liberties II/3 credits

Choose 3 credits from the following courses:

ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits
ECON 218	Principles of Economics (Macro Emphasis)/3 credits

Choose one of the following two courses:

HIST 305	Modern America, 1914 –1945/3 credits
HIST 306	Modern America, 1945-present/3 credits

One credit from the following two courses (satisfies General Education Goal 15):

HIST 490	Directed or Independent Study/1-18 credits
HIST 492	Internships in History/1-18 credits

D. General Electives/30 credits

Pre-law students are advised that they should present at least a 3.0 GPA (as well as a good LSAT score) to the law school admissions committee in order to be competitive law school applicants.

E. Total credits required for BA in History with concentration in Pre-Law/120

TEACHER PREPARATION IN HISTORY AND SOCIAL SCIENCE BA DEGREE

A. General Education Core Requirements/41 credits

Students are required to take either POSC 331 or 332 for General Education Goal 13.

B. Additional Degree Requirements/6 credits

C. Major Requirements/61 credits

Core Requirements/13 credits

HIST 100	Foundations of Western Civilization/3 credits (satisfies General Education Goal 7)
HIST 110	Modern Western Civilization/3 credits
HIST 221	United States History/3 credits
HIST 222	United States History/3 credits
HIST 365	History and Philosophy of Science/3 credits
HIST/POSC 461	Senior Seminar/1 credit

1. UNITED STATES HISTORY

Choose one of the following two US History courses:

HIST 320	African American History/3 credits
HIST 324	American Indian History/3 credits

Choose three credits from the following US History courses:

HIST 301	American Colonial History/3 credits
HIST 302	The Early National Period of the United States/3 credits
HIST 303	Civil War and Reconstruction/3 credits
HIST 304	The Emergence of Modern America/3 credits
HIST 305	Modern America, 1914-1945/3 credits
HIST 306	Modern America, 1945-present/3 credits
HIST 308	United States Diplomatic History
HIST 321	The History of Women in America/3 credits
HIST 322	The American West/3 credits
HIST 363	World War II/3 credits
HIST 364	The American Revolutionary Era/3 credits
HIST 405	Virginia History/3 credits
HIST 406	The Old South/3 credits
HIST 410	Virginia in the Civil War/3 credits
HIST 455	Constitutional History of the United States/3 credits

2. EUROPEAN HISTORY

Choose six credits from the following European History courses:

HIST 351	Medieval Europe/3 credits
HIST 352	Renaissance and Reformation/3 credits
HIST 354	The French Revolution and Napoleon/3 credits
HIST 355	Europe in the 19th Century, 1815-1914/3 credits
HIST 356	Europe in the 20th Century, 1900-present/3 credits
HIST 358	France Since 1815/3 credits
HIST 359	Russian History to 1894/3 credits
HIST 360	Russian History Since 1894/3 credits
HIST 440	History of Ancient Greece/3 credits
HIST 465	Tudor/Stuart England, 1485-1714/3 credits
HIST 468	European Intellectual History from the Enlightenment/3 credits

3. NON-WESTERN HISTORY AND POLITICS

Take HIST 210 World History/3 credits

Choose three credits from the following Non-Western History and Politics courses:

HIST 200	History of China/3 credits
HIST 202	History of Islamic Civilizations/3 credits
HIST 314	Political History of Africa/3 credits
HIST 325	History of Latin America/3 credits

HIST 362	The Vietnam War/3 credits
POSC 314	Political History of Africa/3 credits
POSC 338	Politics of the Middle East/3 credits
POSC 375	Latin American Politics and Government/3 credits

4. POLITICAL SCIENCE

Choose six credits from the following Political Science courses:

POSC 343	American Foreign Policy/3 credits
POSC 350	The American Presidency/3 credits
POSC 355	Constitutional Rights and Liberties/3 credits
POSC 356	Constitutional Rights and Liberties/3 credits
POSC 455	Constitutional History of the United States/3 credits

5. SOCIAL SCIENCES STATE LICENSURE REQUIREMENTS/24 CREDITS (plus 3 credits included in General Education)

ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits
GEOG 201	Introduction to Geography/3 credits (may satisfy General Education Goal 8)
GEOG 241	Cultural Geography/3 credits
GEOG 352	World Geography/3 credits
POSC 150	American Government and Politics/3 credits (may satisfy General Education Goal 8)
POSC 216	American State and Local Government/3 credits
PSYC 101	Introduction to Psychology/3 credits (may satisfy General Education Goal 8)
SOCL 101	Principles of Sociology/3 credits (may satisfy General Education Goal 8)

D. Secondary Education Licensure Grades 6-12/38 credits (Plus 1 credit included in General Education)

(One credit of the 11-hour directed teaching experience satisfies General Education Goal 15.)

HIST 300/POSC 300 Teaching History and the Social Sciences in the Secondary School/3 credits
(offered only in the Spring semester each year)

E. Total credits required for BA in History/Social Science with Secondary Education Endorsement/146

HISTORY COURSE DESCRIPTIONS (HIST)

General Education Course *

Writing Intensive Course WR

Speaking Intensive Courses SP

HIST 100. *Foundations of Western Civilization.* An introduction to the foundations of Western Civilization from the Dawn of Man through the Reformation, with an emphasis on the political, economic, social, intellectual, and cultural attributes that made this civilization unique. In the context of this course, students will come to understand the historical development of western civilization, relate the development of Western civilization to that of other regions of the world, and discuss how historical developments influence the present day. 3 credits. * Fulfills General Education Goal 7.

HIST 110. *Modern Western Civilization.* A survey of the development of Modern Western Civilization from the Age of Absolutism to the present, with emphasis upon the political, economic, social, cultural, and intellectual attributes that have marked its rise to world-wide influence in the twentieth century. 3 credits. * Fulfills General Education Goal 7.

HIST 200. *History of China.* Chinese political, social, and cultural history from earliest times to the present, with an emphasis on the modern period. The course is divided into segments. The first is a fairly rapid survey of Chinese history to the early nineteenth century. The emphasis in this is on the dynasties and the culture of

China. The second portion of the course covers modern China and deals with the arts and philosophy and more with the break-up of the Qing (Ching) dynasty, the domination of China by the Western powers, and the emergence of the communist state. 3 credits. Fulfills General Education Goal 9.

HIST 202. *History of Islamic Civilizations.* This course surveys Islamic culture, from its origins in Arabia to its present role in the world today, including its diffusion to new regions such as Europe and North America. Attention will focus on the interplay of theological assumptions, social pressures, and cultural trends. 3 credits. * Fulfills General Education Goal 9.

HIST 210. *World History.* A survey of world history from prehistory to the present. The course is a thematic and chronological introduction to events and developments in the history of states and major world regions, with an emphasis on comparative religion, human geography, and the spread of technologies and ideologies. Students will be introduced to the major concepts for understanding human diversity and cultural, social, and political change across various continents. 3 credits. * Fulfills General Education Goal 9.

HIST 221. *United States History.* A survey of American life from the Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development. 3 credits. * Fulfills General Education Goal 8.

HIST 222. *United States History.* A survey of American life from 1877 to modern times, with emphasis upon the political, cultural, diplomatic, and societal forces which have shaped its development. 3 credits. * Fulfills General Education Goal 8.

HIST 292. *Internship in History.* A semester-long, on-the-job learning experience designed to apply the principles of history. 1-18 credits.

HIST 295. *Special Topics.* Selected topics in history. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

HIST 300 (POSC 300). *Teaching History and the Social Sciences in the Secondary School.* A methods course designed to offer preparation for student teaching, this class focuses in depth on content required for the secondary school classroom in history, political science, and social studies. Other topics covered include instructional planning, assessment and evaluation, teaching techniques, classroom management, and school/community interaction. This course is open only to students seeking secondary school licensure. Prerequisites: EDUC 245 and 260. 3 credits SP

HIST 301. *American Colonial History.* The English North American colonies from 1607 to 1783, with emphasis upon fundamental aspects of colonial development, the causes of the American Revolution, and the interpretation of the period. Prerequisite: HIST 221 or permission of instructor. 3 credits. SP

HIST 302. *The Early National Period of the United States.* The United States from the adoption of the Constitution of 1787 through the Mexican War. Political institutions and practice, economic growth, reform movements, and westward expansion are emphasized. Prerequisite: HIST 221 or permission of instructor. 3 credits.

HIST 303. *Civil War and Reconstruction.* The United States from the close of the Mexican War to the Compromise of 1877. The constitutional, political, economic, social, and military aspects of the period are emphasized. Prerequisite: HIST 221 or permission of instructor. 3 credits.

HIST 304. *The Emergence of Modern America.* The United States from the Compromise of 1877 to the First World War. The Industrial Revolution and its consequences, the rise of the nation to world power, and the birth of modern reformism are emphasized. Prerequisite: HIST 222 or permission of instructor. 3 credits.

HIST 305. *Modern America, 1914-1945.* The course offers a study of the United States in the pivotal eras of the First and Second World Wars and the Great Depression. Prerequisite: HIST 222. 3 credits.

HIST 306. *Modern America, 1945-Present.* The course offers a study of the United States from the end of World War II to the present. The main emphasis is on domestic affairs, such as the economy, social conditions, religion, politics, and intellectual life. Prerequisite: HIST 222. 3 credits.

HIST 308. *United States Diplomatic History.* American foreign relations from the Revolutionary Era to the present with emphasis on the Twentieth Century. Prerequisite: HIST 221 or 222 or permission of instructor. 3 credits.

HIST 309. *American Social and Intellectual History.* The major developments in American thought and culture from the Colonial era through the Civil War. Puritanism, the Enlightenment, and the Romantic Movement are emphasized. Prerequisite: HIST 221 or permission of instructor. 3 credits. WR

HIST 310. *American Social and Intellectual History.* The major developments in American thought and culture since the Civil War. Social Darwinism, liberal reform and conservative reaction, the affluent society, and the counter-culture are emphasized. Prerequisite: HIST 221 or permission of instructor. 3 credits. WR

HIST 311,312. *Studies Abroad.* Students conduct research in history under the direction of a faculty member. 3 credits.

HIST 314 (POSC 314). *Political History of Africa.* A survey of the political landscape of African history. A major portion of the course examines the significance of precolonial kingdoms, assesses the growth of the "slave trade," analyzes African intellectual history, and explores the "eve of colonialism" in Africa. 3 credits. WR

HIST 316. *Public History.* This course provides students with an upper-division introduction to career opportunities in history outside of classroom teaching. The class provides students with necessary skills in genealogical research, historic preservation and the national register nomination process, the treatment of historic sites, grant writing techniques, and knowledge of national, state, and local historical professional associations. The development of computer skills in web page design and power point presentation is emphasized. Prerequisites: HIST 221 and 222 or permission of instructor. 3 credits

HIST 317. *Historic Editing and Preservation.* This course focuses on the evolution of architectural styles in the United States from the Colonial Era to present with emphasis on principal periods of development in American architecture, furniture, and interior design. Hands-on field work in preservation/restoration methods is included. This course also teaches the tools and techniques of historical editing. Emphasis is placed on operation of the latest computer equipment necessary to document editing and public presentation. Prerequisites: HIST 221 and 222 or permission of instructor. 3 credits

HIST 318. *Introduction to Museum Studies.* An introduction to the field of museology, covering the history, philosophy, and ethics of the profession; various types of museums and different aspects of museum work; the museum's role in the community; and the effects of philanthropy and government on museums. Designed primarily for those concentrating in public history. Prerequisites: HIST 221 and 222 or permission of the instructor. 3 credits. WR

HIST 319. *Archival Management.* An introduction to the archival profession, including the acquisition, accessioning, arrangement and description, preservation, and referencing of archival records. 3 credits.

HIST 320. *African American History.* A survey of the black experience in America from the Colonial Era to the present. 3 credits. WR

HIST 321. *The History of Women in America.* The changing role of women in American life from the Colonial era to the present, contrasting the ideology of women's place in society with the reality of their lives. The Victorians, the fight for women's suffrage, and the 20th-century liberation movement are emphasized. Prerequisite: HIST 222 or permission of instructor. 3 credits.

HIST 322. *The American West.* This course examines the American West as symbol and reality with emphasis placed on the historiography of study from the early frontier theories of Frederick Jackson Turner to the scholarship of the "New West." 3 credits.

HIST 323. *American Military History.* This course examines American Military History from the colonial era through the present-day, with an emphasis on the development of military institutions during the twentieth century. In addition to analyzing the major events and examining the major figures relating to the American military, it also emphasizes the evolution of military doctrine and theory, and examines the changing role of the military in American society. 3 credits.

HIST 324. *American Indian History.* A survey of American Indian peoples from pre-contact to present with emphasis on issues of sovereignty, land and politics. 3 credits. SP

HIST 327. *Colonial Latin America.* A survey of Latin American history from the pre-Columbian era through independence. Major themes include the evolution of the societies, economies, and religions of Native American peoples; the impact of Spanish and Portuguese conquests, settlement, government, trade and culture upon native civilizations; the influence of African population and culture; and the creole nature of the resulting society in the colonial period. 3 credits. WR

HIST 328. *Modern Latin America.* A survey of the history of Latin America since independence. Major themes include the emergence of national identities, the legacies of colonialism, industrialization, social movements and revolutionary change. 3 credits.

HIST 341. *East Africa: Pre-History to the Present.* The course examines the history of East Africa, the geographic region south of the Saharan Desert and between the Indian Ocean and the Equatorial Rainforest. As East Africa is one of the "cradles of humanity," the course will begin with an examination of the Stone Age and will continue through the political and social crises that have plagued the region in recent years. Other course themes include the Bantu and Nilotic migrations, the Iron Age, state formation, the slave trade, imperialism, and the anti-colonial struggles for independence. 3 credits.

HIST 351. *Medieval Europe.* A study of the political, economic, and social institutions, and the religious and intellectual developments in Medieval Europe. 3 credits. WR

HIST 352. *Renaissance and Reformation.* The social, cultural, religious, economic, and political forces that shaped Western Civilization from the High Middle Ages through the era of the religious wars (ca. 1300-1648). 3 credits. WR

HIST 354. *The French Revolution and Napoleon.* A study of the origins and course of the French revolutionary era, with emphasis upon its profound political, economic, social, institutional, and intellectual significance. 3 credits. WR

HIST 355. *Europe in the Nineteenth Century, 1815-1914.* The political, economic, social, and cultural development of Europe from the Congress of Vienna to the eve of World War I. 3 credits. WR

HIST 356. *Europe in the Twentieth Century, 1900 to the Present.* The political, economic, social, and intellectual development of Europe in its world setting since the turn of the century. 3 credits. WR

HIST 358. *France Since 1815.* The history of major developments in French politics, culture, and society in the modern era. 3 credits. WR

HIST 359. *Russian History to 1894.* Russia from the Kievan period to Alexander III, with emphasis upon the modernization efforts of Peter the Great and Catherine the Great, the reforms of Alexander II, and the nineteenth-century revolutionary movement. 3 credits. WR

HIST 360. *History of the Soviet Union and Communist Eastern Europe.* The course examines the rise and decline of Communism in the Soviet Union and Eastern Europe between 1894 and 1991. It analyzes the differing ways in which Communist regimes became established in Russia and in the Eastern European states, and the varied responses of populations to these new political structures. This course goes on to examine the place of these states in the international state system. 3 credits. WR

HIST 361. *How Great Generals Win.* An examination of how great commanders from Hannibal to Douglas MacArthur have applied fundamental principles of strategy to achieve victory in war, and how these principles have remained constant despite changing historical circumstances. 3 credits.

HIST 362. *The Vietnam War.* The course examines the origins of French colonialism in Indochina, the rise of nationalism in Vietnam, and the First Indochina War. The course then focuses on the role of the United States in Vietnam from World War II through the 1970s and the impact of the war on American society. 3 credits.

History 363. *World War II.* An examination of the causes, major events, and consequences of World War II, including the rise and fall of Nazi Germany, Fascist Italy, and Imperial Japan, as well as the role of the United States and its allies in the conflict. 3 credits.

HIST 364. *The American Revolutionary Era.* The course examines the era of the American Revolution from the end of the French and Indian War through the ratification of the Constitution. It emphasizes the constitutional, political, economic, social, and military aspects of the period, with particular focus on the background and immediate causes of the Revolution, the conduct and consequences of the war, the Confederation period, and the adoption and ratification of the Constitution. 3 credits.

HIST 365 (PHIL 365). *History and Philosophy of Science.* An examination of such issues as the logic of scientific reasoning and method, the distinction between science and pseudoscience, the analysis of central concepts in science, especially causality, law and explanation, and finally, the relation of science and values in our culture. Attention will be given to the development of a consistent point of view on these issues. Examples will be drawn from a broad range of sciences, both natural and social. 3 credits.

HIST 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

HIST 392. *Internship in History.* A semester-long, on-the-job learning experience designed to apply the principles of history. 1-18 credits.

HIST 402. *American Historiography.* The writing and interpretation of American history. Recommended for history majors. Prerequisites: HIST 221 and 222. 3 credits. WR

HIST 404. *Frontiers in the Early American Republic.* The course explores the interactions among individuals, societies, and civilizations that shaped the history of the trans-Appalachian frontier and borderlands in the early American republic from 1783 to 1850. The course examines themes such as sources of Indian resistance, the contested boundaries of race and slavery, the meanings of liberty, the composition and purposes of families and communities, and the forces of disunion that threatened the nation. 3 credits. WR

HIST 405. *Virginia History.* A survey of Virginia history from colonial times to present. Prerequisite: History 221 and 222 or permission of instructor. 3 credits. WR and SP

HIST 406. *The Old South.* The basic political, economic, social, and intellectual institutions, forces, and problems that collectively shaped the antebellum South. Prerequisite: HIST 221 or permission of instructor. 3 credits.

HIST 410 (HIST 510). *Virginia in the Civil War.* The course examines the role of Virginia in the American Civil War, 1861-1865. It emphasizes the political, economic, social, and military aspects of the period, with par-

ticular focus on the causes of the war, on military operations in Virginia and the role of Virginia troops and leaders, on the impact of the war on Virginia's civilian population, and on the results and consequences of the war in the state. It will consist of lectures as well as visits to various Virginia battlefields. 3 credits.

HIST 412. *History of the Holocaust.* The course examines the causes, major events, and consequences of the Nazi attempt to exterminate the Jewish population of Europe during the Second World War. The class will consist of lectures, screening of documentary films, and visits to Holocaust museums in Washington, D.C. and Richmond. Offered during the summer. 3 credits.

HIST 430. *The History of European Integration.* The course examines the causes, process and consequences of European integration since the Second World War. 3 credits.

HIST 440. *History of Ancient Greece.* The evolution of Greek culture and political history from c. 2000 to 300 BCE. Emphasis will be on how written documents and material artifacts testify to the dynamics that both spurred on this culture and eventually brought about its collapse. 3 credits.

HIST 442. *War and Society before Gunpowder.* The course surveys pre-modern military history, examining how military activity has shaped human societies and been shaped by those same societies. The emphasis is not on battle narrative, but on the relationships between military culture and other aspects of human organization and history. This course is a discussion-based seminar. 3 credits. WR and SP

HIST 455 (POSC 455). *Constitutional History of the United States.* Intensive case-study examination of the continuing development of the Constitution. Emphasis on judiciary, presidency, federalism, commerce, and due process problems. 3 credits.

HIST 460. *History Seminar.* Offered on demand; open to junior and senior history majors. 1-3 credits.

HIST 461 (POSC 461). *Senior Seminar.* Capstone course in History and Political Science. Research, writing, and assessment of student outcomes. Required of majors in History. Students who are majors in both History and Political Science should enroll in either HIST 461 or POSC 461. 1 credit. WR and SP

HIST 463. *European Historiography.* The writing and interpretation of history in Europe since the Renaissance. Prerequisite: HIST 110, or permission of instructor. 3 credits. WR

HIST 465. *Early Modern England.* The course examines the dynamics of English society from the sixteenth through the early eighteenth centuries. This course explores politics during the reigns of the Tudor, Stuart, and Hanoverian monarchs, as well as themes of religion and society, crime and social order, community and family, literate and oral cultural history, commerce and industrial transformation, and the impact of science on society. Trends in the historiography of the period will also be addressed. 3 credits. WR

HIST 468 (PHIL 468). *European Intellectual History from the Enlightenment.* A survey of the major trends in European thought after the Enlightenment, and the relationship of these trends to their social, cultural, and political context. Prerequisite: HIST 110 or permission of instructor. 3 credits. WR and SP

HIST 470. *Women in World History.* Examination of the history of women for the last several centuries, exploring women's participation in economic, political, and social/cultural life as they both created and were affected by historical processes such as colonization, revolution, state formation, and industrialization. This course compares women in first-, second-, and third-world nations in terms of their participation in political, economic, and cultural aspects of society. 3 credits.

HIST 483. *International Study in Africa.* This course will provide a short-term immersion in a contemporary culture that will complement historical study and analysis. Offered during intersession or during the summer. May be repeated for credit when course topic changes. May count as an elective but cannot fulfill core requirements of the major. 3 credits.

HIST 484. *International Study in Europe.* This course will provide a short-term immersion in a contemporary culture that will complement historical study and analysis. Offered during intersession or during the summer. May be repeated for credit when course topic changes. May count as an elective but cannot fulfill core requirements of the major. 3 credits.

HIST 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits. Fulfills General Education Goal 15.

HIST 492. *Internships in History.* This program of work and study must be approved by the advising departmental instructor, with the credit assigned being tied to the nature of the project. 1-18 credits. Fulfills General Education Goal 15.

HIST 495. *Special Topics in History.* Selected topics in history. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

HIST 498. *Honors Research in History.* Students conduct research in history under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

POLITICAL SCIENCE PROGRAM

Faculty

Mary Carver, PhD, *Assistant Professor of Political Science*

N. Scott Cole, PhD, *Associate Professor of Political Science*

William R. Harbour, PhD, *Associate Professor of Political Science*

The major in political science requires completion of HIST 100 or 110 (whichever is not selected for General Education), HIST 222, and POSC 150 and 216, at least one credit of an internship or directed research, and 25 credits in additional work in political science. Qualified majors may avail themselves of Congressional District Office Internships around the state, internships with the Washington Center and Institute for Experiential Learning in Washington, D.C., law offices, businesses, and a wide variety of state and local government offices.

The optional pre-law concentration requires completion of HIST 222, POSC 150 and 216, and 37 credits in additional courses, including 22 credits in political science, 3 in history, 3 in psychology, 3 in accounting, 3 in philosophy, and 3 in economics. It is also strongly recommended that students add an elective in writing skills (ENGL 470).

The optional global politics concentration requires 21 credits of core political science courses, 15 credits of courses focusing on regional area studies, and 9 credits of courses focusing on transitional communities and related issues.

Political science majors may earn either the Bachelor of Science or Bachelor of Arts degree.

MINOR IN POLITICAL SCIENCE

The minor in Political Science requires completion of POSC 150 and 216 and of 12 credits of additional coursework in political science chosen in consultation with a departmental advisor.

POLITICAL SCIENCE MAJOR, BA, BS DEGREE

A. General Education Core Requirements/41 credits

Students must take POSC 331 to satisfy Goal 13.

B. Additional Degree Requirements, BA degree/6 credits

Additional Degree Requirements, BS degree/7 credits

C. Major Requirements/37 credits (plus 4 credits included in General Education)

HIST 100	Foundations of Western Civilization/3 credits (satisfies General Education Goal 7)
HIST 110	Modern Western Civilization/3 credits
HIST 222	United States History/3 credits
POSC 150	American Government and Politics/3 credits
POSC 216	American State and Local Government/3 credits
POSC 332	Political Philosophy/3 credits
POSC 455	Constitutional History of the United States/3 credits
POSC 461	Senior Seminar/1 credit

Choose one of the following:

POSC 230	Administration of Criminal Justice/3 credits
POSC 355	Constitutional Rights and Liberties/3 credits
POSC 356	Constitutional Rights and Liberties/3 credits

Choose one of the following:

POSC 343	American Foreign Policy/3 credits
POSC 441	International Relations/3 credits
POSC 442	International Law and Organizations/3 credits

Choose one of the following:

POSC 314	Political History of Africa/3 credits
POSC 335	Western European Politics and Government/3 credits
POSC 336	Russian and Eastern European Government and Politics/3 credits
POSC 337	Asian Government and Politics/3 credits
POSC 338	Politics of the Middle East/3 credits
POSC 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits

Political Science Electives/9 credits

One credit from one of the following three courses (satisfies General Education Goal 15):

POSC 490	Directed or Independent Study/1-18 credits
POSC 492	Internships in Political Science/1-18 credits
POSC 498	Honors Research in History/3 credits (must be approved by the Senior Honors Committee)

D. General Electives BA Degree/36 credits

General Electives BS Degree/35 credits

E. Total credits required for BA, BS in Political Science /120

POLITICAL SCIENCE MAJOR, BA, BS DEGREE

Pre-Law Concentration

A. General Education Core Requirements/41 credits

Students must take POSC 331 to satisfy General Education Goal 13.

B. Additional Degree Requirements, BA Degree/6 credits

Additional Degree Requirements, BS Degree/7 credits

C. Major Requirements/46 credits. (plus 1 credit included in General Education)

HIST 222	United States History/3 credits
POSC 150	American Government and Politics/3 credits
POSC 216	American State and Local Government/3 credits
POSC 230	Administration of Criminal Justice/3 credits

POSC 332	Political Philosophy/3 credits
POSC 355	Constitutional Rights and Liberties/3 crédits
or POSC 356	Constitutional Rights and Liberties/3 credits
POSC 455	Constitutional History of the United States/3 credits
PSYC 101	Introduction to Psychology/3 credits
ACCT 240	Principles of Accounting I/3 credits
PHIL 300	Logic/3 credits

Political Science Electives/9 credits

POSC 461 Senior Seminar/1 credit

Choose 3 credits from the following courses:

ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits
ECON 218	Principles of Economics (Macro Emphasis)/3 credits

Choose 3 credits from the following courses:

HIST 305	Modern America, 1914-1945/3 credits
HIST 306	Modern America, 1945-present/3 credits

One credit from the following two courses (satisfies General Education Goal 15):

POSC 490	Directed or Independent Study/1-18 credits
POSC 492	Internships in Political Science/1-18 credits

D. General Electives for BA/27 credits

General Electives for BS/26 credits

Pre-law students are advised that they should present at least a 3.0 GPA (as well as a good LSAT score) to the law school admissions committees in order to be competitive law school applicants.

E. Total credits required for BA, BS in Political Science with a concentration in Pre-Law/120

POLITICAL SCIENCE MAJOR, BA DEGREE

Global Politics Concentration

A. General Education Core Requirements/41 credits

Students must take POSC 331 to satisfy Goal 13

B. Additional Degree Requirements, BA degree/6 credits

C. Major Requirements/46 credits (plus 1 credit included in General Education)

1. Core Political Science Courses/21 credits

HIST 308	United States Diplomatic History/3 credits
POSC 150	American Government and Politics/3 credits
POSC 255	Introduction to Comparative Politics/3 credits
POSC 332	Political Philosophy/3 credits
POSC 343	American Foreign Policy/3 credits
POSC 441	International Relations/3 credits
POSC 455	Constitutional History of the United States/3 credits

2. Regional and Area Studies/15 credits

Choose 15 credits from the following:

POSC 314	Political History of Africa/3 credits
POSC 335	Western European Politics and Government/3 credits
POSC 336	Russian and Eastern European Government and Politics/3 credits
POSC 337	Asian Government and Politics/3 credits
POSC 338	Politics of the Middle East/3 credits
POSC 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits
HIST 200	History of China/3 credits
HIST 325	Latin American History/3 credits
HIST 356	Europe in the Twentieth Century, 1900 to the Present/3 credits

3. Transnational Community and Issues/9 credits

Choose nine credits from the following:

POSC 245	Gender and Politics/3 credits
POSC 360	Comparative Political Participation/3 credits
POSC 420	Democracy and Democratization/3 credits
ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 218	Principles of Economics/3 credits
GEOG 352	World Regional Geography/3 credits
HIST 202	History of Islamic Civilizations/3 credits

4. Senior Seminar/1 credit

POSC 461	Senior Seminar/1 credit
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One credit from the following two courses (satisfies General Education Goal 15):

POSC 490	Directed or Independent Study/1-18 credits
POSC 492	Internships in Political Science/1-18 credits

D. General Electives/27 credits

E. Total credits required for BA in Political Science with a Concentration in Global Politics/120

POLITICAL SCIENCE COURSE DESCRIPTIONS (POSC)

General Education Courses *

Writing Intensive Courses WR

Speaking Intensive Courses SP

POSC 150. *American Government and Politics.* An introduction to the American political system, with an emphasis upon the national political institutions, processes, groups, public behavior, and issues that shape contemporary society. 3 credits. * Fulfills Goal 8

POSC 216. *American State and Local Government.* A study of American state and local political institutions and processes, and of related current issues and problems. 3 credits. WR

POSC 230. *Administration of Criminal Justice.* Survey of the operations of institutions that compose our system for administering criminal justice, including police administration, premises and politics of court procedures and management, and corrections. 3 credits.

POSC 245. *Gender and Politics.* The course examines gender as a socio-political construct within a global context. It surveys both feminist and masculinist theories of politics, which provide the foundation for the course. Attention is then paid to the gendered who, what and how of world politics. Within this discussion, the course carefully explores the gendered divisions of power and of the global economy. 3 credits. * Fulfills Goal 9

POSC 255. *Introduction to Comparative Politics.* The course surveys political systems and considers the meaning of concepts and themes such as political ideologies, states, nationalism, ethnicity, racial politics, democracy, development, and political change. A goal of this course, therefore, is to familiarize students with mainstream and alternative approaches to comparing and contrasting political systems. Examples from Africa, Asia, Latin America, Europe, and the United States will provide the context. 3 credits. * Fulfills Goal 9

POSC 292. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits.

POSC 295. *Special Topics in Political Science.* Selected topics in political science. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

POSC 300 (HIST 300). *Teaching History and the Social Sciences in the Secondary School.* A methods course designed to offer preparation for student teaching, this class focuses in depth on content required for the secondary school classroom in history, political science, and social studies. Other topics covered include instructional planning, assessment and evaluation, teaching techniques, classroom management, and school/commu-

nity interaction. This course is open only to students seeking secondary school certification. Prerequisites: EDUC 245 and 260. 3 credits SP

POSC 311, 312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad in courses in political science. 1-18 credits.

POSC 314 (HIST 314). *Political History of Africa*. A survey of the political landscape of African history. A major portion of the course examines the significance of precolonial kingdoms, assesses the growth of the "slave trade", analyzes African intellectual history, and explores the "eve of colonialism" in Africa. 3 credits. WR

POSC 331 (PHIL 331). *Ancient and Medieval Political Philosophy*. Survey of the principal political theories and philosophies from ancient Greece through the Middle Ages, including the contributions of Plato, Aristotle, Cicero, St. Augustine, and St. Thomas Aquinas. 3 credits.* Fulfills Goal 13

POSC 332 (PHIL 332). *Modern Political Philosophy*. Survey of modern political theories and philosophies, including the contributions of Machiavelli, Hobbes, Locke, Rousseau, Burke, and Marx. 3 credits. * Fulfills Goal 13

POSC 335. *Western European Politics and Government*. An examination of the political systems of Western Europe, with in-depth analyses of Great Britain, France, and Germany. Issues like social democracy, gendered politics, right-wing extremism, and the European Union are explored as causes of political change and continuity in Europe. 3 credits. WR and SP

POSC 336. *Russian and Eastern European Government and Politics*. Study of the governments and politics of Russia and Eastern Europe. Special attention is given to the rise and fall of Communism and to the challenges of building democratic institutions and market oriented economic systems. 3 credits. WR

POSC 337. *Asian Governments and Politics*. A study of the political systems and foreign policies of the major Asian powers, with emphasis on China and Japan. 3 credits. WR

POSC 338. *Politics of the Middle East*. A survey of the political systems of the Middle East, focusing on Israel, Iraq, Iran, Saudi Arabia, Syria, Egypt, and Turkey. Democratization, religion, gender, conflict, terrorism, and economic development are explored in this course. 3 credits.

POSC 341. *American Political Thought to the Civil War*. An introduction to the principal thinkers and the central themes in American political thought. 3 credits. WR and SP

POSC 342. *American Political Thought 1860 to the Present*. An introduction to the principal thinkers and the central themes in American political thought. 3 credits. WR and SP

POSC 343. *American Foreign Policy*. A study of U.S. foreign policy with special attention to the policy-making process, current problems in foreign affairs, and the development of long-range foreign policy. 3 credits. WR

POSC 345. *Terrorism and Homeland Security in a Global Age*. Study of the forces involved in terrorism and the issues surrounding homeland security. 3 credits.

POSC 350. *The American Presidency*. The modern presidency and its role in contemporary politics, emphasizing the constitutional background of the office, the evolution of presidential powers, relationships between the presidency and the Congress and bureaucracy, the presidential election process, and the role of the presidency in policy making. 3 credits. WR

POSC 355. *Constitutional Rights and Liberties*. Study of prominent Constitutional principles, issues, and practices pertaining to persons accused or convicted of crime. Particular focus on the ideas of the Fourth, Fifth, Sixth, and Eighth Amendments. Extensive use of Supreme Court decisions. 3 credits.

POSC 356. *Constitutional Rights and Liberties*. Study of prominent Constitutional principles, issues, and practices concerning government-private individual relations, with particular emphasis upon freedoms of speech,

press, religion; privacy; and social and economic discrimination. Extensive use of Supreme Court decisions. 3 credits.

POSC 360. *Comparative Political Participation.* Examination of political participation from a comparative perspective, focusing mainly on cases from the United States and Western Europe. Political parties, voting, elections, and social movements are highlighted. 3 credits. SP

POSC 375. *Latin American Politics and Government.* A study of Latin American politics, government, and development. The course considers the importance of political institutions and social and economic forces in the processes of democratization and economic development. 3 credits. WR

POSC 390. *Directed or Independent Study in Political Science.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

POSC 392. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits.

POSC 394. *Political Leadership.* The course investigates the diverse nature of leadership and the place of leadership in modern society. While the main emphasis is on political leadership, a strong interdisciplinary approach is employed. Students are required to think about various needs, origins, moral dilemmas, requirements, and techniques of leadership in a wide variety of differing circumstances. 3 credits. WR and SP

POSC 395. *African Politics and Government.* The course offers various intellectual perspectives on contemporary African politics. Attention is devoted to an examination of the state, political institutions, social forces and movements, gender, democratization, and regional economic development. 3 credits. WR

POSC 420. *Democracy and Democratization.* This class explores the development of democracy, focusing on the theories, definitions, history, and pre-conditions of democracy. Democratic transitions and consolidations are also considered. 3 credits.

POSC 441. *International Relations.* Study of the factors conditioning international politics, with emphasis upon the foreign policies of major powers. 3 credits. WR

POSC 442. *International Law and Organizations.* A study of international law and organizations, with emphasis upon the principles of international law. Additional consideration of the policies of the United Nations. 3 credits.

POSC 443. *United States Foreign Policy and National Security: 1990-Present.* This course represents an endeavor to identify and analyze major US foreign policy and national security issues and threats likely facing the United States both externally and internally. Major attention is devoted to the continuing dynamics in Russo-American relations and to problems of a politico-economic nature posed by nations of the developing or Third World. Additionally, discussions focus on various response options potentially applicable to the resolution of current issues. 3 credits.

POSC 455 (HIST 455). *Constitutional History of the United States.* Intensive case-study examination of the continuing development of the Constitution. Emphasis on judiciary, presidency, federalism, commerce, and due process problems. 3 credits.

POSC 460. *Political Science Seminar.* Open to juniors and seniors; offered on demand. 1-3 credits.

POSC 461 (HIST 461). *Senior Seminar.* Capstone course in History and Political Science. Research, writing, and assessment of student outcomes. Required of majors in History. Students who are majors in both History and Political Science should enroll in either HIST 461 or POSC 461. 1 credit. WR and SP

POSC 465. *The Role of US National Intelligence in Foreign Policy.* This course provides a basic overview of the history, current organization, and missions of the US Foreign intelligence establishment ("the Intelligence

Community”) and its various programs and activities in support of US foreign policy and national security objectives. 3 credits.

POSC 490. *Directed or Independent Study in Political Science.* Must be approved by the head of the department. May be repeated as. 1-18 credits. Fulfills Goal 15

POSC 492. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits. Fulfills Goal 15

POSC 495. *Special Topics in Political Science.* Selected topics in political science. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

POSC 498. *Honors Research in Political Science.* Students conduct research in political science under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

MINOR IN LEADERSHIP STUDIES

Directors

N. Scott Cole, PhD, *Associate Professor of Political Science*
Kerstin Soderlund, PhD, *Dean of Students*

Longwood University’s stated mission is to create citizen leaders. The Leadership Studies Program is intended for students who want to explore further the theoretical foundations of leadership. This is an interdisciplinary minor that draws on different conceptions of leadership from across the curriculum. Students from a variety of academic areas are encouraged to participate in this educational experience. Courses for this program are designed to inform students about the concepts, theories, and issues related to leadership.

Requirements for the 19-Credit Hour Minor in Leadership Studies:

In order to complete a minor in Leadership Studies, students must:

1. File a form of intention to pursue the Minor at the Office of Registration.
2. Earn a grade point average of 2.0 in those courses chosen to meet the minor requirements.

Take all of the following courses/13 credits

LDST 120	Foundations of Leadership Studies/3 credits
LDST 220	Leadership and Service/3 credits
LDST 320	Leaders and Leadership/3 credits
POSC 394	Political Leadership/3 credits
LDST 420	Practicum in Leadership /1 credit

Choose 6 credit hours from the following:

COMM 330	Small Group Communication/3 credits
EDUC 376	Intro to Residence Life/1 credit
HONS 202	Fundamentals of Citizen Leadership/1 credit (open to non-Honors students with a GPA of 3.25 or higher)
MISC 101	Foundations of Officership/1 credit
MISC 102	Basic Leadership/1 credit
MISC 201	Military Leadership I: Individual Leadership Studies/2 credits
MISC 202	Military Leadership II: Leadership and Teamwork/2 credits
POSC 360	Comparative Political Participation/3 credits
PSYC 331	Social Psychology/3 credits
RECR 350	Ropes Course and Initiative Dynamics/2 credits
RECR 375	Leadership Development through Wilderness Pursuits/3 credits
SOCL 102	Contemporary Social Problems/3 credits

LEADERSHIP STUDIES COURSE DESCRIPTIONS (LDST)

LDST 120. *Foundations of Leadership Studies.* This course is designed to introduce and engage students in the study of leadership. The course will explore the history, ideas, and theories of leadership, answer questions about leadership and the leadership process, and develop a basic vocabulary and portfolio of concepts and approaches that will prepare students to exercise leadership in service to society. 3 credits.

LDST 220. *Leadership and Service.* Discussion and understanding of theoretical leadership concepts is not sufficient; students must actively employ, reflect upon, and revise (when necessary) their leadership qualities, knowledge, and strategies. This course is a critical component of the Leadership Studies minor as it requires students to be actively engaged in the community - observing, critiquing, and exerting leadership. It is also essential for an institution that strives to create citizen leaders as it cultivates an understanding and appreciation for the concept of leader as servant. 3 credits.

LDST 320. *Leadership and Leadership.* This interdisciplinary course will explore the question, "Do individuals in leadership roles necessarily exhibit exemplary leadership?" Through active involvement in this course, students will have the opportunity to explore and evaluate the legacy of both positional and non-positional leaders from several historical and grassroots/social movements. 3 credits.

LDST 420. *Practicum in Leadership.* This practicum provides students with the opportunity to apply the theoretical concepts and interdisciplinary perspectives and knowledge they have acquired in their leadership courses. They will select an organization/agency with which to work and will concentrate efforts on a designated program/project/issue. 1 credit.

PHILOSOPHY PROGRAM

Faculty

- Mark Lukas, PhD, *Assistant Professor of Philosophy*
- Eric Moore, PhD, *Associate Professor of Philosophy*
- Paul V. Moriarty, PhD, *Assistant Professor of Philosophy*

The minor in Philosophy requires 18 credit hours of work in Philosophy. Its objectives are as follows: to develop the skill to examine critically the philosophical problems that are basic and perennial for any serious-minded and reflective person; to begin to develop a personal philosophy or system of beliefs concerning those issues; to provide a background in the history of western thought; and to analyze problems and theories in other fields in both the humanities and sciences.

Minor Requirements/18 credits

- PHIL 200 Introduction to Philosophy/3 credits

Choose two of the following:

- PHIL 210 Survey of Ancient Philosophy/3 credits
- PHIL 211 Survey of Medieval Philosophy/3 credits
- PHIL 212 Survey of Early Modern Philosophy/3 credits
- PHIL 213 Survey of Nineteenth Century Philosophy/3 credits

Choose three credits from the following:

- PHIL 308 Introduction to Ethics/3 credits
- PHIL 315 Biomedical Ethics/3 credits
- PHIL 316 Environmental Ethics/3 credits

Additional PHIL electives/6 credits

(Students may count POSC 331 or POSC 332 as PHIL electives)

PHILOSOPHY COURSE DESCRIPTIONS (PHIL)

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Courses SP

PHIL 200. *Introduction to Philosophy.* Critical examination of basic problems of philosophy in various fields, e.g. ethics, religion, psychology. Attention to both critical analysis and systematic thinking. An introduction to ideas considered in most of the remaining courses in philosophy. Attention to the development of a system of beliefs in the student. Modern and contemporary readings. 3 credits. WR

PHIL 210. *Survey of Ancient Philosophy.* A survey of the development of western thought during the Hellenic and Hellenistic periods; that is, from Homer to Roman thought. Emphasis on the “golden age of Athens” and on Plato and Aristotle. 3 credits.

PHIL 211. *Survey of Medieval Philosophy.* A survey of the development of western thought during the Medieval and Renaissance periods. Emphasis on the Christian philosophies of Augustine and Aquinas and on the humanistic philosophies of the Italian renaissance. 3 credits.

PHIL 212. *Survey of Early Modern Philosophy.* A survey of the development of western thought from the 16th century through the 19th century. Emphasis on the philosophical traditions from Hobbes in the British Isles and from Descartes on the continent, especially on Descartes, Locke, and Hume. 3 credits.

PHIL 213. *Survey of Nineteenth-Century Philosophy.* A survey of the development of western thought from Kant to the beginning of the 20th century. Emphasis on Kant's position as a solution to problems raised in the 18th century, and to the development of German philosophy in Schopenhauer, Hegel, and Marx. The foundations of existentialism. 3 credits.

PHIL 214. *Survey of Twentieth-Century Analytic Philosophy.* A survey of the development of analytic philosophy in the twentieth century. Topics covered may include the early paradigms of Moore and Russell, logical atomism in Russell and early Wittgenstein, logical positivism, the later Wittgenstein, the ordinary language school of philosophy, Quine's naturalism in semantics, Davidson's views on truth, Kripke's reconceptualization of semantic and metaphysical categories, and the legacy of 20th century analytic philosophy. 3 credits.

PHIL 292. *Internship in Philosophy.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits.

PHIL 295. *Special Topics.* Selected topics in Philosophy. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite none. 1-3 credits.

PHIL 300. *Logic.* The fundamentals of deduction and induction which aid the student in developing habits of valid thinking and in understanding the scientific method. Emphasis on deductive logic and on tools for analysis of issues in different fields of inquiry. 3 credits.

PHIL 306. *Ethics.* An introduction to ethics designed to help the student to make informed, ethical choices and decisions on moral problems and to weigh the consequences of those choices. Emphasis on the detection of moral problems, the process of ethical reasoning, ethical theories and the process of resolution of moral dilemmas posed by contemporary moral issues. 1 credit.

PHIL 307. *Moral Issues and Perspectives.* An introduction to the philosophical analysis of today's moral problems and the “care and justice” perspectives in which such problems may be resolved. (Students may not receive credit for both PHIL 201 and 307). Prerequisite: PHIL 306. 2 credits.

PHIL 308. *Introduction to Ethics.* An introduction to ethical theories and their applications to moral issues. This course has three major components: (1) a survey of the main normative and metaethical theories; (2) a detailed examination of the method of philosophical analysis; and (3) the application of ethical theories and philosophical analysis to contemporary moral issues. 3 credits. * Fulfills General Education Goal 13.

PHIL 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on Philosophy. 1-16 credits per semester.

PHIL 315. *Biomedical Ethics.* Ethical inquiry into the concepts of person, autonomy, rights, responsibility, and justice relevant to biomedicine and their application to issues of euthanasia, abortion, genetic control, the definition of death, allocation of scarce medical resources, experimentation with human beings, and intentional deception in biomedicine. 3 credits.* Fulfills General Education Goal 13.

PHIL 316. *Environmental Ethics.* A study of how the principles of ethical theory can be applied to contemporary environmental controversies. The class will examine a variety of theoretical approaches to environmental ethics, comparing human-centered (anthropocentric), animal-centered (zoocentric), and nature-centered (biocentric) value systems. Students will study local, national, and global environmental issues including factory farming, pollution and pesticides, loss of biodiversity, habitat destruction, and global warming. 3 credits.* Fulfills General Education Goal 13.

PHIL 320. *American Thought.* A survey of the development of American philosophy from its colonial beginnings to the present. Emphasis on the development of native American pragmatism in Pierce, James and Dewey. 3 credits.

PHIL 331 (POSC 331). *Ancient and Medieval Political Philosophy.* Survey of the principal political theories and philosophies from ancient Greece through the Middle Ages, including the contributions of Plato, Aristotle, Cicero, St. Augustine, and St. Thomas Aquinas. 3 credits.* Fulfills General Education Goal 13.

PHIL 332 (POSC 332). *Modern Political Philosophy.* Survey of modern political theories and philosophies, including the contributions of Machiavelli, Hobbes, Locke, Rousseau, Burke, and Marx. 3 credits. * Fulfills General Education Goal 13.

PHIL 350. *Aesthetics.* A study of theories of art and beauty, including the relation between beauty and the arts, the function and value of the arts in culture, and standards for criticism and judgments of beauty. 3 credits.

PHIL 355. *Philosophy of Mind.* A study of such leading theories as dualistic interactionism, behaviorism and materialism, which concern the nature of the person, self-knowledge, the relation to the mental and the physical and human action. Emphasis on theories of the self or person and on criteria for the evaluation thereof. Classical, modern, and contemporary sources. 3 credits.

PHIL 360. *Philosophy of Religion.* A critical examination of certain problems in religion, including the nature of religion, grounds for belief and disbelief in God, the varieties of religious experience and immortality. Classical, modern and contemporary sources. 3 credits.

PHIL 365 (HIST 365). *History and Philosophy of Science.* An examination of such issues as the logic of scientific reasoning and method, the distinction between science and pseudoscience, the analysis of central concepts in science, especially causality, law and explanation, and finally, the relation of science and values in our culture. Attention will be given to the development of a consistent point of view on these issues. Examples will be drawn from a broad range of sciences, both natural and social. 3 credits.

PHIL 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

PHIL 392. *Internship in Philosophy.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits.

PHIL 461. *Seminar in Philosophy.* An intensive study of one of the major philosophers emphasized in the introductory four-course sequence in the history of western philosophy. Lectures on the systematic position in general and student papers on particular topics on or about that position. Readings from major works of the philosopher chosen and from important critical secondary sources. Prerequisites: completion of the other specified required courses for either the major or minor programs in philosophy or permission of instructor. 3 credits.

PHIL 468 (HIST 468). *European Intellectual History from the Enlightenment.* A survey of the major trends in European thought after the Enlightenment, and the relationship of these trends to their social, cultural, and political context. Prerequisite: HIST 110 or permission of instructor. 3 credits. WR and SP

PHIL 490. *Independent Study.* A directed reading and/or research program on a topic or thinker selected by the student and approved by the director. 3 credits. Fulfills General Education Goal 15.

PHIL 492. *Internship.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits. Fulfills General Education Goal 15.

PHIL 495. *Special Topics.* Selected topics in Philosophy. The topics will vary from semester to semester. Descriptions will be available from academic advisers. May be repeated for credit when topics change. 1-3 credits.

PHIL 498. *Honors Research in Philosophy.* Students conduct research in philosophy under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

Department of Mathematics and Computer Science

William P. Abrams, *Chair*
Gale Moss, *Secretary*

The Department of Mathematics and Computer Science offers courses leading to majors in mathematics and computer science, and minors in mathematics and computer science. It also offers courses which fulfill general education and Bachelor of Science degree requirements.

ASSESSMENT: The Department of Mathematics and Computer Science requires all majors to participate in any required assessment activities, including, as seniors, taking a comprehensive test. The purpose of the test is to assess the progress of the majors and the effectiveness of the program.

Teaching Endorsement

Students who are preparing to teach and who are majoring in fields other than mathematics may be endorsed to teach mathematics courses through Algebra I in grades 6 – 12. See the Algebra I Endorsement below for details.

MATHEMATICS PROGRAM

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

- William P. Abrams, PhD, *Professor of Mathematics*
- Susan Browder MS, *Lecturer in Mathematics*
- Sharon Emerson-Stonnell, PhD, *Professor of Mathematics*
- Jacqueline A. Hall, PhD, *Associate Professor of Mathematics*
- Virginia Lewis MS, *Lecturer in Mathematics Education*
- Leigh Lunsford, PhD, *Associate Professor of Mathematics*
- Rebecca S. Nelson, PhD, *Assistant Professor of Mathematics Education*
- Phillip L. Poplin, PhD, *Assistant Professor of Mathematics*
- David Shoenthal, PhD, *Assistant Professor of Mathematics*
- Wendy Smith, Ph.D., *Assistant Professor of Mathematics Education*
- Maria Timmerman, PhD, *Assistant Professor of Mathematics Education*
- Robert P. Webber, PhD, *Professor of Computer Science and Mathematics*

The mathematics curriculum stresses breadth, theory, and depth in the study of mathematics while allowing the student the flexibility to choose among topics of their interest. . In order to calculate the Math Major GPA, any course with the prefix MATH or which can count toward the Math Major should be included in the calculation with the following exceptions:

MATH 114	Consumer Math
MATH 121	Functions and Graphs
MATH 131	Mathematical Thinking
MATH 171	Statistical Decision Making
MATH 181	Finite Mathematics
MATH 267	Applications of Calculus
MATH 309	Numeration Systems
MATH 310	Probability, Statistics, and Programming
MATH 330	Integration of Mathematics and Science Principles
MATH 430	Teaching Mathematics in the Middle Schools

While every attempt is made to state the requirements and as succinctly as possible, it is recommended that every student majoring or minoring in the department continue in close communication with the academic advisor assigned by the department in order to plan the program best suited to individual needs and goals.

Students desiring a minor in mathematics or computer science must successfully complete the appropriate program described below, and must see the Chair of the Department of Mathematics and Computer Science to declare officially a minor in either field.

MATHEMATICS MAJOR, BA, BS DEGREE

A.. General Education Core Requirements/41 credits

Majors are required to take PHIL 300 for General Education Goal 12,
MATH 350 for General Education Goal 13.

B. BS Degree Additional Degree Requirements/7 credits

A students seeking the BS degree must take CMSC 160 as his/her Mathematics or
Computer Science elective.

BA Degree Additional Degree Requirements/6 credits.

C. Major Requirements/38-40 credits. (Plus 4 credits included in General Education)

All Majors

MATH 260	Integrated Calculus II/4 credits
OR MATH 261	The Differential and Integral Calculus I/4 credits (3 of these 4 credits satisfy General Education Goal 5).
MATH 262	The Differential and Integral Calculus II/4 credits
MATH 270	Introductory Statistics/3 credits
MATH 300	A Transition to Advanced Mathematics/4 credits
MATH 343	Linear Algebra/3 credits
MATH 361	Multivariable Calculus/4 credits
MATH 342	Introduction to Modern Algebra/3 credits
OR MATH 462	Advanced Calculus/3 credits
MATH 371	Introduction to Probability and Statistics/3 credits
MATH 461	Senior Seminar/1 credit
CMSC 492 or MATH 492 or MATH 490 or MATH 498, MAED 453/1-3 credits	
(1 credit satisfies General Education Goal 15)	

*Electives***

Students must complete a total of 12 additional hours from 300 – 400 level Mathematics courses, or CMSC 300, and in so doing must complete one of the following sequences:

*Sequence 1**

MATH 362	Differential Equations/3 credits
AND	
MATH 405	Numerical Analysis/3 credits

*Sequence 2**

MATH 342	Introduction to Modern Algebra/3 credits
AND MATH 462	Advanced Calculus/3 credits

*Sequence 3**

MATH 371	Introduction to Probability and Statistics/3 credits
AND MATH 472	Introduction to Mathematical Statistics/3 credits

- * Sequence 1 recommended for students considering working in applied mathematics, Sequence 2 recommended for students in mathematics education or students considering graduate school in mathematics, and Sequence 3 recommended for students interested in pursuing careers in statistics.

****Electives may NOT include:**

MATH 267	Applications of Calculus/4 credits
MATH 271	Applied Statistics/3 credits
MATH 309	Numeration Systems/3 credits
MATH 310	Probability, and Statistics, and Programming/3 credits
MATH 313	Geometry and Reasoning/3 credits
MATH 330	Integration of Mathematics and Science Principles/1.5 credits
MATH 430	Teaching Mathematics in the Middle School/ 3 credits
MATH 451	The Teaching of High School Mathematics/3 credits
MATH 482	Directed Teaching in the Secondary School/11 credits
MATH 350	Ethical Issues

D. Secondary Education Endorsement, grades 6-12/38 - 51 credits

MATH 245	History of Mathematics/2 credits
OR MATH 320*	International Studies in Mathematics History/3 credits
MATH 335*	Advanced Euclidean Geometry/3 credits
MATH 342*	Introduction to Modern Algebra/3 credits
MATH 462*	Advanced Calculus/3 credits
MATH 451	The Teaching of High School Mathematics/3 credits
MATH 482	Directed Teaching in the Secondary School/11 credits
MAED 289**	Admission to Field Experience/1 credit
MAED 452	Practicum I in Mathematics/3 credits
MAED 453*	Practicum II in Mathematics/3 credits
EDUC 245	Human Growth and Development/3 credits
EDUC 260	Instruction to the Teaching Profession/2 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 381	Media and Technology/1 credit
EDUC 430	Teaching Reading in the Content Area/2 credits
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 488	Education Seminar/1 credit
SPED 489	Survey of Exceptional Children/3 credits

* MATH 320, MATH 335, MATH 342, MATH 462, and MAED 453 may count towards the mathematics major.

** Students must earn a "Pass" in MAED 289 before they will be permitted to enroll in MATH 451.

*** Students must be admitted to the Teacher Preparation Program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

E. General Electives (non-teaching majors)/33-36

F. Total Credits Required for BA, BS in Mathematics/120

Total Credits Required for BS in Mathematics with Secondary Teaching Endorsement /124-137

For additional Endorsement to teach Computer Science, Minor in Computer Science/18 hours.

For additional Endorsement to teach Algebra I (grades 6-12) complete Algebra I endorsement/25-26 credits.

See below.

MINOR IN MATHEMATICS

Minor Requirements/21 credits

MATH 260	Integrated Calculus II
OR MATH 261	The Differential and Integral Calculus I
MATH 262	The Differential and Integral Calculus II
MATH 361	Multivariable Calculus

** Electives: Nine additional credits consisting of MATH 271, CMSC 300, or mathematics at the 300 – 400 level.

** Electives may not include:

MATH 267	Applications of Calculus/4 credits
MATH 309	Numeration Systems/3 credits
MATH 310	Probability Statistics and Programming/3 credits
MATH 313	Geometry and Reasoning/3 credits
MATH 330	Integration of Math and Science Principles/1.5 credits
MATH 350	Ethical Issues in Mathematics and Computer Science/3 credits
MATH 430	Teaching Mathematics in the Middle School/3 credits
MATH 451	The Teaching of High School Mathematics/3 credits
MATH 482	Directed Teaching in the Secondary School/11 credits

ALGEBRA I ENDORSEMENT

Students who are preparing to teach and who are majoring in fields other than mathematics may be endorsed to teach mathematics courses through Algebra I in grades 6 – 12 by taking the courses listed below.

Algebra I Endorsement Requirements/26-28 credits

MATH 160	Integrated Calculus I/3 credits
OR MATH 164	Precalculus/3 credits
OR MATH 262	The Differential and Integral Calculus II/4 credits
MATH 343	Linear Algebra/4 credits
MATH 260	Integrated Calculus II/4 credits
OR MATH 261	The Differential and Integral Calculus I/4 credits
OR MATH 267	Applications of Calculus/4 credits
MATH 309	Numeration Systems/3 credits
MATH 310	Probability, Statistics, and Programming/3 credits
MATH 313	Geometry and Reasoning/3 credits
OR MATH 335	Advanced Euclidean Geometry/3 credits
MATH 430	Teaching Mathematics in the Middle School/3 credits
OR MATH 451	The Teaching of High School Mathematics/3 credits
CMSC 121	Introduction to Computer Science/3 credits
OR CMSC 160	Introduction to Algorithmic Design I/4 credits

MATHEMATICS COURSE DESCRIPTIONS (MATH)

- General Education Course *
- Writing Intensive Course WR
- Speaking Intensive Course SP

MATH 114. *Mathematics for the Consumer.* An introductory course designed to acquaint the student with the application of mathematics in the life of the consumer. Special attention will be given to the algebraic derivation of formulas, the reduction of real life situations to mathematical models, and the mathematics employed in banking, budgeting, credit, taxes, insurance, installment buying, annuities, stocks, bonds, and mortgages. 3 credits. * Fulfills General Education Goal 5.

MATH 121. *Functions and Graphs.* Graphical, numerical, and algebraic study of functions. Functions will include linear, polynomial, radical and exponential as well as their applications in sequences and series. Linear and quadratic equations and in equalities will also be studied/3 credits. * Fulfills General Education Goal 5.

MATH 131. *Mathematical Thinking.* An introduction to mathematical thinking through various studies. Mathematical patterns in the world around us through topics such as the Golden Ratio, Fibonacci series, Pi, fractals, chaos. Basic number theory and modular arithmetic applied to cryptology, check digit schemes, and music theory. Introductory statistics and finance. 3 credits. * Fulfills General Education Goal 5.

MATH 160. *Integrated Calculus I.* The first semester of a year-long calculus course, investigating functions, limits, continuity, and derivatives with an emphasis on power, polynomial, and rational functions. This course is intended for mathematics and science majors. 3 credits.

MATH 164. *Precalculus.* A study of polynomial, rational, exponential, logarithmic, and trigonometric functions and conic sections in order to prepare the student for calculus. 3 credits.* Fulfills Goal 5.

MATH 171. *Statistical Decision Making.* An elementary statistics course designed to give students a working knowledge of the ideas and tools of practical statistics and their usefulness in problem solving and decision making. Topics include graphical displays of data, measures of central tendency and variability, elementary probability concepts, the normal distribution, correlation and regression, and confidence intervals and hypothesis testing for means and proportions. Special emphasis is placed upon the proper use and interpretation of statistics in real life situations. 3 credits. * Fulfills Goal 5

MATH 181. *Finite Mathematics.* A study of discrete mathematical structures with applications primarily to business and economics. Topics will be selected from a review of sets; linear and quadratic functions; Gauss-Jordan elimination; matrix algebra; solutions of inequalities; introductory linear programming; introductory probability and statistics; introductory game theory; and mathematics of finance. 3 credits.

MATH 245. *History of Mathematics.* An introduction to the history of mathematics, concentrating on the period from the Greeks through the 19th century. The student will learn the historical development of many mathematical topics taught in middle and high school today. 2 credits. Offered spring of odd numbered years.

MATH 260. *Integrated Calculus II.* The second semester of a year-long calculus course, investigating limits, continuity, derivatives, and anti-derivatives with an emphasis on exponential and trigonometric functions. This course is intended for mathematics and science majors. Prerequisite: MATH 160. 4 credits.

MATH 261. *The Differential and Integral Calculus I.* The first semester of a course dealing with the basic ideas of calculus and analytic geometry. Prerequisite: MATH 164 with a C- or better, or permission of chair. 4 credits.

MATH 262. *The Differential and Integral Calculus II.* A continuation of topics introduced in MATH 260 or MATH 261, dealing with calculus and analytic geometry. Prerequisite for MATH 262: MATH 260 or MATH 261. Students who do not make a C- or better in MATH 260 or MATH 261 must have the consent of the instructor before enrolling in MATH 262. 4 credits.

MATH 267. *Applications of Calculus.* A course designed for students in Business, Economics, and the Social and Life Sciences. The techniques of calculus are presented in an informal approach. Emphasis is on applications of the mathematical concepts of calculus, e.g., break-even analysis, optimization, spread of epidemics, population growth models. Credit will not be given in this course toward the mathematics major. Prerequisite: MATH 164 or equivalent. 4 credits. * Offered every Spring.

MATH 270. *Introductory Statistics.* A rigorous but non-calculus based introduction to basic concepts from statistics and probability intended for mathematics, computer science and science majors. Topics include graphical displays of data, measures of central tendency and variability, elementary probability concepts, basic combi-

natorics, discrete probability distributions including the binomial distribution, the normal distribution, correlation and regression, and confidence intervals and hypothesis testing for means and proportions. Applications will be oriented towards the sciences. Prerequisite/corequisite: MATH 260 or MATH 261. 3 credits. Offered every spring.

MATH 271. *Applied Statistics.* Topics include measures of central tendency, probability distributions, measures of dispersion, correlation and linear regression, multiple linear regression, analysis of variance and covariance. The emphasis will be on linear modeling techniques to conduct hypothesis tests. Computer applications will be an integral part of the course. Knowledge of calculus will not be required. Credit will not be given toward the mathematics major. Prerequisite: MATH 171 or MATH 270. 3 credits. Offered every fall.

MATH 292. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits.

MATH 295. *Special Topics.* Selected topics in mathematics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

MATH 300. *A Transition to Advanced Mathematics.* An introduction to rigorous mathematical proof with focus on the properties of the real number system. Topics include elementary symbolic logic, mathematical induction, algebra of sets, relations, recursion, algebraic and completeness properties of the reals. Prerequisite: MATH 262 or consent of instructor. It is strongly recommended that a student have a C or better in MATH 262. It is also strongly recommended that a student have a C or better in this course before proceeding with future coursework. 3 credits. Offered every spring. WR

MATH 309. *Numeration Systems.* Examines various numeration systems past and present, computational algorithms, basic sets of operations, elementary number theory, concepts of rational numbers, and proportional reasoning in a problem-solving environment through student investigations and hands-on activities. 3 credits.

MATH 310. *Probability, Statistics, and Programming.* Examines probability, descriptive statistics, graphical representations and simple computer programming in a problem-solving environment through student investigations and hands-on activities. This course will require the use of a graphing calculator and computer. Prerequisite: MATH 309 or permission of instructor. 3 credits.

MATH 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in mathematics. 1-18 credits.

MATH 313. *Geometry and Reasoning.* Examines properties of and relationships between geometric figures, measurement, concepts of perimeter, area, and volume of two- and three-dimensional figures, transformations and coordinate geometry, constructions, the Pythagorean Theorem and trigonometric ratios, and geometric reasoning both deductive and inductive in a problem-solving environment through student investigations and hands-on activities. MATH 309 or permission of instructor. 3 credits.

MATH 320. *International Studies in Mathematics History.* The study of the mathematics of a particular culture with a focus on the historical relevance of the culture's mathematical results and its impact on later cultures. Course will provide a short-term immersion in the country (at additional cost) where the relevant mathematical developments took place. Prerequisite: MATH 260 or MATH 261. 3 credits.

MATH 330 (Science 330). *Integration of Mathematics and Science Principles.* An inquiry into basic principles involved in the study of mathematics and science. Emphasis on measurement, use of manipulatives, inference, prediction, data analysis, and hypothesizing. For Liberal Studies Majors only. Students are required to take SCED 330 concurrently with this course. 1.5 credits each. Offered every spring.

MATH 335. *Advanced Euclidean Geometry.* A study of Euclidean geometry from a more advanced viewpoint. The methods and techniques of synthetic axiomatic geometry will be stressed through a study of logic and for-

mal proof applied to Euclidean and non-Euclidean geometries. Prerequisite: MATH 300. 3 credits. Offered fall of odd numbered years.

MATH 336. *Advanced Topics in Geometry.* An examination of some of the geometric and/or topological developments since the time of Euclid. Topics may include: differential geometry, topology, projective geometry, affine geometry, transformations. Prerequisite: MATH 361, MATH 343, and MATH 300 or permission of instructor. 3 credits. Offered based on sufficient student interest.

MATH 342. *Introduction to Modern Algebra.* Sets and mappings, integers, general algebraic systems, groups, rings, and fields. Prerequisite: MATH 300. 3 credits. Offered fall of odd numbered years.

MATH 343. *Linear Algebra.* A basic study of vector spaces, linear transformations, and their relationships to matrix algebra. Also included are determinants, isomorphism theorems, linear functionals, and linear programming. Prerequisite: MATH 260 or MATH 261 or MATH 267/4 credits. Offered every fall.

MATH 345. *Number Theory.* An introductory course in additive and multiplicative number theory. Included are topics such as: divisibility, prime numbers, congruences, residue systems, linear and quadratic congruences, Diophantine equations, quadratic residues, and number theoretic functions. Prerequisite/corequisite: MATH 300. 3 credits. Offered based on sufficient student interest.

MATH 350 (CMSC 350). *Ethical Issues in Mathematics and Computer Science.* Consideration of ethical implications of mathematics and computer science in society. Overview of ethical theory; case studies of situations illustrating ethical dilemmas. A knowledge of calculus and algorithms will be assumed. 3 credit. *Fulfills General Education Goal 13, WR and SP

MATH 361. *Multivariable Calculus.* Advanced topics in calculus will include curves and planes in three dimensions as well as differentiation and integration of multi-variable functions. Prerequisite: MATH 262. Students who do not make C- or better in MATH 262 must have consent of the instructor before enrolling in MATH 361. 4 credits.

MATH 362. *Differential Equations.* Primarily a study of ordinary differential equations of the first and second order with application to elementary work in mechanics and physics. Prerequisite: MATH 262. Students who do not make C- or better in MATH 262 must have consent of the instructor before enrolling in MATH 362. 3 credits. Offered every spring.

MATH 371. *Introduction to Probability and Statistics.* Theory of probability; expected values of random variables; discrete and continuous probability distributions. Prerequisite: MATH 270 and 361. 3 credits. Offered every spring.

MATH 390. *Directed Study in Mathematics.* Individualized study; recommended only when material cannot be studied through existing course offerings. Must have permission of department chair. 1-3 credits. May be repeated as 391, etc.; no more than 6 credits.

MATH 392. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits.

MATH 395. *Special Topics in Mathematics.* Selected topics in mathematics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

MATH 405. *Numerical Analysis.* An investigation of numerical techniques of approximation, matrix computations, integration, and differentiation with emphasis on the solution of non-linear equations, linear systems and differential equations. The course will require use of the computer. Attention will be given to the problems of rounding error, conditioning, and stability. Prerequisite: MATH 343, 361 and CMSC 160 or equivalent. 3 credits. Offered spring of even numbered years.

MATH 420 (CMSC 420). *Graph Theory.* An introduction to topics in graph theory, focusing on analysis of specific applications and proofs of important theorems in the discipline. Topics include graphs, paths, and cycles; directed graphs, trees, and applications of graph theory in real world contexts. Prerequisite: CMSC 160 and either MATH 300 or CMSC 300. 3 credits.

MATH 430. *Teaching Mathematics in the Middle Schools.* A study of current practices in middle-school mathematics teaching with emphasis on principles, techniques, and materials. Required for those planning to teach middle school mathematics. 3 credits.

MATH 435 (CMSC 435). *Queuing Theory and Simulation.* A course covering the basic mathematics of queuing systems and the principles of the computer simulation of queuing systems. Topics include M/M/1, M/G/1, and G/M/1 queues, La-place and z-transforms, priority queuing, and basic computer simulation techniques. Prerequisite: CMSC 160, MATH 261. 3 credits. Offered based on sufficient student interest.

MATH 451. *The Teaching of High School Mathematics.* A study of current practices in high school mathematics teaching with emphasis on principles, techniques, and materials. Includes placement in a secondary classroom. Required for those planning to teach high school mathematics. 3 credits. Offered spring of even numbered years.

MATH 461. *Senior Seminar.* A capstone course for the mathematics major. Emphasis will be on problem solving, connections between various branches of mathematics. Prerequisite: Mathematics Major and Senior Status. 1 credit. SP Offered every fall.

MATH 462. *Advanced Calculus.* A theoretical approach to the study of limits, continuity, differentials, derivatives, and integrals. Development of the real number system, elementary point set theory, functions of several variables, infinite series, and power series. Prerequisite: MATH 300, 361. 3 credits. Offered fall of even numbered years.

MATH 472. *Introduction to Mathematical Statistics.* Distribution of functions of random variables; moments and moment generating functions; T, F and Chi-square distributions; limiting distributions; interval estimation; tests of hypotheses; the Central Limit Theorem; regression analysis; ANOVA. Prerequisite: MATH 371. 3 credits. Offered spring of odd numbered years.

MATH 481. *Complex Analysis.* An introduction to the fundamental concepts of complex analysis, including the complex plane, holomorphic functions, the exponential function, Cauchy integral formula, Taylor series, Laurent series, conformal maps, the notion of residues and some applications in physics. Prerequisite: MATH 361. 3 credits. Offered based on sufficient student interest.

MATH 482. *Directed Teaching in the Secondary School.* This course is required of all students seeking Secondary Teaching Licensure in Mathematics. Each student is assigned to work with a qualified cooperating teacher in a selected school setting. The student teacher will follow the schedule of the cooperating teacher. Prerequisite: Completion of all methods courses and a minimum cumulative GPA of 2.5. 11 credits. SP Offered as needed.
* Fulfills Goal 15

MATH 490. *Directed Study in Mathematics.* Individualized study; recommended only when material cannot be studied through existing course offerings. Must have permission of department chair. 1-3 credits. May be repeated for no more than 6 credits. SP * Fulfills Goal 15

MATH 492. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits. SP * Fulfills Goal 15

MATH 495. *Special Topics in Mathematics.* Selected topics in mathematics that require a student to have a firm grasp of proof techniques. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: MATH 300. 1-3 credits.

MATH 498. *Honors Research in Mathematics.* Students conduct research in mathematics under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

For Graduates and Advanced Undergraduates

MATH 513. *The Teaching of Probability and Statistics.* This course is designed especially for teachers and will use an experiential, informal, activity-based approach. There will be hands-on activities and experiments relating empirical and theoretical probabilities. Quick descriptive statistics and new graphical methods will be presented. These techniques are useful in describing, comparing, exploring and interpreting sets of data. There will also be intuitive ideas from inferential statistics. 3 credits.

MATH 595. *Special Topics in Mathematics.* Selected topics in mathematics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

MATHEMATICS EDUCATION COURSE DESCRIPTIONS (MAED)

MAED 289. *Early Mathematics Field Experience.* Structured field experiences to be completed during the freshman and sophomore years. Required of all students applying for admission to secondary mathematics methods courses. 1 credit.

MAED 452. *Practicum in Mathematics I.* An in-depth observation and participation practicum. Placed in public school settings for at least 60 hours under supervision of Longwood faculty. Taken concurrently with MATH 451. 3 credits. Prerequisite: MAED 289 or permission of instructor. Offered spring semester of even numbered years.

MAED 453. *Practicum in Mathematics II.* An in-depth observation and participation practicum. Placed in public school settings for at least 60 hours under supervision of Longwood faculty. Prerequisite: Passing score on Praxis II and MATH 451, MAED 452 or permission of instructor. 3 credits. Offered fall semester of even numbered years. SP

COMPUTER SCIENCE PROGRAM

Faculty

John R. Graham, PhD, *Assistant Professor of Computer Science*
Robert Marmorstein, PhD, *Assistant Professor of Computer Science*
Jeffery H. Peden, PhD, *Associate Professor of Computer Science*
Robert P. Webber, PhD, *Professor of Mathematics and Computer Science*

While every attempt is made to state the requirements and concentrations available in the department as succinctly as possible, it is recommended that every student majoring or minoring in the department continue in close communication with the academic advisor assigned by the department in order to plan the program best suited to individual needs and goals.

Students desiring a minor in computer science must successfully complete the appropriate program described below, and must see the Chair of the Department of Mathematics and Computer Science to officially declare a minor in this field.

COMPUTER SCIENCE MAJOR, BA or BS DEGREE

A. General Education Core Requirements/41 credits.

Computer Science majors are required to take PHIL 300 for general education goal 12;
CMSC 350 for general education goal 13.

B. BA Degree Additional Degree Requirements/6 credits.

BS Degree Additional Degree Requirements/7 credits.

Students seeking a BS degree cannot take a 100-level Computer Science course as their Mathematics or Computer Science elective.

C. Major Requirements/57-59 credits (plus 4 credits included in General Education)

Computer Science Majors must earn a C or better in any CMSC course for it to count towards the major.

Computer Science Foundations/23-25 credits (plus 1 credit included in General Education)

CMSC 160 Introduction to Algorithmic Design I/4 credits

CMSC 162 Introduction to Algorithmic Design II/4 credits

CMSC 301 Computer Organization/3 credits

CMSC 308 Organization of Programming Languages/3 credits

CMSC 310 Introduction to Operating Systems and Computer Architecture/3 credits

CMSC 461 Seminar in Computer Science/ 3 credits

ENGL 319 Technical Writing/3 credits

CMSC 492 or CMSC 490 /1-3 credits (1 credit satisfies General Education Goal 15)

Mathematics Foundations/7 hours (plus 3 credits included in General Education):

MATH 260 Integrated Calculus II/4 credits

OR MATH 261 The Differential and Integral Calculus I/4 credits
(3 of these 4 credits satisfy General Education Goal 5)

MATH 171 Statistical Decision Making/3 credits

OR MATH 270 Introductory Statistics/3 credits

CMSC 300 Discrete Mathematics for Computer Science/3 credits

OR MATH 300 A Transition to Advanced Mathematics/3 credits

*Electives**

Students must complete a total of 27 additional hours from 300-400 level Computer Science courses, and in so doing must complete one of the following concentrations:

Theoretical Concentration

CMSC 342 Systems Programming/3 credits

CMSC 415 Theory of Computation/3 credits

CMSC 420 (MATH 420) Graph Theory/3 credits

Choose one of the following:

CMSC 210 Web Page Design and Scripting/3 credits

CMSC 215 Introduction to Fortran/3 credits

CMSC 220 Advanced Java Programming/3 credits

CMSC 225 Introduction to Ada/3 credits

CIMS 372 COBOL Programming/3 credits

Choose two of the following:

CMSC 360 Computer Network Theory/3 credits

CMSC 362 Theory of Databases/3 credits

CMSC 445 Compiler Design/3 credits

Information Systems Concentration

CMSC 210 Web Page Design and Scripting/3 credits

CMSC 340 System Administration/3 credits

CMSC 355 Introduction to Computer and Network Security/3 credits

CMSC 362 Theory of Databases/3 credits

CMSC 408 Software Engineering/3 credits

CMSC 360 Computer Network Theory/3 credits

OR CMSC 445 Compiler Design/3 credits

**Electives may NOT include CMSC 350.*

- D. General Electives, BS degree/13-15 credits
General Electives, BA degree/14-16 credits

E. Total Credits Required for BA or BS degree/120

MINOR IN COMPUTER SCIENCE

Minor Requirements/18 credits

CMSC 160 Introduction to Algorithmic Design I/4 credits

CMSC 162 Introduction to Algorithmic Design II/4 credits

Electives: At least ten additional credits of CMSC courses at the 300 or 400 level (excluding CMSC 350).

- D. General Electives, BS degree/8-10 credits
General Electives, BA degree/9-11 credits

E. Total Credits Required for BA or BS degree/120

MINOR IN COMPUTER SCIENCE/18 credits

A minor in computer science shall consist of CMSC 160, CMSC 162, CMSC 240, and at least 9 additional hours of CMSC courses, at the 300 or 400 level. (excluding CMSC 350)/18 credits.

MINOR IN COMPUTER SECURITY, FORENSICS, AND LAW/18 credits

Students may pursue a minor in Computer Security, Forensics, and Law. Students pursuing this interdisciplinary minor will take courses in Computer Information Management Systems, Computer Science, and Criminology and Criminal Justice.

(Please refer to requirements listed in College of Business & Economics)

COMPUTER SCIENCE COURSE DESCRIPTIONS (CMSC)

General Education *

Writing Intensive Course WR

Speaking Intensive Course SP

CMSC 121. Introduction to Computer Science. An introduction to computer science for non-specialists. Basic computer architecture and design, storage formats, principles of computer operation, and algorithms. Application software that emphasizes the computer as a tool. * 3 credits. Fulfills General Education Goal 5.

CMSC 160. Introduction to Algorithmic Design I. An introduction to problem solving and algorithmic design using an object-oriented programming language. Topics include programming logic, iteration, functions, recursion, arrays, memory management, user-defined data types, abstraction, and complexity analysis. 4 credits.

CMSC 162. Introduction to Algorithmic Design II. A continuation of CMSC 160. Topics include algorithmic design, complexity analysis, abstract data types, and encapsulation and basic data structures. Advanced topics using a modern high-level programming language such as inheritance, overloading, and use of objects. Prerequisite: Grade of C- or better in CMSC 160. 4 credits.

CMSC 210. *Web Page Design and Scripting*. The class will study interactive web pages that provide customized data in response to visitor requests and/or collect data from site visitors. This interaction will be done via program scripts written in an appropriate language. Prerequisite: CMSC 160 or permission of the instructor. 3 credits.

CMSC 215. *Introduction to Fortran*. An overview of the FORTRAN programming language, with emphasis on applications to mathematics and science. Prerequisites: knowledge of another computer language. 3 credits.

CMSC 220. *Advanced Java Programming.* This class develops the skills for programming using the Java Programming Language. This is an advanced programming course and it is assumed that the student has the required programming skills acquired from previous C and C++ programming classes. Prerequisite: CMSC 160 or permission of the instructor. 3 credits.

CMSC 225. *Programming in Ada.* An intensive overview of programming constructs, techniques, and data structures using the Ada programming language. Prerequisite: CMSC 160 or permission of the instructor. 3 credits.

CMSC 240. *Data Structures.* A continuation of CMSC 162. Topics include Analysis of Algorithms with an emphasis on computational complexity. Advanced algorithms may include self adjusting trees, hashing, graphs, advanced sorting and searching methods and greedy algorithms. Prerequisites: grade of C or better in CMSC 162. 3 credits.

CMSC 290. *Self Study in Programming.* Independent study of a specific programming language, its syntax and applications, based on prior study of programming languages in general. May not duplicate other language courses. Must be arranged with an instructor and approved by department chair before registering. May be repeated for credit with different languages. Prerequisite: CMSC 162. 1 credit.

CMSC 292. *Internship in Computer Science.* A semester-long, on-the-job learning experience designed to apply the principles of computer science. 1-18 credits.

CMSC 295. *Special Topics.* Selected topics in computer science. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

CMSC 300. *Discrete Mathematics for Computer Science.* Topics in discrete mathematics used in computer science, including methods of proof, graphs, computability, and formal grammars. Prerequisites: CMSC 162. 3 credits.

CMSC 301. *Computer Organization.* The organization, design, and structure of computer systems, including both hardware and software principles. Topics include memory addressing, machine-level representations of software and data, fundamentals of logic design, and the mechanics of information transfer and control within a computer system. Prerequisite: CMSC 162 or consent of instructor. Fall only. 3 credits.

CMSC 306. *Computer Organization.* The organization and structuring of the major hardware components of computers; the mechanics of information transfer and control within a computer system; standard computer architectures; the fundamentals of logic design. Prerequisite: CMSC 162. 3 credits.

CMSC 308. *Organization of Programming Languages.* Topics include language and definition structure, data types and structures, control structures and data flow, run-time characteristics and lexical analysis and parsing. Programming assignments will involve the use of several different languages. Prerequisite: CMSC 162 or permission of instructor. 3 credits. WR

CMSC 310. *Introduction to Operating Systems and Computer Architecture.* Emphasis will be placed on concepts rather than case studies and on the interdependence of operating systems and architecture. Topics include instruction sets, I/O and interrupt structure, addressing schemes, microprogramming, memory management and recovery procedures. Prerequisite: CMSC 162. 3 credits.

CMSC 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in computer science. 1-18 credits.

CMSC 340. *Systems Administration.* A hands-on approach to use of the Linux-based operating systems. This is a project oriented class. Topics include shell programming, managing system resources and understanding user/administrator interactions. Prerequisite: CMSC 301 or permission of instructor. 3 credits.

CMSC 342. *Systems Programming.* A programming intensive class designed to give students access to system resources via Application Programmer Interfaces (API). This is a project oriented class. Projects include network based chat, programming signals to control program operation, and advanced file manipulations. Prerequisite: CMSC 301 or permission of instructor. 3 credits.

CMSC 350. (MATH 350). *Ethical Issues in Mathematics and Computer Science.* Consideration of ethical implications of mathematics and computer science in society. Overview of ethical theory; case studies of situations illustrating ethical dilemmas. A knowledge of calculus and algorithms will be assumed. 3 credits. * Fulfills General Education Goal 13. SP and WR

CMSC 355. *Introduction to Computer and Network Security.* A course dealing with basic techniques in computer and network security. Topics covered include elementary cryptography, secure programs, malicious code, protection of operating systems, database security, network security, security administration and legal issues. Prerequisites: CMSC 160. 3 credits.

CMSC 360. *Computer Network Theory.* A course covering the theory and design of modern computer networks. Topics include local and wide area networks, the OSI network model, basic network performance analysis, and real time networks. Prerequisite: CMSC 162. 3 credits.

CMSC 362. *Theory of Databases.* A course covering the theory and practice of modern databases design and implementation. Topics include relational and hierarchical database design, database query languages, update consistency, and distributed databases. Prerequisite: CMSC 162. 3 credits. WR

CMSC 381. *Introduction to Graphics Programming.* This course is designed to introduce students to computer graphics programming techniques. It will combine the use of a high level programming language with a publicly available graphics application programming interface. Other topics will include the mathematics to manipulate geometric objects. Prerequisites: CMSC 162, MATH 261. 3 credits.

CMSC 389. *Artificial Intelligence.* An advanced theory and programming course covering the theory and techniques of artificial intelligence. Topics covered include computer vision, game playing, min-max algorithms, and an introduction to the LISP programming language. Prerequisite: CMSC 162. 3 credits.

CMSC 390. *Directed Study in Computer Science.* Individualized study; recommended only when material cannot be studied through existing course offerings. Must have permission of department chair. 1-3 credits. May be repeated as CMSC 391, etc.; no more than 6 credits.

CMSC 392. *Internship in Computer Science.* A semester-long, on-the-job learning experience designed to apply the principles of computer science. 1-18 credits.

CMSC 408. *Software Engineering.* A language independent course covering the principles of software engineering including traditional and object-oriented software design, software lifecycle models, software analysis, and management implications. The implementation of developing software using teams will be stressed along with various software tools. Reusability, portability, and interoperability will also be discussed. The choice of implementation language for course projects may vary from year to year. (Speaking Intensive) Prerequisites: CMSC 162. 3 credits. SP

CMSC 415. *Theory of Computation.* The basic theories underlying computer science, such as language and automata theory, and the computability of functions. Emphasis is placed on the development of theoretical machine and language descriptions. Prerequisite: CMSC 300. 3 credits.

CMSC 420 (MATH 420). *Graph Theory.* An introduction to topics in graph theory, focusing on analysis of specific applications and proofs of important theorems in the discipline. Topics include graphs, paths, and cycles; directed graphs, trees, and applications of graph theory in real world contexts. Prerequisite: CMSC 160 and either MATH 300 or CMSC 300. 3 credits.

CMSC 435 (MATH 435). *Queuing Theory and Simulation.* A course covering the basic mathematics of queuing systems and the principles of the computer simulation of queuing systems. Topics include M/M1, M/G/1, and G/M/1 queues, Laplace and z-transforms, priority queuing, and basic computer simulation techniques. Prerequisite: CMSC 160, MATH 261. 3 credits.

CMSC 445. *Compiler Design.* A course covering the basic theory and techniques of compiler and code translation systems. Topics include lexical analysis, parsing, and code generation, and the various techniques used when handling differing source language classes. A programming intensive course. Also covered are the techniques of top-down and bottom-up parsing. Prerequisite: CMSC 300. 3 credits.

CMSC 452. *Computers in Education.* A survey of programming languages, software, and hardware commonly found in an educational setting. Prerequisite: CMSC 121 or consent of instructor. 3 credits.

CMSC 455. *Network Security and Cryptography.* This course covers several modern cryptographic systems, including the DES and AES encryption standards. Their applications to network security are discussed, along with issues of authentication, privacy, intruders, malicious programs and firewalls. The approach is from the theoretical side, and the mathematics of these areas is studied. Prerequisites: CMSC 160 and a background in discrete mathematics. 3 credits.

CMSC 461. *Seminar in Computer Science.* This course is the capstone experience in the computer science major. A segment on assessment will be included. Corequisite: Satisfaction of all other requirements for the computer science major or consent of instructor. 3 credits.

CMSC 490. *Directed Study in Computer Science.* Individualized study; recommended only when material cannot be studied through existing course offerings. Must have permission of department chair. 1-3 credits. May be repeated for no more than 6 credits. SP *Fulfills General Education Goal 15.

CMSC 492. *Internship in Computer Science.* A semester-long on-the-job learning experience designed to apply the principles of computer science. 1-18 credits. SP *Fulfills General Education Goal 15.

CMSC 495. *Special Topics.* Selected topics in computer science. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

CMSC 498. *Honors Research in Computer Science.* Students conduct research in computer science under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits

Department of Music

Charles E. Kinzer, *Chair*

Brenda Clark, *Secretary*

The mission of the Music Department is to educate students in the discipline of music and to provide quality, practical musical experiences for them. Our primary goals are preparing music majors for professional careers in music and providing all interested students and members of the community with experiences that will enhance their appreciation and understanding of music.

Our specific objectives are the following:

- to prepare students to teach in the public schools (K-12) in vocal, instrumental, and general music
- to prepare students for graduate or further professional study in music
- to provide quality musical experiences for the music minors and general education students
- to provide a variety of performance opportunities for the music majors, other qualified Longwood students, and members of the community
- to present high quality musical events for the campus and community

The Department of Music offers courses leading to two degrees: the Bachelor of Arts degree with concentration in Music, and the Bachelor of Music with concentration in one of the following areas: Education, Performance (voice, piano, brass, woodwinds, percussion), and Piano Pedagogy. Common to each degree is a basic music core outlined in the specific degree plans that follow.

Entering music students may be accepted into the Bachelor of Arts or the Bachelor of Music / Concentration Undeclared programs through formal admission to the university and a successful audition before the music faculty.

Students may be accepted into the various Bachelor of Music Concentrations by completing the following:

Bachelor of Music / Performance - successful performance audition before the Applied Committee at the end of MUSC 182

Bachelor of Music / Education - a Virginia passing score on Praxis I (may be completed before entering Longwood) or an equivalent passing score on the SAT or ACT

Bachelor of Music / Piano Pedagogy - successful interview with the piano faculty at the end of MUSC 182

Bachelor of Music students must declare one of these concentrations before the end of the sophomore year.

Music majors must meet the following requirements:

1. Each incoming freshman music major or transfer student must audition and interview with the music faculty. A non-keyboard major must take a keyboard placement examination in order to determine his/her level of piano proficiency.
2. Every music major is required to enroll in an ensemble for credit each semester. For vocal majors that ensemble will be the University Choir or Camerata Singers, and for the instrumental majors that ensemble will be the Wind Symphony. Keyboard majors may choose from the three, depending upon abilities and professional track.

3. Students pursuing the B.M. degree in Performance are required to present a half Junior recital and a full Senior recital. Students pursuing the B.M. degree in Piano Pedagogy are required to present a minimum of a half Junior Recital and half Senior Recital. Students pursuing the B.M. in the Education concentration are required to present a minimum of a half Senior recital. Students pursuing the B.A. in Music are required to present a half Senior recital or approved Senior project.
4. All music majors must complete a piano proficiency examination prior to graduation. Students pursuing education degrees must complete the proficiency prior to student teaching.

The amount of credit in applied music that may be transferred from other institutions will be determined through evaluation of the student's ability by the Music faculty.

The Department of Music also offers a Minor in Music, a program that requires the successful completion of 20 credits in music. Those credits are earned in theoretical studies, history and literature, applied study, music electives, and in music ensembles.

The department is an accredited institutional member of the National Association of Schools of Music.

Assessment

In addition to the Longwood Admission application, students are admitted to the music major on the basis of an in-person audition and interview with the Music Faculty. Students majoring in music are carefully assessed in performance each semester during their college careers by a jury examination in performance administered by the Music Faculty who make written commentary that is then discussed with the student by the applied instructor in a follow-up conference. Prior to the presentation of Junior and Senior recitals, a Recital Hearing is performed for the Music Faculty who make written commentary that is discussed in a follow-up conference. Continuing students who apply for scholarship assistance are auditioned and interviewed by the Music Faculty.

MUSIC DEGREE PROGRAMS

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

Faculty

All music faculty teach in each of the music degree programs listed below.

Jennifer Capaldo, DMA, *Assistant Professor of Music*
 Ryan Hebert, DMA, *Assistant Professor of Music*
 Charles E. Kinzer, PhD, *Professor of Music*
 Lisa B. Kinzer, DMA, *Professor of Music*
 Patricia D. Lust, DM, *Professor of Music*
 Gordon L. Ring, DMA, *Professor of Music*
 Christopher L. Swanson, DMA, *Associate Professor of Music*

BACHELOR OF ARTS

Visual and Performing Arts

Concentration in Music

(Applied Areas: Voice, Piano, Brass, Woodwinds, Percussion)

The degree Bachelor of Arts with a Concentration in Music is a program of study in which the student is encouraged to develop skills as a practicing musician and which prepares the student with the necessary skills to pursue graduate studies in music literature or history. The degree program requires a modern language in Spanish, German, or French at the 202 level. Students following the Recital Option will present a half-recital as a course requirement of MUSC 483. Students following the Project Option will complete MUCS 484, Capstone Project in Music.

A. General Education Core Requirements/41 credits

Music Majors will take MUSC 331 to fulfill Goal 12.

B. Additional Degree Requirements/6 credits

Modern Language (French, German, or Spanish)/3 credits (at 202 level or above)

Humanities/3 credits not in the discipline of music

C. Major Requirements/52 credits (plus 1 credit included in General Education)

MUSC 113 Theory of Music/2 credits

MUSC 114 Theory of Music/2 credits

MUSC 115 Sightsinging and Dictation/1 credit

MUSC 116 Sightsinging and Dictation/1 credit

MUSC 119 Introduction to Computer Applications in Music/1 credit

MUSC 137 Music Literature/2 credits

MUSC 163 Beginning Piano I/1 credit

MUSC 164 Beginning Piano II/1 credit

MUSC 263 Intermediate Piano I/1 credit

(May be exempt from any or all of the above piano classes by passing the Piano Proficiency/not required of keyboard primary)

MUSC 264 Intermediate Piano II/1 credit

MUSC 213 Theory of Music/2 credits

MUSC 214 Theory of Music/2 credits

MUSC 215 Sightsinging and Dictation/1 credit

MUSC 216 Sightsinging and Dictation/1 credit

MUSC 313 Form and Analysis/3 credits

MUSC 332 History of Music/3 credits

MUSC 341 Conducting/2 credits

MUSC 483 Applied Music Capstone Course/3 credits

OR MUSC 484 Capstone Project in Music (1 credit satisfies General Education Goal 15)

Music Electives/5-8 credits

Ensembles/8 credits

Applied Primary/10 credits

D. General Electives/21 credits

E. Total Credits Required for Bachelor of Arts with a Concentration in Music/120

BACHELOR OF MUSIC

CORE MUSIC COURSES/21-24

Required of all students seeking any Bachelor of Music Degree

MUSC 113 Theory of Music/2 credits

MUSC 114 Theory of Music/2 credits

MUSC 115 Sightsinging and Dictation/1 credit

MUSC 116 Sightsinging and Dictation/1 credit

MUSC 119 Introduction to Computer Applications in Music/1 credit

MUSC 137 Music Literature/2 credits

MUSC 163 Beginning Piano I/1 credit (not required for piano primary)

MUSC 164 Beginning Piano II/1 credit (not required for piano primary)

MUSC 213 Theory of Music/2 credits

MUSC 214 Theory of Music/2 credits

MUSC 215 Sightsinging and Dictation/1 credit

MUSC 216 Sightsinging and Dictation/1 credit

MUSC 263	Intermediate Piano I/1 credit (not required for piano primary) (May be exempt from MUSC 163, 164 and 263 by piano placement exam)
MUSC 264	Intermediate Piano II/1 credit
MUSC 313	Form and Analysis/3 credits
MUSC 341	Conducting/2 credits

BACHELOR OF MUSIC

Visual and Performing Arts

Concentration in Education

(Applied Areas: Voice, Piano, Brass, Woodwinds, Percussion)

The degree Bachelor of Music with a Concentration in Education K-12 is designed to prepare the student to be endorsed and to teach music in the schools. Each student develops as a practicing musician in voice or in instrumental studies, and acquires the skills necessary to communicate musical concepts and skills. Opportunities to observe and to teach in the classroom situation prepare the student for an intensive professional semester at the end of the program of study.

A. General Education Core Requirements/41 credits

Music Majors will take MUSC 331 to fulfill Goal 12.

B. Additional Degree Requirements/6 credits

Humanities/3 credits not in music.

MUSC 225, World Music/3 credits

C. Core Music Courses/21-24 credits

D. Major Education Requirements/24-25 credits

Courses specific to the CHORAL track/24 credits

MUSC 140	Diction for Singers I/2 credits
MUSC 141	Diction for Singers II/2 credits
MUSC 340	Instrumental Survey/3 credits
MUSC 342	Advanced Choral Conducting/2 credits
MUSC 412	Arranging/2 credits
MUSC 483	Applied Capstone Course/2 credits (one credit Counted in General Education Goal 15)

Applied Music/12 credits

Courses specific to the INSTRUMENTAL track/25credits

MUSC 165	Strings/1 credit
MUSC 167	Percussion/1 credit
MUSC 205	Vocal Ensemble/2 credits
MUSC 343	Advanced Instrumental Conducting/2 credits
MUSC 361	Brass/1 credit
MUSC 363	Woodwinds/1 credit
MUSC 365	Vocal Techniques/1 credit
MUSC 412	Arranging/2 credits
MUSC 444	Marching Band Fundamentals/1 credit
MUSC 483	Applied Capstone Course/2 credits (one credit Counted in General Education Goal 15)

Applied Music/12 credits

E. Professional Education Courses/17 credits

MUSC 145	Introduction to Music Education/1 credit
MUSC 441	Elementary School Methods and Materials/3 credits
EDUC 245	Human Growth and Development/3 credits

EDUC 260	Introduction to the Teaching Profession/2 credits
MUSC 332	History of Music II/3 credits
MUSC 442	Choral Methods and Materials/2 credits
or MUSC 443	Instrumental Methods and Materials/2 credits
EDUC 487	Classroom Management and System Issues/3 credits

F. Field Experience/14 credits

MUSC 345	Practicum in Elementary School/1 credit
MUSC 346	Practicum in Secondary School/1 credit
EDUC 410	Directed Elementary/Secondary Teaching for Art and Music/12 credits

G. Total Credits Required for Bachelor of Music with a Concentration in Education/123-127

BACHELOR OF MUSIC

Visual and Performing Arts

Concentration in Performance

(Applied Areas: Voice, Piano, Brass, Woodwinds, Percussion)

The degree Bachelor of Music is a performance degree in music. Areas of concentration include instrumental or vocal. In addition to developing the understanding of musical concepts and a knowledge of the historical musical styles, emphasis in the program is weighted to high achievement in musical performance.

A. General Education Core Requirements/41 credits

Music Majors will take MUSC 331 to fulfill Goal 12.

B. Additional Degree Requirements/6 credits

Modern Languages (French or German/3 credits (at 202-level or above)

Humanities/3 credits not in the discipline of music

C. Core Music Courses/21-24 credits

D. Performance Concentration Courses/45-47 credits

Courses specific to VOICE Primary/47 credits

MUSC 140	Diction for Singers I/2 credits
MUSC 141	Diction for Singers II/2 credits
MUSC 243	Piano Accompanying/1 credit
MUSC 332	History of Music II/3 credits
MUSC 436	Vocal Literature/2 credits
MUSC 446	Vocal Pedagogy/2 credits
MUSC 483	Applied Capstone Course/2 credits (one credit Counted in General Education Goal 15)

Applied Study/19 credits

Ensembles/8 credits

Music Electives/6 credits

Courses specific to INSTRUMENTAL Primary/45 credits

MUSC 332	History of Music II/3 credits
MUSC 343	Advanced Instrumental Conducting/2 credits
MUSC 433	Instrumental Literature/2 credits
MUSC 435	Piano Literature/2 credits
Choose one of the following 3 methods classes/1 credit	
MUSC 167	Percussion Techniques and Methods/1 credit
MUSC 361	Brass Techniques and Methods/1 credit
MUSC 363	Woodwinds Techniques and Methods/1 credit

MUSC 483 Applied Capstone Course/2 credits
 (one credit Counted in General Education Goal 15)
 Applied Study/19 credits
 Ensembles/10 credits
 Music Electives/6 credits

Courses specific to PIANO Primary/49 credits

MUSC 243 Piano Accompanying/1 credit
 MUSC 319 Keyboard Improvisation/2 credits
 MUSC 332 History of Music II/3 credits
 MUSC 335 Piano Duet and Duo-Piano Literature/2 credits
 MUSC 435 Piano Literature/2 credits
 MUSC 445 Piano Pedagogy I/2 credits
 MUSC 483 Applied Capstone Course/2 credits
 (one credit Counted in General Education Goal 15)
 Applied Study/19 credits
 Ensembles/10 credits
 Music Electives/6 credits

E. General Electives (all concentrations)/3-7 credits

F. Total Credits Required for Bachelor of Music with a Concentration in Performance/120

BACHELOR OF MUSIC

Visual and Performing Arts

Concentration in Piano Pedagogy

(Applied Area, Piano)

The degree Bachelor of Music with a Concentration in Piano Pedagogy offers students with strong performance skills the opportunity to apply those skills to teaching applied piano in individual and group settings. Elective Education and Business courses supplement a core music curriculum that fosters growth in areas of performance, music theory, music literature, and music education. Students who complete this degree program will be well equipped to perform in varied settings, establish independent teaching studios, and teach piano in community music and preparatory schools. They will also have a thorough background for pursuing graduate studies in piano pedagogy and performance.

A. General Education Core Requirements/41 credits

Music Majors will take MUSC 331 to fulfill Goal 12.

B. Additional Degree Requirements/6 credits

Humanities/6 credits in at least two disciplines and not in the discipline of music

C. Core Music Courses/21 credits

D. Piano Pedagogy Concentration Courses/46 credits

MUSC 243 Piano Accompanying/1 credit
 MUSC 319 Keyboard Improvisation/1 credit
 MUSC 332 History of Music/3 credits
 MUSC 335 Piano Duet and Duo-Piano Literature/2 credits
 MUSC 427 Intermediate Piano Literature/2 credits
 MUSC 435 Piano Literature/2 credits
 MUSC 445 Piano Pedagogy I/2 credits
 MUSC 447 Piano Pedagogy II/2 credits

MUSC 483	Applied Capstone Course/2 credits (one credit Counted in General Education Goal 15)
MUSC 492	Piano Internship/6 credits
Applied Study/17 credits	
Ensembles/8 credits	

E. General Electives/6 credits

F. Total Credits Required for Bachelor of Music with a Concentration in Piano Pedagogy/120

MINOR IN MUSIC

The Minor in music is a program that requires the successful completion of 20 credits in music. Those credits are earned in theoretical studies, history and literature, applied study, and in music ensembles. Music 115 and Music 116 must be taken prior to or during the first year of applied study.

Minor Requirements/20 credits

MUSC 113	Theory of Music/2 credits
MUSC 114	Theory of Music/2 credits
MUSC 115	Sightsinging and Dictation/1 credit
MUSC 116	Sightsinging and Dictation/1 credit
MUSC 137	Music Literature/2 credits
MUSC 163	Beginning Piano I/1 credit
MUSC 164	Beginning Piano II/1 credit

(If applied area is piano, substitute 2 elective credits for this requirement. If student demonstrates intermediate-level keyboard skills, substitute 2 elective credits for this requirement.)

Applied Music: MUSC 171, 172/2 credits

Music electives/4-6 credits

Ensembles/4 credits

MUSIC COURSE DESCRIPTIONS (MUSC)

A special fee is charged for all individual applied music courses. †

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Course SP

Private Applied Study. By special permission of the Chair of the Music Department. A special fee is charged for private study. 1 credit. †

MUSC 113. *Theory of Music.* Introduction to fundamentals of music including notation, scales, intervals, triads and rhythm. 2 credits. Must be taken concurrently with MUSC 115.

MUSC 114. *Theory of Music.* Continuation of 113 including voice leading, modulation and secondary chords. Prerequisite: MUSC 113. 2 credits. Must be taken concurrently with MUSC 116.

MUSC 115. *Sightsinging and Dictation.* Ear training through sightsinging and dictation. 2 periods; 1 credit each semester. Must be taken concurrently with MUSC 113.

MUSC 116. *Sightsinging and Dictation.* Continuation of 115 which is prerequisite. 2 periods; 1 credit. Must be taken concurrently with MUSC 114.

MUSC 117, 118, 217, 218, 317, 318, 417, 418. *Composition*. Instruction in techniques of composing music. Prerequisite: MUSC 113, 115 or consent of instructor. May be repeated for credit. 1 class and 1 private lesson; 1 credit.

MUSC 119. *Introduction to Computer Applications in Music*. An introduction to Musical Instrument Digital Interface (MIDI) and computer music applications including music notation, sequencing, and other software. One period; 1 credit.

MUSC 137. *Music Literature*. Survey of the major periods of music with examples of the works of principal composers in each period; the relation of music to other aspects of history and culture. 2 credits.

MUSC 140. *Diction for Singers I*. Study of phonetics and the International Phonetic Alphabet. Accurate pronunciation in English, Latin and Italian. 2 periods. 2 credits.

MUSC 141. *Diction for Singers II*. Study of phonetics and the International Phonetic Alphabet. Accurate pronunciation in German and French. Prerequisite: MUSC 140. 2 periods. 2 credits.

MUSC 145. *Introduction to Music Education*. Survey of the role of music in the education of children, including historical, sociological and philosophical aspects. Consideration of the relationship between assessment and instruction. Music Majors only. 1 period; 1 credit.

MUSC 163. *Beginning Piano I*. Study and practice in basic keyboard techniques, sightreading, memorization, scales, arpeggios and chord progressions. Introduction to the piano literature. Open only to music majors and others by permission of the instructor. Must be taken concurrently with MUSC 113. 1 credit.

MUSC 164. *Beginning Piano II*. Continuation of MUSC 163 with individually assigned repertoire. Prerequisite: Music 163. Must be taken concurrently with MUSC 114.1 credit.

MUSC 213. *Theory of Music*. Continuation of 114 including chromaticism and altered chords. Prerequisite: MUSC 114. 2 credits. Must be taken concurrently with MUSC 215.

MUSC 214. *Theory of Music*. Continuation of 213, including late 19th and 20th century topics such as 12 tone and other contemporary compositional techniques. Prerequisite: MUSC 213. 2 credits. Must be taken concurrently with MUSC 216.

MUSC 215. *Sightsinging and Dictation*. Continuation of 115, 116 which are prerequisites. 2 periods; 1 credit each semester. Must be taken concurrently with MUSC 213.

MUSC 216. *Sightsinging and Dictation*. Continuation of 215 which is a prerequisite. 2 periods, 1 credit each semester. Must be taken concurrently with MUSC 214.

MUSC 221. *History of Jazz*. Survey of the history of jazz from its origins to the present, with a consideration of the relation of jazz to other aspects of history and culture. 3 credits. * Fulfills Goal 4.

MUSC 222. *History of Rock*. Survey of the history of Rock from its origins to the present, with a consideration of the relation of Rock to other aspects of history and culture. 3 credits. * Fulfills Goal 4.

MUSC 223. *Introduction to Music*. An introduction to the content and structure of music. A practical application through performance and composition of the fundamental theories of music. Not open to music majors. 4 credits.

MUSC 224. *The Appreciation of Music*. Study of Musical arts with regard to the composers and compositions of major style eras. Laboratory/concerts will emphasize critical analysis of live concerts, rehearsals and recitals. Not open to music majors. 3 credits. * Fulfills Goal 4.

- MUSC 225. *Introduction to World Music*. Survey of the history of World Music from its origins to the present, with a consideration of the relation of World Music to other aspects of history and culture. 3 credits. * Fulfills Goal 9.
- MUSC 227. *Jazz, Folk, Rock, and Broadway Musicals*. Survey and comparison of the styles, characteristics, composers, and performers of folk, jazz, rock, and Broadway music. 3 credits.
- MUSC 243. *Piano Accompanying*. Study and practical application of accompanying other musicians. Recommended for keyboard majors. 2 periods; 1 credit.
- MUSC 263. *Intermediate Piano I*. Continuation of MUSC 164 with the addition of improvisation. Prerequisite: MUSC 164. 1 credit.
- MUSC 264. *Intermediate Piano II*. Continuation of MUSC 263. Prerequisite: MUSC 263. 1 credit.
- MUSC 292. *Internship in Music*. A semester-long, on-the-job learning experience designed to apply the principles of music. 1-18 credits.
- MUSC 295. *Special Topics in Music*. Selected topics in music. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.
- MUSC 311, 312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad in courses on music per semester. 1-18 credits.
- MUSC 313. *Form and Analysis*. Harmonic and formal analysis of compositions of each period. Prerequisite: MUSC 214. 3 credits. WR
- MUSC 314. *Jazz Improvisation*. A theory/performance class designed to acquaint the student with improvisation in the jazz idiom. Technical competence on an instrument or in voice required. Prerequisite: permission of the instructor. 1 credit.
- MUSC 315, 316; 415, 416. *Intermediate Computer Applications in Music; Advanced Computer Applications in Music*. Study of piano compositions technique, sightreading, theory, and computer technology. 2 periods. 2 credits.
- MUSC 319. *Keyboard Improvisation*. Fundamentals of jazz and commercial music for keyboard. Open to keyboard majors in the Bachelor of Music (performance) degree program and others with consent of the instructor. Co-requisite: MUSC 314. 1 credit.
- MUSC 331. *History of Music I*. History of music of western civilization from Antiquity to 1750, with examples. Open to non-music majors only with permission of instructor. 3 credits. SP
- MUSC 332. *History of Music II*. History of the art music of western civilization from 1750, with examples. Development of literal, interpretive, critical and evaluative understanding of the literature of music. Practice in communicative skills, including summarizing, presenting, and questioning, with independent reading. Open to non-music majors only with permission of instructor. 3 credits. Prerequisite: MUSC 331. WR and SP
- MUSC 335. *Piano Duet and Duo-Piano Literature*. Study and performance of piano ensemble music. Includes both piano duet literature and duo-piano literature. Required of B.M. piano performance and piano pedagogy majors; open to others with permission of instructor. 2 periods. 2 credits.
- MUSC 340. *Instrumental Survey*. Survey of string, percussion, brass, and woodwind families. Study of history, members of each family, range, timbre, and transposition. Required of music education voice and keyboard majors. 3 credits.
- MUSC 341. *Conducting*. Technique of the baton; score reading; rehearsal procedures; vocal and instrumental conducting. 2 credits.

MUSC 342. *Advanced Choral Conducting*. Continuation of MUSC 341 which is prerequisite. 2 periods. 2 credits.

MUSC 343. *Advanced Instrumental Conducting*. Continuation of MUSC 341 which is prerequisite. 2 credits.

MUSC 345. *Practicum in Elementary School*. Students, through observation and participation, are introduced to the daily routine and music curriculum in the elementary school. 1 credit.

MUSC 346. *Practicum in Secondary Schools*. Students, through observation and participation, are introduced to the daily routine and music curriculum (instrumental or choral) in the junior high or middle school, or high school. 1 credit.

MUSC 365. *Vocal Techniques*. Voice class for instrumental majors. Study of vocal techniques, literature and diction. One small-class instruction per week. Prerequisites: MUSC 115 and 116. 1 credit.

MUSC 390. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

MUSC 392. *Internship in Music*. A semester-long, on-the-job learning experience designed to apply the principles of music. 1-18 credits.

MUSC 412. *Arranging*. Study and practice of arranging in different voice and instrument combinations with attention to style, range, form, and difficulty. Prerequisite: MUSC 214. 2 periods; 2 credits.

MUSC 413. *Advanced Analysis*. Introduction to Schenkerian analysis, set theory. Continuation of MUSC 313, which is prerequisite. 2 periods; 2 credits.

MUSC 414. *Counterpoint*. Strict and free counterpoint; motivic development; invertible counterpoint. Prerequisite: MUSC 137, 214. Offered on demand. 2 credits.

MUSC 427. *Intermediate Piano Literature*. A survey of intermediate-level piano literature through listening, performing, and reading. Required of piano pedagogy concentration, recommended for piano performance concentration. 2 periods. 2 credits.

MUSC 430. *Music of the Eighteenth Century*. Study of the forms, styles, and trends of the music of the eighteenth century; biography. Prerequisites: MUSC 331, 332. 3 credits.

MUSC 431. *Music of the Nineteenth Century*. Study of the forms, styles, and trends of the music of the nineteenth century; biography. Prerequisites: MUSC 331, 332. 3 credits.

MUSC 432. *Music of the Twentieth Century*. Study of the forms, styles, and trends of the music of the twentieth century; biography. Prerequisites: MUSC 332 or permission of the instructor. 3 credits. WR

MUSC 433. *Instrumental Literature*. Study of composers and major compositions of wind instruments. Baroque to the present. May be combined with band and instrumental literature. 2 periods. 2 credits.

MUSC 435. *Piano Literature*. Study of the literature of the piano through performance and listening. 2 periods. 2 credits.

MUSC 436. *Vocal Literature*. Study of the literature of the voice through performance and listening. 2 periods. 2 credits.

MUSC 437. *Music of the Theatre*. Study of opera, operetta, and incidental music. Prerequisites: MUSC 331, 332. 3 credits.

MUSC 438. *Music of the Church*. Study of the development of music in the church from Gregorian chant to the present. Prerequisites: MUSC 331, 332. 3 credits.

MUSC 441. *Elementary School Methods and Materials*. Study of materials and techniques appropriate for teaching music to children, including peer-teaching experiences in the class and a 6-week field experience in the public schools. The course includes several research projects and seminars on issues of importance in elementary music education. Prerequisites: Music major, senior status with MUSC 145 completed or non-major by special permission of the instructor. 3 credits.

MUSC 442. *Choral Methods and Materials*. Study of methods and materials appropriate for secondary school choral music with emphasis on organization, festivals, curriculum, and vocal/choral techniques. Prerequisites: 341. 2 periods. 2 credits.

MUSC 443. *Instrumental Methods and Materials*. Study of all the band and orchestral instruments. Embouchure and technical development; rehearsal techniques; fundamentals of marching, materials. Prerequisites: MUSC 341. 2 credits.

MUSC 444. *Marching Band Fundamentals*. Marching band fundamentals class for instrumental majors who plan to teach on secondary music level. Involves classwork, observation at neighboring high schools during pre-game and half-time shows, and writing marching shows to be appropriately coordinated with music. 1 credit.

MUSC 445. *Piano Pedagogy I*. Techniques and materials of teaching piano individually and in groups. Observation and teaching of demonstration groups. 2 periods. 2 credits.

MUSC 446. *Vocal Pedagogy*. Study of the principles of voice production and voice teaching. Laboratory with beginning voice students. 2 periods. 2 credits.

MUSC 447. *Piano Pedagogy II*. A continuation of Piano Pedagogy I with the inclusion of advanced topics such as class piano for music majors and practice techniques for the advancing student. 2 periods. 2 credits.

MUSC 448. *Integrated Arts/ Music*. A study of the value and practical application of integrating the arts across all content areas of the curriculum with a focus on the musical arts. Students will gain an understanding of the role of the creative process in the classroom and will investigate the various means of expressing ideas, emotions and images through the use of music, drama, movement and visual arts. 3 credits. Junior or senior status required.

MUSC 483. *Applied Music Capstone Course*. Applied study and senior recital (or project for BA). One hour individual lesson or equivalent each week. This course must be taken during the semester when the senior recital is scheduled. 2-3 credits.

MUSC 484. *Capstone Project in Music*. Bachelor of Arts program only. Directed study in music with formal presentation. Pre-requisite: permission of department chair. Satisfies Goal 15. 3 credits.

MUSC 490. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated. 1-18 credits.

MUSC 492. *Internship*. A one-semester, on-the-job learning experience designed to apply the principles of music. 1-18 credits.

MUSC 495. *Special Topics in Music*. Selected topics in music. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

MUSC 498. *Honors Research in Music*. Students conduct research in music under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

APPLIED MUSIC

Private study is offered in most performance areas: Voice, Piano, Brass, Woodwinds, and Percussion. Incoming Music majors must audition in their areas of concentration.

The following is a list of areas of applied study. Music majors take primary applied for their main instrument. Non-majors may enroll in elective applied lessons.

With the permission of the chair of the Music Department, earned primary credits may be substituted for required secondary credits. Earned secondary credits, however, may NOT be substituted for required primary credits.

APPLIED SECONDARY — For Music Minors — Fee of \$178

One half-hour individual lesson each week; 1 credit.

MUSC 171, 172, 271, 272, 371, 372, 471, 472

Sections:

21, 22 . . .	Percussion
31, 32 . . .	Piano
61, 62 . . .	Woodwinds
71, 72 . . .	Brass
81, 82 . . .	Voice

APPLIED PRIMARY — For Music Majors — Fee of \$178

One-hour individual lesson plus related studio classes and recitals. A 3-credit option is reserved for performance majors, only. Education majors may not take more than 2 credits in any one semester. 2 or 3 credits. Level 282 is Speaking Intensive (SP).

MUSC 181, 182, 281, 282, 381, 382, 481, 482

Sections:

21, 22 . . .	Percussion
31, 32 . . .	Piano
61, 62 . . .	Woodwinds
71, 72 . . .	Brass
81, 82 . . .	Voice

ELECTIVE APPLIED MUSIC – For non-Music and Music Majors – Fee of \$355

Elective private study in music. One half-hour lesson weekly.

1 Credit. Applied fee of \$355 per semester. By permission of the department chair and applied instructor.

MUSC 155, 156, 255, 256, 355, 356, 455, 456

Sections:

21, 22. . .	Percussion
31, 32. . .	Piano
61, 62 . . .	Woodwinds
71, 72 . . .	Brass
81, 82 . . .	Voice
91, 92 . . .	Composition

INSTRUMENTAL TECHNIQUES AND METHODS. An examination of the pedagogical materials and techniques appropriate to the instruction of students in instrumental music. Achieving a grade 3-4 technique in performance is required.

MUSC 165. *Strings*. 1 credit.

MUSC 167. *Percussion*. 1 credit.

MUSC 361. *Brass*. 1 credit.

MUSC 363. *Woodwinds*. 1 credit.

APPLIED ELECTIVE CLASSES

MUSC 151, 152. *Piano Class*. Piano for non-majors. Study of piano composition techniques, sightreading, and theory. Class taught in electronic piano lab. 1 credit.

MUSC 153, 154. *Voice Class*. Voice for non-majors. Study of vocal techniques, literature, sightreading, and diction. One small class instruction each week. 1 credit.

ENSEMBLES

Ensembles are open to all students who sing or play an orchestral or band instrument. Some ensembles require instructor's approval and audition. Formal programs are presented on and off campus. May be repeated for credit. 1 credit.

MUSC 102, 103, 104. *Instrumental Ensemble*. Requires all 3 semesters in appropriate sequence (MUSC 102, 103, 104; consecutive semesters preferable but not required) in order to satisfy General Education Goal 4. Study of a unique body of instrumental literature each semester. Several sections are offered at varying degrees of difficulty to match students' skills and previous experience. Auditions are required for some sections. Not open to instrumental music majors. 1 credit each semester. * Fulfills General Education Goal 4.

MUSC 105, 106, 107. *Choral Ensemble*. Requires all 3 semesters in appropriate sequence (MUSC 105, 106, 107; consecutive semesters preferable but not required) in order to satisfy General Education Goal 4. Study of a unique body of choral literature each semester. Several sections are offered at varying degrees of difficulty to match students' skills and previous experience. Auditions are required for some sections. Not open to vocal music majors. 1 credit each semester. * Fulfills General Education Goal 4.

MUSC 201, 401. *String Ensemble*. Open to all Longwood students who have experience in playing stringed instruments. 1 credit.

MUSC 202, 402. *Woodwind Ensemble (Section 01), Brass Ensemble (Section 02), Flute Ensemble (Section 03), Percussion Ensemble (Section 04)*. Open to all Longwood students. Ensembles meet regularly and perform throughout the year. 1 credit.

MUSC 202, 402 (Section 11/12). *Jazz Ensemble A/Jazz Ensemble B*. The Jazz Ensembles rehearse and perform all styles of jazz, presenting a series of concerts throughout the year. The Ensembles are open to all students by audition. 1 credit.

MUSC 202, 402 (Section 21). *Wind Symphony*. Open to all Longwood students and also to members of the community. The band rehearses and performs a wide range and variety of concert band literature. 2 periods; 1 credit.

MUSC 205, 405 (Section 01). *University Choir*. The University Choir is open to all students who have an interest in choral singing. There is no audition necessary though some musical background is helpful. Elements of note reading, solfege, vocal tone, and choral literature will be explored in a rehearsal context leading to one or more public performances each semester. SATB. 2 periods, 1 credit.

MUSC 205, 405 (Section 11). *Camerata Singers*. The Camerata Singers is a select mixed ensemble of 30-40 singers. The choir is devoted to presenting high caliber performances of a wide range of choral repertoire. The

ensemble performs extensively in concerts both on campus and on tours. A singer is selected through audition and non-majors are encouraged to participate. SATB. 3 periods; 1 credit.

MUSC 205, 405 (Section 21). *Chamber Singers.* The Chamber Singers is a small choral ensemble which provides music majors with an education in small choral repertoire and performance. Admission through audition. 1 credit.

MUSC 206, 406. *Handbell Ensemble.* Instruction and participation in the art of ringing English handbells resulting in a performing handbell ensemble. This ensemble is open to all students by audition. 2 periods. 1 credit.

MUSC 208, 408. *Opera Workshop.* Preparation and performance of scenes from operas, operettas, and musical theater, or complete works. Emphasis is on musical preparation, movement, and diction. Prerequisite: Audition or consent of the instructor. May be repeated for credit. 3 periods, 1 credit.

Department of Nursing

Melody K. Eaton, *Chair*

NURSING PROGRAM

The Department of Nursing offers a four-year program leading to the Bachelor of Science in Nursing degree. The department contributes to the university's mission by developing Citizen Leaders who can meet the health care needs of our region, our state and beyond. Longwood has a chapter of the Student Nurses Association, linking our students to other nursing students nationwide.

The department is approved by the Virginia State Board of Nursing and the Virginia State Council on Higher Education. Admission to the program requires a separate admission process in addition to the standard Longwood admission process.

NURSING MAJOR, BSN DEGREE

A. General Education Core Requirements/41 credits

See General Education Requirements.

SOCL 331 is required for General Education Goal 12

PHIL 315 is required for General Education Goal 13

MATH 171 is recommended for General Education Goal 5

SOCL 101 or 102 is recommended for General Education Goal 8

B. Additional Degree Requirements/6 credits

BIOL 304 Microbiology/4 credits

MATH 271 Applied Statistics/3 credits

C. Major Requirements/73 credits

BIOL 206 Anatomy and Physiology I/4 credits

BIOL 207 Anatomy and Physiology II/4 credits

BIOL 121 The Unity of Life/4 credits

EDUC 245 Growth and Development/3 credits

NURS 100 Intro to Nursing and the Health Care System/3 credits

NURS 210 Health Assessment Across the Lifespan/3 credits

NURS 220 Clinical Skills for Nursing Practice/3 credits

NURS 230 Foundations of Nursing Practice/4 credits

NURS 310 Principles of Pathophysiology/4 credits

NURS 320 Principles of Pharmacology/3 credits

NURS 330 Nursing Care of Children and Their Families/4 credits

NURS 340 Nursing Care of Adults and Families/4 credits

NURS 350 Maternal and Newborn Nursing/4 credits

NURS 360 Intro to Research and Evidence Based Practice/3 credits

NURS 370 Nursing Care of the Older Adult/1 credit

NURS 392 Nursing Care of Patients with Complex Health Problems/3 credits

(1 credit satisfies General Education Goal 15)

NURS 410 Nursing Care of Patients with Psychiatric/Mental Health Problems/4 credits

NURS 420 Community Health Nursing/4 credits

NURS 430 Health Care Policy and Regulation/3 credits

NURS 440 Managing for Safety and Quality Outcomes/3 credits

NURS 492 Transition to Professional Practice Practicum/6 credits

D. General Electives/0 credits

E. Total credits required for BSN in Nursing/121

NURSING COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Course SP

NOTE: Admission to the Bachelor of Nursing Program is a prerequisite for all nursing courses.

NURS 100. *Introduction to Nursing and the Health Care System.* This course traces the origins and major milestones in the history of professional nursing and the US health care system. It explores the contributions of major historical figures in nursing and the social context that influenced their work. The course also provides an overview of how health care in the US is organized and financed, and the impact of legislative and regulatory processes on issues of affordability, equity and access to health care. Prerequisite: Permission of instructor if not admitted to the BSN program. 3 credits. SP

NURS 210. *Health Assessment Across the Lifespan.* This course introduces the student to the theoretical knowledge and skills necessary to perform a comprehensive health assessment on children, adults and the elderly. The nursing process is introduced as a tool to guide data collection through a comprehensive culturally sensitive history, physical examination, and documentation of findings. Prerequisites: BIOL 206 and 207. Two lecture and one two hour lab period. 3 credits.

NURS 220. *Clinical Skills for Nursing Practice.* This course focuses on the acquisition of foundational clinical and communication skills needed to provide safe quality patient care. Emphasis is placed on the theoretical underpinnings of individual skills and the clinical reasoning necessary to properly select and use psychomotor skills and patient care technology. Principles of effective communication with patients of varying ages and cultures are also introduced. Students are encouraged to explore the research evidence available to support the use of various skills in patient care. Prerequisites: BIOL 206 and 207. 3 credits.

NURS 230. *Foundations of Nursing Practice.* This course examines selected nursing principles, concepts and skills that are central to patient care delivery. The nursing process is used as a framework for exploring the role of the professional nurse in patient care management. The emphasis is on the nurse's role as direct and indirect provider of safe patient centered care that incorporates health promotion, clinical prevention, and basic illness care with adult and elderly patients. Clinical and simulation experiences provide students with opportunities to apply theory, communication strategies, assessment and psychomotor skills in the care of patients in various settings. Prerequisites: NURS 210 and 220. 4 credits.

NURS 310. *Principles of Pathophysiology.* This course examines the pathophysiologic factors that contribute to common disease processes affecting individuals across the lifespan. The influences of environment, genetics, and lifestyle choices that lead to increased disease susceptibility, morbidity and mortality are discussed along with the cultural differences that influence an individual's understanding of disease and response to it. Prerequisites: NURS 210, 220 and 230. 4 credits.

NURS 320. *Principles of Pharmacology.* This course establishes a foundation about pharmacology and the use of drugs to manage common diseases and conditions. It focuses on the pharmacokinetics and pharmacodynamics of common drugs and how they are used to modify body systems. Lifespan variations are discussed as well as the implications for patient teaching and monitoring. Economic, political and ethical issues related to drug development and marketing are explored. Prerequisites: NURS 210, 220 and 230. 3 credits.

NURS 330. *Nursing Care of Children and Their Families.* This course focuses on the nursing care of infants, children, adolescents and their families as they face normal developmental challenges and common diseases and conditions. Emphasis is placed on the use of the nursing process to assess physical and developmental needs; pro-

mote health and prevent illness and injury; and assist patients and families to adapt to acute and chronic illness challenges. Actual and simulated clinical experiences take place in various settings and support the continued development of cognitive, psychomotor and interpersonal skills necessary to provide safe, high quality care. Prerequisites: NURS 210, 220 and 230. 4 credits.

NURS 340. *Nursing Care of Adults and Families.* This course focuses on the knowledge base necessary to provide safe, high quality care to adults experiencing common acute and chronic health problems. The course blends knowledge from pathophysiology, pharmacology and disease management into a comprehensive plan for culturally sensitive care that integrates current evidence for best practices management. The impact of major diseases on patients and families is explored with an emphasis on the nurse's role in health promotion, symptom management and beginning interprofessional collaboration for effective care management. Simulated and actual clinical experiences take place in a variety of settings. Prerequisites: NURS 310 and 320. Three lecture periods weekly and a total of 56 clinical hours. 4 credits.

NURS 350. *Maternal and Newborn Nursing.* This course focuses on the nursing management of normal and high risk pregnancies from the period of conception through infancy, with an emphasis on health promotion and risk reduction. The nursing process is used to appropriately assess childbearing women and their families and select appropriate interventions to meet their physical and emotional needs. Particular attention is given to identifying evidence based interventions to support quality care. The actual and simulated clinical experiences assist students to develop increasing skill in providing high quality, compassionate care to patients from a wide range of cultures and traditions about childbearing. Prerequisites: NURS 210, 220 and 230. 4 credits.

NURS 360. *Introduction to Research and Evidence Based Practice.* This course provides an overview of nursing and health care related research and evidence based practice. It introduces the basic skills and knowledge necessary to critically read research studies and conduct systematic literature reviews using established data bases. Basic principles of study design are presented and ethical issues in the conduct of research with patients and families are emphasized. The challenges of translating research evidence into practice are explored. Prerequisites: Third year status in the nursing program and MATH 171 or 270. Three lecture periods. 3 credits. WR

NURS 370. *Nursing Care of the Older Adult.* This course supplements the content presented in SOCL 331 by adding a nursing care management perspective to the discussion of the issues of aging in American society and culture. The course focuses on assessment and intervention with older adults experiencing normal aging or common aging related health problems and the role of the nurse in health promotion, risk reduction, and disease management for this population. Co- or Prerequisites: NURS 340 and SOCL 331 or permission of instructor. Two lecture periods every other week. 1 credit.

NURS 392. *Nursing Care of Patients with Complex Health Problems.* This course focuses on the care of patients who are experiencing complex health problems. Case studies are used to integrate prior learning about the pathophysiologic basis of disease and its medical and pharmacologic management, and to discuss care challenges in depth. The course emphasizes the role of direct and indirect care provider but also expands the student's focus to include issues related to coordination of care, interprofessional collaboration, quality and safety. Clinical experiences take place with an assigned precepted summer externship. Prerequisites: NURS 310, 320, 330, 340, 350, 360 and 370. Six lecture periods for five weeks and 56 clinical hours. 3 credits.

NURS 410. *Nursing Care of Patients with Psychiatric/Mental Health Problems.* This course focuses on the nursing care of persons with acute and chronic mental health and psychiatric disorders. The nursing process is used as a tool for assessing, planning, and implementing care and evaluating outcomes. Emphasis is placed on the biopsychosocial origins of mental illness, the available research evidence to support current practice, and the importance of effective interprofessional teams. Clinical experiences will take place in a variety of settings. Prerequisite: NURS 392. Three lecture periods and 56 clinical hours. 4 credits.

NURS 420. *Community Health Nursing.* This course focuses on the application of epidemiologic and public health principles to work with individuals, families, groups and other aggregates in a community setting. The nursing process is used as a framework for assessing community needs and providing interventions and services targeted at disease prevention, health promotion and protection. The influence of political, socioeconomic, cul-

tural and environmental issues on the health of populations is examined. Prerequisite: NURS 392. Three lecture periods and 56 clinical hours. 4 credits. WR

NURS 430. *Health Care Policy and Regulation.* This course presents the broad context of health policy and law and the way policy is formulated. It emphasizes the social, ethical and political issues that affect the delivery of health services, particularly the impact of policy decisions on professional nursing practice. It also provides an overview of the maze of regulatory agencies that influence and control practice, particularly as they relate to issues of quality and safety. Prerequisites: NURS 310, 320, 330, 340, 350, 360 and 370 or permission of the instructor. Three lecture periods. 3 credits. SP

NURS 440. *Managing for Safety and Quality Outcomes.* This course focuses on the knowledge and skills needed by the entry level nurse for the safe and effective management of patient care. The course considers nursing practice from the staff nurse and middle management perspective with an emphasis on creating a culture of quality, safety and ongoing improvement. Theories of change, complexity, organizational design, horizontal leadership, coalition building and conflict management are introduced. The use and analysis of outcome data as evidence for practice change is stressed. Simulated scenarios are used to apply course content. Prerequisites: NURS 310, 320, 330, 340, 350, 360 and 370. Three lecture periods. 3 credits.

NURS 492. *Transition to Professional Practice Practicum.* This course consists of a 280 hour clinical practicum experience with an experienced clinical preceptor. It assists students to begin the transition to the practice world and refines their clinical skills, particularly in the areas of decision making, organizing and managing care to groups of patients, setting priorities, and delegating care responsibilities appropriately. The focus of the course remains on the professional role of care provider, but there is increased emphasis on the role of care coordinator and manager, and the opportunity to develop a more mature identity as a member of the nursing profession. Students are challenged to integrate all prior learning and function collaboratively as an effective participant on the interprofessional care team. A weekly seminar parallels the clinical experience and explores current practical issues in job search, licensure, and adjusting to the demands of the practice environment. Prerequisites: All required clinical courses in the nursing major. One 75 minute lecture period for 10 weeks, 280 clinical hours. 6 credits.

Department of Psychology

Eric L. Laws, PhD, *Chair*

Joyce M. Trent, *Secretary*

The Department of Psychology offers both an undergraduate major and a minor, as well as basic introductory and service courses to numerous other college majors. Psychology courses required for other majors and minors are clearly identified under those disciplines.

PSYCHOLOGY PROGRAM

Faculty

Jennifer M. Apperson, PhD, *Professor of Psychology*

Christopher A. Bjornsen, PhD, *Professor of Psychology*

Norman J. Bregman, PhD, *Professor of Psychology*

Stephanie Buchert, PhD, *Assistant Professor of Psychology*

David M. Carkenord, PhD, *Professor of Psychology*

Kurt Crandall, PhD, *Assistant Professor of Psychology*

Eric L. Laws, PhD, *Associate Professor of Psychology*

To satisfy major requirements for graduation, students majoring in psychology must earn a grade of no less than C- in all psychology courses (41-43 credits).

The Department of Psychology offers four concentrations. All psychology majors are required to take the 22-24 credits of core requirements and 13 credits of concentration requirements and 6 credits of psychology electives.

ASSESSMENT

The Department of Psychology requires senior majors to take a comprehensive psychology test. The purpose of the test is to assess the progress of our majors and the effectiveness of our program.

PSYCHOLOGY MAJOR, BS DEGREE

A. General Education Requirement/41 credits

B. Additional Degree Requirements/7 credits

C. Major Requirements/41-43 credits

1. CORE REQUIREMENTS/22-24 credits

PSYC 101	Introduction to Psychology/3 credits
PSYC 151	Introduction to Biopsychology/3 credits
PSYC 233	Research Methods in Psychology/4 credits
PSYC 234	Quantitative Methods in Psychology/3 credits
PSYC 457	History and Systems of Psychology/3 credits
PSYC 460	Advanced General Psychology/3 credits
PSYC 461	Seminar in Psychology/3 credits
PSYC 490	Independent Research in Psychology

OR

PSYC 492	Internship in Psychology (satisfies General Education Goal 15)
OR	
PSYC 498	Honors Research in Psychology (May be taken for additional credit applied toward PSYC electives)

2. CONCENTRATION REQUIREMENTS/13 credits

All students must successfully complete at least one class from each area below.

DEVELOPMENTAL AREA

PSYC 350	Psychology of Sex and Gender/3 credits
PSYC 371	Infant and Child Development/3 credits
PSYC 373	Adolescent Development/3 credits

GENERAL/EXPERIMENTAL AREA

PSYC 300	Sensation and Perception (lab)/4 credits
PSYC 321	Physiological Psychology (lab)/4 credits
PSYC 322	Cognitive Psychology (lab)/4 credits
PSYC 323	Developmental Methods (lab)/4 credits
PSYC 324	Learning (lab)/4 credits

INDUSTRIAL/ORGANIZATIONAL/SOCIAL AREA

PSYC 331	Social Psychology/3 credits
PSYC 360	Consumer Psychology/3 credits
PSYC 366	Industrial/Organizational Psychology/3 credits
PSYC 400	Human Factors Psychology/3 credits

PRE-CLINICAL/COUNSELING AREA

PSYC 356	Abnormal Psychology/3 credits
PSYC 420	Psychological Tests and Measurements/3 credits
PSYC 423	Theories of Personality/3 credits

3. PSYCHOLOGY ELECTIVE REQUIREMENTS

Students must complete at least 6 Psychology elective credits. Psychology elective courses may be selected from the concentration areas or from the elective courses offered on a rotating basis listed below. Students planning to attend graduate school in a given concentration area or intending to seek employment in a given concentration area are encouraged to complete their electives from that concentration area.

ELECTIVE courses offered on a rotating basis:

PSYC 295	Special Topics in Psychology
PSYC 311	Study Abroad
PSYC 312	Study Abroad
PSYC 330	Life Span Developmental Psychology
PSYC 350	Psychology of Sex and Gender
PSYC 357	Psychopathology of Childhood
PSYC 384	Cross-Cultural Psychology
PSYC 410	Fundamentals of Psychological Interviewing
PSYC 430	Psychology and the Law
PSYC 440	Behavior Modification
PSYC 452	Psychopharmacology
PSYC 453	Psycholinguistics
PSYC 489	Symposium in Psychology (Washington Center)
PSYC 490	Independent Research in Psychology

D. General electives for BS in Psychology/29-31 credits

E. Total credits required for BS in Psychology /120

MINOR IN PSYCHOLOGY

A minor in psychology is offered. A minimum of 18 semester hours is required for this program. These include:

PSYC 101. Introduction to Psychology/3 credits

Three credits from courses in Developmental Area

Three credits from courses in Industrial/Organizational/Social Area

Three credits from courses in Pre-Clinical/Counseling Area

Six credits of electives selected from any of the Psychology courses

TOTAL/18 credits

PSYCHOLOGY COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

PSYC 101. *Introduction to Psychology.* Overview of the theories, methods, and applications of psychology. Explanation of the ways psychology and culture have influenced each other, as well as the application of psychological principles and ideas to contemporary issues. Focuses on personality, emotional, and social development; psychological disorders and treatment; cognitive processes and abilities; direct and indirect influences on thoughts, feelings, and behavior; and health, stress, and coping. 3 credits.* Fulfills General Education Goal 8.

PSYC 151. *Introduction to Biopsychology.* A general introduction to, and overview of, the structure and function of the nervous system and its role in determining behavior. Emphasis will be on the impact of biopsychology on the traditional areas of psychology, as well as its relationship to everyday behavior. Prerequisites: PSYC 101 or permission of instructor. 3 credits.

PSYC 233. *Research Methods in Psychology.* Examination of the major problems of psychology and experimental procedures available for their investigation. Lecture and one double-lab period. Prerequisites: PSYC 101. 4 credits. WR and SP

PSYC 234. *Quantitative Methods in Psychology.* Introduction to the principles and techniques of experimental design and statistical analysis. Prerequisites or Co-requisite PSYC 233. 3 credits.

PSYC 295. *Special Topics.* Selected topics in Psychology. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

PSYC 300. *Sensation and Perception.* A study of transduction, organization, and interpretation of information. Topics include sensory physiology, theories of perception, theories of attention, subjective influences on perception, and consciousness. Prerequisites: PSYC 233 and 234. Lecture and one double-lab period. 4 credits. WR

PSYC 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on psychology. 1-18 credits.

PSYC 321. *Physiological Psychology.* Study of the physiological correlates of behavior including the sensory receptors, central brain mechanisms, and coordination of the motor system. Prerequisites: PSYC 233 and 234. Lectures and one-double lab period. 4 credits. WR

PSYC 322. *Cognitive Psychology.* Examination of theories and research dealing with verbal learning, concept learning, short-term and long-term memory stores, cognitive encoding and search strategies, and transfer. Prerequisites: PSYC 233 and 234. Lecture and one double-lab period. 4 credits. WR

PSYC 323. *Developmental Methods.* An examination of the designs and methods used to investigate growth and change in humans from birth through old age. Introduction to the wide variety of research programs that exist in developmental psychology. Emphasis on hands-on application of techniques used in developmental research. Prerequisite: PSYC 233 and 234. Lecture and one double-lab period. 4 credits

PSYC 324. *Learning.* Examination of the classic and contemporary literature in animal learning and motivation. Prerequisites: PSYC 233 and 234. Lecture and one double-lab period. 4 credits. WR

PSYC 330. *Life-Span Developmental Psychology.* Principles and research covering the life-span development of human abilities and behavior. Topics include developmental research methodologies, variables influencing development, basic processes in development; and physical, motor, perceptual, cognitive, linguistic, motivational, emotional, social, and personality development. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 331. *Social Psychology.* An examination of some of the many interesting ways in which individual behavior and thought is influenced by social situations. A major theme that will emerge is that social situations are often more powerful than personality in influencing behavior. Topics to be covered include: aggression, altruism, conformity, interpersonal attraction, persuasion, and prejudice. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 350. *Psychology of Sex and Gender.* An examination of the differences between the male and female experience from the psychologist's point of view. The course will include factors which have affected the male and female experience, current research on actual and perceived gender differences, and how social changes have contributed to changing roles. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 356. *Abnormal Psychology.* Diagnostic classifications and models of adult behavior disorders. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 357. *Psychopathology of Childhood.* Diagnostic classifications and models of abnormal childhood behavior. Attention will be given to physical, learned and social bases of abnormal behavior. Prerequisites PSYC 356. 3 credits.

PSYC 360. *Consumer Psychology.* Study of the psychological relationship between individuals who receive services and purchase goods and those organizations that provide such services and goods. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 366. *Industrial and Organizational Psychology.* Study of the theories and techniques of psychology in relation to the topics of employee selection, performance appraisal, work motivation, job satisfaction, leadership, working conditions, and job-related health and stress. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 371. *Infant and Child Development.* An examination of the biological, cognitive, social, emotional, and behavioral changes that take place during prenatal development, infancy, and childhood including genetic influences, transformations in attachment, autonomy, family relations, sibling relations, peer relations, moral thinking and behavior, intelligence, language, and achievement. Brief examination of childhood psychopathology. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 373. *Adolescent Development.* An examination of the biological, cognitive, social, emotional, and behavioral changes that take place during early, middle, and late adolescence including transformations in identity, intimacy, autonomy, sexuality, achievement, and attachment. Brief examination of adolescent psycho-pathology. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 384. *Cross-Cultural Psychology.* An in-depth investigation of the relationships between cultural and human development, and the thoughts, emotions and behaviors of individuals in different cultures. Focuses on human traits, development, and interactions from a multicultural and multiethnic perspective. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

PSYC 400. *Human Factors Psychology.* This course examines the relationship between human behavior and technology, with a focus on understanding how knowledge of psychology can be applied to make the human-technology interaction more efficient and effective. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 410. *Fundamentals of Psychological Interviewing.* This course will provide an overview of the interview process in different settings. Basic professional listening, communicating, and interviewing skills will be taught and practiced. Strategies for obtaining accurate information and for avoiding bias in the interview will also be reviewed. Junior or Senior standing or permission of instructor. 3 credits.

PSYC 420. *Psychological Tests and Measurements.* A survey of methods, techniques, and instruments for measuring individual differences in behavior, personality interests and intellectual ability. Prerequisite: PSYC 234. 3 credits.

PSYC 423. *Theories of Personality.* An examination of the major theories of personality including analytical, cognitive and behavioral theories. 3 credits.

PSYC 430. *Psychology and the Law.* Psychology applied to various legal topics such as criminal behavior, characteristics of lawyers and police, civil commitments, insanity plea, competence, the legal process and ethical issues. 3 credits.

PSYC 440. *Behavior Modification.* Research on the use of behavioral techniques for modifying human behavior in the clinical setting will be explored. Methods for working with child and adult cases will be covered. Methods for working with group behavior will also be reviewed. The student will learn how to monitor case progress through the use of single case designs. Prerequisites PSYC 101 or permission of instructor. 3 credits.

PSYC 452. *Psychopharmacology.* This course serves as an overview of the research and current thought on the topics of treating and counseling people addicted to drugs. In addition, the course will review the use and misuse of prescription medications. We will be reviewing the history of various drugs, the neuropharmacological actions, the affects on health, and the psychopharmacological actions. Prerequisites PSYC 151 or permission of instructor. 3 credits.

PSYC 453. *Psycholinguistics.* This course surveys the psychological foundations of language. Topics will range from basic issues such as the structure of language, language development, language comprehension, and language production, to special issues such as the relationship between language and thought, the relationship between language and the brain, bilingualism, and learning a second language. Junior or Senior standing or permission of instructor. 3 credits.

PSYC 457. *History and Systems of Psychology.* The development of psychology from ancient to modern times. Prerequisite: Open only to Junior or Senior psychology majors and minors. 3 credits. WR

PSYC 460. *Advanced General Psychology.* A survey course for senior psychology majors. It covers the most contemporary concepts, principles, theories, methodologies, issues and insights in the field of psychology. Prerequisite: Open only to Senior psychology majors. 3 credits.

PSYC 461. *Seminar in Psychology.* A seminar for the senior psychology major, designed to integrate knowledge of specific fields into a comprehensive view of psychology. Prerequisites: PSYC 233 and 234. Open only to Senior psychology majors. 3 credits. WR and SP

PSYC 490. *Independent Research in Psychology.* A directed research project administered by qualified specialists in the department. By permission of instructor. 1-6 credits. Fulfills General Education Goal 15.

PSYC 492. *Internship in Psychology.* Directed practicum in applied setting, or research mentorship that permits supervised experiential learning. Students learn through performance in meaningful tasks in a variety of environments. By permission of instructor. 1-15 credits. (hours 1-3 graded; hours 4-15 pass/fail) Fulfills General Education Goal 15.

PSYC 495. *Special Topics.* Selected topics in Psychology. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-6 credits.

PSYC 498. *Honors Research in Psychology.* Students conduct research in psychology under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

Department of Sociology, Anthropology, and Criminal Justice Studies

Brian D. Bates, *Chair*

Sharon Perutelli, *Secretary*

The Department of Sociology, Anthropology, and Criminal Justice Studies offers undergraduate majors and minors in sociology, anthropology, and criminology/criminal justice. Students majoring in sociology or in anthropology may earn either the BA or BS degree. Students majoring in criminology/criminal justice will earn a BS degree.

Additionally, students may pursue a minor in Computer Security, Forensics, and Law as well as Homeland Security. Students pursuing this interdisciplinary minors will complete programs that incorporate a wide variety of course work relevant to national needs and political forces at work in the world today.

Students with a GPA below 2.0 will not be accepted as majors. Students may reapply after their GPA has increased to 2.0.

The departmental curriculum is designed to provide knowledge, skills and abilities to students who plan to (1) seek employment in business, industry, criminal justice, human service, or related fields, (2) pursue advanced studies in law, public policy, urban planning, or related fields, or (3) engage in graduate work in sociology, anthropology, criminology, criminal justice, or related fields.

Sociology majors may specialize in concentrations in Family Studies or Pre-Law. Anthropology majors will be exposed to the four fields of anthropology: archaeology, physical anthropology, cultural anthropology, and linguistics. Of particular interest to Sociology and Criminology/Criminal Justice majors are unique agreements with the Central Virginia Criminal Justice Academy and Richmond Police Academy whereby students can spend one semester of their senior year at an academy earning academic credit and becoming certified to work as law enforcement officers in the Commonwealth of Virginia upon graduation.

Internships or field experiences are required for all three majors offered in the department. In the past, students have interned in a variety of settings including probation and parole offices, community colleges, local government branches, planning and research agencies, physical and mental health care facilities, and museums. A popular offering in the department is the Archaeology Field School, which can be used by anthropology majors to fulfill their internship requirement. In the Field School students learn about historic and prehistoric civilizations through supervised excavations of actual settlements. The Field School is offered in Summer Sessions. For more information, contact Dr. Brian D. Bates.

Through a variety of activities, the department attempts to provide students with a program of breadth and depth characteristic of the Longwood educational experience. Students have the opportunity to join a variety of activities and organizations relating to their major including: the Sociology Club; Lambda Alpha Epsilon—a criminal justice fraternity; and Primtech—an archaeology club designed to teach primitive technology. Additionally, the department sponsors honor societies for all three majors: Alpha Kappa Delta, International Sociology Honor Society; Lambda Alpha, National Collegiate Honors Society for Anthropology; and Alpha Phi Sigma, National Criminal Justice Honor Society. Each academic year the departmental faculty chooses outstanding students to receive the Kathleen Goodwin Cover Sociology Scholarship, the Diane M. Sheffield Memorial Scholarship, and the Outstanding Graduating Senior in the Department of Sociology, Anthropology, and Criminal Justice Studies Award.

General education requirements for the student majoring in sociology, anthropology, and criminology/criminal justice can be found under “General Education Requirements” in this catalog. It is the responsibility of all students to consult with their academic advisor prior to each registration to ensure the proper fulfillment of general education and departmental requirements for graduation. Students minoring in sociology, anthropology, or criminology/criminal justice must satisfy the course requirements of the department of their major subject. Majors and minors are required to participate in yearly curriculum assessment, which may consist of comprehensive examinations.

The department occupies offices and classrooms in Main and West Ruffner. The administrative office of the department is located in Main Ruffner Room 202 on the west side of the Rotunda.

SOCIOLOGY PROGRAM

Faculty

- John W. Barbrey, PhD, *Assistant Professor of Sociology and Criminal Justice*
- Lee D. Millar Bidwell, PhD, *Professor of Sociology*
- William Burger, PhD, *Professor of Sociology and Criminal Justice*
- Debra S. Kelley, PhD, *Associate Professor of Sociology and Criminal Justice*
- Jason S. Milne, PhD, *Assistant Professor of Sociology*
- Kenneth B. Perkins, PhD, *Professor of Sociology*
- Carla M. Riden, PhD, *Associate Professor of Sociology*

The objective of the sociology major is to prepare students for occupations in business, industry, government, and human service. The major is appropriate preparation for graduate study in the social sciences and law. The focus of sociology is on social forces, institutions, organizations, and how individuals interface with society. The student's personal growth can be achieved through understanding of the rich diversity of the modern world. Skills can be developed in oral and written communication, critical thinking, scientific research methods, statistics and computerized data analysis.

SOCIOLOGY MAJOR, BA, BS DEGREE

A. General Education Core Requirement/41 credits

- Sociology majors may not use SOCL 101 or 102 for Goal 8
- Sociology majors must take PHIL 308, 315 or 316 to satisfy Goal 13
- Sociology majors must take SOCL 490, 492 or 498 to satisfy Goal 15

B. Additional Degree Requirements, BA/6 credits

Additional Degree Requirements, BS/7 credits

C. Major Requirements/41 credits

- | | |
|----------|---|
| SOCL 101 | Principles of Sociology/3 credits |
| SOCL 102 | Contemporary Social Problems/3 credits |
| SOCL 233 | Race, Class, and Gender/3 credits |
| SOCL 345 | Social Research/3 credits (fall semester) |
| SOCL 346 | Basic Statistics/3 credits (spring semester) |
| SOCL 389 | Sociological Theory/3 credits (fall semester) |
| SOCL 461 | Senior Seminar in Sociology/3 credits (spring semester) |

Sociology electives/18 credits

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

- | | |
|----------|--|
| SOCL 490 | Directed Independent Study/3 credits |
| SOCL 492 | Internship in Sociology/3 credits |
| SOCL 498 | Honors Research in Sociology/3 credits |

D. No grade below C- is accepted for graduation in major course work

E. General Electives BA Degree/32 credits

General Electives BS Degree/31 credits

F. Total Credits Required for BA or BS in Sociology/120

SOCIOLOGY MAJOR, BA, BS DEGREE

Family Studies Concentration

A. General Education Core Requirement/41 credits

Sociology majors may not use SOCL 101 or 102 for Goal 8

Sociology majors must take PHIL 308, 315 or 316 to satisfy Goal 13

Sociology majors must take SOCL 490, 492 or 498 to satisfy Goal 15

B. Additional Degree Requirements, BA/6 credits

Additional Degree Requirements, BS/7 credits

C. Major Requirements/41 credits

SOCL 101	Principles of Sociology/3 credits
SOCL 102	Contemporary Social Problems/3 credits
SOCL 222	Socialization: Sociology of Child Development/3 credits
SOCL 233	Race, Class, and Gender/3 credits
SOCL 241	Sociology of Marriage and the Family/ 3 credits
SOCL 345	Social Research/3 credits (fall semester)
SOCL 346	Basic Statistics/3 credits (spring semester)
SOCL 389	Sociological Theory/3 credits (fall semester)
SOCL 461	Senior Seminar in Sociology/3 credits (spring semester)
PSYC 373	Adolescent Development/3 credits
SOWK 337	Family and Children's Services/3 credits

Choose three credits from the following:

SOCL 331	Social Gerontology/3 credits
SOWK 305	Social Work with Older Americans
RECR 304	Leisure and Aging/3 credits

Choose three credits from the following:

SOCL 306	Stress and Crisis in Families/3 credits
SOCL 325	Gender and Society/3 credits
SOCL 332	Dying and Death/3 credits
CRIM 335	Juvenile Delinquency/3 credits
SOCL 351	Sociology of Family Violence/3 credits

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

SOCL 490	Directed Independent Study/3 credits
SOCL 492	Internship in Sociology/3 credits
SOCL 498	Honors Research in Sociology/3 credits

D. No grade below C- is accepted for graduation in major course work

E. General Electives BA Degree/32 credits

General Electives BS Degree/31 credits

F. Total Credits Required for BA or BS in Sociology with a Concentration in Family Studies/120

SOCIOLOGY MAJOR, BA, BS DEGREE

Pre-Law Concentration

A. General Education Core Requirement/41 credits

Sociology majors may not use SOCL 101 or 102 for Goal 8

Sociology majors must take PHIL 308, 315 or 316 to satisfy Goal 13

Sociology majors must take SOCL 490, 492 or 498 to satisfy Goal 15

B. Additional Degree Requirements, BA/6 credits

Additional Degree Requirements, BS/7 credits

C. Major Requirements/41 credits

SOCL 101	Principles of Sociology/3 credits
SOCL 102	Contemporary Social Problems/3 credits
SOCL 233	Race, Class, and Gender/3 credits
SOCL 345	Social Research/3 credits (fall semester)
SOCL 346	Basic Statistics/3 credits (spring semester)
CRIM 375	Criminology/3 credits
SOCL 376	Sociology of Law/3 credits
SOCL 389	Sociological Theory/3 credits (fall semester)
SOCL 461	Senior Seminar in Sociology/3 credits (spring semester)

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

SOCL 490	Directed Independent Study/3 credits
SOCL 492	Internship in Sociology/3 credits
SOCL 498	Honors Research in Sociology/3 credits

Sociology electives*/12 credits

**Recommended sociology electives:*

SOCL 205	Deviance/3 credits
SOCL 241	Marriage and the Family/3 credits
CRIM 200	Introduction to Corrections/3 credits
CRIM 335	Juvenile Delinquency/3 credits
SOCL 350	Power and Privilege: Social Stratification/3 credits
SOCL 355	The Community/3 credits
SOCL 360	Urban Sociology/3 credits

Courses Highly Recommended as General Electives for the Pre-Law Concentration:

POSC 230	Administration of Criminal Justice/3 credits
POSC 355	Constitutional Rights and Liberties/3 credits
POSC 356	Constitutional Rights and Liberties/3 credits
ACCT 240	Principles of Accounting I/4 credits
ACCT 242	Principles of Accounting II/4 credits
ECON 218	Principles of Economics (Macro Emphasis)/3 credits
PHIL 200	Introduction to Philosophy/3 credits
PHIL 300	Logic/3 credits
COMM 200	Fundamentals of Communication/3 credits

D. No grade below C- is accepted for graduation in major course work

E. General Electives BA Degree/32 credits

General Electives BS Degree/31 credits

F. Total Credits Required for BA or BS in Sociology with a Concentration in Pre-Law/120

Minor in Sociology

No grade below a C- is accepted in minor course work.

Minor Requirements/18 credits

SOCL 101	Principles of Sociology/3 credits
SOCL 102	Contemporary Social Problems/3 credits
SOCL 345	Social Research/3 credits (fall semester)
SOCL 389	Sociological Theory/3 credits (fall semester)

Sociology electives/6 credits

SOCIOLOGY COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Courses WR

Speaking Intensive Courses SP

SOCL 101. *Principles of Sociology.* Principles of Sociology seeks to impart an analytical framework with which the student can better understand the relationship between individual and social structure. Theories of functionalism, conflict, symbolic interactionism, and socialization will be discussed. The concepts of normative culture, technology, demography, ethnocentrism, values, norms, institutions, status, role, bureaucracy, and stratification will be developed and applied to social institutions. These institutions will include: the formal organization, courtship, marriage and family, religion, health care service delivery, media, politics, military, and criminal justice. 3 credits. * Fulfills General Education Goal 8 for non Sociology majors.

SOCL 102. *Contemporary Social Problems.* Contemporary Social Problems examines problems confronted by humans as both creators and objects of society. Problems of family instability, health and disease, war, distribution of resources, substance abuse, gender role definition, prejudice, discrimination and institutional response to deviance will be addressed. Particular emphasis is given to how groups define, experience, and attempt to solve these social problems. Attention will also be given to a global perspective and how the concepts of fact, truth, right and wrong are socially constructed. 3 credits. * Fulfills General Education Goal 8 for non Sociology majors.

SOCL 205. *Deviance.* This course is an in-depth examination of deviant behavior, its social forms and functions. Societal response to deviance is examined to highlight norms, values and control mechanisms. Emphasis is placed on sociological theories that explain deviant behavior. 3 credits. WR

SOCL 220. *Self in Society.* The interplay of societal forces and self are examined in this course. Attention is given to such topics as: self in society and society in self; collective behavior; mass movements, public opinion, propaganda and the mass media; group processes; socialization and social psychological aspects of social structure. 3 credits.

SOCL 222. *Socialization: Sociology of Child Development.* This course is designed to give students an understanding of the foundations and functions of the socialization process. Socialization is examined from infancy through adolescence. Topics that will be explored include socialization theory, language acquisition, identity formation, agencies of socialization, and how socialization experiences differ by gender, race, and socioeconomic status. 3 credits.

SOCL 233. *Race, Class, and Gender.* This course focuses on the causes, consequences and justifications of the inequalities associated with race, ethnicity, socioeconomic status, and gender in the United States and in other societies. Current social policies are critically examined and alternative routes to social change are explored. Race, class and gender are significant variables by which human societies make distinctions among their members. Such distinctions often lead to an inequitable distribution of political power, social well-being, and the resources available to individual members of the society. In this course we seek to increase students' awareness and understanding of the inequities in society and the consequences of those inequities for different communities and individuals within society.

SOCL 241. *Marriage and the Family.* The history of American families and contemporary family issues are analyzed using sociological theory and research. Topics that are covered include marriage, cohabitation, divorce, single parent families, blended families, the impact of race and gender norms, and socioeconomic status on family structure. 3 credits. WR

SOCL 295. *Special Topics.* Selected topics in Sociology. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

SOCL 301. *Sociology of Religion.* This course will acquaint students with the broad range of concepts, theories, and issues that have shaped the sociological study of religion. The course begins with a consideration of the sociological perspective on religion. Students will examine various sociological definitions of religion and be introduced to the methods used in the sociological analysis of religion. Finally, religious diversity, elements of religion, religious experiences, and the functions and dysfunctions of religion will be addressed. While the course

will focus on religion in the contemporary United States, students will also consider religion as a key element in all human societies. Prerequisite: SOCL 101 or SOCL 102. or permission of instructor. 3 credits.

SOCL 302. *Sociology of Popular Culture.* This course will present a variety of sociological perspectives on popular culture. During the course students will examine the nature and forms of popular culture, its role in our lives, and its broad effects on American society and culture. More specifically, students will critically examine how popular culture is produced, disseminated, consumed, interpreted, and experienced in the United States. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 305. *Society and Technology: Identity, Community, and Ethics.* This course provides an analysis of the relationship between science, technology, and society. The focus is on information-based technology that is rapidly restructuring the nature of human interaction and contemporary reality personally, ethically, and institutionally. Topics will include identity, social interaction, community, work, family, inequality, deviance, and social control. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 306. *Stress and Crisis in Families.* Normative and traumatic stresses and crises that families and their members experience, including birth of a child, divorce, violence, death, natural disasters, and war time family separations are examined. Family stress theory, protective factors, coping strategies, prevention and intervention are addressed as well. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 310. *Complex Organizations.* In this course students engage in a study of complex organizations such as private enterprises, voluntary associations, and governmental bureaucracies in terms of political-economic environment, formal and informal structure, technology, management ideologies, control and commitment of personnel, and impact on lives of individuals. Classical and recent theory and research are examined. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits. WR

SOCL 311, 312. *Studies Abroad.* These courses are primarily intended for transfer of credit earned abroad in courses on sociology. 1-18 credits.

SOCL 320. *Sociology of Education.* Sociology of Education examines the structure and process of education in contemporary society. The primary focus is on U.S. public education. Topics include the contribution of sociology to understanding education and teaching; the relationship of education to other institutions such as the family, government, religion, and the economy; demographic changes that effect education; the effect of social class on student achievement and teaching; formal and informal positions, roles and processes in schools; and consideration of current issues such as school funding, compensatory and special education programs, race and gender issues, and educational reform movements. Open to Juniors and Seniors only. 3 credits.

SOCL 321 (ANTH 321). *Supernatural Belief Systems.* This course provides an investigation of the social aspects of religion, its forms of organization, and its relationships to other institutions. 3 credits.

SOCL 325 (ANTH 325). *Gender and Society.* This course provides an examination of the social construction of gender and the social organization of gender inequality, as well as an analysis of gender identity in socialization, interpersonal behavior, the family, the media, and the economy. 3 credits.

SOCL 331. *Social Gerontology.* This course provides a comprehensive examination of social gerontology, with particular emphasis on the historical changes in the role of the elderly in society, future social and demographic trends, the contribution of sociological theories to understanding this group, and public policy implications. Also addressed are specific social problems associated with aging (poverty, loneliness, suicide). Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 332. *Sociology of Dying and Death.* The course explores social processes attendant to dying and death, including those that define the role processes of dying and the status of being dead. The effects of disruption in dyads, families, and larger social organizations will be studied. The thesis that emotions are socially and culturally mediated will be examined. Other topics include cross-cultural causes of death, demography of death, care systems which attend dying, the concept and treatment of pain, funeral and body dispositions, and medical and legal ethics. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 345. *Social Research and Program Evaluation.* In this course students learn the logical basis for conceptualization and research in sociology and criminology. Research design, concept formation, data collection, data reduction, data analysis, and data interpretation are studied. Students learn how to design and conduct both basic research and applied research. Methods of conducting program evaluation are emphasized. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. Offered fall semester. Open to Juniors and Seniors only. 3 credits. WR

SOCL 346. *Basic Statistics.* Computer application of quantitative and statistical techniques to sociological data. Emphasis on questionnaire construction, coding, sampling, building and maintaining data sets, probability, statistical distributions, hypothesis testing, and theoretical modeling. Students are required to become proficient in the use of a statistical software package. Offered spring semester. Open to Juniors and Seniors only. Prerequisite: SOCL 345. 3 credits. WR

SOCL 350. *Power and Privilege: Social Stratification.* This course is a study of how power, wealth, and prestige are built into the structure of society. The consequences of social ranking, class identification, and opportunities for social mobility are also explored. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 351. *Sociology of Family Violence.* This course is designed to familiarize students with the sociological literature on family violence. Topics which will be explored include the social causes and consequences of spouse abuse, marital rape, child maltreatment (physical abuse, neglect, emotional abuse, and sexual abuse) and parent abuse, as well as the response of the criminal justice system to and the societal perceptions of such violence. Emphasis will be on synthesizing and critiquing family violence theories and research. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 355 (Anthropology 355). *The Community.* Students review theories of community and analyze representative community studies. 3 credits.

SOCL 360. *Urban Sociology.* This course provides an examination of city life, its problems and prospects. The nature of organization, bureaucratization, and massification including social, economic, and political features of metropolitan areas are studied. Urban lifestyles and dilemmas are also discussed. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 370. *Medical Sociology.* Students study sociocultural factors that influence health, health care and illness in addition to an analysis of health care services, hospital organization, roles and role relationships in the health care setting and the processes of socialization of health care personnel and patients. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCL 376. *Sociology of Law.* In this course students learn the relationship between law and social structure. They further study the processes of law creation, interpretation, enforcement and modification, and examine police, judicial and jury behavior as well as analyze the legal profession itself. 3 credits.

SOCL 381, 382. *Topical Seminars.* These courses are advanced seminars for sociology majors and non-majors interested in sociology. These seminars are designed to permit small groups of qualified students to pursue specialized topics in sociology, as listed below. Prerequisite: SOCL 101, SOCL 102 or permission of instructor. 3 credits.

Collective Behavior and Social Movements. In this course, students study social behavior that is guided by non-traditional norms and is less structured than more traditional behaviors. The topics of crowds, cults, riots, rebellions, social change movements, and revolutions are explored.

Small Groups. In this course, students gain a sociological appreciation of units consisting of two or more members engaged in meaningful contact such as families, work groups, therapeutic associations, athletic teams, and peer groupings.

Sociology of Mass Communication. This course is an exploration of the structure of media industries (press, radio, television, and advertising), their impact on audiences, mass culture, and specific public issues such as violence and politics.

Sociology of Sport and Leisure. This course provides an analysis of sport and leisure as changing social institutions emphasizing sex and ethnic status, collegiate sport, professionalization, law and shifting social values.

SOCL 389. *Sociological Theory.* This course is an examination of the major theoretical positions in classical and current sociology. Offered fall semester. Open to Juniors and Seniors only. 3 credits.

SOCL 455 (ANTH 455). *Social Change.* In this course students study significant alterations in the organization of society and in patterns of values, norms, and behavior over time. The social and economic development associated with modernization and industrialization and various sources of change found in technology, social structure, population, the environment, and cultural innovation are explored. Prerequisite: SOCL 101 or ANTH 101 or permission of instructor. 3 credits.

SOCL 461. *Senior Seminar in Sociology.* This course is a seminar for the senior sociology major, designed to integrate knowledge of specific subfields into a comprehensive view of sociology and its role in relation to other sciences. Open only to senior sociology majors. 3 credits. * WR and SP

SOCL 490. *Directed Independent Study.* Individualized study. Must be approved by the head of the department. 1-18 credits. Fulfills General Education Goal 15.

SOCL 492. *Internship in Sociology.* This course provides direct student learning in applied settings that permits a practiced supervised experience. Students learn through performance in meaningful tasks in a variety of social environments. Prerequisite: 18 hours of sociology at Longwood. Students' cumulative GPA must be 2.0 or above to be eligible for internship. Must be arranged at least one semester in advance with chair of department. May be repeated in subsequent semesters. Variable credit; no more than 15 total credits may be earned. Only six credit hours of Internship will earn quality points (A, B, C, and D grades); all credits earned beyond six credits will be assigned Pass/Fail grades. 1-15 credits. SP Fulfills General Education Goal 15.

SOCL 495. *Special Topics.* These courses are recommended when the student desires to pursue a specialized topic in depth. Students must have permission of department chair and instructor directing the course. Students' cumulative GPA must be 2.00 or higher to be eligible. 3 credits.

SOCL 498. *Honors Research in Sociology.* Students conduct research in sociology under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. Fulfills General Education Goal 15.

ANTHROPOLOGY PROGRAM

Faculty

Brian D. Bates, PhD, *Associate Professor of Anthropology*

Douglas M. Dalton, PhD, *Professor of Anthropology*

James W. Jordan, PhD, *Professor of Sociology and Anthropology*

Walter R. T. Witschey, PhD, *Professor of Anthropology and Science Education*

Anthropology focuses on the cultural, social, and biological diversity of human groups in the present, historic, and prehistoric past. This great diversity is examined through the study of patterns of culture, social behavior, language structure, archaeological artifacts, and evolution.

The objective of the anthropology major is to prepare students for careers in business and industry, government, and human service. Additionally, the major is appropriate preparation for graduate study in anthropology or other social sciences.

The objective of the minor in anthropology is to acquaint the student with the discipline and to survey the techniques of research used in physical anthropology, linguistics, archaeology, and social cultural anthropology. Research methods, critical thinking, oral and written communication are emphasized. The minor is intended to enhance career possibilities.

Students with a GPA below 2.0 will not be accepted as majors. Students may reapply after their GPA has increased to 2.0.

ANTHROPOLOGY MAJOR, BA, BS DEGREE

A. General Education Core Requirement/41 credits

Anthropology majors may NOT use ANTH 101 for Goal 9

Anthropology majors must take PHIL 308, 315 or 316 to satisfy Goal 13

Anthropology majors must take ANTH 296, 490, 492 or 498 to satisfy Goal 15

B. Additional Degree Requirements, BA/6 credits

Additional Degree Requirements, BS/7 credits

C. Major Requirements/41 credits

ANTH 101	Introduction to Anthropology/3 credits
ANTH 202	Archaeology/3 credits
ANTH 203	Physical Anthropology/3 credits
ANTH 204	Language and Culture/3 credits
ANTH 410	Research Methods in Cultural Anthropology/3 credits
ANTH 460	Anthropological Theory/3 credits
ANTH 461	Senior Seminar in Anthropology/3 credits

Choose six credits from the following:

ANTH 314	Indians of North America/3 credits
ANTH 315	South American Indians/3 credits
ANTH 316	People of Africa/3 credits
ANTH 317	Peoples of the Pacific/3 credits

Choose six credits from the following:

ANTH 320	Folklore/3 credits
ANTH 321	Supernatural Belief Systems/3 credits
ANTH 325	Gender and Society/3 credits
ANTH 355	The Community/3 credits

Anthropology electives/6 credits

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

ANTH 296	Field Methods in Archaeology/3 to 6 credits
ANTH 490	Directed Independent Study/3 credits
ANTH 492	Internship in Anthropology/3 credits
ANTH 498	Honors Research in Anthropology/3 credits

D. No grade below C- is accepted for graduation in major course work

E. General Electives BA Degree/32 credits

General Electives BS Degree/31 credits

F. Total Credits Required for BA or BS in Anthropology/120

NOTE: Three hours of Archaeology Field School may count as ANTH 202.

MINOR IN ANTHROPOLOGY

No grade below a C- is accepted in minor course work.

Minor Requirements/18 credits

ANTH 101 Introduction to Anthropology/3 credits

Choose one of the following:

ANTH 202 Archaeology/3 credits

ANTH 203 Physical Anthropology/3 credits

Choose one of the following:

ANTH 314 Indians of North America/3 credits

ANTH 315 South American Indians/3 credits

ANTH 316 People of Africa/3 credits

ANTH 317 Peoples of the Pacific/3 credits

Choose one of the following:

ANTH 320 Folklore/3 credits

ANTH 321 Supernatural Believe Systems/3 credits

ANTH 325 Gender and Society/3 credits

ANTH 355 The Community/3 credits

Anthropology electives/6 credits

ANTHROPOLOGY COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

ANTH 101. *Introduction to Anthropology.* The origins, evolution, and present biological and cultural diversity of the human species using data from the fossil record, archaeological artifacts, the structure of languages, and behavior and world-view of people living in other cultures. 3 credits. * Fulfills General Education Goal 9 for non Anthropology Majors

ANTH 106. (WGST 106.) *Introduction to Women's Studies.* The course will introduce students to literature in the social sciences by and about women. We will explore key roles which women play in society, how they have questioned these roles, and contributions which women make in different societies. We will read about women in our own and other societies as a way to explore these questions. 3 credits. WR Fulfills General Education Goal 8.

ANTH 202. *Archaeology.* A survey course of the techniques used to locate, survey, sample and excavate prehistoric and historic archaeological sites. The analysis of artifacts and features, typing of collection of stone tools and pottery, and case studies of well known archaeological sites from various culture areas of the world. 3 credits. WR and SP

ANTH 203. *Physical Anthropology.* An analysis of prehistoric and contemporary humans as physical organisms. The study of human origins and evolution from 5 million years ago to the present. The study of variation in human populations in characteristics such as skin color, blood type, susceptibility to diseases, and adaptations to extremes of cold, heat, and altitude. 3 credits.

ANTH 204. *Language and Culture.* The analysis of language with stress on the dependence of language upon its sociological context. A survey of linguistic variability, social dialectology, language change, and ethnolinguistic analysis. 3 credits.

ANTH 205. *Human Life in the Prehistoric World.* An examination of the behavior and values likely to have been central to human groups in prehistoric times. The seminar approach will be employed with continual student dialog based on readings. Collections of stone tools and pottery shards will be analyzed in class. 3 credits.

ANTH 280. *Archaeological Laboratory Methods.* This course provides a basic introduction to archaeological laboratory methods as well as illustration. Instruction in the essential elements of any archaeological lab will provide the student with the necessary knowledge to undertake the basic organization and analysis of data recovered from an archaeological site. 3 credits.

ANTH 295. *Special Topics.* Selected topics in Anthropology. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

ANTH 296. *Field Methods in Archaeology.* The skills necessary to excavate historic and prehistoric sites and to recognize and recover archaeological artifacts. The site work consists of learning the techniques of excavation, mapping, soil analysis, the recovery, washing and analysis of prehistoric stone tools and historic artifacts, and the interpretation of stratigraphy. Offered during summer session. 6 credits. SP Fulfills General Education Goal 15 for Anthropology Majors

ANTH 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on anthropology. 1-18 credits.

ANTH 314. *Indians of North America.* Descriptions, comparisons, and analysis of past and present Indian cultures. Possible origins of the various North American Indian tribes will also be discussed and will be supported by the use of archaeological and linguistic data. 3 credits. WR

ANTH 315. *South American Indians.* A survey course of archaeological and ethnographic focusing on hunter-gatherer and horticulturalist Indian groups. The effects of social-cultural change in contemporary Indian life will be a major component of the course. 3 credits.

ANTH 316. *People of Africa.* An analysis of the human cultures of pre-historic and contemporary Africa. Archaeological and linguistic data will be used to trace the biological and cultural relationships among contemporary African societies. 3 credits. WR

ANTH 317. *Peoples of the Pacific.* Historical and contemporary descriptions of the varieties of peoples and cultures in Polynesia, Micronesia, and Melanesia. 3 credits. WR

ANTH 320. *Folklore.* The oral techniques used in literate and non-literate cultures to pass traditions from generation to generation. The forms and functions of folktales, proverbs, curses, folk-songs, riddles, ceremonies, folk art, and games in Western and non-Western culture. 3 credits.

ANTH 321 (SOCL 321). *Supernatural Belief Systems.* An investigation of the social aspects of religion, its forms of organization, and its relationships to other institutions. 3 credits.

ANTH 325 (SOCL 325). *Gender and Society.* This course provides an examination of the social construction of gender and the social organization of gender inequality, as well as an analysis of gender identity in socialization, interpersonal behavior, the family, the media, and the economy. 3 credits.

ANTH 350. *Advanced Archaeology and Cultural Resources Management.* This course provides students with in-depth exposure to advanced archaeological practices such as the development of research proposals, pre-excavation planning, excavation management, surveying methods involving a transit or theodolite, mapping, photography, and computer applications in archaeology. Students will also be involved in preparations for upcoming projects to be conducted by the Longwood Archaeology Field School. All of the techniques and methods will be considered within the framework of Cultural Resource Management laws and practices at the local, state, and federal level. Prerequisite: ANTH 202. WR

ANTH 355 (SOCL 355). *The Community.* Review of theories of community and analysis of representative community studies. 3 credits.

ANTH 390. *Directed Independent Study.* Individualized study. Must be approved by the head of the department. May be repeated as ANTH 391. 1-18 credits.

ANTH 410. *Research Methods in Cultural Anthropology.* The methods employed by anthropologists in their gathering and analysis of material of the behavior of people living in other cultures. Methods surveyed include participant observation, analysis of speech patterns, collection of genealogies, mapping, collection of oral histories, semantic analysis and the eliciting of symbol systems. 3 credits.

ANTH 450. *Archaeological Theory.* This course provides students with detailed knowledge of both the theoretical and practical issues facing archaeologists today. By participating in seminar-style discussions students will explore a wide range of topics from the history of archaeology and the beginnings of “archaeological theory” to the most current cultural resource management practices. The course offers students the opportunity to delve into topics such as theoretical archaeology including competing schools of thought and various proponents of important ideas and concepts within the discipline. Prerequisite: 202 or ANTH 296. WR and SP

ANTH 455 (SOCL 455). *Social Change.* The study of significant alterations in the organization of society and in patterns of values, norms, and behavior over time. Explores the social and economic development associated with modernization and industrialization and various sources of change found in technology, social structure, population, the environment, and cultural innovation. Prerequisite: SOCL 101 or ANTH 101 or permission of instructor. 3 credits.

ANTH 460. *Anthropological Theory.* The history of theory and models in anthropology. An overview of the intellectual “schools” which have affected research in the past and a survey of present models in anthropological thinking. 3 credits. WR

ANTH 461. *Senior Seminar in Anthropology.* A seminar for senior anthropology majors, designed to integrate knowledge of specific subfields into a comprehensive view of anthropology and its role in relation to other sciences. Open only to senior anthropology majors. 3 credits. WR and SP

ANTH 490. *Directed Independent Study.* Individualized study. Must be approved by the head of the department. 1-18 credits. SP Fulfills General Education Goal 15.

ANTH 492. *Internship in Anthropology.* Directed student learning in applied settings, that permits a practiced, supervised experience. Students learn through performance in meaningful tasks in a variety of social environments. Prerequisite: 18 hours of anthropology. Student’s cumulative GPA must be 2.0 or above to be eligible for internship. May be repeated. Variable credit; no more than 15 total credits may be earned. Only six credit hours of internship will earn quality points (A, B, C and D grades; all credits earned beyond six credits will be assigned Pass/Fall grades 1-15 credits. Must be arranged in advance with program director or department chair. Variable credit 1-15 hours per semester. SP *Fulfills General Education Goal 15.

ANTH 495. *Special Topics.* Selected topics in Anthropology. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

ANTH 496. *The Organization and Execution of Archaeological Fieldwork.* Advanced students with experience in basic field methods in archaeology learn the skills necessary to organize and supervise the execution of archaeological excavations. Students will serve as assistants to the Director of an ongoing excavation and will aid in the design of the field strategy, intra-site sampling techniques, site mapping, and artifact and feature plotting and recording. Offered during summer session. 6 credits.

ANTH 497. *Fieldwork in South American Archaeology.* This course is designed to expose students to the skills and methods needed to excavate prehistoric sites and to recover and analyze artifacts and features. Students will have the opportunity to work in laboratory as well as field settings. Prerequisite: Permission of Instructor. 6 credits.

ANTH 498. *Honors Research in Anthropology.* Students conduct research in anthropology under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR Fulfills General Education Goal 15.

CRIMINOLOGY AND CRIMINAL JUSTICE

Faculty

John W. Barbrey, PhD, *Assistant Professor of Sociology and Criminal Justice*

Lee D. Millar Bidwell, PhD, *Professor of Sociology*

William Burger, PhD, *Professor of Sociology and Criminal Justice*

Debra S. Kelley, PhD, *Associate Professor of Sociology and Criminal Justice*

Jason S. Milne, PhD, *Assistant Professor of Sociology*

Kenneth B. Perkins, PhD, *Professor of Sociology*

Carla M. Riden, PhD, *Associate Professor of Sociology*

The objective of the criminology and criminal justice major is to prepare students for work in the criminal justice system, including jobs in local, state, and federal law enforcement, corrections, and probation and parole. The major also is appropriate preparation for graduate study in the social sciences and law. The major gives students a strong foundation in criminology and sociology while simultaneously emphasizing how academic knowledge can be applied in occupational settings. Skills can be developed in oral and written communication, critical thinking, scientific research methods, statistics and computerized data analysis.

Students with a GPA below 2.0 will not be accepted as majors. Students may reapply after their GPA has increased to 2.0.

Criminology/Criminal Justice Major, BS Degree

A. General Education Core Requirement/41 credits

SOCL 102 is highly recommended for Criminology/Criminal Justice majors for Goal 8

Criminology/Criminal Justice majors must take PHIL 308, 315 or 316 to satisfy Goal 13

Criminology/Criminal Justice majors must take CRIM 490, 492 or 496 to satisfy Goal 15

B. Additional Degree Requirements, BS/7 credits

C. Major Requirements/42 credits

CRIM 100	Survey of Criminal Justice/3 credits
CRIM 200	Introduction to Corrections/3 credits
CRIM 205	Introduction to the U.S. Court System/3 credits
CRIM 210	Introduction to Policing/3 credits
CRIM 375	Criminological Theory/3 credits
CRIM 455	Constitutional Law for Criminal Justice Professionals/3 credits
CRIM 461	Senior Seminar in Criminology and Criminal Justice/3 credits
SOCL 345	Social Research/3 credits (fall semester)
SOCL 346	Basic Statistics/3 credits (spring semester)

Choose 12 credits from the following:

CRIM 201-499 excluding courses listed in the core above

POSC 230 Administration of Justice/3 credits

POSC 356 Constitutional Rights and Liberties II/3 credits

SOCL 205 Deviance/3 credits

SOCL 233 Race, Class, and Gender/3 credits

SOCL 241 Sociology of Marriage and the Family/3 credits

SOCL 350 Power and Privilege: Social Stratification/3 credits

SOCL 351 Sociology of Family Violence/3 credits

SOCL 360 Urban Sociology/3 credits

SOCL 376 Sociology of Law/3 credits

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

CRIM 490	Directed Independent Study/3 credits
CRIM 492	Internship in Criminology and Criminal Justice/3 credits
CRIM 496	Professional Study in Criminal Justice/3 credits

D. No grade below C- is accepted for graduation in major course work

E. General Electives BS Degree/30 credits

F. Total Credits Required for BS in Criminology/Criminal Justice /120

Minor in Criminology/Criminal Justice

No grade below a C- is accepted for minor course work.

Minor Requirements/18 Credits

CRIM 100	Survey of Criminal Justice/3 credits
CRIM 375	Criminology/3 credits
SOCL 345	Social Research/3 credits (fall semester)

Criminology/Criminal Justice electives/9 credits

Minor in Computer Security, Forensics, and Law

(Please refer to requirements listed in College of Business and Economics)

Minor in Homeland Security

(Please refer to requirements listed in Cook-Cole College of Arts and Sciences)

CRIMINOLOGY/CRIMINAL JUSTICE COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Courses WR

Speaking Intensive Courses SP

CRIM 100. *Survey of Criminal Justice.* This course is an introduction to the study of the criminal justice system in the United States. The history, theory and practice of the various subsystems within the criminal justice system will be explored. Additionally, the various indices that provide measures of crime in the United States, the role of the police, the courts and corrections in addressing the "crime problem," and selected Supreme Court decisions will be critically examined. 3 credits.

CRIM 200. *Introduction to Corrections.* The theory and practice of prison management and criminal rehabilitation are examined in this course. The overarching concepts of this course are: the functions of punishment and rehabilitation; historical and cross-cultural approaches to punishment, deterrence, and rehabilitation; current theories and practices; and future possibilities. The course is intended for those interested in the general study of sociology and criminal justice, prison administration, and complex organizations. 3 credits.

CRIM 205. *Introduction to the U.S. Court System.* This course is an introduction to the study of the United States Judicial System. The history, theory, and practice of the courts systems within the criminal justice system and its impact on the citizens of the United States will be explored. Additionally, the uniqueness of the dual courts system in the United States will be examined. 3 credits.

CRIM 210. *Introduction to Policing.* This course is designed to provide students with an opportunity to conduct a critical analysis of the institutions of policing and the social actors therein. Topics that will be covered include: sociological notions of policing; social research and policing; historical developments and evolution of policing institutions; police roles and functions; police authority; control of the police; police deviance; and the emergent police occupational subculture. 3 credits.

CRIM 220. *Homicide.* This course analyzes the impact of homicide on social order by examining prevalence and incidence data on homicide as well as the different types and patterns of this crime. The relevant theoretical debates surrounding homicide causation and formation, both classic and current, will be presented along with supporting empirical material. Situational factors connecting homicide to other major crimes and the response of the criminal justice system will be examined for both typical cases and rare forms, such as serial murder.

Emphasis is on how laws and crime control strategies are developed, implemented, and evaluated by the system to address homicide. 3 credits. WR

CRIM 295. *Special Topics.* Selected topics in criminology and criminal justice. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

CRIM 300. *Probation, Parole, and Community Corrections.* This course is designed to provide an in-depth study of the theoretical and practical aspects of probation, parole, and other aspects of community corrections beyond the introductory level. This course will utilize a variety of practitioners working in the field and we will be reading and analyzing the most current research in community corrections. Prerequisite: Criminology/Criminal Justice 100. 3 credits.

CRIM 305. *White Collar Crime.* This course examines white-collar crime from a broad theoretical perspective and with a focus on the methodological issues involved in research on the causes of such crimes. Issues surrounding the origin and conceptual definitions of white-collar crime are studied and critically assessed. The costs associated with white-collar crime, especially corporate crime are investigated and analyzed. Computer crime is given particular emphasis. Other topics that are examined include: occupational crime, governmental crime, and state-corporate crime. The course gives particular emphasis to how the criminal justice system and the public respond to white-collar crimes. Prerequisite: CRIM 100 or permission of instructor. 3 credits.

CRIM 310. *Administrative Issues in Criminal Justice.* This course examines the structure and process of criminal justice administration in contemporary American society. Topics include the police, courts, and corrections. Special attention will be given to administration and leadership practices and challenges in these criminal justice organizations, inter-organizational relations, and public relations issues. 3 credits.

CRIM 311, 312. *Studies Abroad.* These courses are primarily intended for transfer of credit earned abroad in courses on sociology. 1-18 credits.

CRIM 323. *Gender and Crime.* This course will integrate theoretical and empirical information on a wide variety of issues related to justice and women and issues surrounding women as criminal justice practitioners. Issues related to social control and gender, theoretical perspectives and empirical research on criminal offenders, the place of women, and the victimization of women will be examined. 3 credits. WR

CRIM 330. *Violent Offending.* This course addresses the incidence, prevalence, and nature of violent crime within the U.S. The most recent empirical data will be combined with current qualitative research to present an informed and broad perspective on violent criminal offending and the response of the criminal justice system. Attention will be given to how both sociocultural and structural factors impact on patterns of crime at the macro and micro level. Special emphasis is on how laws and crime control strategies are developed, implemented, and evaluated by the system to address criminal violence. 3 credits. WR

CRIM 335. *Juvenile Delinquency.* In this course students explore the diversity of delinquent behavior, the process of becoming delinquent, the importance of legislation, the law enforcement apparatus, the courts, and juvenile correctional facilities in the development of delinquent identities. 3 credits.

CRIM 340. *Issues in Policing.* This course examines the fundamental issues in policing a democratic society including but not limited to the police mission, subculture, performance measurement, moral hazards, discretion, impact on crime, use of force, police occupational stress, legitimacy, community policing, and police reform issues. 3 credits.

CRIM 375. *Criminological Theory.* An historical analysis of the theories that have been developed to explain crime. Beginning with Cesare Beccaria's *An Essay on Crimes and Punishment* published in 1764, other writers to be considered include but are not be limited to Lombroso, Durkheim, Marx, Weber, Merton, The Chicago School scholars and Chesney-Lind. The discussion will focus on both the causes of "street" and white collar crimes. Prerequisite: SOCL 101 or 102 or permission of instructor. 3 credits.

CRIM 401. *Issues in Criminal Justice.* This course invites students to participate in a critical analysis of the American Criminal Justice System. The administration of “justice” as a selective process and the social and political contexts and contests within which social control is articulated will be explored in this course. Particular attention is given to the front line criminal judicial agencies and actors that serve to reproduce order. Inherent in the examination of the criminal justice processes are specific inquiries into social, political and economic struggles that characteristically reflect fundamental issues of social inequality. Institutional structures and their attendant networks are explained in relationship to the state and its differential networks. The nature of the criminal justice agencies and actors, degrees of enforcement and interrelationships with coercive agencies will be investigated. 3 credits.

CRIM 410. *Crime and Communities.* This course is designed to provide an in-depth study of the theoretical and practical aspects concerning the criminology of place. Topics that will be covered include the ecology of crime; routine activities; social disorganization; human ecology; geographic profiling; and crime prevention through environmental design (CPTED). Prerequisite: CRIM 100. 3 credits

CRIM 455. *Constitutional Law for Criminal Justice Professionals.* This course will focus heavily on Supreme Court decisions that directly impact the criminal justice profession. Specific attention will be devoted to the Fourth, Fifth, Sixth, and Eighth Amendments. The Patriot Act and Terrorism Bill will also be discussed at length. Prerequisites: CRIM 100, 200, and 210. 3 credits..

CRIM 461. *Senior Seminar in Criminology and Criminal Justice.* This course is a seminar for the senior criminology & criminal justice major, designed to integrate knowledge of specific sub-fields into a comprehensive view of the discipline and its role in relation to other sciences. Open only to senior criminology and criminal justice majors. 3 credits. WR and SP

CRIM 490. *Directed Independent Study.* Individualized study. Must be approved by head of department. 1-18 credits. Fulfills General Education Goal 15.

CRIM 492. *Internship in Criminology and Criminal Justice.* This course provides direct student learning in applied settings that permits a practiced supervised experience. Students learn through performance in meaningful tasks in a variety of social environments. Prerequisite: 18 hours of Criminology/Criminal Justice and Sociology credits taken at Longwood combined. Students' cumulative GPA must be 2.0 or above to be eligible for internship. Must be arranged at least one semester in advance with chair of department. May be repeated in subsequent semesters. Variable credit; no more than 15 total credits may be earned. Only six credit hours of Internship will earn quality points (A, B, C, and D grades); all credits earned beyond six credits will be assigned Pass/Fail grades. 1-15 credits. SP Fulfills General Education Goal 15.

CRIM 495. *Special Topics.* Selected topics in criminology and criminal justice. The topics may vary from semester to semester. May be repeated for credit when topics change. 3 credits.

CRIM 496. *Professional Study in Criminal Justice.* This course provides students with the opportunity to apply rigorous theoretical and methodological considerations and analysis to the practical training and experience gained in acquiring professional accreditation within the criminal justice profession. Accumulated GPA 2.50 or above and permission of the department chair, arranged at least one semester in advance. Only six credit hours of CRIM 496 will earn quality points (A, B, C, and D grades); all credits earned beyond six credits will be assigned Pass/Fail grades. Prerequisites: 18 hours of sociology/criminology courses. Sociology or Criminal Justice seniors only. 3-15 credits. SP Fulfills General Education Goal 15.

CRIM 498. *Honors Research in Sociology.* Students conduct research in criminology and/or criminal justice under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

COLLEGE OF BUSINESS AND ECONOMICS

Accredited by AACSB International – The Association to Advance Collegiate Schools of Business

Paul T. Barrett, *Dean*

Melinda I. Fowlkes, *Assistant Dean*

Vacant, *Assistant Dean for External Affairs & Professional Development*

Janet C. Evans, *Administrative Assistant to the Dean*

April B. Godsey, *Executive Secretary to the Faculty*

Degree Programs:

Bachelor of Science in Business Administration

Bachelor of Science in Economics

Bachelor of Arts in Economics

Minors:

Business Administration

Economics

Computer Security, Forensics, and Law (An interdisciplinary minor with Computer Science and Criminology)

Department of Accounting, Economics, Finance, and Real Estate

Bennie D. Waller, *Chair*

Department of Management, Marketing, Retailing, Computer Information Management Systems, and Business Education

Cheryl L. Adkins, *Chair*

McGaughy Professional Development Center

Vacant, *Director*

Nancy C. Postans, *Executive Assistant*

Department of Military Science

Captain Nathaniel B. Merrigan, *Officer in Charge*

Faculty

Cheryl L. Adkins, PhD, *Professor of Management*
Frank W. Bacon, PhD, *Professor of Finance*
Paul T. Barrett, PhD, CPA, *Dean*
Raymond T. Brastow, PhD, *Associate Professor of Economics*
William P. Brown, PhD, CPA, *Associate Professor of Accounting*
Roman Cech, PhD, *Assistant Professor of Economics*
Robert J. Cochran, PhD, CPA, *Associate Professor of Accounting*
Roy R. Creasey, PhD, *Assistant Professor of Management*
Glenn S. Dardick, PhD, *Associate Professor of Information Systems*
Cheryl F. Davis, MS, *Senior Lecturer in Management and Business Education*
Mary A. Flanigan, PhD, CPA, *Professor of Accounting*
Melinda I. Fowlkes, MBA, CPA, *Assistant Professor of Business*
John N. Gaskins, PhD, *Associate Professor of Marketing and Retailing*
Sally W. Gilfillan, MS, CPA, *Associate Professor of Accounting*
James C. Haug, DBA, *Assistant Professor of Management*
Terry L. Hunsinger, SFC, *Senior Military Instructor*
Claire R. LaRoche, JD, MBA, *Associate Professor of Business Law*
Linda K. Lau, PhD, *Associate Professor of Information Systems*
David Lehr, PhD, *Associate Professor of Economics*
Melanie B. Marks, PhD, *Professor of Economics*
Ronald F. McPherson, PhD, *Associate Professor of Information Systems*
Wayne E. McWee, EdD, *Professor of Business*
Nathaniel B. Merrigan, *Assistant Professor of Military Science*
Abigail H. O'Connor, MBA, *Lecturer in Marketing*
William H. Rusher, 1 Lt, *Assistant Professor of Military Science*
Tracy Tuten Ryan, PhD, *Associate Professor of Marketing*
Steven A. Samaras, PhD, *Assistant Professor of Management*
Bennie D. Waller, PhD, *Associate Professor of Finance and Real Estate*
Linda B. Wright, PhD, *Associate Professor of Marketing and Retailing*

DEGREE PROGRAMS

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

The College of Business and Economics offers courses leading to a Bachelor of Science in Business Administration, a Bachelor of Science in Economics and a Bachelor of Arts in Economics. In addition, minors are offered in business administration, economics, and computer security, forensics and law. A Master of Business Administration degree is offered at the graduate level.

COLLEGE OF BUSINESS AND ECONOMICS

The College of Business and Economics is accredited by AACSB International, the most prestigious business school accrediting agency. The College is characterized by excellence in teaching and high levels of student achievement as defined by the business community. The vision, mission, values, and degree outcomes of the College of Business and Economics are defined as follows:

VISION: To be a nationally ranked business school that develops exceptional business leaders.

MISSION: Building upon Longwood University's mission of developing citizen leaders, the College of Business and Economics is dedicated to preparing effective and successful business leaders by guiding students to develop their full potential.

VALUES:

- Committing to excellent teaching and active scholarship
- Fostering an engaging learning community where student-faculty interactions extend beyond the classroom
- Encouraging students to develop team skills and become involved in leadership roles
- Promoting real world experience through internships, collaborative research, interaction with business leaders, and travel study, complemented by coursework that emphasizes the application of knowledge to the resolution of practical issues
- Cultivating critical thinking, formal analysis, and communication skills
- Incorporating a world view that includes ethical responsibility, diversity, community service, and appreciation for the global marketplace
- Coordinating disciplines for an integrated academic experience
- Striving for continuous improvement in all we do

DEGREE OUTCOMES

Students will:

- gain core business knowledge and in-depth knowledge in their concentration.
- integrate concepts across disciplines.
- communicate effectively orally and in writing, formulating thoughts and ideas and transmitting them to target audiences.
- utilize effective critical thinking skills and problem solving techniques.
- demonstrate proficiency in the use of computer technology.
- exercise sound ethical reasoning, synthesizing and critically analyzing information from multiple perspectives, and making informed, ethical decisions.

ADMISSION REQUIREMENT

Formal Admission to the College of Business & Economics

Students must be formally admitted to the College of Business & Economics before they may declare a business or economics major or minor or register for upper-division business and economics courses. Only those students admitted to the College of Business & Economics (see admission criteria below) may declare a “business” or “economics” major or minor.

All new freshmen and transfer students entering with freshman or sophomore standing interested in pursuing a Bachelor of Science in Business Administration (BSBA), Bachelor of Arts in Economics, or a Bachelor of Science in Economics will be admitted to the respective “pre-business” or “pre-economics” program pending their successful completion of the criteria for formal admission to the College of Business & Economics.

Declaration of an intended concentration is advisable for all pre-business and pre-economics students, but not required.

The minimum criteria for formal admission to the College of Business & Economics are as follows:

Admission to the College of Business & Economics as a Business Administration or Economics Major or Minor

Current Students:

- good standing with the university (not subject to probation or suspension or in financial arrears);
- an overall grade-point average (GPA) of at least 2.33;
- successful completion of the following “pre-core” business courses
 - ◆ *or business administration majors:* ACCT 240, ACCT 242, CIMS 170, ECON 217, ECON 218, and MANG 275

- ◆ *for business administration minors*: ACCT 240, ACCT 242, ECON 217, and ECON 218
- ◆ *for economics majors*: CIMS 170, ECON 217, ECON 218, MANG 275 and one upper-level economics course
- ◆ *for economics minors*: ECON 217 and ECON 218
- a business administration or economics major or minor GPA of at least 2.33;
- the completion of a minimum of 45 credits for business administration majors or 30 credits for economics majors; and
- submission of the College of Business & Economics admission application by the posted deadline the term prior to expected admission (October 1 for Spring Semester and March 1 for Fall Semester).

Transfer Students:

The College of Business & Economics concentrates most of its professional business and economics courses in the last two years of the four-year program. As a result of this approach and because of the standards of AACSB International accreditation, it would be best for students planning to transfer to the College from another program to do so by the end of their sophomore year.

It is recommended that students majoring in business at a two-year college or another university should take only those business courses that are offered at the freshman or sophomore level at Longwood University as a part of the College of Business & Economics “pre-core” described above. Students transferring from two-year colleges or from four-year programs not accredited by AACSB International may not use coursework completed at those institutions to satisfy upper-division course requirements of the College of Business & Economics.

Transfer students entering Longwood University with junior status or higher in a business or economics program may be provisionally admitted to the College of Business & Economics for one semester during which they must successfully complete any remaining “pre-core” courses and otherwise comply with all admission criteria listed above.

Upper-division transfer students from non-business or economics fields of study or those otherwise unable to meet the College of Business & Economics admission criteria within one semester of study at Longwood will be admitted when they do meet all criteria.

For purposes of eligibility, GPA for transfer students is computed on the basis of Longwood work only.

To facilitate the transfer of students from the Virginia Community College System (VCCS) and Richard Bland College to Longwood University College of Business & Economics, the following agreement has been established. This agreement is supplementary to the Guaranteed Admission Agreement between Longwood University and VCCS and Richard Bland College, and it does not alter or eliminate any of the provisions of that agreement.

Admission to the College of Business & Economics as a Business Administration Major:

Graduates of VCCS and Richard Bland College (RBC) who meet the requirements of the Guaranteed Admission Agreement AND who have completed the following six “pre-core” courses with a least a GPA of 2.33:

- ACC 211 and 212 at VCCS or BUS 201 and 202 at RBC
- ECO 201 and 202 at VCCS and RBC
- BUS 216, 220, 221 or 222 at VCCS
- ITE 115 at VCCS or CMSC 202 at RBC

will be deemed to have met the admission criteria to the College of Business & Economics and will be admitted to the University as business administration majors. Students who meet all the requirements of the Guaranteed Admission Agreement but have not completed the above-mentioned six courses and/or the major GPA required for admission to the College of Business & Economics will be provisionally admitted to the College of Business & Economics for one semester during which they must successfully complete the remaining “pre-core” course(s) and earn at least a 2.33 cumulative and major grade point average. Transfer students may be admitted as pre-business majors and then complete the “pre-core” business courses at Longwood to earn admission to the business administration program.

Admission to the College of Business & Economics as an Economics Major:

Graduates of VCCS and Richard Bland College (RBC) who have met the requirements of the Guaranteed Admission Agreement AND who have completed the following four “pre-core” courses with at least a GPA of 2.33:

- ECO 201 and 202 at VCCS and RBC
- BUS 216, 220, 221 or 222 at VCCS
- ITE 115 at VCCS or CMSC 202 at RBC

will be provisionally admitted to the College of Business & Economics for one semester during which they must successfully complete the remaining “pre-core” course (one 300-400 level economics course), and earn at least a 2.33 cumulative and major grade point average. Students who meet all the requirements of the Guaranteed Admission Agreement but have not completed the above-mentioned four courses and/or the major GPA required for admission to the College of Business & Economics will be provisionally admitted to the College of Business & Economics for one semester during which they must successfully complete the remaining “pre-core” course(s) and earn at least a 2.33 cumulative and major grade point average. Transfer students may be admitted as pre-economics majors and then complete the “pre-core” economics courses at Longwood to earn admission to the economics program.

Continuation and Graduation Eligibility Requirements

Continuation

Continued enrollment in the College of Business & Economics is a privilege that is granted to a student who is making satisfactory academic progress and meets the standards of the College of Business & Economics, Longwood University and the Longwood Student Government Association. Students failing to do so will be subject to the Probation and Suspension Policy of Longwood University.

To be eligible to register for the internship program and/or the MANG 497 *Business Policy* or ECON 461 *Senior Seminar* capstone courses, a student must continue to meet the College of Business & Economics entrance requirements (2.33 cumulative and major GPA).

Probation and Suspension

The academic probation and suspension policies of Longwood University are described under Academic Probation and Suspension Policy of this catalog. In addition to those policies, College of Business & Economics students on probation or returning from suspension are required to first correct any deficiencies in their previously attempted business and economics coursework before moving forward in their program sequence.

Readmission after Suspension

Eligibility for readmission to Longwood University is determined according to the procedure and requirements described under Academic Probation and Suspension Policy of this catalog.

To be considered for readmission to the College of Business & Economics, a student must be readmitted to Longwood and meet the College's admission criteria described above. Until readmitted to the program a student may only register for those College courses necessary to correct any deficiencies in their previously attempted business and economics courses.

Graduation

Bachelor of Science in Business Administration (BSBA) degree:

To be eligible for graduation, students seeking the BSBA degree must be in good standing with the university, must complete their respective programs with a GPA of at least 2.33 in their major, and pass the Major Field Achievement Test (MFAT) for Business.

Bachelor of Arts in Economics and Bachelor of Science in Economics:

To be eligible for graduation, students seeking either the BA or BS degrees in economics must be in good standing with the University, must complete their respective programs with a GPA of at least 2.33 in their major, and pass a comprehensive examination in economics.

GENERAL GUIDELINES

All students will be assigned an individual College of Business and Economics academic advisor to assist them with program planning, course selection, course registration, and career planning. Students are strongly encouraged to maintain close communication with their faculty advisor in order to plan a program that meets their individual goals and needs.

Since the College of Business and Economics offers some upper-level courses only once a year and does not guarantee that all courses will be offered every year, it is important for students to consult their academic advisor as they plan their course of study.

GENERAL REQUIREMENTS

- Courses should be taken in the order approved by the faculty of the College of Business and Economics. All prerequisites listed for individual courses must be satisfied (see individual course listings for prerequisites). Under special circumstances, a student may have a course prerequisite waived by obtaining written permission of the respective department chair and Dean of the College of Business and Economics.
- Students must meet course requirements in general education, additional degree requirements, major requirements, and the requirements of a selected area of concentration.
- Students are allowed a maximum of six credits in internship (the 492 courses) toward the total credit hour requirement for any degree offered by the College of Business and Economics.
- Any course substitution involving Major Requirements must be approved by the respective department chair and the Dean of the College of Business and Economics.

BUSINESS ADMINISTRATION DEGREE PROGRAM

Students seeking a Bachelor of Science in Business Administration (BSBA) degree pursue a general course of business study that includes taking core courses in the functional areas of business. Students earning the BSBA degree must take a minimum of 50 percent of the total business hours at Longwood. For the purpose of assessing the quality of the program, graduating seniors will be tested on their general knowledge of business by taking the Major Field Test in Business.

Students also gain in-depth business knowledge by concentrating in one of nine areas of business. Students must declare a concentration prior to registering for the second semester of their junior year.

Concentration Areas

Students pursuing a Bachelor of Science in Business Administration degree (BSBA) must concentrate in one of the following nine areas:

Accounting: Students concentrating in accounting take courses that provide both technical instruction and a managerial perspective relevant to a career in accounting. The accounting concentration is designed to prepare students to be professional accountants in industry, government, or public practice. Students who complete the requirements for a concentration in accounting meet the specified content requirements to take the Virginia Certified Public Accountant examination. However, students taking the exam after July 1, 2006, will need a total of 150 credit hours to sit for the exam. A five-year BSBA and MBA program is available for students who want to graduate with 150 credit hours.

Business Education: The business education concentration is a joint program between the College of Education and Human Services and the College of Business & Economics. This program of study provides students with practical experience both in business and education. Students completing this concentration are qualified to

teach business courses at the middle and secondary level as well as pursue a career in the business world. Additionally, students may elect to complete the marketing education endorsement to be licensed to teach marketing at the secondary level. Students are subject to the teaching licensure requirements listed under the College of Education & Human Services.

Computer Information Management Systems (CIMS): The CIMS concentration is designed to prepare students to plan, design, engineer, and implement networks and information systems in a modern computer environment. Students learn how to manage information technologies and exploit their full potential. The concentration prepares students for a career in a variety of organizations ranging from the end users to the creators of information technology.

Economics: Economic logic underlies all business decisions and all government policies. A goal of the economics concentration is to teach students how to think critically about a situation and analyze its implications. Emphasis is placed on exposing students to important consumer, business, government and international situations. Graduates with a background in economics are hired by government and industry. In addition, a concentration in economics is a traditional education for students wishing to enter law school.

Finance: The finance concentration prepares students to make financial assessments and managerial decisions as well as plan and supervise financial activities for businesses and clients. Financial managers must be knowledgeable in a wide variety of fields, including capital budgeting, investments, capital markets, financial institutions, and emerging financial instruments. The finance curriculum provides background in these areas.

Management: The management concentration explores the relationship of behavioral and quantitative management techniques in the application of human resources, production processes, and organizational development. This curriculum provides students with skills in communication and critical thinking leading to management careers in any organization. In addition, the management skills of planning, directing, motivating, and controlling are essential for achieving organizational goals. The management concentration provides a strong foundation for future graduate study in business.

Marketing: Careers in advertising, buying, selling, logistics, product management, international marketing, and marketing research are only a few of the fields available to students concentrating in marketing. This concentration is designed to prepare students for managerial positions in these fields. The curriculum includes not-for-profit, governmental, and international applications of marketing knowledge. Classroom knowledge, internship opportunities, and involvement of students in business organizations are integral components of the marketing concentration.

Real Estate: This concentration prepares students for a career as a professional in the real estate field. Students completing this concentration will be prepared to enter the areas of real estate investment, mortgage banking, property management, sales, appraisal, and development. The Principles of Real Estate (FINA 453) and Real Estate Appraisal (FINA 454) courses have been approved by the state of Virginia as preparation for the licensure exams.

Retailing: The retailing concentration provides students with background and skills leading to careers in retail management. Students with a serious interest in retailing who wish to enter the retail environment at the upper store level or regional level will benefit from the extensive and directed educational experience of this concentration. The curriculum provides a strong foundation in management, marketing, and retailing subject matters.

BUSINESS ADMINISTRATION MAJOR, BSBA DEGREE

A. General Education Core Requirements/41 credits

Lower Level General Education/31 credits

Upper Level General Education/10 credits - Business students must take:

- ECON 319 International Economics (Accounting concentrators may take any upper level Economics course) for Goal 12
- MANG 474 Business Ethics for Goal 13
- Internship 492 in their area of concentration for Goal 15

B. Additional Degree Requirements/7-8 credits

Natural Science/4 credits

Choose one of the following:

MATH 181 Finite Mathematics/3 credits

MATH 261 The Differential and Integral Calculus/4 credits

MATH 267 Applications of Calculus/4 credits

C. Major Requirements/42-45 credits (of which 4 to 7 credits count in General Education)

A minimum of 50 percent of the total business hours must be taken at Longwood.

1. General Core 36 credits (4 credits counted in upper-level General Education)

ACCT 240 Principles of Accounting I/3 credits

ACCT 242 Principles of Accounting II/3 credits

ACCT 296 Legal Environment/3 credits

CIMS 170 Computer Applications/3 credits

ECON 217 Principles of Economics (Micro Emphasis)/3 credits

ECON 218 Principles of Economics (Macro Emphasis)/3 credits

FINA 350 Principles of Finance/3 credits

MANG 275 Business Statistics/3 credits

MANG 291 Business Communication/3 credits

MANG 360 Principles of Management/3 credits

MANG 474 Managing Business Ethics and Diversity/3 credits
(Meets General Education Goal 13)

MANG 497 Business Policy/3 credits

MARK 380 Principles of Marketing/3 credits

ACCT, CIMS, ECON, FINA, MANG, or MARK 492 - Internship/1 credit
(Meets General Education Goal 15)

2. Functional Competencies/6-9 credits

(3 credits counted in upper-level General Education for all concentrations except Accounting)

Concentrations require one course from each group as indicated:

International Issues:

ACCT 447 International Accounting/3 credits (Accounting)

In addition, accounting students take a three credit 300-400 level economics course to fulfill General Education Goal 12

ECON 319 International Economics/3 credits (Meets General Education Goal 12)

(Business Education, Computer Information Management Systems, Economics, Finance, Management, Marketing, Real Estate and Retailing).

Information Systems:

ACCT 448 Accounting Information Systems/3 credits (Accounting)

CIMS 370 Principles of Management Information Systems/3 credits

(Business Education, Computer Information Management Systems, Economics, Finance, Management, Marketing, Real Estate and Retailing).

Quantitative Methods:

ACCT 342 Cost Accounting/3 credits (Accounting)

ECON 309 Managerial Economics/3 credits (Economics, Finance)

MANG 363 Introduction to Management Science/3 credits

(Business Education, Computer Information Management Systems, Management, Marketing, Real Estate and Retailing).

D. Business Concentration Requirements/15-39 credits

In addition to completing the major requirements, each candidate for the BSBA degree shall satisfy the additional specific requirements of one of the following concentrations. Students must declare a concentration prior to registering for the second semester of their junior year but are strongly encouraged to do so earlier.

Business Concentration Requirements - Accounting 24, Business Education 39, Management 15, Real Estate & Retailing 21, all others 18 credits.

ACCOUNTING/24 credits

ACCT 340	Intermediate Accounting I/3 credits
ACCT 341	Intermediate Accounting II/3 credits
ACCT 344	Tax Accounting I/3 credits
ACCT 346	Intermediate Accounting III/3 credits
ACCT 442	Auditing/3 credits

Select three of the following for a total of 9 credits:

ACCT 345	Tax Accounting II/3 credits
ACCT 350	Principles of Fraud Examinations/3 credits
ACCT 441	Accounting Theory/3 credits
ACCT 443	Governmental Not-For-Profit and Advanced Accounting/3 credits
ACCT 445	Law for Accountants/3 credits
ACCT 495	Special Topics in Accounting/1-3 credits

BUSINESS EDUCATION/39 credits

MANG 190	Introduction to American Business Systems/3 credits
EDUC 245	Human Growth & Development/3 credits
EDUC 260	Intro to the Teaching Profession/3 credits
EDUC 265	Practicum I/3 credits
EDUC 299	Admission to the Teacher Preparation Program/0 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 430	Teaching Reading in the Content Area/2 credits
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management & Systems Issues/3 credits
SPED 489	Survey of Exceptional Children/3 credits
BSED 435	Methods for Teaching Business in Secondary Schools/3 credits
BSED 436	Practicum II Business Education/1 credit
EDUC 402	Directed Teaching in the Secondary School/11 credits
EDUC 488	Education Seminar/1 credit

Students in Business Education are subject to the teaching licensure requirements listed under the College of Education & Human Services. To be licensed to teach in business education in Virginia, students in the Business Education Concentration need to take Keyboarding and Office Procedures at the community college (see course list below). Students who have had at least two semesters of keyboarding and two semesters of office procedures/administration in high school could exempt these two courses. Students also have the option of exempting Keyboarding by passing the Keyboarding Pro test.

AST 101	Keyboarding/3 credits
AST 243	Office Administration/3 credits

Students in the Business Education Concentration may elect to seek a marketing education teaching endorsement by taking:

MARK 387	Principles of Retailing/3 credits
MARK 492	Marketing Internship/3 credits
Passing Marketing Endorsement of PRAXIS II	

COMPUTER INFORMATION MANAGEMENT SYSTEMS/18 credits

CIMS 272	Introduction to Business Programming/3 credits
CIMS 373	Database Management/3 credits
CIMS 471	Introduction to Systems Analysis and Design/3 credits
CIMS 473	Network Communications/3 credits

Select two from the following for a total of 6 or more credits:

CMSC 160	Introduction to Programming I/3 credits
CIMS 372	COBOL Programming/3 credits
CIMS 375	Web Design and Development/3 credits
CIMS 475	Web Programming/3 credits
CIMS 495	Special Topics in Computer Information Systems/1-3 credits

ECONOMICS/18 credits

ECON 317	Intermediate Microeconomics/3 credits
ECON 318	Intermediate Macroeconomics/3 credits
ECON 414	Econometrics and Forecasting/3 credits
ECON 461	Senior Seminar/3 credits
Economics electives/6 credits 300-400 level, ECON 492 cannot be used as economics elective	

FINANCE/18 credits

FINA 353	Managerial Finance/3 credits
FINA 450	Financial Management/3 credits
FINA 451	Investment Analysis and Portfolio Management/3 credits
FINA 452	Financial Markets and Institutions/3 credits

Select two from the following for a total of 6 or more credits:

ACCT 340	Intermediate Accounting I/3 credits
ACCT 341	Intermediate Accounting II/3 credits
ACCT 342	Cost Accounting/3 credits
ACCT 344	Tax Accounting I/3 credits
ACCT 345	Tax Accounting II/3 credits
ECON 308	Money and Banking/3 credits
ECON 317	Intermediate Microeconomics/3 credits
ECON 318	Intermediate Macroeconomics/3 credits
ECON 414	Econometrics and Forecasting/3 credits
FINA 351	Risk Management/3 credits
FINA 354	Working Capital and Treasury Function/3 credits
FINA 413	International Finance/3 credits
FINA 453	Principles of Real Estate/4 credits
FINA 454	Real Estate Appraisal/4 credits
FINA 455	Real Estate Finance and Investment/4 credits
FINA 495	Special Topics in Finance/1-3 credits

*MATH 261	The Differential and Integral Calculus/4 credits
or MATH 262	The Differential and Integral Calculus/4 credits

*MATH 267	Applications of Calculus/4 credits
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*Cannot be used both as a FINA elective and to meet BSBA additional degree requirement.

MANAGEMENT/15 credits

- MANG 362 Organization Behavior/3 credits
MANG 465 Human Resource Management/3 credits

Select three from the following (a minimum of two courses selected must have the MANG prefix) for a total of 9 credits:

- MANG 364 Negotiation and Conflict Resolution/3 credits
MANG 365 Breakthrough Work Teams/3 credits
MANG 368 Beyond the Silk Road: An Exploration of Sino-American Business/3 credits
MANG 462 Staffing Organizations/3 credits
MANG 466 Industrial Relations/3 credits
MANG 469 Entrepreneurship/3 credits
MANG 495 Special Topics in Management/1-3 credits
FINA 353 Managerial Finance/3 credits
FINA 450 Financial Management/3 credits
MARK 385 Marketing Channels Management/3 credits
MARK 481 International Business/3 credits
COMM 362 Organizational and Professional Communication/3 credits
POSC 394 Political Leadership/3 credits
SOCL 310 Complex Organizations/3 credits

MARKETING/18 credits

- MARK 381 Marketing Research/3 credits
MARK 383 Consumer Behavior/3 credits
MARK 482 Marketing Strategy/3 credits

Select three from the following for a total of 9 credits:

- MANG 368 Beyond the Silk Road: An Exploration of Sino-American Business/3 credits
MARK 382 Professional Selling and Sales Force Management/3 credits
MARK 385 Marketing Channels Management/3 credits
MARK 386 Direct Marketing/3 credits
MARK 387 Principles of Retailing/3 credits
MARK 388 Services Marketing/3 credits
MARK 480 Integrated Marketing Communications/3 credits
MARK 481 International Business/3 credits
MARK 484 New Product Marketing/3 credits
MARK 490 Independent Study/1-3 credits
MARK 495 Special Topics in Marketing/1-3 credits

REAL ESTATE/21 credits (must complete a Finance Internship in a real estate setting)

- FINA 453 Principles of Real Estate/4 credits
FINA 454 Real Estate Appraisal/4 credits
FINA 455 Real Estate Finance and Investments/4 credits
FINA 456 Real Estate Law/3 credits

Select two from the following for a total of 6 credits:

- ECON 308 Money and Banking/3 credits
FINA 353 Managerial Finance/3 credits
FINA 451 Investment Analysis and Portfolio Management/3 credits
FINA 452 Financial Markets and Institutions/3 credits
MANG 469 Entrepreneurship/3 credits
MARK 381 Marketing Research/3 credits
MARK 382 Professional Selling and Sales Force Management/3 credits
MARK 480 Integrated Marketing Communication/3 credits

RETAILING/21 credits

(may complete a Management or Marketing Internship, but it must be in a retail setting)

MANG 362	Organizational Behavior/3 credits
MANG 465	Human Resource Management/3 credits
MARK 383	Consumer Behavior/3 credits
MARK 387	Principles of Retailing/3 credits (may not be simultaneously used as a Marketing Concentration elective)
MARK 388	Services Marketing/3 credits
MARK 489	Retail Strategy/3 credits

Select one of the following for a total of 3 credits:

MANG 469	Entrepreneurship/3 credits
MANG 495	Special Topics in Management/1-3 credits
MARK 381	Marketing Research/3 credits
MARK 382	Professional Selling and Sales Force Management/3 credits
MARK 385	Marketing Channels Management/3 credits
MARK 386	Direct Marketing/3 credits
MARK 389	Retail Merchandising/3 credits
MARK 390	Directed or Independent Study/1-18 credits
MARK 480	Integrated Marketing Communication/3 credits
MARK 495	Special Topics in Marketing/1-3 credits

- E. General Electives: Accounting/5 credits; Business Education/0 credits, Computer Information Management Systems/11-12 credits, Management/15 credits; Real Estate and Retailing/9 credits; all other concentrations/12 credits.
- F. Total Credits Required for Bachelor of Science in Business Administration with a concentration in Computer Information Management Systems, Economics, Finance, Management, Marketing, Real Estate or Retailing/120; for Accounting/122; for Business Education/129.

MINOR IN BUSINESS ADMINISTRATION

The College of Business and Economics offers a minor in Business Administration. To be admitted to the Business Administration minor, students must earn at least a 2.33 cumulative GPA and complete ACCT 240 & 242 and ECON 217 & 218 with at least a 2.33 minor GPA. Students should apply for admission to the Business Administration minor during the semester in which they meet the admission requirements (Oct. 1 for fall semester and March 1 for spring semester).

Students must complete the following requirements:

Business Administration/21 credits

ACCT 240	Principles of Accounting I/3 credits
ACCT 242	Principles of Accounting II/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits
ECON 218	Principles of Economics (Macro Emphasis)/3 credits
FINA 350*	Principles of Finance/3 credits
MANG 360**	Principles of Management/3 credits
MARK 380***	Principles of Marketing/3 credits

*Prerequisites to FINA 350: ACCT 242; CIMS 170; ECON 217 & 218; and one of the following: MANG 275, MATH 171, or MATH 271.

**Prerequisite to MANG 360: PSYC 101 or SOCL 101 or 102.

***Prerequisites to MARK 380: ECON 217 & ACCT 242.

MINOR IN COMPUTER SECURITY, FORENSICS, AND LAW

Students may pursue a minor in Computer Security, Forensics, and Law. Students pursuing this interdisciplinary minor will take courses in Computer Information Management Systems, Computer Science, and Criminology and Criminal Justice.

Computer Security, Forensics, and Law/18 credits	
CIMS 376	Introduction to Computer Security, Forensics, and Law/3 credits
CMSC 355	Computer Security/3 credits
CIMS 377	Computer Communications and Forensics/3 credits
CRIM 305	White Collar Crime/3 credits
CIMS 476	Advanced Topics in Computer Security, Forensics, and Law/3 credits

*Select one from the following for a total of 3 credits:
(students must select a course outside their major/concentration)*

ACCT 350	Principles of Fraud Examinations/3 credits
CMSC 360	Computer Network Theory/3 credits
CMSC 455	Network Security and Cryptography/3 credits
CIMS 473	Network Communications/3 credits
SOCL 305	Society and Technology: Identity, Community, and Ethics/3 credits

ECONOMICS DEGREE PROGRAM

Two degrees in economics are offered: the Bachelor of Science and the Bachelor of Arts. Both degrees are designed to offer the student flexibility in fashioning the major. Students are taught to think critically about typical issues faced in business and social policy and how to analyze their implications. Emphasis is placed on exposing the student to decision-making tools used in a variety of career paths. All economics majors are required to take at least 36 hours of economics courses.

Economics is also considered to be a traditional pre-law degree since students with an economics degree enter law school with well-refined analytical tools and an ability to think critically. The *Wall Street Journal* has quoted Edward Tom of UC Berkeley School of Law as stating that “of all the majors, economics ranks in the top four or five consistently year after year for both applications and offers made. Logical reasoning and analytical skills are critical to legal studies.” Furthermore, research has shown that economics majors tend to perform well on the LSAT exam. Research published in the *Journal of Economics Education* reports that of the 14 majors that had more than 2,000 students taking the exam, economics students received the highest average score in both of the time periods studied.

There are three curricular tracks offered for the Bachelor of Science in Economics, each of which has a different emphasis. The first track, Business Economics Concentration, focuses on economics while requiring students to take supporting courses in accounting, finance, computing, and statistical methods. It is designed to prepare students for analytical positions in a variety of businesses.

The second track, the Public Policy Concentration, allows students to study Economics while focusing on public policy and social issues. Economics is combined with Political Science and Sociology to provide a Liberal Arts orientation.

The third track, the Bachelor of Science degree without a specific concentration, provides the most flexibility in both course work and career choices.

There is one curricular track offered for the Bachelor of Arts degree with a concentration in International Economics. This concentration provides a wide-ranging international experience. As part of this program, the student is required to take international economics courses, the International Studies Minor, and a foreign language as a requirement of the BA degree. In addition, Longwood's Office of International Studies offers many study-abroad experiences that complement this major.

ECONOMICS MAJOR, BS DEGREE

A. General Education Core Requirements/41 credits

Lower Level General Education/31 credits

Upper Level General Education/10 credits - Economics students must take:

- ECON 319 International Economics for Goal 12
- ECON 492 Internship for Goal 15

B. Additional Degree Requirements/7 or 8 credits

Natural Science/4 credits

Choose one of the following:

- | | |
|----------|--|
| MATH 164 | Precalculus/3 credits |
| MATH 181 | Finite Mathematics/3 credits |
| MATH 261 | The Differential and Integral Calculus/4 credits |
| MATH 267 | Applications of Calculus/4 credits |

C. Major Core Requirements/27 credits (plus 1 credit counted in upper-level General Education

- | | |
|----------|--|
| ECON 217 | Principles of Economics (Micro Emphasis)/3 credits |
| ECON 218 | Principles of Economics (Macro Emphasis)/3 credits |
| ECON 309 | Managerial Economics/3 credits |
| ECON 317 | Intermediate Microeconomics/3 credits |
| ECON 318 | Intermediate Macroeconomics/3 credits |
| ECON 414 | Econometrics and Forecasting/3 credits |
| ECON 461 | Senior Seminar/3 credits |
| ECON 492 | Internship/1 credit (Meets General Education Goal 15)
(Additional credits of ECON 492 may be taken as general electives, but may not be used as ECON electives. The total credits in ECON 492 cannot exceed 6 hours.) |
| MANG 275 | Business Statistics/3 credits |
| CIMS 170 | Computer Application/3 credits |

D. Economics Concentration Requirements

In addition to completing the major core requirements, each candidate for the BS in Economics degree shall satisfy the additional specific requirements of one of the following concentrations:

BUSINESS ECONOMICS/27 credits

- | | |
|---------------------------|---------------------------------------|
| ECON 319 | International Economics/3 credits |
| ECON Electives/15 credits | (at the 300 or 400 level) |
| ACCT 240 | Principles of Accounting I/3 credits |
| ACCT 242 | Principles of Accounting II/3 credits |
| FINA 350 | Principles of Finance/3 credits |

PUBLIC POLICY/33 credits

- | | |
|--------------------------|--|
| ECON 302 | Law for Economists/3 credits |
| ECON 313 | Public Economics/3 credits |
| ECON 314 | Environmental and Resource Economics/3 credits |
| ECON 319 | International Economics/3 credits |
| ECON Electives 9 credits | (at the 300 or 400 level) |
| COMM 101 | Oral Communication/3 credits |
| POSC 370 | Public Administration/3 credits |

Select one from the following:

- | | |
|----------|--|
| POSC 255 | Introduction to Comparative Politics/3 credits |
| POSC 343 | American Foreign Policy/3 credits |
| POSC 441 | International Relations/3 credits |

Select one from the following:

CRIM 375	Criminology/3 credits
CRIM 401	Issues in Criminal Justice/3 credits
SOCL 350	Power and Privilege: Social Stratification/3 credits
SOCL 360	Urban Sociology/3 credits
SOCL 376	Sociology of Law/3 credits

NO CONCENTRATION/15 credits

ECON Electives/15 credits (at the 300 or 400 level)

E. General Electives:

Business Economics concentration: 17 or 18 credits. No more than 21 elective credits in total can be taken in Business (ACCT, MANG, MARK, FINA, CIMS). There is no limit on how many of these credits can be taken as ECON.

Public Policy Concentration: 11 or 12.

No Concentration: 29 or 30 credits. No more than 15 credits can be taken in Business (ACCT, MANG, MARK, FINA, CIMS). There is no limit on how many of these credits can be taken as ECON.

F. Total Credits Required for a BS in Economics/120

ECONOMICS MAJOR, BA DEGREE

International Economics Concentration

A. General Education Core Requirements/41 credits

Lower Level General Education - 31 credits

Upper Level General Education - 10 credits - Economics students must take:

- ECON 319 International Economics for Goal 12
- ECON 492 Internship for Goal 15

B. Additional Degree Requirements/6 credits

Humanities (3 credits) - not in the discipline of the major.

Foreign Languages (3 credits) - at the 202-level or above (Meets General Education Goal 10)

C. Major Requirements/54-61 credits (plus 4 credit counted in General Education)

ECON 217	Principles of Economics (Micro Emphasis)/3 credits
ECON 218	Principles of Economics (Macro Emphasis)/3 credits
ECON 307	Economic Development and Transition to Free Markets/3 credits
ECON 309	Managerial Economics/3 credits
ECON 317	Intermediate Microeconomics/3 credits
ECON 318	Intermediate Macroeconomics/3 credits
ECON 319	International Economics/3 credits
ECON 414	Econometrics and Forecasting/3 credits
ECON 461	Senior Seminar/3 credits
ECON 492	Internship (1 credit counted in General Education as Goal 15) (Additional credits of ECON 492 may be taken as general electives, but may not be used as ECON electives. The total credits in ECON 492 cannot exceed 6 hours.)
ECON	Electives/9 credits (at the 300 or 400 level)
CIMS 170	Computer Applications/3 credits
MANG 275	Business Statistics/3 credits
MATH 164	Precalculus/3 credits

or

MATH 267 Applications of Calculus/4 credits

International Studies Minor/18 credits (which may include ECON 307, and 319 listed above and foreign language General Education Goal 10)

D. General Electives/9-16 credits

E. Total Credits Required for BA in Economics with Concentration in International Economics/120

Minor in Economics

The College of Business and Economics offers a minor in Economics. To be admitted to the Economics minor, students must earn at least a 2.33 cumulative GPA and complete ECON 217 & 218 with at least a 2.33 minor GPA. Students should apply for admission to the Economics minor during the semester in which they meet the admission requirements (Oct. 1 for fall semester and March 1 for spring semester).

Students must complete the following requirements:

Economics/21 credits

ECON 217 Principles of Economics (Micro Emphasis)/3 credits

ECON 218 Principles of Economics (Macro Emphasis)/3 credits

ECON 317 Intermediate Microeconomics/3 credits

or ECON 318 Intermediate Macroeconomics/3 credits

Economics electives/12 credits (at the 300- or 400-level)

(ECON 492 may not be used as an Economics elective)

MILITARY SCIENCE PROGRAM

Faculty and Staff

William H. Rusher, 1 Lt, *Assistant Professor of Military Science*

Terry L. Hunsinger, SFC, *Senior Military Instructor*

The objective of the military science and leadership program is to provide the leadership and management foundation required for military service as a commissioned officer or in a civilian counterpart position. In support of this objective the program includes classroom instruction and activities geared to the development of leadership skills.

Military Science and Leadership classes may be taken by all University students. Class enrollment in the 100 and 200-level Military Leadership classes carry no U.S. Army commitment, and there is no obligation to enroll for successive course offerings. College and/or commissioning credit may be awarded for prior military service, attendance at the ROTC Leader's Training Course, or Junior ROTC participation. International students desiring to attend Military Science and Leadership classes must have written approval from their respective embassies prior to taking classes.

ACCOUNTING COURSE DESCRIPTIONS (ACCT)

General Education Courses *

Writing Intensive Courses WR

Speaking Intensive Courses SP

ACCT 240. *Principles of Accounting I.* Basics of the accounting cycle, including use of journals and ledgers, and the preparation of balance sheets and income statements. 3 credits.

ACCT 242. *Principles of Accounting II.* Continuation of ACCT 240. Preparation of statement of cash flows. Accounting for owners' equity in partnerships and corporations, standard costs and budgeting, cost-volume-profit analysis, and analysis of financial data. Prerequisite: ACCT 240. 3 credits.

ACCT 295. *Special Topics.* Selected topics in accounting. Topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of the instructor. 1-3 credits.

ACCT 296. *Legal Environment.* A survey of the critical business law requirements that are needed for day-to-day business operations. Topics such as contracts, consumer protection, agency and bailments will be included. 3 credits.

ACCT 311-312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad in courses in accounting. 1-18 credits.

ACCT 340. *Intermediate Accounting I*. Review of the accounting cycle; development of the theoretical foundation of financial reporting; accounting for assets; payroll accounting; additional topics related to current developments in financial accounting and reporting. Offered fall semester only. Prerequisite: ACCT 242 with a C- or better. 3 credits.

ACCT 341. *Intermediate Accounting II*. Continuation of ACCT 340. Accounting for assets, liabilities, stockholders' equity, and cash flows; financial statement disclosure and analysis; additional topics related to current developments in accounting. Offered spring semester only. Prerequisite: ACCT 340. 3 credits.

ACCT 342. *Cost Accounting*. The study of basic cost accounting systems and concepts. Consideration of inventory costing, cost variance analysis, budgeting, and managerial decision-making based on economic considerations. Offered fall semester only. Prerequisite: ACCT 242 with a C- or better. 3 credits.

ACCT 344. *Tax Accounting I*. A comprehensive study of income tax problems relating to individuals. These topics, among others, will be studied: income, exclusions, gain or loss on sales, exchange and involuntary conversions, deductions, exemptions and credits. Offered fall semester only. Prerequisite: ACCT 242 with a C- or better. 3 credits. WR

ACCT 345. *Tax Accounting II*. A comprehensive study of income tax problems relating to partnerships, corporations, specially taxed corporations, estates and trusts. Offered spring semester only. Prerequisite: ACCT 344. 3 credits.

ACCT 346. *Intermediate Accounting III*. Continuation of ACCT 341. Accounting for leases, pensions, and income taxes; effect of accounting changes; revenue measurement and income presentation; accounting for partnerships; additional topics related to current developments in financial accounting and reporting. Offered fall semester only. Prerequisite: ACCT 341. 3 credits.

ACCT 350. *Principles of Fraud Examinations*. Fraud examination will cover the principles and methodology of fraud detection and deterrence. The course includes such topics as skimming, cash larceny, check tampering, register disbursement schemes, billing schemes, payroll and expense reimbursement schemes, non-cash misappropriations, corruption, accounting principles and fraud, fraudulent financial statements, and interviewing witnesses. The course includes a focus on current events related to fraudulent activity. Prerequisite: ACCT 240 or permission of the instructor. 3 credits.

ACCT 390. *Directed or Independent Study*. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

ACCT 441. *Accounting Theory*. A study of current issues in accounting, including generally accepted accounting principles, APB opinions, and FASB statements. Prerequisite: ACCT 346. 3 credits. WR

ACCT 442. *Auditing*. Examines auditing standards, procedures, internal control, programs and reports to clients, ethics and legal liabilities. Offered fall semester only. Offered fall semester only. Prerequisite: ACCT 341. 3 credits. WR

ACCT 443. *Governmental Not-For-Profit and Advanced Accounting*. Fund and budget accounting for governmental and not-for-profit entities. Consolidated financial reporting for corporations. Offered fall semester only. Prerequisite: ACCT 341. 3 credits.

ACCT 445. *Law for Accountants*. This course is designed to present students concentrating in accounting with a broad overview of the legal environment of U.S. business operations with emphasis on areas of substantive law that entry level professional accountants are expected to know. Offered spring semester only. 3 credits.

ACCT 447. *International Accounting.* This course introduces students to the problems that the U.S. accountant faces when functioning in the global economy. The course starts with a survey of accounting systems around the world, including comparative financial accounting practices and efforts towards harmonization. The second part of the course covers the international aspects of specific financial topics: accounting for price changes, foreign currency exposure and translation, and analysis of foreign financial statements. Offered spring semester only. Prerequisite: ACCT 341. 3 credits. SP

ACCT 448. *Accounting Information Systems.* This course covers the treatment of accounting information as a system to be managed. Topics include a general overview of management information systems; managing computer technology; transaction processing; systems security; systems planning and analysis; and database management. Students will also be exposed to data communications technologies. Offered spring semester only. Prerequisites: ACCT 340, CIMS 170, and junior status. 3 credits.

ACCT 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

ACCT 492. *Internship: Accounting.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major and a declared concentration, and permission of internship director, 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

ACCT 495. *Special Topics.* Selected topics in accounting. An individually designed course that allows the student to pursue advanced topics in specific accounting areas. Topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of the instructor. 1-3 credits.

ACCT 498. *Honors Research in Accounting.* Students conduct research in accounting under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

BUSINESS EDUCATION COURSE DESCRIPTION (BSED)

General Education Courses *
Writing Intensive Course WR
Speaking Intensive Course SP

BSED 435. *Methods of Teaching Business in Secondary Schools.* A study of how to implement the current practices and procedures in teaching business courses in secondary schools with emphasis on principles, techniques, and materials. Prerequisite: EDUC 265 & 299 or permission of instructor. 3 credits. SP

BSED 436. *Practicum II.* The goal of the Practicum II course is to help prepare and train student teachers for the business courses they will be teaching through participation and micro-teaching processes observed in business education in a public school settings for at least 30 hours under Longwood supervision. In addition, instruction and follow-up will occur through course meetings. Prerequisite: EDUC 265 & 299. 1 credit.

COMPUTER INFORMATION MANAGEMENT SYSTEMS COURSE DESCRIPTIONS (CIMS)

General Education Courses *
Writing Intensive Course WR
Speaking Intensive Course SP

CIMS 170. *Computer Applications.* The course utilizes several common business software applications to explore how these tools are used in typical business environments. The course enhances the students' knowledge of tools needed for upper-level courses in the School of Business and Economics, as well as their knowledge of computer concepts that are required in the business world. 3 credits.

CIMS 272. *Introduction to Business Programming.* The course emphasizes analysis of existing systems and designs of new systems using common structured and object-oriented modeling tools. It also includes the development of information systems from the analysis of present information flow, system specifications, and modeling. Prerequisite: CIMS 170. 3 credits.

CIMS 275. *Web Design for Beginners.* An introduction to Web page design and development. Students will be introduced to HTML, Javascript and Vbscript. Students will create a Web site with features such as pictures, video, guestbook, marquees, forms, and other useful tools for Web site creation. In addition, OBNC connectivity, ASP and server/client relationships will be introduced for creating dynamic web pages and understanding Electronic commerce. 3 credits.

CIMS 295. *Special Topics.* Selected topics in computer information management systems. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

CIMS 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in computer information management systems. 1-18 credits.

CIMS 370. *Principles of Management Information Systems.* A general overview of information systems. Planning, designing and implementing information management systems. Emphasis is on application of the systems. Prerequisite: CIMS 170. 3 credits.

CIMS 372. *COBOL Programming.* An introduction to programming in a business oriented language (COBOL) with emphasis on commercial applications and elementary concepts of file processing. 3 credits. WR

CIMS 373. *Database Management.* Introduction to theory of data structure, implementation of database models, and applications using a conventional database system. Prerequisites: CIMS 370 and one of the following: CIMS 272, CIMS 372, or CMSC 160. 3 credits.

CIMS 375. *Web Design and Development.* This course teaches students how to use powerful, sophisticated, commercially available Web design tools to create interactive multimedia projects in an interdisciplinary team environment. Students build a personal Web site, an interactive portfolio site, and a site for a "real world" client. Other topics include introduction to ASP, CGI, Perl, VBScript, JavaScript, and Jscript. Prerequisites: CIMS 170 and 370, or permission of the instructor. 3 credits.

CIMS 376. *Introduction to Computer Security, Forensics, and Law.* This class covers IT security, computer law, and methods and tools for gaining forensic information from computer systems. It includes case studies of cyber crimes with a focus on the capabilities and limitations of forensics techniques today. The course introduces students to forensics tools using hands-on experience and the Internet. Prerequisite: CMSC 121 or CIMS 170, or permission of the instructor. 3 credits.

CIMS 377. *Computer Communications and Forensics.* This is a fundamental required course as part of an interdisciplinary curriculum that is very much in demand in today's society. This course covers IT forensics as part of one of the three academic areas in the interdisciplinary curriculum. The three areas covered are IT security, IT forensics, and cyber law. Prerequisite: CIMS 376 or permission of instructor. 3 credits.

CIMS 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

CIMS 471. *Introduction to Systems Analysis and Design. Development of an information system from the analysis of present information flow, system specifications and equipment selection to implementation.* Emphasis on analysis of existing systems and design of new systems. Prerequisite: CIMS 373. 3 credits. SP

CIMS 473. *Network Communications.* A study of voice and data communications concepts, including network components, strategies, topologies, planning and design issues, security considerations, evaluation/performance criteria, and management control requirements. Topics cover physical components as well as theoretical issues. Course includes in-class lectures as well as hands-on lab experiences with physical media, microcomputer connectors, and network operating systems. Prerequisite: CIMS 370. 3 credits.

CIMS 475. *Web Programming.* An in-depth study of programming techniques used in Web page design. Topics can include HTML and derivative languages, server-side programming, client-side programming, Web server

architecture, and Web security. Use of these programming techniques to create contemporary applications will be covered. These applications can include, but are not limited to, shopping carts, guest books, login validation, database access and manipulation, form processing, auctions, and chat rooms. Other applications and techniques may be covered that reflect current trends in Web design and use. Prerequisites: Successful completion of a programming course prior to enrollment in this course is required as well as CIMS 373 or CMSC 362 or permission of instructor. 3 credits.

CIMS 476. *Advanced Topics in Computer Security, Forensics, and Law.* This class covers IT security, computer law, techniques for identifying and tracking cyber attacks, and methods and tools for gaining forensic information from computer systems. It includes case studies of cyber crimes with a focus on the relationship between computer forensics, IT security and cyber law today. The course will incorporate practical projects representing forensic challenges. The course will emphasize the application of law, ethics, conceptual models and hands-on experiences of using forensic tools with personal computers, servers, Internet activity and Web browser usage. Prerequisites: CMSC 355, CIMS 376, CIMS 377, CRIM 305, and one of the following: both CMSC 360 and 455; or CIMS 473; or SOCL 305. 3 credits.

CIMS 492. *Internship: Computer Information Management Systems.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major, a declared concentration, and permission of the internship director. 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

CIMS 495. *Special Topics.* Selected topics in computer information management systems. An individually designed course that allows the student to pursue advanced topics in specific management information systems areas. Topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of the instructor. 1-3 credits.

CIMS 498. *Honors Research in Computer Information Management Systems.* Students conduct research in computer information management systems under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

ECONOMICS COURSE DESCRIPTIONS (ECON)

General Education Course *
Writing Intensive Course WR
Speaking Intensive Course SP

ECON 111. *Contemporary Economic Issues and Social Policy.* Fundamental economic principles and the economics of social issues. Material is addressed in a manner that illustrates the importance of understanding economic issues that affect you as a consumer, citizen, and taxpayer. Example topics are: environmental issues, poverty and inequality, the war on drugs, the determination of prices in markets and price manipulation, and the collapse of communism. The format for all classes is discussion. 3 credits. Goal 8

ECON 115. *Economics for Educators.* An examination and exploration of economic concepts and principles as well as instructional approaches aimed at incorporating these concepts into the elementary school curriculum. This course is designed especially for students preparing for careers as elementary school educators and will focus on preparing students to be able to implement the economics strand in the Virginia Social Studies Standards of Learning adopted in 1995. This course may not be taken for credit by business or economics majors. Prerequisite: EDUC 299. 3 credits.

ECON 217. *Principles of Economics (Micro Emphasis).* Overview of economic theory and real world applications. For example, how are prices in the economy determined? How do economic markets operate? How do economic events such as technological advances, increases in input prices, and government policy changes affect market prices and the consumer? Some time will be spent on discussion of market structures such as competitive markets versus monopoly. Real world applications will be used to illustrate economic theories. 3 credits.

ECON 218. *Principles of Economics (Macro Emphasis).* Study of the economy as a whole. Topics include the determination of a general price level for the economy, determinants of inflation, unemployment, interest rates, and Gross Domestic Product. For example, this course addresses how the Federal Reserve uses monetary policy to manipulate economic activity, inflation, and interest rates. 3 credits.

ECON 295. *Special Topics.* Selected topics in economics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

ECON 302. *Law for Economists.* Students will evaluate the law based on economic principles and will form connections to public policy. Specifically, students will examine the effects of current law on behavior and predict the effects of future laws on society. Topics include economics of crime and punishment, economic theory of property and property liability, and medical malpractice. Students will apply legal and economic concepts to recent cases. Prerequisite: ECON 217. 3 credits.

ECON 303. *Economics of Sports.* A study of how economic theories apply to the markets for professional and amateur sports. Topics will include competition within the industry, wage determination, labor market functions, regulation and market failure. Class will be discussion oriented. Prerequisite: ECON 217. 3 credits.

ECON 305. *Economics of the European Union.* The purpose of this course is to study the evolution of the European Union from the early post-war years all the way to the recent largest expansion in the EU's history. While covering historical, geographic and cultural aspects of the process of European integration, we will focus primarily on the economic analysis of the present and future challenges in the EU. The scope of this class includes two areas: first, the effects of EU on major world markets; and second, the policy issues and challenges for the private enterprises and government policy makers in EU. Prerequisite: ECON 217 and ECON 218. 3 credits.

ECON 307. *Economic Development and Transition to Free Markets.* This course represents a unified approach to issues that have been traditionally partitioned into two separate subjects, the Economics of Development and Economics Systems. The events of 1989 in Eastern and Southeastern Europe brought political and economic changes, which highlight the fact that the countries undergoing transition from a centrally planned economy to free markets face challenges that are similar to those of the developing countries. That is why we examine the processes of transition together with economics development in a unified context with common basis in methods of analysis and measurement. Prerequisite: ECON 217 and 218. 3 credits.

ECON 308. *Money and Banking.* The function of money as legal tender and the relation of money and credit to prices. Emphasis will be placed on monetary policy, interest rates, and the Federal Reserve System, international applications, and problems of currency exchange. Prerequisites: ECON 217 and 218. 3 credits.

ECON 309. *Managerial Economics.* This course applies economics to business decision-making. Applied regression analysis, an important empirical tool that is widely used in business and government, will be used to study managerial insights that can be gained from business data. Additional topics include linear programming, forecasting, and business strategies for firms in competitive and monopolistic markets. Prerequisites: ECON 217 and one of the following: MANG 275, MATH 171, or MATH 271. 3 credits.

ECON 310. *Economic History of the World.* This course deals with the international economic history. Main emphasis is on the economic and technical development in the world starting with the industrialization in Europe and the U.S. economic history since the 1770's. The center of interest is the special, rather short, period of world history when in a limited part of the world a development takes place from static, stationary societies to growing economies which gradually have raised GDP per capita far above the traditional subsistence level. Together with the analysis of the main factors of economic growth, the analysis will result in a deep understanding of the role of U.S. as a leader in the world economy. Prerequisites: ECON 217 and ECON 218. 3 credits.

ECON 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in economics. 1-18 credits.

ECON 313. *Public Economics.* This course addresses the role of government in a market economy. The economic rationale for government intervention in correcting market failures is analyzed, along with regulation and redistribution issues. Emphasis is placed on the evaluation of government policies and programs, as well as potential reforms; for example, health care, drug prohibition, education reform, and farm subsidy programs. Contrast is made between bureaucratic and market solutions. Prerequisites: ECON 217. 3 credits.

ECON 314. *Environmental and Resource Economics.* This course analyzes environmental concerns and the economics of resource use. Specifically, a contrast will be made between governmental solutions to environmental issues and market-based environmental reforms. Issues addressed include: animal extinction and common ownership problems, pollution, water management, global warming/global cooling, and land management. The underlying theme of the course is the ability to use economic theory to develop appropriate incentive structures for the use of economic resources. Prerequisite: ECON 217. 3 credits.

ECON 317. *Intermediate Microeconomics.* Advanced topics in microeconomics supplemented by applications of microeconomic theory to policy and business issues. Theory of the consumer and production will be emphasized. Prerequisite: ECON 217. 3 credits.

ECON 318. *Intermediate Macroeconomics.* Advanced coverage of monetary and fiscal theory and policy with emphasis on money supply and interest rates, national income determination, unemployment, inflation, and international issues. Prerequisites: ECON 217 and 218. 3 credits.

ECON 319. *International Economics.* Analytical approach to gains derived from trade, treatment of various theories of international trade (classical and current). Includes analysis of economic and political influences on exports and imports, foreign exchange rates, concept of elasticity as applied to international trade, balance of payments, significance of foreign trade and investment. Prerequisites: ECON 217 and 218. 3 credits.

ECON 401. *Economics in the High School Classroom.* Teachers will learn basic economic concepts and how to apply them to topics including domestic and global issues such as the environment, international trade, economic reform in Russia, macroeconomic policy, welfare reform, and drug legalization. Classroom activities and social studies SOLs will be addressed. Course taught through the Longwood Center of Economic Education. Not for credit toward the economics major, minor, or concentration. 3 credits.

ECON 411. *Economics of Labor and Discrimination.* Economic analysis of labor markets, including issues of labor supply and demand, wage determination, unemployment, job search, education, and other human capital investments. Emphasis will be placed on the analysis of data on labor market outcomes relative to ethnicity and gender. Theories of discrimination will be addressed. Policy issues and programs such as minimum wage, comparable worth pay programs, and affirmative action will be discussed. Prerequisite: ECON 217. 3 credits.

ECON 413. *International Financial Markets.* This course will analyze the key financial markets and instruments that facilitate trade and investment activity on a global scale. The scope of this class includes two areas: first, the economic determinants of prices, price changes, and price relationships in the major financial markets; and second, the policy issues that result for private enterprises and government policymakers. Prerequisite: ECON 308 or FINA 350. 3 credits.

ECON 414. *Econometrics and Forecasting.* Introduction to the basic concepts used in economic data analysis. Emphasis is on applications of linear regression techniques to analyze common empirical problems in economics, business, and government. Forecasting techniques that are commonly used by economists will be covered. Students will receive hands-on experience in data collection, computer software, and project design. Prerequisites: ECON 217, 218, and one of the following: MANG 275, MATH 171 or MATH 271. 3 credits. WR and SP

ECON 416. *Thinking Strategically: Applied Game Theory.* This course examines decision-making in an interdependent environment. Often choices are difficult to make because there are other active decision makers whose choices interact with each other. Such situations are known as "games" and this course explores the science behind these games. Knowledge of game theory will give students an advantage in such strategic settings. The

course will cover simultaneous and sequential games, games of perfect and incomplete information, and one period and multi-period games. Prerequisite: ECON 217. 3 credits.

ECON 417. *Economic Growth, Development, & Public Policy.* Patterns of economic growth across countries and over time will be analyzed, and the stylized facts of growth uncovered. Both exogenous and endogenous growth models will be introduced and carefully analyzed, with their public policy implications highlighted. Traditional and current policy issues such as population growth, financial markets, education, technological change & innovation, and trade will be emphasized. This course emphasizes the applicability of growth theories to real world issues. Prerequisites: ECON 217 and ECON 218. 3 credits.

ECON 461. *Senior Seminar.* This course is designed as a seminar for senior level economics students and centers around the development of a semester-long original econometrics research project. Technical writing and oral presentations are emphasized. The Senior Exit Examination is administered as part of this course. 3 credits. Prerequisites: Cumulative and major GPA of 2.33 or greater; ECON 317, 318, 319, and a C- or better 414. (ECON 318 and 319 may be taken concurrently with ECON 461). WR SP

ECON 490. *Independent Study: Economics.* This is an individually designed course that allows the student to pursue advanced topics in specific areas of economics. Prerequisites: Senior standing and permission of instructor. 1-3 credits.

ECON 492. *Internship: Economics.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major, a declared concentration, and permission of internship director. 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

ECON 495. *Special Topics.* Selected topics in economics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

ECON 498. *Honors Research in Economics.* Students conduct research in economics under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

ECON 501. *Economics and the Environment in the K-12 Classroom.* This educator-oriented class is designed to cover the economic strands of the Virginia Standards of Learning using an environmental context. Students will learn basic economics theory and innovative, hands-on methods of delivering the content. Environmental themes include resource scarcity, common pool and tragedy of the commons, externalities, population growth, regulation, garbage and recycling, pollution, and endangered species. Children's literature is incorporated. Students are responsible for development of curriculum activities appropriate for the classroom. Students may not use this course to meet the economics requirements in the economics major (BS or BA in Economics), in the business administration major (BSBA) or in the economics minor. 3 credits.

ECON 502. *Financially Focused in the K-12 Classroom.* This educator-oriented class is designed to cover the essential elements of financial literacy, including basic economics, financial planning, saving/investing, budgeting, use of credit, taxation, social security, and insurance. Hands-on activities will be included, so that teachers learn how to make these topics more interesting for students. Students may not use the course to meet the economics requirements in the economics major, the business administration major, or the economics minor. 3 credits.

ECON 503. *Saving Our Rivers and Bays with Dollars and Sense.* This educator-oriented class focuses on the importance of Virginia's water resources. Participants will explore both the scientific and economic reasons that Virginians should be concerned about the quality of these resources and the reasons that they are being degraded. They will understand how water resources are impacted by the common pool problem and the tragedy of the commons, and they will explore the role of property rights in setting the correct incentives for protection. Participants will also learn how to teach a classroom-friendly model for effective decision making with respect

to environmental resources. A major focus of the class is the Chesapeake Bay and its importance in the Virginia economy. Hands-on classroom activities and children's literature selections will be a major element of this training. This class is intended for educator relicensure and cannot be counted towards the Economics major, the Economics minor, the B.S. in Business Administration, or the Master in Business Administration. 3 credits.

FINANCE COURSE DESCRIPTIONS (FINA)

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Course SP

FINA 250. *Personal Finance.* Basic fundamentals in selected areas of personal finance; role of the individual as a consumer and as an investor. 3 credits.

FINA 295. *Special Topics.* Selected topics in finance. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

FINA 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in finance. 1-18 credits.

FINA 350. *Principles of Finance.* Principles and practices of financial management within a business firm. Examines acquisition of funds, cash flow, financial analysis, capital budgeting, working capital requirements, and capital structure. Prerequisites: CIMS 170, ACCT 242, ECON 217 and 218, and one of the following: MANG 275, MATH 171, or MATH 271. 3 credits.

FINA 351. *Risk Management.* An introduction to the fundamentals of risk management. General understanding of the varied applications of the principles of insurance to situations involving risk. Prerequisite: FINA 350. 3 credits.

FINA 353. *Managerial Finance.* This course focuses on corporate financial decision-making. Topics include risk assessment, capital budgeting, cost of capital, and asset pricing models. Offered fall semester only. Prerequisite: FINA 350. 3 credits.

FINA 354. *Working Capital and Treasury Function.* This course complements FINA 353; it concerns managing liquidity, working capital, long-term liabilities, selecting a capital structure, and obtaining long-term financing. Prerequisite: FINA 350. 3 credits.

FINA 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

FINA 413. *International Financial Markets.* This course will analyze the key financial markets and instruments that facilitate trade and investment activity on a global scale. The scope of this class includes two areas: first, the economics determinants of prices, price changes, and price relationships in the major financial markets; and second, the policy issues that result for private enterprises and government policymakers. Prerequisite: ECON 308 or FINA 350. 3 credits.

FINA 450. *Financial Management.* Considerations, analyses and decisions pertinent to the financial management of a business firm. The course will make extensive use of cases. Offered spring semester only. Prerequisite: FINA 353. 3 credits. WR and SP

FINA 451. *Investment Analysis and Portfolio Management.* Characteristics and analysis of individual securities as well as the theory and practice of optimally combining securities into portfolios. The presentation of material is intended to be rigorous and practical, without being overly quantitative. Offered spring semester only. Prerequisite: FINA 350. 3 credits.

FINA 452. *Financial Markets and Institutions.* Characteristics of and interrelationships among financial markets, securities, and institutions. Includes analysis of futures, options, swaps, and other derivative instruments. Offered fall semester only. Prerequisite: FINA 350. 3 credits.

FINA 453. *Principles of Real Estate.* Principles of ownership and transfer of real property interests; buying, selling, or leasing residential or investment real estate; and legal, economic, financial, and appraisal aspects of the subject matter. Offered fall semester only. Prerequisite: FINA 350. 4 credits.

FINA 454. *Real Estate Appraisal.* Introduction to the basic principles and procedures of real estate appraisal. Topics include the real estate market, principles of valuation, building and site analysis, legal concepts, and the application of the three approaches to real estate valuation. Single family housing and rural lands will be highlighted. Offered spring semester only. Prerequisites: FINA 350 and FINA 453 or instructor's permission. 4 credits. SP

FINA 455. *Real Estate Finance and Investments.* Introduction to the basic principles and procedures of real estate finance and investments. Topics include sources of funds, types and contents of financing instruments, roles of private and governmental institutions, the determination of economics feasibility of real estate investments and the effects of financing and taxes on investment profitability. Offered spring semester only. Prerequisite: FINA 350. 4 credits.

FINA 456. *Real Estate Law.* Legal concepts of real estate, land descriptions, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, evidence of title, consumer protection and landlord-tenant law. Offered fall semester only. Prerequisite: FINA 350. 3 credits.

FINA 490. *Independent Study.* Advanced topics in finance. This is an individually designed course that allows the student to pursue advanced topics in specific finance areas. Prerequisites: Senior standing and permission of instructor. 1-3 credits.

FINA 492. *Internship: Finance.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major, a declared concentration, and permission of internship director. 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

FINA 495. *Special Topics.* Selected topics in finance. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

FINA 498. *Honors Research in Finance.* Students conduct research in finance under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

MANAGEMENT COURSE DESCRIPTIONS (MANG)

General Education Course*

Writing Intensive Course WR

Speaking Intensive Course SP

MANG 190. *Introduction to the American Business System.* Operations of the American Business System and its place in the economy. The course provides the basic understanding of the business world, philosophy, objectives, and general responsibilities to the environment, government, and society. 3 credits.

MANG 275. *Business Statistics.* An introductory course in statistics stressing managerial applications. Interpret and analyze business data for use in managerial decision-making. Topics include descriptive statistics, probability sampling, estimation, hypothesis testing, and regression correlation analysis. 3 credits.

MANG 291. *Business Communication.* Principles, practices, and techniques of writing and speaking in business settings. Includes report and letter writing, interpersonal and group communication, and oral presentation skills. Prerequisite: CIMS 170. 3 credits. WR and SP

MANG 295. *Special Topics.* Selected topics in management. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

MANG 360. *Principles of Management.* Management fundamentals with emphasis on theories of management, the evolution of management thought, and the functions of management in organizational activity. Prerequisite: PSYC 101 or SOCL 101 or 102. 3 credits.

MANG 362. *Organization Behavior.* An examination of behavior at the individual, group, and organizational levels. Topics include individual differences, perception and attribution, motivation, groups and teams, decision-making, leadership, organizational culture and socialization, and change in organizations. Emphasis on translating theories of behavior into management practice. Prerequisite: MANG 360. 3 credits.

MANG 363. *Introduction to Management Science.* Concepts and techniques of management science commonly used in managerial decision making with a focus on application. Topics include linear programming, transportation method, assignment model, forecasting, PERT/CPM, queuing models and simulation. Prerequisites: MANG 360, and one of the following: MANG 275, MATH 171, or MATH 271. 3 credits.

MANG 364. *Negotiation and Conflict Resolution.* A study of negotiation and conflict resolution theory and application in various settings, with simulations. Demonstrations and role-plays provide for skill development as managers resolving conflict for themselves, with subordinates, and in teams. Course also covers designing organizational systems to manage conflict. Prerequisite: MANG 360. 3 credits. WR

MANG 365. *Breakthrough Work Teams.* Experiential approach to applying psychological, social, and structural theories and methods towards improving personal effectiveness in group settings and breakthrough performance for work teams. Prerequisite: MANG 360. 3 credits.

MANG 368. *Beyond the Silk Road: An Exploration of Sino-American Business.* This course examines the Chinese market – its recent growth and importance to the world economy – and looks at business relationships between the U.S. and China. In addition to examining how U.S. companies must adapt to conduct business in China, it examines how Chinese companies adapt to U.S. practices. Particular emphasis is placed on how democracy, capitalism, environmental issues, and social issues impact the business relationships between the U.S. and China. Prerequisite: MANG 360 or MARK 380 or permission of instructor. 3 credits.

MANG 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

MANG 462. *Staffing Organizations.* This course will provide the student with an understanding of issues and techniques in staffing organizations including factors in the organization's environment which affect staffing decisions, including legal issues, measurement in selection, internal and external recruitment and selection, orientation and socialization of new employees, and organizational exit. The emphasis in the course will be on applying knowledge of staffing issues to practical situations. Prerequisites: MANG 275 and 360. 3 credits.

MANG 465. *Human Resource Management.* An introduction to human resource management with an emphasis on strategic human resource management. Topics include: legal issues affecting human resource management, human resource planning, job analysis, recruitment and election, training and development, performance appraisal compensation of employees (including employee benefits), and occupational safety and health. Prerequisite: MANG 360. 3 credits. SP

MANG 466. *Industrial Relations.* The historical, legal, and institutional aspects of the American labor force and its organizations; wage and employment theory; and the economic, social and public dimensions of collective bargaining. Prerequisite: MANG 360. 3 credits.

MANG 469. *Entrepreneurship.* An introduction to the essential functions of business planning for success in entrepreneurial endeavors. Students will learn concepts related to the planning organizing, financing, and management of a small business, as well as concepts related to marketing their business. Students will develop a start-up business plan during the course to test the feasibility of their business concept and to act as the blueprint for a potential start-up venture. Prerequisite: MANG 360. 3 credits.

MANG 474. *Managing Business Ethics and Diversity.* Comparison of egoistic, deontological, and utilitarian ethical theories as well as the exploration of the perception of human differences based on concepts of demographic and cultural diversity. Methods and suggestions are analyzed for turning ethical and diversity issues into management opportunities. 3 credits. Goal 13

MANG 490. *Independent Study: Management.* An individually designed course that allows the student to pursue advanced topics in specific management areas. Prerequisites: Senior standing and permission of instructor. 1-3 credits.

MANG 492. *Internship: Management.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major and a declared concentration, and permission of internship director. 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

MANG 495. *Special Topics.* Selected topics in management. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

MANG 497. *Business Policy.* Integrates the various functional areas of business in terms of policy level decision-making. The comprehensive case study method is used. Prerequisites: Cumulative and major GPA of 2.33 or greater, FINA 350, MANG 360, MARK 380, and senior standing. 3 credits. WR

MANG 498. *Honors Research in Management.* Students conduct research in management under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

MARKETING COURSE DESCRIPTIONS (MARK)

General Education Courses *

Writing Intensive Course WR

Speaking Intensive Course SP

MARK 280. *Fundamentals of Marketing.* Fundamentals of marketing is a survey course designed for the non-business major. This course will introduce the student to a broad range of marketing concepts, ideas, and topics for a variety of perspectives. 3 credits.

MARK 295. *Special Topics.* Selected topics in marketing. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

MARK 380. *Principles of Marketing.* An introduction to the functions of marketing in our economy with particular attention to the influence of social, economic, ethical, legal, and technological forces on marketing activities. Problems and policies involved in the marketing of goods and services. Prerequisite: ACCT 242 and ECON 217. 3 credits.

MARK 381. *Marketing Research.* An application of scientific research methodology to marketing problems. The systematic gathering, recording, processing, and analyzing of marketing data are applied to studies of market structure, market segmentation, positioning, concept and product testing, name and package testing, advertising pre-testing and tracking, and test marketing. Students will complete an individual research project. Prerequisite: MARK 380. 3 credits.

MARK 382. *Professional Selling and Sales Force Management.* This class will focus on the fundamental principles of personal selling. Topics include the economic problems connected with personal selling, an analysis of products and markets, the interview and the selling process, and building relationships and goodwill. The class will also focus on a strategic approach to the process of planning, organizing, directing, and controlling the activities of the sale force. Prerequisite: MARK 380. 3 credits.

MARK 383. *Consumer Behavior.* A study of consumer purchasing behavior and the environmental factors that affect that behavior. Cultural, social, and psychological determinants of consumer behavior are examined. The implications of these determinants for market segmentation and marketing strategy are stressed. Prerequisite: MARK 380. 3 credits.

MARK 385. *Marketing Channels Management.* Application of marketing and managerial strategies and functions to the activities involved in operating an organization's channel of distribution. Areas to be covered include channel strategies, objectives, and design; channel organization and maintenance; and logistics, including physical distribution and material management. Prerequisite: MARK 380. 3 credits.

MARK 386. *Direct Marketing.* This is a survey course designed to provide an overview of direct marketing approaches, presenting direct marketing essentials, emphasizing retailing and advertising online, and exploring other direct marketing media. The course will cover both consumer and business perspectives as well as online marketing research. Prerequisite: MARK 380 or permission of instructor. 3 credits.

MARK 387. *Principles of Retailing.* Study of the marketing role of retailing in the economy. Special emphasis will be placed on careers in retailing, retail market segmentation, location theory, buying, pricing, and promotion in the retail industry. Prerequisite: MARK 380. 3 credits.

MARK 388. *Services Marketing.* This class will focus on current developments in the services marketing area. It will focus on topics such as service encounters, marketing mixes for services, managing, delivering, evaluating the service process, and customer relationship management. Prerequisites: MARK 380 and 383. 3 credits.

MARK 389. *Retail Merchandising.* This class will focus on merchandising. Topics include the merchandising cycle, buying techniques, inventory systems, and display principles. The dynamics of fashion and consumer buying behavior are also explored. Prerequisites: MARK 380, 383, and 387. 3 credits.

MARK 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

MARK 480. *Integrated Marketing Communication.* Principles underlying advertising, economic and social aspects of advertising, policies and objectives, selection and use of various media, advertising organizations, campaigns, displays and copy. Prerequisite: MARK 380. 3 credits.

MARK 481. *International Business.* A study of successful business practices in the global marketplace. Areas of coverage include: levels of international involvement, organizational behavior across cultures, the environment of global marketing, identifying global opportunities, and international market planning and strategy. Prerequisite: MARK 380 & MANG 360. 3 credits.

MARK 482. *Marketing Strategy.* Policymaking and operating decisions of the marketing manager and tools available to aid in solving marketing problems. Prerequisites: FINA 350, MANG 360, MARK 381, MARK 383, plus senior standing. 3 credits. SP

MARK 484. *New Product Marketing.* This course focuses on the marketing of new products, including strategy, planning, analysis, and implementation. Of interest are the concepts and tools to be used in successful development and marketing of new products. Specific decisions to understand include: product policy formulation, the selection of product market strategies, and new product development process. Prerequisite: MARK 380. 3 credits.

MARK 489. *Retail Strategy.* This class will integrate the elements of product and services marketing with a focus on strategy, operating decisions, and problem solving from the perspective of the retail-marketing manager. The case study methods will be utilized. Prerequisites: MARK 380, 383, 387, and MANG 360. 3 credits.

MARK 490. *Independent Study: Marketing.* Advanced topics in marketing. An individually designed course that allows the student to pursue advanced topics in specific marketing areas. Prerequisites: Senior standing and permission of instructor. 1-3 credits.

MARK 492. *Internship: Marketing.* An on-the-job learning experience designed to give students an opportunity to apply their technical and professional skills and to observe organizations in action. Prerequisites: Cumulative and major GPA of 2.33 or greater, 60 credits, declared business or economics major, a declared concentration, and permission of internship director. 1-3 credits per internship placement; limited to a maximum of 6 credits. Fulfills General Education Goal 15.

MARK 495. *Special Topics: Marketing.* Selected topics in marketing. The topics may vary from semester to semester. May be repeated for credit when topics change. Prerequisite: Permission of instructor. 1-3 credits.

MARK 498. *Honors Research in Marketing.* Students conduct research in marketing under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

MILITARY SCIENCE COURSE DESCRIPTIONS (MISC)

MISC 101. *Foundations of Officership.* The course introduces students to fundamental components of service as an officer in the United States Army. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership and officership. Additionally, the semester addresses life skills, including fitness, communications theory and practice (written and oral), and interpersonal relationships. Prerequisite: Freshmen or sophomore class standing. 1 credit.

MISC 102. *Introduction to Leadership.* Introduction to “life skills” of problem solving, decision-making, and leadership designed to help students in the near-term as leaders on campus. Will also help students be more effective leaders and managers in the long-term, whether they serve in the military or as leaders in civilian life. This course is designed to introduce the student to fundamental officer skills such as map reading, land navigation, tactics and leadership values/actions. Using these basic skills, students will build a rudimentary understanding of the core competencies necessary to become an Army officer and leader. Prerequisite: Freshman or sophomore class standing. 1 credit.

MISC 201. *Military Leadership I: Innovative Team Leadership.* MISC 201 explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced planning, executing and assessing team exercises and participating in leadership labs. The focus continues to build on developing knowledge of the leadership values and attributes through understanding Army rank, structure, and duties as well as broadening knowledge of land navigation and squad tactics. Case studies will provide a tangible context for learning the Soldier’s Creed and Warrior Ethos as they apply in the contemporary operating environment. Prerequisite: Military Science and Leadership 101 and 102. 2 credits.

MISC 202. *Military Leadership II: Leadership and Foundations of Tactical Leadership.* MISC 202 examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). This course highlights dimensions of terrain analysis, patrolling, and operation orders. Continued study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. MISC 202 provides a smooth transition into MSL 301. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios. Prerequisite: Military Science and Leadership 201. 2 credits.

MISC 204. *Leader's Training Course.* Five-week summer course consisting of leadership training at Fort Knox, Kentucky. Completion of this course equates to completion of MISC 101-202 and enables students to enroll in the advanced military leadership courses. Amount of academic credit awarded depends upon the amount of basic military leadership credit previously earned. Travel pay and salary provided through Department of Military Science and Leadership. Graded pass/fail. Prerequisite: Enrollment into the ROTC Program, military service obligation and permission of the departmental chair required. 0-6 semester hours. 6 credits.

MISC 295. *Special Topics.* Selected topics in military science. The topics may vary from semester to semester. Military Science Program approval required prior to registration. May be repeated for credit when topics change. 1-3 credits.

MISC 301. *Adaptive Team Leadership.* Students are challenged to study, practice, and evaluate adaptive team leadership skills as they are presented with the demands of the ROTC Leader Development and Assessment Course (LDAC). Challenging scenarios related to small unit tactical operations are used to develop self awareness and critical thinking skills. Students receive systematic and specific feedback on leadership abilities. Prerequisite: Military Science and Leadership 202, 204, or permission of departmental chair.

MISC 302. *Leadership in Changing Environments.* Instruction and case studies that build upon leadership competencies and military skills attained in Military Science and Leadership 301 in preparation for future responsibilities as army officers. Specific instruction is given in individual leader development, planning and execution of small unit operations, individual and team development, and the army as a career choice. Prerequisite: Military Science and Leadership 301 or permission of departmental chair. 3 credits.

MISC 305. *Leadership Development Assessment Summer Course Practicum.* Six weeks of intensive leadership application. Students are exposed to varying leadership situations requiring problem-solving and decision-making skills under physically and mentally stressful conditions. Prerequisites: MISC 301 and 302 and approval of Military Science Program. 3 credits.

MISC 401. *Advanced Military Leadership I.* Command and staff operations and procedures, military briefings, and military correspondence are studied in detail. Prerequisites: MISC 302 and approval of Military Science Program. 4 credits.

MISC 402. *Advanced Military Leadership II.* Study of military justice, the Law of Warfare, professionalism and ethics. Prerequisite: MISC 401 and permission of instructor. 4 credits.

MISC 495. *Special Topics.* Selected topics in military science. The topics may vary from semester to semester. Military Science approval required prior to registration. May be repeated for credit when topics change. 1-3 credits.

College of Education and Human Services

Deneese L. Jones, PhD, *Dean*

Wayne K. White, *Associate Dean*

Peggy Ward, *Executive Secretary to the Dean*

Margie Godfrey, *Executive Secretary to the Assistant Dean*

MISSION: To educate leaders committed to the advancement of the organizations and individuals they serve, competent in the skills and knowledge required to serve people in a diverse society, and caring in the way that their commitments to others are pursued.

FIELD PLACEMENT REGULATION: Any student participating in a Longwood College of Education and Human Services course- or program-related extended field placement shall present evidence prior to placement that a criminal record background check has been completed in accordance to the requirements of the agency where the student is placed. Students should confer with their specific program faculty to understand the placing agency's requirements and the procedures they should follow to comply with these requirements.

Department of Education and Special Education

Department of Social Work and Communication Disorders

Department of Health, Recreation, and Kinesiology

Department of Education and Special Education

Peggy L. Tarpley, *Chair*

Bonnie J. Campbell, *Administrative Assistant*

EDUCATION PROGRAM

Faculty

Gretchen Braun, PhD, *Associate Professor and Elementary Education Coordinator-Graduate*

Audrey Church, PhD, *Associate Professor and School Library Media Coordinator-Graduate*

Don Fleming, PhD, *Assistant Professor*

Frank Howe, PhD, *Professor and Guidance and Counseling Coordinator-Graduate*

Susan Jones, EdD, *Assistant Professor*

Stephen Keith, EdD, *Assistant Professor*

David Locascio, PhD, *Assistant Professor and Middle School Education Coordinator-Undergraduate*

Susan McGowan, EdD, *Assistant Professor*

Jeannine Perry, PhD, *Assistant Professor and Literacy and Culture Coordinator-Graduate*

Nancy Powers, PhD, *Assistant Professor and Elementary Education Coordinator-Undergraduate*

Frances Reeve, MSLS, *Associate Professor*

James Riley, PhD, *Associate Professor*

Gerry Sokol, EdD, *Associate Professor and Educational Leadership Coordinator-Graduate*

Peggy Tarpley, PhD, *Associate Professor*

Wayne K. White, EdD, *Associate Professor*

Barbara Williams, PhD, *Assistant Professor*

Katherine Wiesendanger, PhD, *Professor*

The Department of Education and Special Education offer the following programs of study:

1. **Liberal Studies Elementary Education.** In collaboration with the Liberal Studies program, this Department offers the education coursework and field experiences for students who wish to be elementary education (PK – 6) teachers. Students are Liberal Studies Elementary majors.
2. **Liberal Studies Middle School Education.** In collaboration with the Liberal Studies program, this Department offers the education coursework and field experiences for students who wish to be middle education teachers (6 – 8). Students are Liberal Studies Middle School majors.
3. **Liberal Studies Special Education.** In collaboration with the Liberal Studies program, this department offers a five-year program in special education with licensure in learning disabilities, emotional/behavioral disorders, and mild-moderate mental retardation K-12. Students are Liberal Studies majors with a concentration in special education. Students who complete the undergraduate program will receive a bachelor's degree in Liberal Studies and upon the completion of the fifth year will receive a Master's degree and licensure in special education. Students must complete the fifth year to be endorsed to teach special education.
4. **Master of Science in Education degree.** The department offers the following graduate programs: Literacy and Culture, Guidance and Counseling, Educational Leadership, Elementary Education, Special Education, and School Library Media. Information on these programs is found in the Graduate Catalog.

OFFICE OF PROFESSIONAL SERVICES

Dr. Connie H. Ballard, *Director*

Alissa A. Baldwin, *Assistant Director*

Judy M. Allen, *Administrative Assistant*

The Office of Professional Services (OPS) coordinates the application process for admittance to the Teacher Preparation Program and all field and clinical experience placements that prepare the teacher candidate to enter the field of education with an initial license. Field experiences, practicum I and II, represent a variety of early and ongoing school-based opportunities in which the teacher candidate may observe, assist, tutor, plan and present instruction. The clinical experience is student teaching. It provides the teacher candidate with experiences that allow for full immersion in a school setting so that s/he is able to demonstrate proficiencies in the professional roles for which s/he is preparing.

Prior to the first field placement the teacher candidate, at her/his expense, is asked to present evidence of a criminal background check, tuberculosis test results, and an automobile insurance form. In addition to Longwood requirements, school divisions may have their own forms to complete and procedures to follow. This information is usually found on the school division's website. It is the teacher candidate's responsibility to access this information.

Subsequent placements will require a review of these records by the OPS. The teacher candidate must submit all updates and changes to previously submitted forms. All forms can be found on the OPS website.

It is the responsibility of the teacher candidate to access the OPS website on a regular basis for updates regarding requirements, meeting dates, applications for placement and other essential information.

Field Placements

Practicum I (EDUC 270): The first field experience is an in-depth observation and analysis of the school classroom. The teacher candidate is placed in a public school setting for at least 30 hours. The university supervisor is assigned to observe and provide feedback. It is recommended that the teacher candidate completes practicum I after her/his first year of enrollment. Since practicum I is not required for all program areas, the teacher candidate must consult with her/his advisor.

Practicum II (EDUC 370 or SPED 327): The second field experience continues to be one of observation and analysis of the public school classroom for at least 90 hours. In addition, the teacher candidate plans and teaches at least one lesson. The university supervisor observes and provides feedback. In order to register for practicum II, the teacher candidate must be admitted to the Teacher Preparation Program.

The teacher candidate must notify the OPS if assigned to a school where s/he attended as a student or where a family member attends or is employed. Failure to notify the OPS of such may result in a cancellation of the practicum placement and/or receiving a grade of incomplete.

Admission to Teacher Preparation

Prior to completing the online application, the following requirements must be met:

1. Passing scores on one of the following tests:
 - A composite SAT score of 1100, 530 or higher on both the math and verbal sections of the test or
 - ACT composite score of 24, math minimum 22, reading and English total 46 or
 - Praxis I: composite score of 532
2. Two positive faculty recommendations (online faculty access only). One must be from the program coordinator or program coordinator's designee.

3. Must meet the minimum grade requirements (C or better) in the introductory education courses associated with the teacher candidate's program area.
 - For majors in PK-6, 6-8, Secondary 6-12—EDUC 245 and EDUC 260
 - For majors in Physical and Health Education—KINS 280 or KINS 175 or KINS 275
 - For majors in Special Education—SPED 202 and SPED 305
 - For majors in Music Education—MUSC 145 and EDUC 245
4. ENGL 150 with a grade of C or better
5. Have an overall GPA of 2.5

The elementary, middle, secondary and PK-12 teacher candidate will not be allowed to enroll in 300 - 400 level EDUC courses until all requirements above have been met and the application has been submitted and the teacher candidate admitted into the Teacher Preparation Program. The Special Education university student will not be allowed to enroll in SPED 321 or SPED/EDUC courses above this level unless s/he has been admitted to the Teacher Preparation Program.

The transfer student must meet the above requirements and apply for admission to the Teacher Preparation Program by March 1 or October 1 of her/his second semester at Longwood. One faculty recommendation may be accepted from an instructor at the transferring college/university, but the other one must come from a Longwood instructor of choice. Additionally, the transfer student may use her/his overall 2.5 (or higher) GPA from the transferring institution to meet one of the admission requirements.

The licensure only student must apply for admission and be admitted to the Teacher Preparation Program by the end of her/his first semester of course work at Longwood. The teacher candidate must hold a baccalaureate degree from an accredited institution and meet the required criteria listed above. Two letters of recommendation from a licensed teacher or school administrator or from a previous college level instructor are also required.

Admission to Student Teaching

Prior to completing the online application, the following requirements must be met:

1. Overall **and** Major GPA of 2.5 or higher
2. Two positive faculty recommendations (online faculty access only)
3. All Elementary Education Candidates must pass the VRA, VCLS, and Praxis II before placement.

All requirements must be submitted and met by March 1 for a fall placement and October 1 for a spring placement. The student teaching application and faculty recommendations must be completed one year in advance of the placement.

Clinical experience placement requests will be sent to school districts only for the teacher candidate who meets all requirements. Any teacher candidate denied admission to student teaching may reapply upon meeting requirements.

The teacher candidate must notify OPS if assigned to a school where s/he attended as a student or where a family member attends or is employed. Failure to notify the OPS of such may result in a cancellation of the clinical experience placement and/or receiving a grade of incomplete. This could delay expected graduation date.

Teacher Assessments for Initial License

The teacher candidate seeking initial licensure in Virginia is required to take and submit passing scores on all required licensure tests. Copies of all score reports must be submitted to OPS.

Academic Skills Assessments:

VCLA Virginia Communications and Literacy Assessment

Passing Scores:	
Writing	235
Reading	235
Composite	470

VRA Virginia Reading Assessment for licensure in the following areas:

Elementary Education PK-6
Special Education: ED, SLD, MR, HI, VI
Reading Specialist endorsement

Score Requirements effective July 1, 2006	
Teacher	235
Reading Specialist	245

Praxis II

The teacher candidate may be required to take specific content area tests if specified for her/his endorsement area.

LIBERAL STUDIES ELEMENTARY AND MIDDLE SCHOOL EDUCATION PROGRAM

The Liberal Studies major has been designed specifically for students seeking licensure to teach with an Elementary or Middle School Endorsement. Requirements for the BA or BS Degree in Liberal Studies are listed in the Catalog. With careful scheduling and attention to the requirements for admission to the teacher preparation program, a student can complete all degree and program requirements in four years. After completing the degree and program requirements, students receive a BA or BS Degree in Liberal Studies is eligible to receive an endorsement in PK-6, 6-8; or both.

Students seeking teacher licensure and majoring in Liberal Studies will be assigned an academic advisor in Liberal Studies or Education. Such students declare Liberal Studies as their major by the end of the sophomore year and inform the Office of Registration that they will be majoring in Liberal Studies and seeking teacher licensure with an Elementary School Endorsement, a Middle School Endorsement or both.

Dr. Patricia D. Lust is the Director of the Liberal Studies program.

Liberal Studies Elementary Education/40 credits

The 40-credit Liberal Studies Elementary program consists of the following education courses:

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 310	Foundations of Literacy Instruction /3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 441	Elementary School Literacy Instruction/3 credits
EDUC 440	Field Experience in Literacy Instruction/1 credit
EDUC 450	Principles of Instruction (PK-8)/2 credits
EDUC 451	Curriculum in the Elementary School (PK-6)/2 credits
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits

Practica: Two practica are required: one on the lower primary level and one on the upper primary level.

EDUC 270 Practicum I - Lower Primary or Upper Primary level/1 credit
(Take in first session of summer school at end of freshman or sophomore year)

EDUC 370 Practicum II – Lower Primary or Upper Primary Level/3 credits
(Prerequisite: EDUC 270 & Admission to Teacher Prep)
(Take in first session of summer school at end of sophomore or junior year)

(All of the above will be taken prior to enrolling in the Student Teaching semester. See office of professional services section for requirements for admission to Teacher Preparation and Student Teaching. A minimum cumulative 2.5 GPA is required. See undergraduate catalog for other requirements.)

* Student must be admitted to the Teacher Preparation Program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Partnership Program

Elementary and middle education teacher candidates participate each week in a semester of Partnership Program courses (requiring EDUC 440, 441, 450, 451 for licensure in either or both elementary and middle school licensure). The program consists of four days of on-site methodological preparation in reading/language arts, mathematics, science and social science; one-half of each of the four days is spent in the classrooms working with the children. Teacher candidates return each Friday to the campus for courses that focus upon exceptional learners and classroom management. Special education teacher candidates follow a modified form of this program. (*See Liberal Studies - Special Education Program*)

Student Teaching:

EDUC 400 Directed Teaching in the Elementary and Middle School /12 credits
or
EDUC 401 Directed Teaching in the Elementary School /12 credits
or
EDUC 405 Direct Teaching in the Middle School/12 credits

Liberal Studies Middle School Education

Students wishing to teach at the middle school level, grades 6 - 8, have three options:

1. They may pursue middle school only endorsement by completing a Liberal Studies program with two areas of concentration, by completing the middle school education courses (EDUC 440, 442 and 452) and by choosing EDUC 405 for student teaching. They complete practica at the middle school level in the selected areas of concentration.
2. They may add middle grades (6-8) endorsement to the elementary endorsement (pre-K-6) by completing all Liberal Studies and Education requirements for elementary endorsement and adding specified courses in two subject concentrations as well as two middle school education courses, EDUC 427 and 442. These students should select EDUC 401 for student teaching. They complete one practica at the primary level and one at the middle school level.
3. If they wish to teach a single subject, they may major in that subject and seek 6-12 endorsement in it. (See below.) They complete one practica at the middle level and one at the secondary level.

SECONDARY EDUCATION PROGRAMS 6-12/28-38 credits

Teaching Area	Department
Biology	Biological and Environmental Sciences
Business Education	Management, Marketing, Retailing, Computer Information Management Systems, and Business Education
Chemistry	Chemistry and Physics
Physics	
English	English and Modern Languages
History and Social Science	History, Political Science, and Philosophy
Mathematics	Mathematics and Computer Science

To teach on the secondary level, a student must have an advisor in one of the departments listed above. Further information on course requirements can be found in the section of this catalog related to that particular major. With careful scheduling, a student can complete all degree and program requirements in four years.

Professional Studies/15-18 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 432	Content Area Literacy/3 credits.
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management & Systems/3 credits

Methods course in the student's major/3-6 credits (Please see undergraduate catalog for course number and title)

- Student must be admitted to the Teacher Preparation Program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Practica - Field Placement/1-7 credits

Take in First Summer School session at end of freshman or sophomore year:

EDUC 265	Practicum I (middle school or secondary level)/3 credits
OR	
EDUC 270	Practicum I (middle school or secondary level)/1 credit

Take in First Summer School Session at end of sophomore or junior year:

EDUC 370	Practicum II (middle school or secondary level)/3 credits
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(All courses listed above will be taken prior to enrolling in Student Teaching
A minimum Cumulative 2.5 GPA is required. See Office of Professional Services section.)

Professional Semester/12 credits

See program area for Student Teaching course.

TEACHER EDUCATION PROGRAM Pre-K-12

Teaching Area	Department
Art	Art
Modern Languages:	English and Modern Languages
French, German, Spanish, English as a Second Language	
Instrumental Music:	Music
Vocal/Choral Music	
Kinesiology:	Health, Recreation, and Kinesiology
Physical and Health Education	
Theatre Arts	Communication Studies and Theatre

Professional Studies/15-18 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 432	Content Area Literacy/3 credits.
EDUC 455	Principles of Secondary Education/1 credit
EDUC 487	Classroom Management & Systems/3 credits

Methods course in the student's major/3-6 credits (Please see undergraduate catalog for course number and title)

- Student must be admitted to the Teacher Preparation Program before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Practica - *Field Placement*/1-7 credits

Take in First Summer School session at end of freshman or sophomore year:

EDUC 270	Practicum I (middle school or secondary level)/1 credits
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Take in First Summer School Session at end of sophomore or junior year:

EDUC 370	Practicum II (middle school or secondary level)/3 credits
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(All courses listed above will be taken prior to enrolling in Student Teaching

A minimum Cumulative 2.5 GPA is required. See Office of Professional Services section.)

Professional Semester/12 credits

See program area for Student Teaching course.

For students who want to teach art, modern languages (French, German, and Spanish), music, or physical education on the PK-12 level, please review the information under that department for the courses that need to be taken. An academic/professional advisor will be assigned by that department. With careful scheduling, a student can complete all degree and program requirements in four years.

ADD-ON ENDORSEMENTS

It may be possible for some teacher education students to add a second endorsement to a teaching license while completing degree and teacher education requirements. To receive an add-on endorsement, a student must minor in one of the disciplines listed below. Students must have the written permission of the chair of that department prior to declaring a minor. With careful scheduling, it may be possible for a student to complete degree requirements, teacher education program requirements, and an add-on endorsement, in four years.

Add-On Endorsements for Grades 6-12:

Algebra I: for secondary majors

Biology: for science majors only

Chemistry: for science majors only

Driver Education: for secondary majors

Physics: for science majors only

EDUCATION COURSE DESCRIPTIONS (EDUC)

Writing Intensive Courses WR

Speaking Intensive Courses SP

A special fee is charged for all practicum and student teaching courses. †

EDUC 205. *Life and Career Preparation.* This course is the design and management of the Longwood educational experience to establish vision, direction, and strategies for gaining knowledge, skills, and attitudes for life and career preparation. It is designed to challenge and support Sophomore Participants who are working with Senior Mentors in the Project Success Program. 1 credit.

EDUC 245. *Human Growth and Development.* A survey of physical, cognitive, and social-emotional development of human beings. Heredity and environmental influences will be stressed in the life-span study with specific emphasis upon prenatal through adolescent development. 3 credits.

EDUC 260. *Introduction to the Teaching Profession.* An overview of teaching and schooling that addresses the foundations of education and the professional aspects of teaching. Emphasis on the history and philosophy of education; school organization; governance; legal and financial issues; teacher preparation; professional development; practicum preparation; and lesson planning. 2 credits.

EDUC 265. *Education Practicum I.* An in-depth observation and participation practicum. Placed in public school settings for at least 60 hours under supervision of Longwood. In addition, instruction and follow-up will occur. 3 credits. †

EDUC 270. *Practicum I.* An observation and participation practicum taking place in a public school setting for one week (30 hours minimum) under the supervision of Longwood. Students will complete reflective journals and other specific reports demonstrating an understanding of the roles of educational professionals and the school culture. 1 credit.

EDUC 275. *Educational Leadership I.* Course is for Orientation Leaders who assist with the Longwood Seminar. Designed to prepare these leaders to work with professors and their first-year students in the Seminar. Prerequisite: Open to Student Orientation Leaders only and permission of instructor. 1 credit.

EDUC 295. *Special Topics.* Selected topics in Education. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

EDUC 310. *Foundations of Literacy Instruction.* This course will provide an introduction to literacy learning and instruction. The nature and functions of literacy and the development of language use within and across different social and cultural contexts will be discussed. Attention will be given to early literacy development, appropriate teaching techniques and materials, differentiation, and instructional design. Diagnostic tools for the assessment of literacy development in diverse populations will be introduced. Interpretation and application of data from these assessments will be discussed. Prerequisite: Students must be admitted to teacher prep; this course should be taken immediately prior to the Partnership term. 3 credits.

EDUC 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in education. Prerequisite: 1-18 credits.

EDUC 370. *Practicum II.* Additional participation and micro-teaching processes in public school settings for at least 60 hours under Longwood supervision. In addition, instruction and follow-up will occur. Prerequisite: EDUC 265 and admission to the Teacher Preparation Program. 3 credits. †

EDUC 375. *Intro to Residence Life.* The Spring RA Class focuses on general areas related to understanding the mission and goals of residence life (the organization), as well as understanding theoretical perspectives related to student development. The course will utilize the process of experiential learning with emphasis placed on struc-

tured group exercises and experience, out-of-class observations, readings and group discussion. Prerequisite: Admission to the Teacher Preparation Program. 1 credit.

EDUC 380. *Classroom Assessment.* Theory and practice in construction of teacher-made evaluation instruments with heavy emphasis upon test construction and alternative assessment. Includes study of standardized testing and an in-depth study of the Virginia Assessment program. Prerequisite: Admission to the Teacher Preparation Program. 2 credits.

EDUC 381. *Media and Technology.* A laboratory course concerned with the utilization of instructional media and computer technology in the learning process. Prerequisite: Admission to the Teacher Preparation Program. 1 credit.

EDUC 400. *Middle and Elementary Directed Teaching.* Required of all students seeking licensure to teach elementary school (grades PK-6). See prerequisites for student teaching. 12 credits SP

EDUC 401. *Elementary Directed Teaching.* Required of all students seeking licensure to teach elementary school (grades PK-6). See prerequisites for student teaching. 12 credits SP

EDUC 402. *Directed Teaching in the Secondary School.* Required of all students seeking licensure to teach secondary school (grades 6-12). See prerequisites for student teaching. 12 credits. SP

EDUC 405. *Middle Directed Teaching.* Required of all students seeking licensure to teach middle school (grades 6-8). See prerequisites for student teaching. 12 credits SP

EDUC 410. *Directed Elementary/Secondary Teaching for Art and Music.* Required of all students seeking licensure to teach K-12 Art or Music. Prerequisite: Admission to student teaching. 12 credits.

EDUC 415 (Economics 415). *Educator Oriented Course.* Applying economics to environmental issues such as resource scarcity, pollution, property rights, garbage and recycling, oil spills, and endangered species. Students will learn how markets and prices can be used to help solve environmental problems. Course cannot be used toward credit towards economics major or minor in economics. Students cannot receive credit for both EDUC 415/ECON 415 and ECON 500 or both ECON 415/EDUC 415 and ECON 314. Prerequisite: Admission to the Teacher Preparation Program. 3 credits.

EDUC 430. *Teaching Reading in the Content Area.* An analysis of skills and practices required in the content areas required for reading comprehension in middle and secondary grades 6-12, including question strategies in literal, interpretive, critical, evaluative comprehension, and techniques for fostering an appreciation of a variety of literature and independent reading. Prerequisite: Admission to the Teacher Preparation Program. 2 credits.

EDUC 432. *Content Area Literacy.* This course provides secondary education students an overview of the skills and strategies required to support literacy in the content areas. It includes as emphasis on the supporting comprehension, vocabulary, and writing at the high school level across all subject. Pre-requisite: Admission to the teacher preparation program. 3 credits.

EDUC 440. *Field Experience in Literacy Instruction.* This field experience is to be taken in conjunction with either the elementary or middle school partnership literacy course. It is intended to support those literacy courses and provide time for discussion of classroom experiences and observations and link theory with practice in the partnership setting. Intensive application of assessments and instructional approaches will be required. Must be taken concurrently with EDUC 441 or EDUC 442. Prerequisite: EDUC 310.

EDUC 441. *Elementary School Literacy Instruction (PreK-6).* This course will focus on teaching literacy in the elementary school, PreK-6 including reading, writing, speaking, listening, and viewing. PreK-6 concepts introduced in EDUC 310- will be applied in the elementary partnership setting during this course. Attention will be given to encoding and decoding to communicate meaningfully, motivation, materials, technologies, teaching

strategies and using assessment to inform instruction. This course must be taken concurrently with EDUC 440. Prerequisite: EDUC 310. 3 credits.

EDUC 442. *Middle School Literacy Instruction.* This course will focus on adolescent literacy, including reading, writing, speaking, listening and viewing. Attention will be given to effective methods for teaching reading and writing to learn, vocabulary, comprehension, the writing process, and the integration of literacy across the content areas. Concepts appropriate to middle school introduced in EDUC 310 will be applied in the partnership setting during this course. Literacy assessments to inform instruction for diverse populations in the middle school will be reviewed and applied. This course must be taken concurrently with EDUC 440. Prerequisite: EDUC 310. 3 credits.

EDUC 450. *Principles of Instruction. (PK-8).* Methods of instruction in the elementary and middle school. The class will focus on generic teaching strategies, time utilization, teaching effectiveness research, and professional responsibilities. Required for those seeking licensure to teach at the elementary and/or middle school levels. Prerequisite: Admission to the Teacher Preparation Program, EDUC 380, EDUC 381. 2 credits.

EDUC 451. *Curriculum in the Elementary School (PK-6).* This course will focus on mathematics, science, and social studies. Interdisciplinary units and content appropriate pedagogical approaches will be utilized to meet the Virginia standards of learning in grades PK-6. Required for those seeking a teaching license with an endorsement to teach at the elementary level. Prerequisite: Admission to the Teacher Preparation Program, EDUC 380. 2 credits.

EDUC 452. *Curriculum in the Middle School (6-8).* This course will focus on mathematics, science, and social studies as they are taught within the structure and philosophy of the middle school. An examination of team planning, teacher-based guidance, the needs of young adolescents, and flexible scheduling as well as interdisciplinary units and content appropriate pedagogy will be used to meet the Virginia standards of learning in grades 6 -8. Required for all those seeking a teaching license with an endorsement to teach at the middle school level. Prerequisite: Admission to the Teacher Preparation Program, EDUC 380. 2 credits.

EDUC 455. *Principles of Secondary Education.* Principles and methods of curriculum and instruction in the secondary school with an emphasis on Virginia SOLs. Required of all majors seeking licensure at the secondary level. Prerequisites: Admission to the Teacher Preparation Program. 1 credit.

EDUC 470. *Mentoring Skills for Academic and Career Planning.* This course is an exploration of the fundamental mentoring and guidance skills needed to promote effective academic and career planning. It is especially designed to prepare Senior Mentors to work with sophomore participants in the Project Success Program. 1 credit.

EDUC 473. *Inquiry into the Classroom Community.* Prospective teachers will examine the principles of content planning (curriculum), effective methods for teaching content that reflects best practices (instruction), and demonstrate the alignment of curriculum with assessment. Participants will complete a Teacher Work Sample in a 75 hr minimum supervised field placement prior to the Professional Internship. Research that informs best practices for grades 6-12 student learning will be examined. Prerequisites: EDUC 380. 3 credits. WR (check individual program requirements)

EDUC 475. *Educational Leadership II.* Course is for Orientation Leaders who assist with the Longwood Seminar for the second time. Designed to provide additional experiences for Orientation Leaders who work with professors and their first-year students. Prerequisite: EDUC 275 and permission of instructor. 1 credit.

EDUC 487. *Classroom Management and System Issues.* An examination of classroom management techniques and the development of skills necessary to foster a supportive learning environment as well as examination of system problems and solutions within traditional education settings N, K-12. 3 credits.

EDUC 488. *Education Seminar.* A series of discussions concerned with orientation to the teaching profession, the American school system, trends and innovations in education, and current research. See prerequisites for student teaching. 1 credit.

EDUC 495. *Special Topics. Selected topics in Education.* The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. Prerequisite: Admission to the Teacher Preparation Program. 1-3 credits.

EDUC 498. *Honors Research in Education.* Students conduct research in education under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. Prerequisite: Admission to the Teacher Preparation Program. 3 credits.

SPECIAL EDUCATION/LIBERAL STUDIES GENERAL CURRICULUM FIVE YEAR K-12 (SLG)

Faculty

- Christopher Jones, PhD, *Associate Professor of Special Education*
- Rachel Mathews, EdD, *Professor of Special Education*
- Ruth L. Meese, PhD, *Professor of Special Education*
- Peggy L. Tarpley, PhD, *Associate Professor of Special Education*

Longwood offers a five-year Special Education Program/Liberal Studies General Curriculum Five Year (SLG) leading to a Master's Degree with a concentration in Special Education (graduate courses will need to be taken in the summer). This program is designed for students who want to become Special Education teachers. Liberal Studies is the major for teacher education. (See the Liberal Studies section of this Catalog.) Students graduate with a Bachelor's Degree in Special Education/Liberal Studies in four years. Those who choose not to complete the fifth year of the program will not be licensed to teach in Special Education.

Course Sequence - Special Education

YEAR 1

- SPED 202 Introduction to Special Education/3 credits
- SPED 245 Human Growth and Development/3 credits

YEAR 2

- SPED 305 Behavior Management/3 credits

****** Students must be admitted to the Teacher Preparation Program before they will be permitted to enroll in SPED 321 or SPED/EDUC courses above this level. Information on meeting the requirement is available at the Office of Professional Services web site.
http://www.longwood.edu/cehs/Office%20of%20professional_services/index.htm

YEAR 3

- SPED 321 Reading and Language Arts for Students with Exceptional Needs/3 credits
- SPED 323 Practicum in Reading Assessment and Tutoring/2 credits
- SPED 325 Introduction to Assessment/3 credits
- ***SPED 321, 323, and 325 must be taken concurrently.***
- SPED 322 Mathematics, Science, and Social Studies Adaptations for Students with Exceptional Needs/3 credits
- SPED 327 Practicum II/3 credits

YEAR 4

- SPED 375 Language and Language Disorders/3 credits
- SPED/CSDS 411 Assistive Technology and Augmentative Communication in the General Curriculum /3 credits
- EDUC 406 Directed Teaching for Students with Exceptional Needs/12 credits ***

YEAR 5

- EDUC 502 Research Design/3 credits
- SPED 519 Instructional Phonics/3 Credits
- SPED 525 Evidence Based Language Arts Instruction/3 Credits
- EDUC 620 School of Law/3 credits

SPED 516	Medical and Neurological Problems of Exceptional Students/3 credits
SPED 545	Psychoeducational Assessment/3 credits
SPED 565	Behavioral Management/3 credits
SPED 575	Career and Life Planning for Exceptional Learners in the General Curriculum/3
SPED 682	Collaboration in the School, Home and Community/3 credits
SPED 575	Career and Life Planning for Individuals With Disabilities/3 credits
SPED 600	Thesis Research/3 credits
OR	
SPED 601	Collaborative Special Education Research/3 credits
OR	
EDUC 699	Comprehensive Examination Option/0 credits***
SPED 689	Seminar of Current Issues in Special Education/3 credits
SPED 690	Internship/3 credits

*** Students selecting the Comprehensive Examination option must complete a three-credit class in lieu of SPED 600 or SPED 601 and register for the comprehensive examination. (See Graduate Catalog). Suggested three-credit classes for the comprehensive examination option include: EDUC 549, EDUC 571, EDUC 524, EDUC 527, EDUC 530, SPED 550, SPED 555, SPED 560.

The course selected must not have been taken during the undergraduate years

MINOR IN SPECIAL EDUCATION

A special education minor may be pursued by students in any other major. Students who wish to minor take the following sequence of courses: 18 credits

Required Courses/15 credits

SPED 489	Survey of Exceptional Children /3 credits
SPED 305	Behavior Management/3 credits
SPED 322	Mathematics, Science, and Social Studies Adaptations for Students with Exceptional Needs /3 credits
SPED 325	Introduction to Assessment/3 credits
SPED 375	Language and Language Disorders/3 credits (except CSDS students)

3 Credits from the following:

CSDS 206	Introduction to Sign Language/3 credits
EDUC 245	Human Growth and Development/3 credits
PSYC 101	Introduction to Psychology/3 credits
PSYC 356	Abnormal Psychology/3 credits
PSYC 357	Psychopathology of Childhood/3 credits

SPECIAL EDUCATION COURSE DESCRIPTIONS (SPED)

A special fee is charged for all practicum, student teaching, internship, and assessment courses. †

Writing Intensive Courses WR

Speaking Intensive Courses SP

SPED 202. *Introduction to Special Education.* Introduction to all exceptionalities included in special education; the psychology of exceptional learners and legislation pertaining to the education of students with disabilities. 3 credits.

SPED 295. *Special Topics.* Selected topics in Special Education. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

SPED 305. *Behavior Management.* Strategies for developing positive behavior intervention plans and supports from behavioral, cognitive, ecological, psychoeducational, and psychodynamic theories. 3 credits.

SPED 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in special education. 1-18 credits.

SPED 321. *Reading and Language Arts for Students with Exceptional Needs.* Research-based strategies for teaching reading and Language Arts to Students with Exceptional Needs. Emphasis on teacher-directed instruction and direct instructional teaching models. 3 credits Must be taken concurrently with SPED 323. Prerequisites: SPED 202 and admission to the Teacher Preparation Program.

SPED 322. *Mathematics, Science, and Social Studies Adaptations for Students with Exceptional Needs.* Emphasis on strategies, accommodations, modifications, and collaboration for content areas such as Mathematics, Social Studies, and Science. Prerequisites: SPED 202. 3 credits.

SPED 323. *Practicum in Reading Assessment and Tutoring.* A field experience tutoring students with exceptional needs. Prerequisite: SPED 202 and admission to the Teacher Preparation Program. 2 credits. Must be taken concurrently with SPED 321 and SPED 325. †

SPED 325. *Introduction to Assessment.* This course is designed to introduce students to the assessment process in special education by addressing foundational knowledge and issues surrounding the construction of IEP's, curriculum-based measurement and assessment (CBM and CBA), and teacher-made tests. In addition, state assessments, such as SOL's, will be discussed as they relate to special education students. 3 credits. WR Prerequisites: SPED 202. Must be taken concurrently with SPED 321 and SPED 323.

SPED 327. *Practicum II.* Advanced teaching experience with students exceptional needs. Prerequisites: SPED 305, 306. 3 credits. †

SPED 375. *Language and Language Disorders.* A study of normal development of language and delayed language acquisition resulting from environmental and organic causes. 3 credits.

EDUC 406. *Directed Teaching for Students with Exceptional Needs* 12 credits ***

SPED 411. *Assistive Technology and Augmentative Communication in the General Curriculum.* Students will develop an understanding of low tech and high tech Assistive Technology (AT) and Augmentative/ Alternative Communication (AAC) systems. Study will include federal and state laws related to the provision of AT/AAC and funding for devices. Students will learn to assess for, design, and apply AT and AAC to facilitate success in the lives of persons with disabilities. 3 credit hours.

SPED 450. *Non-Violent Crisis Intervention.* Safe methods to help human services workers provide care for violent individuals, non-verbal and verbal techniques to reduce anxiety, principles of personal safety, and physical restraint and control procedures. Prerequisites: Junior Level or above and permission of instructor. 1 credit.

SPED 489. *Survey of Exceptional Children.* An introduction to all disabilities in special education. Characteristics and needs of students with disabilities, legislation, litigation, inclusion, and the role of the classroom teacher as a member of the IEP team. 3 credits.

SPED 495. *Special Topics in Special Education.* Selected topics in special education. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

SPED 498. *Honors Research in Special Education.* Students conduct research in special education under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

SPED 516. *Medical and Neurological Problems of Exceptional Students.* A comprehensive study of environmental/hereditary factors affecting the child with disabilities from the prenatal period through the school years. Educational strategies for accommodating medical and neurological conditions in the classroom. 3 credits.

SPED 545. *Psychoeducational Assessment.* Psychological and educational assessment, administration and interpretation of informal, curriculum-based, standardized, and criterion-referenced tests. Interpretation of test results as a basis for placement and instruction. 3 credits. Prerequisite: SPED 202 or SPED 489 or SPED 515 and SPED 375 or SPED 520. †

SPED 575. *Career and Life Planning for Exceptional Learners in the General Curriculum.* An in-depth study of preparatory skills for vocational opportunities for individuals with disabilities. An overview of social, leisure and recreational opportunities and assistive technology for individuals with disabilities. 3 credits.

SPED 595. *Special Topics in Special Education.* Selected topics in special education. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

SPED 600. *Thesis Research.* This credit is awarded for the successful completion of a proposal, data collection, final thesis paper, and thesis presentation. Students must complete three hours for the degree requirement and must remain continuously enrolled in at least one credit hour until completion. Students must be enrolled in the semester scheduled for graduation. 1-3 credit hours. Prerequisite: SPED 689, EDUC 502.

SPED 601. *Collaborative Special Education Research.* The student will design, conduct, evaluate, discuss and disseminate the results of her/his proposed collaborative research project that is conducted with a Longwood University Professor. The product of this research will be either an article submitted for possible publication in a professional journal or a product approved by the faculty committee. Students must complete three hours for the degree requirement and must remain continuously enrolled in at least one credit hour until completion. Students must be enrolled in the semester scheduled for graduation. 1-3 credit hours. Prerequisite: SPED 689, EDUC 502.

SPED 682. *Collaboration in the School, Home and Community.* 3 Credits

SPED 689. *Seminar of Current Issues in Special Education.* A discussion of current selected issues in special education such as litigation, legislation, personnel preparation and research. 3 credits.

SPED 690. *Graduate Internship.* A minimum of 200 clock hours in a public or private agency, supervised by a faculty advisor, in diagnosis, consultation, or research. Continuous enrollment required. Students may re-enroll as many times as necessary to earn the required 3 credit hours. Prerequisite: EDUC 406. Fee Required fee for 3 credits - \$15.00. 1-3 credits

Department of Social Work and Communication Disorders

Linwood Cousins, *Chair*

Peggy Turner, *Administrative Assistant*

SOCIAL WORK PROGRAM

Faculty

Theresa A. Clark, PhD, Associate Professor of Social Work and Area Coordinator

Linwood H. Cousins, PhD, Professor of Social Work

Kristen McAleavey, PhD, Associate Professor of Social Work

Mary Beth Stebbins, MSW, Lecturer and Director of Field Education

Mission Statement

The mission of the Longwood University undergraduate Social Work Program is to prepare practitioners who have a foundation in social work knowledge, theory and research through a strong liberal arts based education; to prepare competent and effective generalist practitioners who become citizen leaders in their respective communities, while representing and empowering oppressed individuals, groups, and communities to improve the quality of life; to reduce the inequalities in society through the use of social justice strategies and effective practice; and to contribute to the knowledge base of practice, research, and theory regarding the needs of diverse populations served by professional social workers.

Goals

1. Provide strong liberal arts based education that incorporates coursework from the natural sciences, humanities, social sciences, and mathematics and computer sciences.
2. Provide guided field instruction experiences that promote the delivery of effective services to diverse populations.
3. Provide social work curricula that build on the knowledge and skills acquired in the liberal arts education and that focuses on research, knowledge, theories and skills that develop effective generalists' social work practitioners.
4. Encourage understanding and respect for the person-in-environment conceptualization, diversity, inequalities and changing needs of a complex society and use this information to address social injustices.
5. Support faculty and student research and knowledge building to ensure excellence in learning and teaching.

Objectives

Upon completion of the Social Work Program, social work students should be able to:

1. Communicate effectively, both orally and in writing, with diverse constituencies.
2. Think critically and apply analytic skills in understanding current issues and in providing effective services to diverse clientele.
3. Use current technology to locate and disseminate information.
4. Understand the biological and psychosocial developmental stages of individuals.
5. Recognize the importance of diversity and its implications for effective social work practice.

6. Understand the core values that form the basis of the profession of Social Work to include service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence.
7. Integrate knowledge, skills and abilities to provide direct and indirect services in diverse practice settings.
8. Use information gained from continuous self-assessment to recognize when changes in behavior and practice are needed.
9. Enable faculty to engage in research, practice, and other knowledge building activities.
10. Synthesize and use various theoretical approaches in understanding the needs of clientele and in the provision of services to clientele at the micro, mid and macro levels of practice.
11. Conduct and understand the results of research projects and apply the information to practice settings of diverse sizes.
12. Present self in a professional manner.
13. Recognize the impact of oppression and discrimination on such groups as women, gays and lesbians, older Americans, disabled, African-Americans, Hispanics, Native Americans and other groups identified as being treated in an inequitable manner in society.
14. Use knowledge and skills to reduce inequalities and injustices in society.

Admissions Process

Any student accepted to Longwood University may declare Social Work as a major. However, the student will be officially accepted to the Social Work Program at the conclusion of their sophomore year after established criteria have been met.

To be admitted to Longwood University Social Work Program, a student must:

1. Submit a completed application to the Social Work Program by the Friday before spring break of the sophomore year.
2. Provide two professional references with one from a Longwood Social Work professor.
3. Complete 55 earned credit hours, which must include successful completion of ENG 150, SOWK 200 and 201. Completion of SOCL 101, PSYC 101, MATH 171 and BIOL 101 is strongly recommended within the 55 credit hours. Transfer students who meet the above criteria upon entering Longwood must complete one semester at Longwood and provide a reference from one of Longwood's Social Work professors. (A recommended course of study is included in the student handbook that students declaring Social Work as their major receive.)
4. Have a 2.25 cumulative grade point average (which is the current GPA requirement to enter field instruction).
5. Earned no grade less than a C- in any Social Work course.
6. Complete a satisfactory interview with the Social Work Faculty.

The Program in Social Work provides an undergraduate course of study of unique and personalized instruction accredited by the Council on Social Work Education, leading to the Bachelor of Science or Bachelor of Arts in Social Work. The curriculum prepares graduates for first-level professional social work practice as practitioners utilizing the generalist perspective. Program graduates frequently pursue advanced study in graduate schools and may be eligible for admission into advanced standing one-year MSW degree programs. They may utilize their professional credentials for careers as generalist-based, professional practitioners according to the standards of the National Association of Social Workers in such areas as:

- Addiction Treatment
- Adoption
- Case Management
- Child Protective Services
- Child Welfare
- Community Mental Health
- Criminal and Youth Court Services
- Crisis Intervention
- Disaster Relief
- Domestic Violence
- Employee Assistance Programming
- Family Planning
- Family Preservation
- Foster Care
- Geriatric Services
- Health Care
- Home Health Care
- Homelessness
- Hospice Care
- Hospital Social Work
- International Social Work
- Parenting Education
- Policy Advocacy
- Rural Social Work
- School Social Work
- Veterans Services

The faculty of the Social Work Program, reflecting the generalist orientation, provide an individualized focus on each student's professional growth and development. Specifically, the Program faculty, using academic and practice courses as well as internships in human service agencies, work strategically with each student to develop proficiency in professional knowledge and skills.

Junior Field Instruction consists of an agency placement or field practicum concurrent with integrative course work and involves 180 hours of instruction in a field setting. A grade point average of 2.25 both in the major and overall is required for placement in a field instruction setting. Students transferring into the program later in their academic pursuits are afforded the opportunity to enter the accelerated 9 1/2-week summer program. Senior Field Instruction usually occurs during the last semester and consists of 600 hours (15 weeks, 40 hours per week) of field instruction in an agency setting. Only those students who are social work degree candidates may be admitted to the field practicum experiences. Enrollment in social work practice courses (SOWK 330, 425, and 430) is restricted to social work majors only! Practicum experiences are readily available throughout the state, and many students choose to live at home during this experience, thus saving money and greatly enhancing their professional career entry. The Social Work Program, in compliance with CSWE accreditation standards, grants no academic credit for life experience and/or previous work experience in lieu of the field practicum or in lieu of courses in the professional foundation content areas.

SOCIAL WORK MAJOR, BA, BS DEGREE

- A. General Education Core Requirement/41 credits**
See General Education Requirements
- B. Additional Requirements for BA Degree/6 credits**
Additional Requirements for BS Degree/7 credits
See Degree Requirements

C. Major Requirements. 69 credits

Core Courses/54 credits

SOWK 200	Introduction to the Human Services/3 credits
SOWK 201	Introduction to Social Work and Social Welfare/3 credits
SOWK 300	Social Problems and the Development of Social Policy/3 credits
SOWK 301	Human Behavior and the Social Environment I/3 credits
SOWK 302	Human Behavior and the Social Environment II/3 credits
SOWK 320	Introduction to Social Work Research
SOWK 325	Human Diversity: Populations-at-Risk/3 credits
SOWK 330	Methods: Practice I Individuals and Families/4 credits
SOWK 392	Junior Field Instruction Internship/6 credits
SOWK 425	Methods: Practice II Social Work Practice with Groups/4 credits
SOWK 430	Methods: Practice III Communities and Organizations/4 credits
SOWK 492	Senior Field Instruction Internship/15 credits (one credit satisfies General Education Goal 15)

Social Work Electives/15 credits

D. General Electives for BA Degree/5 credits

General Electives for BS Degree/4 credits

E. Total Credits Required for BA or BS in Social Work/120 credits

SOCIAL WORK COURSE DESCRIPTIONS (SOWK)

General Education Course*

Writing Intensive Course WR

Speaking Intensive Course SP

SOWK 200. *Introduction to the Human Services.* The course introduces the broad range of human service professions designed to provide a wide variety of services to individuals, groups, the community, and the larger society. Further, the course explores the relationship between social problems and human needs, and the development of human service agencies and institutions in response. 3 credit

SOWK 201. *Introduction to Social Work and Social Welfare.* This course is designed to introduce students seeking to become generalist social workers (entry-level practitioners) to the unique aspects of the social work profession. This includes historic development of social work and social welfare and the relationship to effective provision of intervention services, which are based on the profession's knowledge, skills, and values. 3 credit hours.
Pre-requisite: SOWK 200

SOWK 295. *Special Topics. Selected topics in Social Work.* The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

SOWK 300. *Social Problems and the Development of Social Policy.* The development of social policies in response to social problems is examined with a special emphasis on the impact of social injustices. The history of the relationship between social work practice and social policy development is explored. Students are encouraged to view social policy practice as a viable and bona fide multi system social work practice intervention. Analytic skills, interactional skills, political skills, and value-clarifying skills are primary skill areas that students build on in preparation for policy analysis and development. 3 credit. Prerequisite: SOWK 201. SP

SOWK 301. *Human Behavior and the Social Environment I.* Part one of a two-part foundation course, using the general systems approach, the student will develop a multi-level perspective of human behavior in the areas of personality development and self-concept in the context of community and organizational systems, group processes, personal change dynamics, family systems, and life cycles. Concurrent focus is placed on the relevancy of the theory base. . Integrated into this course as well is content on human diversity and populations at risk, a strengths perspective, and the values and ethics of social work practice. Prerequisites: SOCL 101. 3 credits.

SOWK 302. *Human Behavior and the Social Environment II.* The second of a two part course, which continues the application of a multidimensional perspective in an examination of human behavior across the life span and in terms of biological, social and psychological processes. This course primarily emphasizes models and theories of human behavior in families, groups, organizations, institutions and communities, all from an ecological and systems perspective. Integrated into this course as well is content on human diversity and populations at risk, a strengths perspective, and the values and ethics of social work practice. 3 credit. Prerequisite: SOCL 101 WR

SOWK 305. *Social Work with Older Americans.* This course will explore the diverse mandates for social welfare services and for the providers of these services, especially professional social workers. In addition, the course will provide an overview of the aging process and how it impacts the individual, family, and ultimately society. Further, the course will examine the interface between older Americans and social problems, social policies and the rights of older Americans. 3 credits. Prerequisite: Sociology 101.

SOWK 309. *Human Sexual Adjustment.* Socio-cultural influences on gender identity and sexual behavior will be analyzed and issues regarding sexual expression and sexual dysfunctioning will be explored. Methods of dealing with sexual adjustment difficulties at both the individual and community levels are presented including human service

SOWK 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in social work. 1-18 credits.

SOWK 320. *Introduction to Social Work Research.* Students will learn and apply the fundamental principles and practices of social science research in the context of the social work profession, social work policy and social work practice. Students will address issues and practices related to the development, production, consumption, and dissemination of research in terms empirically based knowledge and evidence-based interventions, social work ethics and values, and in consideration of human diversity and populations at risk. Prerequisite: MATH 171. 3 credits. WR

SOWK 325. *Human Diversity: Populations-at-Risk.* Conceptual frameworks for understanding human diversity with a special emphasis on understanding self will under gird the identification and study of populations-at-risk in society. The dynamics of social injustices and the impact on diverse groups in society are explored. Students will develop competent skills to provide services to diverse clientele at multilevel systems. 3 credit hours. Prerequisite: SOCL 101 SP

SOWK 330. *Methods: Practice I Individuals and Families.* A generalist model of practice is presented which emphasizes a problem-solving approach toward assisting clients/ consumers of social work services. The primary framework discussed in this course will be theories employing a generalist social work model. Content area required by CSWE is included and focuses on issues of diversity, populations-at-risk, social and economic justice, and social work values and ethics. Along with SOWK 425 and SOWK 430, this course builds theoretical and practice knowledge, skills, and values, which are used to assist individuals, families, groups, communities, and organizations in a wide range of social welfare/ human services settings. (4 credit course) Prerequisites: SOWK 301, 302 (4 credit course) Prerequisites: SOWK 301, 302

SOWK 337. *Family and Children's Services.* Major concepts of family and child welfare are presented and trends in relevant policy, services and practice skills related to supportive, supplemental and substitutive programs are analyzed. Prerequisite: SOWK 300 or permission of instructor. 3 credits.

SOWK 390. Directed or Independent Study. Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

SOWK 392. *Junior Field Instruction Internship.* This is the first of two sequential courses. This course is open only to majors with junior status. Students will spend 14 hours per week in a local community agency under the supervision of an agency based field instructor. The purpose of this course is intended to begin the application of beginning level practice skills in working with individuals, families, groups, organizations, and communities from a generalist perspective. Reinforces students' identification with the purposes, values, and ethics of the

Social Work profession. Field education is systematically designed, supervised, coordinated, and evaluated based on criteria by which students demonstrate the achievement of program objectives. Semester Course: 6 credits. Prerequisite SOWK 330. !

SOWK 425. *Methods: Practice II Social Work Practice with Groups.* Students will develop theoretical and practice knowledge and skills regarding group practice in various human service settings and contexts. Students will integrate an eco-systems perspective, knowledge, and skills regarding social work ethics and values, principles of human diversity, social justice, populations at risk, and a strengths perspective. This course will review and apply different theoretical approaches and practice methods to social work with various kinds of small groups, including therapy or counseling groups, socialization and education groups, support and self-help groups, various task groups and social action groups. Emphasis is placed on the role of social work practice with groups in the promotion of well-being and optimal functioning. 4 credits. Prerequisites: SOWK 301 and SOWK 302.

SOWK 430. *Methods: Practice III Communities and Organizations.* This course introduces theories and concepts for socially and culturally competent social work practice in communities and organizations. Students examine the roles of communities and organizations within and beyond the context of traditional social work practice with individuals, families, small groups, organizations and large systems. Students will integrate social work's historical and contemporary emphasis on empowerment, a strengths perspective, human and cultural diversity, populations at risk, and the values and ethics of social work practice. Political action, advocacy, and related collaborative approaches for building and strengthening communities, neighborhoods, and organizations will be stressed. 4 credit hours. Prerequisite: SOWK 392.

SOWK 461. *Topical Seminar in Social Work.* A series of topical lectures, presentations and discussions concerning areas of current concern to practitioners in a variety of welfare settings. Emphasis is placed on practice related material and the involvement of practitioners from local agencies is encouraged. 1-3 credits.

SOWK 462. *Delivering Hospice Care.* A skills approach to the provision of hospice care to the terminally ill. Physical, psychological, social, and spiritual needs unique to this client population will be presented. 1 credit.

SOWK 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

SOWK 492. *Senior Field Instruction Internship.* This course is open only to majors with senior status. Forty hours per week in a local community agency under the supervision of an agency based field instructor will be a major component to the course. The total hours of senior field instruction (SOWK 492) is 600 hours upon placement. SOWK 492 is intended to extrapolate and build from Junior Field Instruction beginning level practice skills with individuals, families, groups, organizations, and communities. The purpose of this course is to reinforce students' identification with the purpose, values, and ethics of the social work profession. Field education is systematically designed, supervised, coordinated, and evaluated on the basis of criteria by which students demonstrate the achievement of program objectives. SOWK 492 is a semester course of 15 credits. Prerequisite classes include: SOWK 330, 425, and 430 with a 2.25 G.P.A average overall. * Fulfills General Education Goal 15. !

SOWK 495. *Special Topics. Selected topics in Social Work.* The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits. SP

SOWK 498. *Honors Research in Social Work.* Students conduct research in social work under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits.

COMMUNICATION SCIENCES AND DISORDERS PROGRAM

Faculty

Peggy Agee, SLPD, CCC-SLP, *Assistant Professor and Undergraduate Program Coordinator*

Gayle Daly, MS, CCC-SLP, *Instructor and Speech-Language Clinical Director*

Lissa Power-deFur, PhD, CCC-SLP, *Associate Professor and Graduate Program Coordinator*

Wendy Pulliam, MS, CCC-SLP, *Clinical Educator and Grant Coordinator*

Michele Norman, PhD, CCC-SLP, *Assistant Professor*

Program Mission Statement

The Communication Sciences and Disorders (CSDS) Program is dedicated to providing a comprehensive education in human communication processes and in the prevention, assessment, and treatment of communication disorders across the lifespan. The program is committed to providing students in the undergraduate program with comprehensive pre-professional academic and observation experiences for entrance into a graduate program in speech language, pathology, audiology, deaf education, or related field.

Undergraduate Program

The Bachelor of Science degree program in Communication Sciences and Disorders is a pre-professional program that provides academic training in the normal process of speech, language, hearing, and their associated pathologies. The coursework provides the foundation for pursuing a master's degree in speech-language pathology or audiology. The master's degree is the entry-level degree in the profession of speech-language pathology, while a clinical doctorate in audiology is required for entry into that profession. One of the objectives of the CSDS undergraduate program is to prepare students to apply to graduate school in Communication Sciences and Disorders.

Admission to the Communication Sciences and Disorders Major

All students first entering the College of Education and Human Services (CEHS) who wish to pursue a bachelor's degree in Communication Sciences and Disorders must meet the following criteria prior to registration for CSDS courses at and beyond the 300 level:

- Completion of 45 credit hours
- minimum overall GPA of 2.75
- Demonstration of competency in written and oral English as evidenced by no less than a grade of "C" in English 150 or the equivalent course or courses from a community college or another university.
- An earned grade of no less than "B-" in Biology 101 or the equivalent course or courses from a community college or other university.

Students may enroll in a few selected courses required for the CSDS major while they are moving toward satisfying the above requirements. These courses include CSDS 201, CSDS 206, CSDS 207, CSDS 285, CSDS 290, CSDS 307, CSDS 313, COMM 101, and EDUC 245, ENGL 380, EDUC 381, SPED 305, and SPED 489. Each student will receive personalized academic counseling from full-time faculty in the Communication Sciences and Disorders Program.

Students transferring from other colleges and universities and entering Longwood University with junior level standing may register for CSDS courses from the 201 through 313 level. Student transfers will need to earn a 2.75 Longwood University GPA prior to registering for CSDS courses beyond the 314 level.

COMMUNICATION SCIENCES AND DISORDERS MAJOR, BS Degree

A. General Education Core Requirements/41 credits

Goal 12: Choose one of the following courses:

PSYC 371 or PSYC 373 or PSYC 375/3 credits.

Goal 13: Recommended choice: PHIL 315/3 credits

B. Additional Degree Requirements/7 credits

MATH 171 Statistical Decision Making/3 credits

Natural Science/4 credits

C. Major Requirements/59 credits

To satisfy major requirements for graduation, students majoring in Communication Sciences and Disorders must earn a grade of no less than C in all CSDS courses and an overall GPA of 2.75.

CSDS 201 Introduction to Communication Disorders/ 3 credits

CSDS 206 Introduction to Sign Language and
Other Modes of Communication for the Hearing Impaired/ 3 credits

CSDS 207 Sign Language/Hearing Impaired Communication/3 credits

EDUC 245 Human Growth and Development/ 3 credits

CSDS 285 Language Development Across the Life Span/ 3 credits

CSDS 290 Morphology and Syntax/1 credit

CSDS 307 Phonetics/ 3 credits

CSDS 313 Anatomy & Physiology of Speech & Hearing Mechanisms/ 3 credits

CSDS 314 Phonology and Language Disorders/ 3 credits

CSDS 361 Introduction to Audiology and Hearing Science/ 3 credits

CSDS 430 Language and Literacy/ 3 credits

CSDS 450 Speech Science/ 3 credits

CSDS 455 Neurology in Human Communication/ 3 credits

CSDS 489 Introduction to Clinical Practice/2 credits

SPED 305 Behavior Management, Part 1/ 3 credits

SPED 489 Survey of Exceptional Children/ 3 credits

CSDS 411 Assistive Technology and Augmentative Communication in the General
Curriculum/ 3 credits

COMM 101 Public Speaking/ 3 credits

ENGL 380 Children's Literature/ 3 credits

ENGL 470 Professional Writing Skills/ 3 credits

Choose one of the following:

SOWK 325 Human Diversity: Populations at Risk/ 3 credits

SOCL 233 Race, Class, and Gender/ 3 credits

PSYC 384 Cross-Cultural Psychology/ 3 credits

HLTH 210 World Health Issues/ 3 credits

D. Electives:

Program Electives/6 credits

A minimum of 6 credit hours must be selected from the following list:

SOCL 102 Contemporary Social Problems/ 3 credits

HLTH 275 Medical Terminology/ 2 credits

ENGL 382 Traditional and Modern English Grammar/ 3 credits

SOCL 320 Sociology of Education/ 3 credits. open to juniors and seniors only

PSYC 453 Psycholinguistics/ 3 credits

General Electives/7 credits

E. Total credits required for a BS in Communication Sciences and Disorders/120

COMMUNICATION SCIENCES AND DISORDERS COURSE DESCRIPTIONS (CSDS)

Writing Intensive course WR

Speaking intensive course SP

CSDS 201. *Introduction to Communication Disorders.* An overview of the field of communication disorders, including the professions of speech-language pathologist and audiologist. 3 credits.

CSDS 203. *Oral Communication Skills for English Language Learners.* The focus of this course is to demonstrate accurate production of the phonemes of English, the stress and intonation patterns of English, and the changes that occur in connected speech. This course may be taken only once for credit towards a degree. It may be repeated. Prerequisites: Restricted to students for whom English is a second language. 2 credits.

CSDS 206. *Introduction to Sign Language and Other Modes of Communication for the Hearing Impaired.* To promote understanding of communication modalities used with Hearing Impaired persons, including cued language, speech reading, verbal communication, and to demonstrate proficiency in beginning sign language. 3 credits.

CSDS 207. *Sign Language/Hearing Impaired Communication.* This intermediate level course is intended to improve or advance the communication skills of those students whose core vocabulary of signed languages and knowledge of deafness has already been established. Active learning strategies are designed to move the students from entry level to a level of proficiency necessary to communicate with members of the Deaf community or with hearing-impaired individuals whose sign language parallels English. Prerequisite Communication Sciences and Disorders 207. 3 credits.

CSDS 285. *Language Development Across the Life Span.* An introduction to the normal acquisition of language, including the components of language, the physical, social, and cognitive bases for language, theories of language development, and how language evolves from infancy through adulthood to senescence. Cultural influences on language development will also be explored. 3 credits. WR

CSDS 290. *Morphology and Syntax.* This course is designed to acquaint students with the morphologic and syntactic terminology used in the analysis of language samples. 1 credit.

CSDS 295. *Special Topics.* Selected topics in Communication Disorders The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change 1-3 credits.

CSDS 307. *Phonetics.* The phonetic structure of the English Language, its dialects and derivations; clinical application of the International Phonetic Alphabet 3 credits.

CSDS 313. *Anatomy and Physiology of Speech and Hearing Mechanisms.* Anatomical structures of the human communication system and the physiology of inter-related movements. Prerequisite: Biology 101 or permission of instructor 3 credits.

CSDS 314. *Phonology and Language Disorders.* The identification and evaluation of phonological and language disorders in children and adolescents, etiological factors, and basic assessment and management procedures for a culturally and linguistically diverse populations. Prerequisites: Communication Sciences and Disorders 285 and 307 or permission of instructor. 3 credits.

CSDS 361. *Introduction to Audiology and Hearing Science.* Physics of sound; physiology of hearing; types and amounts of hearing loss; hearing evaluation: audiometry. Prerequisite: CSDS 313 or consent of instructor. 3 credits.

CSDS 411/SPED 411. *Assistive Technology and Augmentative Communication in the General Curriculum.* Students will develop an understanding of low-tech and high-tech Augmentative/Alternative Communication (AAC) systems and Assistive Technology (AT) systems. Study will include federal and state laws related to the provision of AT/AAC and funding for devices. Students will learn to assess for, design, and apply AT and AAC to facilitate success in the lives of persons with disabilities. 3 credits.

CSDS 430. *Language and Literacy.* Overview of the relationship between language and literacy Learning outcomes target the specific skills for professionals in communication disorders including: phonological and phonemic awareness, development of expressive language, and a focus on collaborative practice with classroom teachers. Therapeutic strategies, which integrate listening, thinking, speaking, reading and writing, are targeted for all children. 3 credits. WR

CSDS 450. *Speech Science.* An introduction to speech science theory, instrumentation, and measurement Emphasis on normal speech perception and production Prerequisites: Communication Sciences and Disorders 307, 313, and 361. 3 credits.

CSDS 455. *Neurology in Human Communications.* An overview of neurology as it relates to communication and communication disorders. Prerequisite: Communication Sciences and Disorders 313. 3 credits.

CSDS 489. *Introduction to Clinical Practice.* Class instruction related to clinical methods and practicum experience plus 20 hours field experience with a Speech-Language Pathologist or Audiologist Prerequisites or co-requisites: CSDS 314 or consent of instructor 2 credits. WR and SP

CSDS 495. *Special Topics. Selected topics in Communication Disorders.* The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change Prerequisite: Communication Sciences and Disorders 314 1-3 credits.

Department of Health, Recreation, and Kinesiology

J. Charles Blauvelt, *Chairperson*

Nancy E. Scruggs, *Administrative Assistant*

The Department offers three BS degree programs, one in athletic training, one in therapeutic recreation, and one in kinesiology with concentrations in either teaching physical and health education or exercise science. The department also offers a teaching endorsement in driver education, and minor programs in coaching, health education, outdoor education and pre-professional clinical studies. A variety of activity classes, whose goal is to develop fitness and skills in life-time sport and recreation, are offered to all students. Health and activity classes are structured to provide students with knowledge about current health problems and to help them develop behaviors and attitudes that will aid in maintaining a state of optimal health and well-being throughout the life-span.

Faculty

Sarah M. Bingham, PhD, *Professor of Physical Education*

J. Charles Blauvelt, PhD, *Chairperson and Associate Professor of Physical Education*

A. Vonnice Colvin, EdD, *Associate Professor of Physical Education*

Sharon J. Gaunt, PhD, *Lecturer in Physical Education*

Donald J. Herlan, MS, *Lecturer in Physical Education*

Rená A. Koesler, PhD, *Professor of Recreation*

Chrystyna Kosarchyn, PhD, CHES, *Professor of Health Education*

Matthew D. Lucas, EdD, *Assistant Professor of Physical and Health Education*

Susan E. Lynch, PhD, CTRS, *Associate Professor of Therapeutic Recreation*

Sharon M. Menegoni, MS, ATC, *Assistant Professor of Athletic Training*

Joanna Morrison, PhD, *Assistant Professor of Exercise Science*

Cathy J. Roy, PhD, *Associate Professor of Exercise Science*

Glenda P. Taylor, PhD, CTRS, *Professor of Therapeutic Recreation*

Margaret Frederick Thompson, EdD, ATC, *Assistant Professor of Athletic Training*

William C. Thomson, EdD, *Assistant Professor of Physical Education*

Rodney L. Williams, BA, *Artist-in-Residence, Dance*

KINESIOLOGY PROGRAMS

The Kinesiology curriculum offers programs of study leading to a Bachelor of Science degree in kinesiology in two areas: Exercise Science and in teaching Physical and Health Education (PHETE). Both majors must take a core of kinesiology theory and skill classes; then, depending upon interest and career goals, students will take course work in one of the following program concentrations: Exercise Science or in Physical and Health Education Teacher Education (PHETE).

PHYSICAL AND HEALTH EDUCATION TEACHER EDUCATION PK-12 CONCENTRATION (PHETE)

Faculty

Sarah M. Bingham, PhD, *Professor of Physical Education*

J. Charles Blauvelt, PhD, *Chairperson and Associate Professor of Physical Education*

A. Vonnice Colvin, EdD, *Program Coordinator, Associate Professor of Physical Education*

Philip A. Gapinski, PhD., CHES, *Assistant Professor of Health Education*

Chrystyna Kosarchyn, PhD., CHES, *Professor of Health Education*

Matthew D. Lucas, EdD, *Assistant Professor of Physical and Health Education*

William C. Thomson, EdD, *Assistant Professor of Physical Education*

PHYSICAL AND HEALTH EDUCATION TEACHER EDUCATION (PHETE)

Note: Program changes that may impact teacher licensure were in process at the time this Catalog went to press. Students must consult with their advisor or program director to obtain the most current information.

The PHETE program prepares students to meet State licensure requirements to teach both health and physical education from pre-kindergarten through 12th grade. Students can also elect to become endorsed to teach Driver Education. Our program is a competency-based, fieldwork intensive curriculum that ensures students obtain teaching experiences throughout their academic career. As a result, graduates tend to enter the workforce confident in their ability to deal with the many challenges faced by public school teachers.

Admission to the teacher education program requires that by mid-point of fall semester of the sophomore year students complete an application which includes successful completion of Praxis I, demonstrate competency in written and oral English (earn a grade of "C" or better in ENGL 150), have satisfactory professional dispositions, successfully complete an interview with the Physical and Health Education Teacher Education faculty, and possess an overall grade point average of 2.50. All physical education majors must earn a minimum grade of "C" in each professional course noted by an asterisk below. Transfer students have two semesters to complete the above requirements. Additional policies and standards for physical education majors are in the Physical and Health Education Teacher Education Student Handbook.

KINESIOLOGY, BS DEGREE

Physical and Health Teacher Education, PK-12

Physical and Health Education Licensure

A. General Education Core Requirement/41 credits

The department requires SOCL 320 to satisfy General Education Goal 12.

B. Additional Degree Requirements/7 credits

BIOL 206	Human Anatomy and Physiology I/4 credits
MATH 171	Statistical Decision Making/3 credits
or MATH 271	Applied Statistics/3 credits

C. Major Requirements/78-81 credits (plus 1 credit included in General Education)

Professional Core/11 credits

KINS 275	Foundations of Physical Education and Sport/3 credits
KINS 386	Biomechanics/4 credits
KINS 387	Physiology of Exercise/4 credits

Teaching Concentration Activity Requirements/10-12 credits

KINS 150	Fitness Education/1 credit
*KINS 350	Skill Acquisition and Analysis I: Team Sports/3 credits
*KINS 351	Skill Acquisition and Analysis II: Teaching Fundamental Movement Concepts, Skills Themes and Dance/3 credits
*KINS 352	Skill Acquisition and Analysis III: Lifetime Activities/3 credits

Take 0-2 credits from the following:

Successfully complete the swimming proficiency test/0 credits	
PHED 111	Beginning Swimming/1 credit
PHED 211	Intermediate Swimming/1 credit
PHED 212	Lifeguarding and Emergency Water Safety/2 credits
PHED 315	Water Safety Instructor/2 credits

Teaching Concentration Requirements/57-59 credits (plus 1 credit included in General Education)

BIOL 207	Human Anatomy and Physiology II/4 credits
KINS 175	Introduction to the Profession of Health and Physical Education/1 credit
KINS 280	Motor Development/3 credits
KINS 363	Assessment and Evaluation in Health and Physical Education/3 credits
*KINS 364	Adapted Physical Education/3 credits
*KINS 377	Teaching Elementary Physical Education/4 credits
*KINS 378	Teaching Middle School Physical Education/4 credits
*KINS 382	Teaching High School Physical Education/4 credits
KINS 482	Directed Teaching in Elementary and Secondary Physical Education and Health/11 credits (one credit satisfies General Education Goal 15)
KINS 483	Seminar in Teaching/2 credits
RECR 338	Outdoor Education in the Schools/2 credits
HLTH 205	Health and Wellness/3 credits
HLTH 314	Human Sexuality/3 credits
HLTH 260	Emergency Care and First Aid/3 credits
OR HLTH 160	Basic Care and First Aid/1 credit
HLTH 313	Drugs and Human Behavior/3 credits
HLTH 335	Nutrition/3 credits
*HLTH 465	Comprehensive School Health Education/4 credits
*EDUC 430	Reading in the Content Area/2 credits

Total Credits Required for BS Degree with Physical and Health Education with Teacher Education PK-12 Concentration/128-132

Driver Education Endorsement/6 credits

Any student may elect to take the following sequence of courses and become endorsed to teach driver education in secondary schools.

HLTH 301	Foundations of Traffic Safety/3 credits
HLTH 302	Instructional Principles and Methodologies of Classroom and In-Car Instruction/3 credits

D. Total Credits Required for BS Degree with Physical and Health Education with Teacher Education PK-12 Concentration and Driver Education Concentration/134-138

Non-Teaching Option

EXERCISE SCIENCE

Faculty

Cathy J. Roy, PhD, *Program Coordinator, Associate Professor of Exercise Science*
Joanna Morrison, PhD, *Assistant Professor of Exercise Science*

The Exercise Science Concentration is designed to provide students with a foundation in the sciences with emphasis in exercise, health, and sport sciences. Students enrolled in this concentration are prepared for entrance into health-related fitness and sport science professions. Graduates of this program are eligible to sit for certification examinations offered by the American College of Sports Medicine and the National Strength and Conditioning Association, and to apply for advanced study in a variety of applied science and allied health programs.

KINESIOLOGY MAJOR, BS DEGREE

Exercise Science Concentration

A. General Education Core Requirements/41 credits

B. Additional Degree Requirements/ 7 credits

BIOL 206 Human Anatomy and Physiology I/4 credits

Take one of the following:

MATH 171 Statistical Decision Making/3 credits

MATH 271 Applied Statistics/3 credits

C. Major Requirements/76-78 credits.

Professional Core/17 Credits

KINS 275 Foundations of Physical Education and Sport/3 credits

KINS 280 Motor Development/3 credits

KINS 386 Biomechanics/4 credits

KINS 387 Physiology of Exercise/4 credits**

KINS 462 Administration of Exercise Science and Sport/3 credits

Activity Requirements

PHED 116 Beginning Weight Training/1 credit

PHED 126 Beginning Yoga/1 credit

Take two credits from the following:

PHED 127 Aerobic Dance/1 credit

PHED 104 Beginning Tennis/1 credit

PHED 108 Beginning Golf/1 credit

PHED 212 Lifeguarding and Emergency Water Safety/2 credits

PHED 315 Water Safety Instruction/2 credits

KINS 150 Fitness Education/1 credit

KINS 217 Olympic Lifting Movements/1 credit

KINS 227 Methods/Group Ex Instruction/1 credit

DANC 130 Beginning Jazz/1 credit

DANC 131 Beginning Modern Dance/1 credit

Fitness Concentration Requirements

BIOL 207 Human Anatomy and Physiology II/4 credits*

CHEM 101 General Chemistry/4 credits+

or CHEM 111 Fundamentals of Chemistry/4 credits

PHYS 101 General Physics/4 credits+

KINS 205 Introduction to Exercise Science/2 credits

KINS 216 Essentials of Strength Conditioning /3 credits

KINS 375 Exercise Science Seminar/3 credits*

KINS 376 Sports Nutrition/2 credits

KINS 385 Sport Psychology/3 credits

KINS 392 Fitness Internship/8 credits (one credit satisfies General Education Goal 15)*

KINS 399 Advanced Exercise Physiology/3 credits

KINS 430 Applied Exercise Physiology/3 credits*

KINS 470 Research Methods in Health, Recreation and Kinesiology/3 credits

KINS 486 Exercise Testing and Prescription/4 credits*

KINS 488 Exercise Intervention in Disease/3 credits*

KINS 489 Health Fitness Management/3 credits*

HLTH 215 Physical Activity and Health/3 credits

HLTH 260 Emergency Care and First Aid/3 credits

or HLTH 160 Basic Emergency Care and First Aid/1 credit

HLTH 335 Nutrition/3 credits

D. Total Credits Required for BS Degree with Exercise Science Concentration/124-126

One of the above courses will count as a general education course under Goal 6 and will be considered as 4 credits of the 41 total required credits. +

Courses in which students must have a grade of C- or higher.*

Courses in which students must have a grade of C or higher.**

ATHLETIC TRAINING MAJOR, BS DEGREE

Faculty

Sharon M. Menegoni, MS, *Program Coordinator, Assistant Professor of Athletic Training*

Margaret Frederick Thompson, EdD, *Clinical Coordinator, Assistant Professor of Athletic Training*

The Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and is designed to prepare students for a career in the field of athletic training, or may serve as the pre-professional course of study for physical therapy and sports medicine. The course of study leading to the Bachelor of Science Degree includes one year of pre-athletic training, a selection process, and three years in the professional and clinical education phase of the program. Admission to the Athletic Training Education Program is competitive. Because of enrollment limitations, students who have completed the pre-athletic training year at Longwood cannot be assured admission to the professional and clinical education phase of the Athletic Training Education Program.

Formal Admission to the Athletic Training Curriculum Program

Students must be formally admitted to the athletic Training curriculum program before they can declare a major or register for upper division Athletic Training curriculum courses. Only those students admitted to the curriculum program (see admission criteria below) may declare an Athletic Training major.

All new freshmen and transfer students interested in pursuing a Bachelor of Science in Athletic Training will be admitted to the "Pre-athletic Training" program. Upon their successful completion of the criteria for and formal admission to the Athletic Training curriculum, the student will declare the Athletic Training major.

Admission to the Athletic Training Education Program is competitive. Because of enrollment limitations, students who have completed the pre-athletic training year at Longwood cannot be assured admission to the professional and clinical education phase of the Athletic Training Education Program.

Admission to the athletic training program is contingent upon the student satisfactorily completing the following prerequisites:

Admission to the athletic training program is contingent upon the student satisfactorily completing the following prerequisites:

- a. written application;
- b. 75 hours of athletic training directed observation/work experience at one of the program's clinical sites;
- c. 30 credit hours of college course work;
- d. a 2.25 overall grade point average (GPA) and a 2.5 GPA or better in all athletic training major and supporting courses are required at the time of application;
- e. courses ATTR 200, 210, BIOL 207 and BIOL 206;
- f. grades of C or better in ATTR 200, 210, BIOL 206 and BIOL 207;

- g. completion of all Level I Skill Competencies and Proficiencies, and
- h. demonstration of appropriate clinical performance and conduct as determined by clinical instructor evaluations of the directed-observation experience.

Admission to the Longwood University Athletic Training Education Program is a three stage process. In the first stage students must (a) meet a number of grade and grade point criteria, (b) file a formal written application for admission, (c) successfully complete prerequisite courses, and (d) complete a directed observation requirement.

Once those criteria are met the student will enter the second stage which includes (a) obtaining updated grade estimates and (b) participation in an admission interview. Assessments for each student are placed in rank order for each component of the application process. A final rank ordering is based on the total of all components of the application process. Preliminary admission decisions are made by the Athletic Training Review Committee based on collective results across all pre-admission categories. At the completion of stage two, students will be informed by the program director of denial of admission or the preliminary admission decision or denial.

Students granted preliminary admission enter stage three. In this stage, final semester grades are subject to the grade and grade point criteria. The program director verifies that the student's final semester grades meet the grade and grade point requirements. Final admission decisions are made following the verification of candidates' semester grades.

Students (freshmen) may apply for admission to the program after the completion of the first academic year or the first semester on campus (transfer students) providing that all prerequisite courses are completed. The admissions process will be administered at the end of the spring semester. Students will be informed by the program director of exact dates.

Students who are accepted into the program are required to accumulate a minimum of 800 hours of supervised clinical experience with the Longwood intercollegiate athletic program or an affiliated site. Students will also complete an off campus clinical internship at a site of their choice during the final semester of the program. Graduates of this program are eligible to sit for the Board of Certification examination. The course of study for students planning to participate as a member of an intercollegiate athletic team is five years.

The technical standards set forth by the Athletic Training Education Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (CAATE). Technical standards for program admission are published in the Athletic Training Education Program Curriculum Handbook.

Internship Requirements

Eligibility for the Clinical Internship in Athletic Training (ATTR 492) requires the successful completion of all coursework in the curriculum. The student must maintain a 2.25 overall grade point average and a 2.50 grade point average in all major coursework. The internship reflects a 480 hour, minimum of 12 weeks placement to be taken during the final semester of enrollment. Placement must be in an agency or educational institution under the supervision of a certified athletic trainer (ATC). University and CAATE standards will be adhered to throughout this experience.

ATHLETIC TRAINING MAJOR, BS DEGREE

A. General Education Core Requirements/41 credits

The program requires PSYC 330 for the satisfaction of Goal 12 and PHIL 315 for Goal 13, ATT 492 for Goal 15.

B. Additional Degree Requirements/7 credits

BIOL 206 Human Anatomy and Physiology I/4 credits

MATH 271 Applied Statistics/3 credits

C. Major Requirements/78 credits

Supporting Courses/16 credits (4 credits included in General Education)

KINS 386	Biomechanics/4 credits
KINS 387	Physiology of Exercise/4 credits
PHYS 101*	General Physics I/4 credits
PHYS 102	General Physics II/4 credits
BIOL 207	Human Anatomy and Physiology II/4 credits

Required Requirements/41 credits

HLTH 260	Emergency Care and First Aid/3 credits
HLTH 335	Nutrition/3 credits
ATTR 200	Introduction to Athletic Training/3 credits
ATTR 210	Basic Skills in Athletic Training/3 credits
ATTR 300	Injury Mechanism and Assessment I (Lower Extremity)/3 credits
ATTR 310	Injury Mechanism and Assessment II (Upper Extremity)/3 credits
ATTR 320	Therapeutic Modalities/2 credits
ATTR 325	Principles of Therapeutic Exercise/3 credits
ATTR 326	Applied Therapeutic Exercise/2 credits
ATTR 330	Injury Mechanism and Assessment III (Head, Neck and Spine)/3 credits
ATTR 410	Athletic Training Administration/3 credits
ATTR 420	Medical Aspects of Athletic Training/3 credits
KINS 470	Research in Health, Recreation and Kinesiology/3 credits
PHED 116	Beginning Weight Training/1 credit
KINS 216	Essentials of Strength and Conditioning/3 credits

Clinical Requirements/21 credits (plus 1 credit included in General Education)

ATTR 371	Clinical Methods in Athletic Training I/2 credits
ATTR 372	Clinical Methods in Athletic Training II/2 credits
ATTR 471	Clinical Methods in Athletic Training III/2 credits
ATTR 472	Clinical Methods in Athletic Training IV/2 credits
ATTR 473	Clinical Methods in Athletic Training V/2 credits
ATTR 492	Clinical Internship in Athletic Training/12 credits

(one credit satisfies General Education Goal 15)

*PHYS 101 may be used to fulfill General Education Goal 6

D. Total Credits Required for BS Degree in Athletic Training/126

THERAPEUTIC RECREATION PROGRAM

Faculty

Rená A. Koesler, PhD, *Program Coordinator, Professor of Recreation*

Susan E. Lynch, PhD, CTRS, *Associate Professor of Therapeutic Recreation*

Glenda P. Taylor, PhD, CTRS, *Professor of Therapeutic Recreation*

The Bachelor of Science in Therapeutic Recreation degree is an accredited program of the National Recreation and Park Association Council on Accreditation and reflects the National Council for Therapeutic Recreation Certification (NCTRC) competencies. The program exists within the framework of an allied health profession, and is a professional preparation program offering both didactic and experiential learning designed to prepare the student for basic-entry level practice in health and human service settings.

The application of therapeutic recreation principles and practices utilize a wide variety of interventions including leisure experiences to facilitate, promote and/or maintain client functioning, promoting healthy behaviors, assisting with habilitation/rehabilitation needs while enhancing quality of life; including the development of a personally meaningful leisure life-style. The context of therapeutic recreation service delivery is contained in:

physical medicine and rehabilitation facilities, psychiatric and mental health facilities for children and adults; substance treatment programs; corrections and juvenile justice centers; wilderness therapy camps; long-term, sub-acute care; and adult day health and nursing homes; community service boards residences for individuals with developmental disabilities school settings, and community parks and recreation departments.

Longwood's nationally recognized Therapeutic Recreation program provides students with a comprehensive foundation of: liberal arts, biological and health sciences, social sciences, disability studies and leisure theory. The technical aspects of the Therapeutic Recreation profession are taught within specialty courses emphasizing professional and therapeutic communication, program planning, intervention techniques, clinical assessment and documentation, clinical reasoning, management and research.

Outdoor Education Minor

The outdoor education minor enhances the Therapeutic Recreation major, and is especially useful for those clinicians who will work with "at-risk-youth" in education, juvenile justice systems, and adventure therapy programs. Although not limited to these populations, outdoor education has a wide application to diverse population groups and is often used as a "modality" in the delivery of therapeutic recreation services.

The experiential nature of the course offerings in this minor provide the student with skill development, self-awareness, aesthetic appreciation, safe practice and risk management. The course offerings provide the foundation knowledge for future certifications in the outdoor adventure field.

Sequence and Progression

The requirements of this professional preparation program are designed to academically prepare the student in a sequenced offering of coursework. The sequence and progression of the student in the curriculum will be determined and monitored by the therapeutic recreation faculty.

1. Critical to student learning is that all therapeutic recreation majors, or intending majors, must complete BIOL 206/207 (Anatomy and Physiology); HLTH 275 (Medical Terminology) or equivalencies by the second year of study.

A transfer student must show evidence of prior learning, or equivalencies in these courses to enable them to progress in the sequence as determined.

2. All upper level Therapeutic Recreation content courses are available only to Therapeutic Recreation majors, or permission by the Program Coordinator.

Fieldwork and Internship Requirements

Successful completion of this degree program requires practical experience, beyond the classroom. The following progression and requirements are identified below:

1. Preliminary Fieldwork

All students must complete 120 hours of volunteer work in a recreation setting which can include persons with disabilities. The recording of these hours will be the responsibility of the student and the faculty advisor. All 120 hours must be completed by the end of December of the student's junior year.

2. Junior Internship

Eligibility for junior internship requires the successful completion of all courses at the 100, 200, and 300 levels. The student must maintain a 2.50 GPA in all Therapeutic Recreation content coursework, and a 2.25 GPA overall. The junior internship reflects a minimum 400-hour, 10-12 week placement the summer after the junior year.

3. Senior Internship

Eligibility for senior internship requires the successful completion of all coursework in the curriculum. The student must maintain a 2.50 GPA in Therapeutic Recreation coursework, and a 2.25 GPA overall. The senior internship reflects a 560 hour, minimum of 14 weeks placement to be taken during Spring semester Senior year. Placement must be in an affiliated agency, and supervision carried out by a Certified Therapeutic Recreation Specialist (CTRS®). University and NCTRC standards will be adhered to throughout this experience.

Upon graduation, students become eligible to sit for the national certification examination through the National Council for Therapeutic Recreation Certification (NCTRC®). The processes for application are the responsibility of the graduate, and the university cannot enter into the process. Application is available at www.nctrc.org.

THERAPEUTIC RECREATION MAJOR, BS DEGREE

Students must have a “C-” or better in all major required recreation courses which also includes PSYC 330 and PSYC 356.

A. General Education Core Requirements/41 credits

The department requires PSYC 356 for the satisfaction of General Education Goal 12 and CHEM 101 for the satisfaction of General Education Goal 6.

B. Additional Degree Requirements/7 credits

BIOL 206	Human Anatomy and Physiology/4 credits
MATH 171	Statistical Decision Making/3 credits
or MATH 271	Applied Statistics/3 credits.

C. Major Requirements/82 credits

RECR 110	Introduction to Therapeutic Recreation/3 credits
RECR 111	Foundations of Leisure Services/3 credits
RECR 120	Therapeutic Recreation Professional Practice I/3 credits
RECR 205	Recreation Leadership and Activity/3 credits
RECR 210	Plan and Design of Recreational Areas and Facilities/2 credits
RECR 237	Adventure Programming/3 credits
RECR 250	Leisure Education and Counseling/3 credits
RECR 300	Pre-Internship Seminar/1 credit
RECR 301	Therapeutic Recreation in Mental Health Settings/3 credits
RECR 303	Therapeutic Recreation for Physical Disabilities/3 credits
RECR 304	Leisure and Aging: Therapeutic Services/3 credits
RECR 320	Facilitation Techniques in Therapeutic Recreation/3 credits
RECR 360	Therapeutic Recreation: Children with Disabilities/3 credits
RECR 371	Program Planning in Leisure Services/3 credits
RECR 392	Junior Internship/6 credits
RECR 408	Therapeutic Recreation Professional Practice II/3 credits
RECR 410	Supervision and Administration of Leisure Services/3 credits
RECR 437	Group Dynamics/3 credits
RECR 461	Senior Seminar/3 credits
RECR 470	Research in Health, Recreation and Kinesiology/3 credits
RECR 492	Senior Internship/12 credits (one credit satisfies General Education Goal 15)
HLTH 160	Basic Emergency Care and First Aid/1 credit
HLTH 275	Medical Terminology/2 credits
BIOL 207	Human Anatomy and Physiology II/4 credits
PSYC 330	Life Span Developmental Psychology/3 credits

Must have a 2.25 overall GPA and 2.50 GPA in major courses

D. Total Credits Required for BS Degree in Therapeutic Recreation/129

MINORS

The Health, Recreation and Kinesiology curricula offer minor programs in coaching, health education, outdoor education and pre-professional clinical studies.

COACHING MINOR/19 credits

Sarah Bingham, PhD, *Professor of Physical Education*

Students interested in the coaching minor must enroll in 19 hours of specialized professional courses in kinesiology and physical education. Any student may elect to take the following sequence of courses for a minor in coaching:

PHED 116	Beginning Weight Training/1 credit
KINS 216	Essentials of Strength Training/3 credits
KINS 298	Prevention and Care of Athletic Injuries/3 credits
KINS 350	Acquisition and Analysis: Team Sports/3 credits
OR KINS 352	Acquisition and Analysis: Individual Sports/3 credits
KINS 385	Sport Psychology/3 credits
KINS 491	Coaching Practicum/3 credits
KINS 496	Coaching Interscholastic and Intercollegiate Athletics/3 credits

HEALTH EDUCATION MINOR/18 credits

Chrystyna Kosarchyn, PhD, CHES, *Program Coordinator, Professor of Health Education*

Philip Gapinski, PhD, CHES, *Assistant Professor of Health Education*

The minor in Health Education is designed to provide students with information about current health issues and to help them develop attitudes and behaviors that will be helpful in attaining a state of optimal health throughout their lifetime. This minor is open to students in any major program other than those in the Physical and Health Education Teacher Education Program (PHETE) and is particularly complementary to degrees in the health and human services areas.

Core/3 credits

HLTH 205	Health and Wellness/3 credits
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Choose 5 courses/15 credits from the following:

HLTH 210*	World Health Issues/3 credits
HLTH 215	Physical Activity and Health/3 credits
HLTH 313	Drugs and Human Behavior/3 credits
HLTH 314	Human Sexuality/3 credits
HLTH 325	Human Diseases/3 credits
HLTH 335	Nutrition/3 credits
HLTH 400	Environmental Health/3 credits
HLTH 430	Women's Health and Health Care Issues/3 credits

* may be used to fulfill the Health Education Minor requirements ONLY if not used to fulfill General Education Goal 9.

OUTDOOR EDUCATION MINOR/19 credits

Rená A. Koesler, PhD, *Program Coordinator, Professor of Recreation*

The minor in Outdoor Education is open to those students interested in developing the skills, knowledge and experience in the outdoor education field. Students will gain the necessary skills and experience to teach, lead, and/or serve individuals who wish to use the natural environment as well as enhance their appreciation of it. Students who minor in Outdoor Education are required to take the following courses. Grades below "C-" will not apply toward the fulfillment of minor requirements.

RECR 237	Adventure Programming/3 credits
RECR 340	Introduction to Outdoor Adventure Skills/3 credits (canoeing, rock climbing, orienteering)
RECR 350	Ropes Course and Initiative Dynamics/3 credits
RECR 375	Leadership Development Through Wilderness Pursuits/3 credits
HLTH 260	Emergency Care and First Aid/3 credits
RECR 420	Environmental Education Resources/3 credits
RECR 487	Practicum Experience in Outdoor Education/1-3 credits

PRE-PROFESSIONAL CLINICAL STUDIES MINOR

Sharon M. Menegoni, MS, ATC, *Assistant Professor of Athletic Training*

The purpose of this minor is to provide the student with applied knowledge of athletic training clinical theory and skills. It is primarily designed for those students pursuing other medical and allied health fields or graduate education. It is an attractive and marketable combination with the following programs: pre-medicine, pre-physical therapy, pre-occupational therapy, and pre-nursing.

The minor in Pre-professional Clinical Studies does not meet NATA-BOC or Virginia licensure eligibility requirements, and therefore does not lead to certification as an Athletic Trainer.

ATTR 210	Basic Skills in Athletic Training/3 credits
ATTR 300	Injury Mechanism and Assessment I (Lower Extremity)/3 credits
ATTR 310	Injury Mechanism and Assessment II (Upper Extremity)/3 credits
<i>Select one of the following/2-3 credits</i>	
ATTR 320	Therapeutic Modalities/2 credits
OR	
KINS 330	Injury Mechanism and Assessment III (Head, Neck and Spine)/3 credits
<i>Select one of the following/2-3 credits</i>	
ATTR 325	Principles of Therapeutic Exercise/3 credits
OR	
ATTR 420	Medical Aspects in Athletic Training/3 credits
<i>Select one of the following/4 credits</i>	
KINS 386	Biomechanics/4 credits
OR	
KINS 387	Physiology of Exercise/4 credits

** a minimum of 18 credits is required.*

HEALTH PROGRAM COURSE DESCRIPTIONS (HLTH)

General Education Course *

Writing Intensive Course WR

Speaking Intensive Course SP

HLTH 160. *Basic Emergency Care and First Aid.* This course will enable the student to acquire the essential skills to perform basic first aid. Knowledge and skill gained will lead to certifications in first aid, cardiopulmonary resuscitation, and automatic external defibrillator. 1 credit.

HLTH 205. *Health and Wellness.* Focusing on the application of scientific facts and principles to current health issues, this course is designed to help foster intelligent decision-making in the areas of health needs and health behaviors. 3 credits.

HLTH 210. *World Health Issues.* An examination of the physical, psychological, social, and environmental dimensions of health as encountered in a variety of cultures with a particular emphasis on those in the non-Western world. 3 credits.*

HLTH 215. *Physical Activity and Health.* This course examines the effect of physical activity on health and diseases. Patterns and trends in physical activity are also covered as well as understanding and promoting physical activity in a variety of populations/settings. Prerequisite: PHED 101. 3 credits.

HLTH 260. *Emergency Care and First Aid.* Emergency care procedures necessary to sustain life and maintain life support until the victims of an accident or sudden illness are cared for by more qualified medical personnel. Knowledge and skill gained will lead to certification in first aid and cardiopulmonary resuscitation. 3 credits.

HLTH 275. *Medical Terminology.* An on-line course designed to familiarize students entering the public health field with the fundamentals of medical terminology and to provide them with the skills to learn medical terminology easily and quickly. Prerequisite: internet access. 2 credits.

HLTH 295. *Special Topics.* Selected topics in health education. The topics will vary from semester to semester. Descriptions will be available from academic advisors. May be repeated for credit when topics change. 1-3 credits.

HLTH 301. *Foundation of Traffic Safety.* Foundation of Traffic Safety is the first of two courses required by the Virginia Department of Education for an endorsement in driver education. The intent of this course is to develop a thorough understanding of the highway transportation system, the complexity of the driving task, factors contributing to the performance of highway users, and attitudes and skills necessary to develop competent drivers. It will also provide prospective teachers with the essential knowledge and skills to effectively deliver the course content as presented in the Administrative and Curriculum Guide for Driver Education for Virginia. 3 credits.

HLTH 302. *Instructional Principles and Methodologies of Classroom and In-Car Instruction.* Principles and Methodologies of Classroom and In-Car Instruction is the second of two courses required by the Commonwealth of Virginia for endorsement in driver education. This course provides students with an overview of teaching methods and effective practices for driver education instruction. Emphasis is placed on program organization and administration, classroom instruction, single car instruction, multiple-car range instruction, simulation and evaluation. Focus is also placed on teaching skills. The course includes a minimum of 14 hours of behind-the-wheel supervised teaching experiences. 3 credits.

HLTH 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on health education per semester. 1-18 credits.

- HLTH 313. *Drugs and Human Behavior.*** An examination of drug use and abuse in today's society. Emphasis is placed on prevention and strategies for the learner while providing accurate, up-to-date information concerning human biology, sociological principles, and the pharmacological nature of drugs. 3 credits.
- HLTH 314. *Human Sexuality.*** An examination of the biological, psychological, cultural and behavioral aspects of sexuality with emphasis on providing the student with practical and meaningful information pertaining to human sexuality and family life while encouraging the development of responsible sexual behaviors and attitudes. 3 credits.
- HLTH 325. *Human Diseases.*** A study of communicable and chronic diseases with regards to disease description, etiology, signs and symptoms, diagnostic procedures, treatment, prognosis and prevention. Prerequisites: HLTH 205 or consent of instructor. 3 credits.
- HLTH 335. *Nutrition.*** This course examines the principles of normal human nutrition applied to various stages in life, especially as they relate to disease prevention, fitness, and weight control. Factors that influence human nutrition needs and eating patterns are also covered. Prerequisite: BIOL 206. 3 credits.
- HLTH 340. *Pharmacology.*** The emphasis of this course is on legal and illegal drug use in the world today. Topics will include indications, contraindications, and effects of commonly used non-prescription and prescription medicines, ergogenic aids and the use of illegal substances in athletics, and neurophysiology and pharmacology as it relates to the effects of drugs on the body. Prerequisites: BIOL 206 and CHEM 101 or 111. 2 credits.
- HLTH 345. *Selected Health Topics.*** An in-depth examination of timely health issues such as stress management, aging, and death and dying, which have physical, psychological and sociological implications for one's overall health status. 3 credits.
- HLTH 390. *Directed or Independent Study.*** Must be approved by the head of the department. May be repeated as 391. 1-18 credits.
- HLTH 400. *Environmental Health.*** The study of the environment as it relates to the total well being of the individual with special emphasis on the threats to human health posed by the degradation of the environment. Environmental diseases/illnesses attributed to toxic substances, metals, pesticides, food additives and contaminants, radiation, noise, and infectious agents will be addressed. 3 credits.
- HLTH 405. *Practicum.*** Supervised field experience in community health education setting. 1-3 credits.
- HLTH 430. *Women's Health and Health Care Issues.*** An examination of women's health problems, their prevention and treatment. 3 credits.
- HLTH 465. *Comprehensive School Health Education.*** A study of comprehensive school health education (CSHE) with a focus on the teaching of health, (N, K-12) including an examination of the components of CSHE, health education content, instructional methodology, resource materials (including audiovisual), evaluation of teaching, and computer assisted instruction. A supervised practicum experience is required. Prerequisites: HLTH 205, HLTH 212, HLTH 313. 4 credits.
- HLTH 490. *Independent Study.*** Individualized study. 1-18 credits.
- HLTH 492. *Internship in Health Education.*** A semester-long, on-the-job learning experience designed to apply the principles of health education. 1-18 credits.
- HLTH 495. *Special Topics in Health.*** Selected topics in health which will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

HLTH 498. Honors Research in Health Education. Students conduct research in health under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

DANCE COURSE DESCRIPTIONS (DANC)

DANC 127 (PHED 127). Aerobic Dancing. An aerobic activity which combines different styles of music with vigorous jazz and modern dance movements to increase cardio respiratory fitness. In addition to performing choreographed routines, students receive instruction in monitoring heart rate, injury prevention and a variety of other topics relevant to body/mind wellness. 1 credit.

DANC 128 (PHED 128). Beginning Social and Recreation Dance. Beginning instruction in the fundamental skills of square dance, folk dance, novelty and contemporary rhythms and in the social dance steps. 1 credit.

DANC 129 (PHED 129). Beginning Ballet. Dance techniques that evolved over the past five centuries, combined with freer contemporary techniques. It includes barre work: plie, tendu, rond de jambe; center combinations: glissade, assemble; and combinations across the floor: saute and soutenu. 1 credit.

DANC 130 (PHED 130). Beginning Jazz. Dance style based on a combination of African and European influences which has developed into the dance form seen on Broadway, film and television. Basic skills include stretching exercises for strength and flexibility, isolations and syncopated movements such as rib isolation, kicks, jump turns, and jazz runs. 1 credit.

DANC 131 (PHED 131). Beginning Modern Dance. Instruction in creative or interpretive dance utilizing specific stretching exercises and movement such as leaps, walks, bends, and turns. Emphasis on performing short dances and creating dances which can be performed with or without music. 1 credit.

DANC 132. Advanced Modern Dance. High level of skill required in any one of three dance forms: ballet, jazz, or modern dance. Prerequisite: audition. 2 credits.

DANC 133 (PHED 133). Ballroom and Social Dance. Introduces the student to the steps, rhythms, and body positions that are fundamental to ballroom and social dances. Dances that will be taught include, but are not limited to the following: waltz, fox trot, cha-cha-cha, tango, rumba, shag, and electric slide. 1 credit.

DANC 136 (PHED 136). International Folk Dance. Performance of dances from selected countries and early American culture, and an examination of the influence of the culture upon a country's folk dance and costume. 1 credit.

DANC 138. African Dance. African dance is a movement and technique course designed to explore the dances, rhythms, and chants of Africa. It also focuses on cultural enrichment, history, language and customs of the people of African ancestry. 1 credit.

DANC 228 (PHED 228). Intermediate Social and Recreation Dance. Advanced instruction in square dance, folk dance, novelty and contemporary rhythms and in the social dance steps. Prerequisite: permission of the instructor. 1 credit.

DANC 229 (PHED 229). Intermediate Ballet. Emphasis on improving ballet skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANC 230 (PHED 230). Intermediate Jazz. Emphasis on improving jazz dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANC 231 (PHED 231). Intermediate Modern Dance. Emphasis on improving modern dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANC 232. *Advanced Modern Dance.* High level of skill required in any one of three dance forms: ballet, jazz, or modern dance. Prerequisite: audition. 2 credits.

ATHLETIC TRAINING PROGRAM COURSE DESCRIPTIONS (ATTR)

Writing Intensive Courses WR

Speaking Intensive Courses SP

ATTR 200. *Introduction to Athletic Training.* A survey of the area of Athletic Training and Sports Medicine and their professional applications. The course is designed as an initial experience for students considering a career in athletic training or physical therapy. Open to non-majors. 3 credits.

ATTR 210. *Basic Skills in Athletic Training.* Practical study of procedures for the evaluation and treatment of injuries within the athletic environment which includes classroom instruction in selected basic skills. The course also involves a directed observation experience requirement and participation in the student athletic trainer mentor program. 3 credits.

ATTR 300. *Injury Mechanism and Assessment I (Lower Extremity).* An examination of the mechanism and pathology of injuries to the lower extremities. Detailed anatomy, biomechanics, evaluation, and immediate care are discussed. 3 credits. Prerequisites: ATTR 210, BIOL 207.

ATTR 310. *Injury Mechanism and Assessment II (Upper Extremity).* An examination of the mechanism and pathology of injuries to the upper extremities. Detailed anatomy, biomechanics, evaluation, and immediate care are discussed. 3 credits. Prerequisites: ATTR 210, BIOL 207.

ATTR 320. *Therapeutic Modalities.* The use of therapeutic modalities for the treatment of the injured athlete. The course includes an introduction to the physiological principles and operational procedures of contemporary therapeutic modalities as they relate to the care and treatment of athletic injuries. 2 credits. Prerequisite: ATTR 210. Co-requisite: PHYS 102.

ATTR 325. *Principles of Therapeutic Exercise.* An introduction to the concepts and principles of comprehensive rehabilitation programs including determination of therapeutic goals and objectives, selection of therapeutic exercises, methods of evaluating and recording rehabilitation progress, development of criteria for return to competition, and the physiological effects of tissue trauma/wound healing and inactivity/immobilization. 3 credits. Prerequisites: ATTR 210, KINS 386, PHYS 101.

ATTR 326. *Applied Therapeutic Exercise.* This course emphasized the application of principles and theory of therapeutic exercise in order to develop proficiency in case management and advanced rehabilitation skills using critical thinking and problem solving proficiency. Content of this course includes skillful rehabilitation examination and the design and analysis of therapeutic exercise programs. Units include gait, training, swiss balls/foam rollers rehabilitation and the application of therapeutic techniques for specific musculoskeletal injuries and conditions. Prerequisite: ATTR 325. 2 credits.

ATTR 330. *Injury Mechanism and Assessment III (Head, Neck, and Spine).* An examination of the mechanism and pathology of injuries to the head, neck, and trunk. Detailed anatomy, biomechanics, evaluation, and immediate care are discussed. 3 credits. Prerequisites: ATTR 210, BIOL 207.

ATTR 371. *Clinical Methods in Athletic Training I.* Supervised application and mastery of basic clinical proficiencies in a clinical and laboratory setting. Focus is on evaluative methods including manual muscle testing, ROM, goniometry and palpation. 2 credits. Prerequisite: admission to the athletic training program.

ATTR 372. *Clinical Methods in Athletic Training II.* Continuation of proficiency mastery through clinical instruction in a laboratory setting as well as practical experience. Coursework relates to special testing, padding and bracing, protective equipment, and casting. 2 credits. Prerequisite: admission to the athletic training program.

ATTR 410. *Athletic Training Administration.* This course utilizes an experiential approach to examine the administration of athletic training programs. Content of this course includes professional communications, record keeping, financial and human resource management, insurance and legal liability issues, professionalism, public relations, and facility planning, design and operation. 3 credits. Prerequisite: ATTR 330. SP and WR.

ATTR 420. *Medical Aspects in Athletic Training.* The emphasis of this course is on general medical conditions prevalent in athletic populations. Focus is on the recognition, treatment and prognosis of skin conditions, congenital deformities, disease, special populations, and environmental factors. Epidemiology, counseling techniques, and current pharmacology concepts are discussed. 3 credits. Prerequisites: BIOL 206-207.

ATTR 471. *Clinical Methods in Athletic Training III.* Supervised application and mastery of advanced clinical proficiencies related to evaluation and management of athletic related injuries and conditions. Included coursework involves isokinetic testing skills. 2 credits. Prerequisite: admission to the athletic training program.

ATTR 472. *Clinical Methods in Athletic Training IV.* Continuation of advanced proficiency mastery in athletic clinical education and isokinetic evaluation and interpretation are covered. 2 credits. Prerequisite: admission to the athletic training program.

ATTR 473. *Clinical Methods in Athletic Training V.* Concentrated clinical experience in athletic training. Mastery of proficiencies related to assessment and rehabilitation of athletic injuries, as well as management and administration of the athletic training room. Includes certification examination review. 2 credits. Prerequisite: admission to the athletic training program.

ATTR 492. *Clinical Internship in Athletic Training.* Supervised off-campus on-the-job learning experience designed to give students an opportunity to gain practical experience in a private clinic, educational setting, or sports organization which is involved in athletic health care. 12 credits. Prerequisites: Completion of all required courses.

GENERAL EDUCATION AND PHYSICAL ACTIVITY COURSE DESCRIPTIONS

General Education Courses *
Writing Intensive Courses WR
Speaking Intensive Courses SP

PHED 101. *Fitness Concepts through Exercise.* Examination of issues dealing with physical and mental well-being, and participation in physical activities that can improve physical and mental well-being. 2 credits. * Fulfills General Education Goal 11.

Choose one of the following activities:

Aerobic Exercise	Power Walking	Weight Training
Aerobic Dance	Yoga	Jogging
Cycling	Multiple Activities	Core Training
Swimming	Water Aerobics	Advanced Personal Training
Race Preparation: 5K through Marathon		

RECR 101. *Fitness Concepts/Adaptive Activities.* Examination of issues dealing with physical and mental well-being, and participation in physical activities that can improve physical and mental well-being. Enrollment in this class is limited to students with physical restrictions. Please see the Office of Disability Support Services for more information. *Fulfills General Education Goal 11.

Fitness Concepts through Restricted Activity

PHYSICAL EDUCATION ACTIVITY CLASSES (PHED)

To enroll in the beginning level the student should have little or no prior experience in the sport. Enrollment in the intermediate and advanced levels requires successful completion of a beginning class or meeting the prerequisites listed. The instructor reserves the right to evaluate the level of skill and make assignments as to the appropriate level.

PHED 102. *Beginning Fencing.* Instruction in guard position, foot-work, basic defense and offensive skills. Emphasis on fencing with "foil" and an overview of epee. 1 credit.

PHED 103. *Beginning Gymnastics.* An introduction to beginning tumbling and apparatus skill. Emphasis is placed on correct technique and form. 1 credit.

PHED 104. *Beginning Tennis.* Beginning instruction in the fundamental skills of forehand, backhand, serve and volley. Competitive play in women's and men's singles and doubles. 1 credit.

PHED 105. *Beginning Lacrosse/Field Hockey.* Instruction in the basic lacrosse skills of throwing, cradling, stick handling, loose ball pick-up, checking and goal play, and the field hockey skills of passing, dribbling, scoring, tackling and strategies of offensive and defensive play and interpretation of rules. 1 credit.

PHED 106. *Downhill Skiing.* Instruction in the basic skills of traversing hill, snowplow, stopping and parallel turns. Fee charged. 1 credit.

PHED 107. *Beginning Bowling.* Beginning instruction in the fundamentals of approach, release, arm swing, picking up spares, methods in scoring, rules, and etiquette on the lanes. Interclass competition with handicaps. 1 credit.

PHED 108. *Beginning Golf.* Beginning instruction in techniques in putting, short approach shots, and the full swing with irons and woods. Course includes rules and etiquette of golf. Students play at the Longwood Golf Course. 1 credit.

PHED 109. *Beginning Volleyball.* Instruction in the basic skills of serving, bump, dig, set and spike. Team defensive and offensive strategies and rules are included. 1 credit.

PHED 110. *Non-Swimming.* Emphasis on physical and mental adjustment to the water through basic swimming and rescue skills. Prerequisites: uncomfortable in water and unable to swim one width of the pool. 1 credit.

PHED 111. *Beginning Swimming.* Development of the five (5) basic strokes and basic rescue skills. Prerequisites: able to swim a width of the pool on the front and back, but uncomfortable in deep water. 1 credit.

PHED 112. *Water Aerobics.* Exercising in the water to music for the purpose of improving muscular strength, flexibility, slimness and especially aerobic fitness as well as overall swimming ability. 1 credit.

PHED 113. *Beginning Synchronized Swimming.* Instruction in rhythmic swimming, figures and sculling techniques. Performance of basic routine to music. 1 credit.

PHED 114. *Beginning Scuba Diving.* Instruction in scuba diving skills in preparation for open water dives and certification. Fee charged. 1 credit.

PHED 116. *Beginning Weight Training.* An introductory course with emphasis on current issues dealing with weight training. The student will learn and workout with various weight training programs and apply the principles to his/her individual workouts. The course employs basic techniques in proper lifting with safety procedures involved. 1 credit.

PHED 117. *Beginning Canoeing.* Basic river paddling skills in canoeing culminating in river trip(s) in class I and class II white water. 1 credit.

PHED 118. *Cycling.* An introductory activity course with emphasis upon the history and development of the modern bicycle, selection and properly fitting the bicycle to the rider, development of good riding skills, maintenance of the bicycle and knowledge and adherence to correct safety procedures. The class emphasizes the fitness and leisure application of cycling. 1 credit.

PHED 120. *Beginning Racquetball.* Basic skills and rules of the sport applied to the games of singles, doubles, and 3 player racquetball. 1 credit.

PHED 121. *Beginning Archery.* Instruction in the basic skills of bracing and embracing the bow, stance, grip, bow arm, nocking, drawing and anchoring, and aiming. Emphasis on fundamental skills and shooting form. 1 credit.

PHED 122. *Basketball.* Instruction in the fundamentals of individual and team offensive and defensive skills and their applications to the game of basketball. The rules and basic officiating techniques are incorporated. 1 credit.

PHED 123. *Beginning Equitation.* Beginning instruction in balance seat (hands, seat, feet and leg position). Proper method of groom, saddle, bridle, mount and dismount. Fee charged: \$140.00. 1 credit.

PHED 124. *Camping Skills.* Instruction in the basic camping skills such as tent pitching, firebuilding, site selection, meal planning, and trip planning. Students will plan and participate in a weekend camping experience. 1 credit.

PHED 125. *Beginning Archery and Badminton.* Instruction of the basic skills relating to shooting the arrow and including good form. Instruction in the basic skills and techniques of badminton for singles, doubles and mixed doubles play. A semester course with half the semester in archery and half in badminton. 1 credit.

PHED 126. *Beginning Yoga.* Instruction in physical (Hatha) postures with the incorporation of breath control and conscious relaxation. Emphasis on stress management, increased vitality and physical well-being. 1 credit.

PHED 127 (DANC 127). *Aerobic Dancing.* An aerobic activity which combines different styles of music with vigorous jazz and modern dance movements to increase cardio respiratory fitness. In addition to performing choreographed routines, students receive instruction in monitoring heart rate, injury prevention and a variety of other topics relevant to body/mind wellness. 1 credit.

PHED 128 (DANC 128). *Beginning Social and Recreation Dance.* Beginning instruction in the fundamental skills of square dance, folk dance, novelty and contemporary rhythms and in the social dance steps, rhumba, tango, samba, Lindy and fox trot. 1 credit.

PHED 129 (DANC 129). *Beginning Ballet.* Dance techniques that evolved over the past five centuries, combined with freer contemporary techniques. It includes barre work: plie, tendu, rond de jambe; center combinations: glissade, assemble; and combinations across the floor: saute and soutenu. 1 credit.

PHED 130 (DANC 130). *Beginning Jazz.* Dance style based on a combination of African and European influences which has developed into the dance form seen on Broadway, film and television. Basic skills include stretching exercises for strength and flexibility, isolations and syncopated movements such as rib isolation, kicks, jump turns, and jazz runs. 1 credit.

PHED 131 (DANC 131). *Beginning Modern Dance.* Instruction in creative or interpretive dance utilizing specific stretching exercises and movement such as leaps, walks, bends, and turns. Emphasis on performing short dances and creating dances which can be performed with or without music. 1 credit.

- PHED 133 (DANC 133).** *Ballroom and Social Dance.* Introduces the student to the steps, rhythms, and body positions that are fundamental to ballroom and social dances. Dances that will be taught include, but are not limited to the following: waltz, fox trot, cha-cha-cha, tango, rumba, shag, and electric slide. 1 credit.
- PHED 134.** *Track and Field.* Instruction in basic track and field events, rules, workouts, and testing. 1 credit.
- PHED 136 (DANC 136).** *International Folk Dance.* Performance of dances from selected countries and early American culture, and an examination of the influence of the culture upon a country's folk dance and costume. 1 credit.
- PHED 137.** *Orienteering.* Fundamental skills for traveling outdoors by map, compass, and observation, and an introduction to orienteering as a competitive cross country sport. 1 credit.
- PHED 140.** *Windsurfing.* Introduction to windsurfing, including how to select equipment, rig and care for the board, points of sail, nomenclature and safety. Practical experience will include basic sailing skills-tacking, jibing, beating, reaching and running-and manipulating the rig in and out of water. Prerequisite: able to swim 100 yards. 1 credit.
- PHED 141.** *Aerobic Fitness and Weight Control.* Instruction and participation in aerobic exercises and their relationship to personal health, physical fitness and weight control. 1 credit.
- PHED 202.** *Intermediate Fencing.* Review of the basic skills. Emphasis on competitive fencing. 1 credit.
- PHED 204.** *Intermediate Tennis.* Instruction in spin serve, lob and advanced drive placement. Emphasis on singles and doubles playing strategies. 1 credit.
- PHED 207.** *Intermediate Bowling.* Emphasis on improving the basic skills and introduction of the hook delivery. Prerequisites: women-bowl an average of 120; men-bowl an average of 135. 1 credit.
- PHED 208.** *Intermediate Golf.* Advanced instruction and practice with the full swing, short game and putting. Emphasis on advanced techniques and strategies related to ball control, sand shots, course management and psychological aspects of the game. Prerequisites: score below 90 on regulation 18 hole golf course or permission of instructor. 1 credit.
- PHED 209.** *Intermediate Volleyball.* Review of the basic skills, offenses and defenses, strategies and rules. Instruction in intermediate to advance play and skills. 1 credit.
- PHED 211.** *Intermediate Swimming.* Instruction designed to improve skill in mastery of five basic strokes, water safety skills and diving. Prerequisite: able to swim the length of the pool using three (3) different strokes. 1 credit.
- PHED 212.** *Life-guarding and Emergency Water Safety.* Instruction in lifesaving, first aid, CPR and lifeguard techniques leading to certification by the American Red Cross. Prerequisite: pass screening test. 2 credits.
- PHED 213.** *Intermediate Synchronized Swimming.* Junior level synchronized swimming. Figures and choreography of a routine. Prerequisite: pass screening test. 1 credit.
- PHED 214.** *Advanced Open Scuba and Coral Reef Ecology.* Held on Atlantic coral reefs leading to certification in Advanced Open Water (PADI) and Reef Ecology (YMCA). Prerequisite: ten (10) logged dives. (Fee charge.) 2 credits.
- PHED 217.** *Intermediate Canoeing.* Development of river paddling skills such as peel out, surfing, ferring, and eddy turns on class II and class III white water. 1 credit.

PHED 223. *Intermediate Equitation.* Instruction in the fundamentals of position and control with emphasis on security with the walk, trot, and canter. Basic hunter exercises of circles, turns, transition and cross-country riding. (Fee charge.) 1 credit.

PHED 224. *Outdoor Skills.* Develop the technical skills and knowledge necessary for participation in back country trips, backpacking, rappelling, rock climbing, orienteering, equipment, clothing and first aid. Prerequisite: PHED 117 or permission of instructor. 2 credits.

PHED 228 (DANC 228). *Intermediate Social and Recreation Dance.* Advanced instruction in square dance, folk dance, novelty and contemporary rhythms and in the social dance steps. Prerequisite: permission of the instructor. 1 credit.

PHED 229 (DANC 229). *Intermediate Ballet.* Emphasis on improving ballet skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHED 230 (DANC 230). *Intermediate Jazz.* Emphasis on improving jazz dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHED 231 (DANC 231). *Intermediate Modern Dance.* Emphasis on improving modern dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHED 241. *Advanced Aerobics.* Instruction and participation in aerobic activities for students with good cardiovascular endurance. The emphasis is on long distance training and its effect on the body systems. 1 credit.

PHED 314. *Fitness Swimming.* Emphasis on competitive stroke with workouts designed for endurance and speed. 1 credit.

PHED 315. *Water Safety Instructor.* Methods of teaching and in depth analysis of swimming and personal safety skills leading to American Red Cross certification as a swimming instructor. Prerequisite: pass screening test. 2 credits.

KINESIOLOGY ACTIVITY/THEORY COURSES (KINS)

KINS 150. *Fitness Education.* Students in this course will examine issues relating to the teaching of physical fitness in the public schools and will participate in a wide range of fitness activities. These issues include the definition of physical fitness, fitness related to stages of development, and assessment of physical fitness. The main focus of the course, however, will be on the participation in fitness activities that are appropriate for use in educational settings, including aerobic dance. 1 credit.

KINS 175. *Introduction to the Profession of Health and Physical Education.* An introductory course designed to acquaint students with the health and physical education profession and allied fields. Students will be introduced to the health and physical education major at Longwood and address specific major requirements. 1 credit.

KINS 205. *Introduction to Exercise Science.* This course is designed to introduce majors to aspects of the content areas in the discipline, including technology, certifications, professional associations, and career opportunities. These initial lessons allow for examination of the philosophical, historical, and psycho-social origin of the fields of exercise science. Current issues and future directions will also be explored. 2 credits.

KINS 216. *Essentials of Strength Conditioning.* This course addresses the selection and implementation of advanced resistance training methods, focusing primarily on periodization programs. Components include discussions of physiological principles and strength assessment as they relate to resistance training. Prerequisites: PHED 116 and BIOL 207 or permission of the instructor. 3 credits.

KINS 217. *Olympic Lifting Movements.* A sequel to PHED 116, this course addresses the technique and theory of Olympic lifting movements, specifically the clean and jerk and the snatch, in addition to their assistance exercises, polymetrics and medicine ball training, as a means of training for explosive strength and power.

KINS 275. *Foundations of Physical Education And Sport.* Survey of the historical philosophical bases of health and physical education. 3 credits. WR

KINS 280. *Motor Development.* This course emphasizes the sequential, age-related, and continuous processes whereby movement behavior changes across the life span. Attention is directed toward physical growth and aging as well as acquisition of basic skills, perceptual motor development, and fitness development. Implications for future exercise scientists and physical educators are emphasized. 3 credits

KINS 292. *Internship in Physical Education.* A semester-long, on-the-job learning experience designed to apply the principles of physical education. 1-18 credits.

KINS 295. *Special Topics in Physical Education.* Selected topics in physical education which will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

KINS 299. *Prevention and Care of Athletic Injuries.* A lecture course is designed to provide entry-level knowledge in the field of sports related injuries. Content areas include: basic anatomy of common injuries, emergency procedures, evaluation techniques, medical conditions affecting athletes and preventive measures to reduce the incidence of injuries. Standard treatment protocols and legal and ethical issues are also discussed. Course fees are listed in the current course schedule. Prerequisite: A current first aid certificate. 3 credits.

KINS 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on physical education. 1-18 credits.

KINS 350. *Skill Acquisition and Analysis I: Team Sports.* The purpose of this course is to provide learning experiences that will lead to the development of basic skills in team sports. In addition to skill acquisition, the course will focus on how to plan the four stages of games skill development through the use of extending, refining, and application tasks. An emphasis will be placed on the use of the games stages and movement framework as a guide for designing a variety of sport games experiences for the grades 5-12 student. 3 credits.

KINS 351. *Skill Acquisition and Analysis II: Teaching Fundamental Movement Concepts, Skill Themes and Dance.* The purpose of this course is to provide learning experiences that will lead to the development of fundamental movement concepts, skill themes and dance skills. Topics include manipulative skills, locomotor patterns, transfer of weight, balance, and rhythmic activities. Co-requisite: KINS 377. 3 credits.

KINS 352. *Skill Acquisition and Analysis III: Lifetime Activities.* The purpose of this course is to provide learning experiences that will lead to the development of fundamental skills used in lifetime activities and expertise in teaching. The course will focus on how to plan for the four stages of game skill development. 3 credits.

KINS 362. *Administration in Exercise Science and Sport.* Practice and theory in organizing and administering intramurals. 3 credits.

KINS 363. *Assessment and Evaluation in Health and Physical Education.* Contemporary practice and theory in assessment of performance in health and physical education in the NK-12 setting. This includes strategies for selection, administration, and evaluation of assessment tools in health-related fitness, skill and motor performance, the cognitive domain, measuring affective behavior, as well as grading performances. 3 credits.

KINS 364. *Adapted Physical Education.* Symptoms, causes and implications of various types of disabilities in relation to programming. Techniques in individual educational planning, activity adaptation and classroom organization. 3 credits.

KINS 375. *Exercise Science Seminar.* Designed to help the student understand principles fundamental to the professional field as well as to provide students with an understanding of scientific hypotheses currently being investigated, this seminar course will consist of three separate sections of varying topics. Prerequisites: HLTH 215, 33, or permission of the instructor. 3 credits.

KINS 376. *Sports Nutrition.* Discussion of nutrient use and requirements with the increased demand of exercise and sports activities and discussion of ways to meet these demands. Emphasis will be on the application of sports nutrition concepts for recreational and collegiate athletes. Prerequisites: BIOL 206 and 207. 2 credits.

KINS 377. *Teaching Elementary Physical Education.* The first of three courses in the pedagogy sequence is designed to explore the teaching-learning process and develop teaching skills. This course focuses specifically on the planning and implementation of developmentally appropriate physical education programs in the elementary school. Issues such as diversity, curriculum development aligned with the Virginia Standards of Learning, interdisciplinary teaching through physical education, behavior management, teaching techniques with emphasis on the "Skill Themes" approach, and assessment of learning. PHETE candidates will have field teaching experiences with PK-4 students. Co-requisite: KINS 351. Pre-requisite: Admission to Teacher Preparation Program which includes passing Praxis I. 4 credits. SP

KINS 378. *Teaching Middle School Physical Education.* This is the second course in the pedagogy sequence and is designed to explore the teaching-learning process and develop teaching skills specifically for the middle school grades (grades 5-8). This course focuses specifically on the planning and implementation of a developmentally appropriate physical education program for the middle school (grades 5-8). Learning experiences are provided to address issues such as diversity, characteristics of children in the middle school years, curriculum development aligned with the Virginia Standards of Learning, behavior management, teaching techniques and assessment of learning. Teacher candidates will have an extensive field teaching experience at the middle school level. Co-requisite: KINS 350. Pre-requisite: KINS 377. 4 credits.

KINS 382. *Teaching High School Physical Education.* This is the third course in the pedagogy sequence and allows teacher candidates to refine their teaching skills prior to student teaching. The course focuses on the high school level of physical education (9-12). In high school physical education, students are to develop the skills necessary to become physically active for a lifetime. To accomplish that goal, this course covers such issues as characteristics of learners, curriculum development aligned with the Virginia Standards of Learning, behavior management, teaching techniques, and assessment of learning, with special emphasis on the "Sport Education" model of teaching physical education as students learn lifetime physical activities. Teacher candidates will have an extensive field teaching experience at the high school level. This course is designed as speaking intensive. Co-requisite: KINS 352. Pre-requisite: KINS 378. 4 credits. SP

KINS 385. *Sport Psychology.* An examination of the psychological dimensions which influence an athlete's skill acquisition and performance in the competitive environment. 3 credits.

KINS 386. *Biomechanics.* The analysis of human movement with an emphasis on the knowledge and methods of mechanics applied to the structure and function of the human system. This course provides a knowledge base for a systematic analysis of motor skills and exercise regimes as well as practical experience in applying knowledge to the analysis of a performer and/or performance. Prerequisite: Biology 207 or permission from program coordinator. 4 credits. **

KINS 387. *Physiology of Exercise.* Lecture and laboratory experiences in the physiological responses of the body to the physical activity in everyday life and in sports. Prerequisites: Biology 206 and Biology 207. 4 credits.

KINS 389. *Methods of Teaching Health and Physical Education for Elementary Classroom Teachers.* This course is designed to acquaint liberal studies majors with content information, organizational skills, and the methods of instruction needed to teach health education and physical education in the K-6 school. Prerequisite: EDUC 260 or SPED 202 and sophomore standing required. 3 credits.

KINS 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

KINS 392. *Fitness Internship.* An 8-10 week supervised field experience (minimum of 320 clock hours). The internship will take place during the summer between the junior and senior years. To be eligible for participation the student must be of junior standing, enrolled in the fitness specialist option and have an overall GPA of 2.0. Prerequisites: KINS 387, 486. 8 credits.

KINS 393, 394, 395, 396. *Principles and Techniques of Officiating.* The study of current roles and practices in the techniques of officiating. (393-Field Hockey; 394-Gymnastics; 395-Volleyball; 396-Basketball) 1 credit.

KINS 397. *Mechanical and Physiological Principles of Sport and Exercise.* The physiological responses of the body to exercise and the mechanical principles of human movement. Designed for students other than physical education majors; physical education majors may not take this course. 3 credits.

KINS 398. *Ethics in Sport and Physical Education.* An examination of the basic philosophic issues concerning ethics and moral reasoning and how these issues relate to sport. Students will be encouraged to develop their ability to make informed ethical choices and decisions relating both to sport and to their own personal and professional lives. This course is designed for all students of any major Junior or Senior Status. 3 credits. * Fulfills General Education Goal 13.

KINS 399. *Advanced Exercise Physiology.* A study of the acute and chronic physiologic adaptations to anaerobic and aerobic energy metabolism, energy support systems, and adaptations to training. 3 credits.

KINS 430. *Applied Exercise Physiology.* The application of physiological principles of training for physical fitness and sport will be examined. Other topics include aspects of neuromuscular and cardiovascular exercise. A variety of applied activities will be investigated to assist the student in understanding principles fundamental to the professional field. Prerequisite: KINS 387. 3 credits.

KINS 462. *Administration of Exercise Science and Sport.* Administrative theory applicable to a variety of settings including education, industry, health clubs, Y's. 3 credits. WR

KINS 470. *Research in Health, Recreation and Kinesiology.* Methods, techniques, and application of the research process related to a variety of functions typically found in health, physical education, and recreation professions. Designed to acquaint students with practical and applicable tools emphasizing research methodology and elementary data treatment through practical experiences, including computer use. 3 credits. WR and SP

KINS 482. *Directed Teaching in Elementary and Secondary Physical Education and Health.* Students are placed in elementary and secondary schools where they are responsible for the planning and delivery of instruction in the areas of health and physical education. 50 percent of the experience is spent at the elementary level (K-6) and 50 percent at the secondary level (6-12). The experience is directed by a cooperating teacher(s) and a Longwood supervisor direct to the experience. 11 credits. \$300 fee.

KINS 483. *Seminar in Teaching.* This seminar provides an opportunity for teacher candidates during the student teaching experience to interact with peers, PK-12 teachers, and professors about teaching, ideas, and innovations. Reflection on the teaching experience is emphasized. Critical issues in teaching are discussed. Practical solutions to the teacher candidates' most pressing challenges are explored. The teacher candidate will prepare an interview/employment portfolio and complete a Teacher Work Sample. 2 credits.

KINS 485. *Motor Learning and Control.* Processes and conditions influencing the acquisition and performance of motor skills. 3 credits.

KINS 486. *Exercise Testing and Prescription.* This course is designed to provide students with an understanding of fundamental guidelines for exercise testing and prescription methodologies and clinical experiences in applying these methodologies while working under the guidance of an academic supervisor. Students will also gain knowledge relating to the administration of programs for special populations. Students will work in a minimum of one practicum setting during this course. Prerequisite: KINS 387 or permission of the Instructor. 3 credits.

KINS 487. *Clinical Exercise Physiology.* Designed to advance student's knowledge, skills, and abilities (KSA's) of exercise testing, prescription, metabolic assessment, and fitness program administration to assist both pre-professionals in the field and candidates for certification. Clinical experience is emphasized. Prerequisite: KINS 486. 3 credits. SP

KINS 488. *Exercise Intervention in Disease.* This course examines the impact of exercise on the disease process, focusing primarily on cardiovascular disease and diabetes, and to a lesser extent on pulmonary disease and osteoporosis. Emphasis is placed on a review of epidemiological research and exercise/diet intervention studies. Prerequisites: KINS 386, 387, 486 or permission of instructor. 3 credits. SP

KINS 489. *Health Fitness Management.* This course is designed to advance students' knowledge, skills, and abilities (KSA's) related to exercise leadership, health education, and fitness program administration. Practical experience is emphasized. Prerequisites: HLTH 215, KINS 486, or permission of instructor. 3 credits.

KINS 490. *Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

KINS 491. *Practicum in Coaching.* This course is designed to provide the future coach with the opportunity to apply the principles and practices of coaching youth sports. This entails supervised observation, lesson/practice development, and direct work with student athletes and coaches in a specific sport. This is a multicultural learning course and serves as part of your education that enhances your coaching experiences. Students are required to work collaboratively with a school or organization. Prerequisite: 9 credits in the minor. 3 credits.

KINS 492. *Internship.* A semester-long, on-the-job learning experience designed to apply the principles of physical education. 1-18 credits.

KINS 495. *Special Topics in Physical Education.* Selected topics in physical education which will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits. Prerequisite: permission of the Instructor.

KINS 496. *Coaching Interscholastic and Intercollegiate Athletics.* A seminar course to include the following topics: the role of athletics in the education setting, the organization and administration of athletics on the interscholastic and intercollegiate levels, the role of the teacher/coach, and special issues in athletics. 3 credits.

KINS 497. *Special Projects in Physical Education.* Independent study and research projects for qualified students. 1-3 credits.

KINS 498. *Honors Research in Physical Education.* Students conduct research in physical education under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

RECREATION COURSE DESCRIPTIONS (RECR)

Writing Intensive Courses WR

Speaking Intensive Courses SP

RECR 110. *Introduction to Therapeutic Recreation.* History, philosophy, rationale for service and overview of the profession of therapeutic recreation; and overview of therapeutic recreation settings and employment opportunities. 3 credits.

RECR 111. *Foundation of Leisure Services.* The history and development of the recreation profession, definitions of recreation, theories of play, and the role of recreation and leisure in society. Providers of leisure services and general operational aspects of various organizations and agencies are investigated. 3 credits. WR

RECR 115. *Arthritis Aquatics Practicum.* A course designed to provide students with a practical experience in teaching aquatic exercise for individuals diagnosed with arthritis. Topics include the meaning and types of arthritis, benefits of exercise, safety issues, and teaching older adults basic and endurance aquatic exercise. 1 credit.

RECR 120. *Therapeutic Recreation: Professional Practice I.* This course will introduce the student to professional behaviors and beginning professional practice skills in therapeutic recreation services; overview the diagnostic groupings and populations served in health care settings and community services promoting health and well-being. 3 credits.

RECR 205. *Recreation Leadership and Activity.* The development of creative leadership skills, methods, and techniques that can be applied in various recreational settings through the use of social and informal recreational activities. 3 credits.

RECR 210. *Plan and Design of Recreation Areas and Facilities.* This course is designed to analyze the many elements of managing recreational resources. Topics to be discussed include indoor and outdoor facility usage, maintenance and operation, design, management application, and liability/risk management issues. 2 credits.

RECR 237. *Adventure Programming.* This course will involve the theory and application of outdoor and experiential education; students will have the opportunity to plan, organize and implement a variety of outdoor and environmental education activities for a variety of age and population groups. Students will also learn and practice specific skills related to camping and outdoor education activities. 3 credits.

RECR 250. *Leisure Education and Counseling.* This course is an exploration and application of the various theories and practice of leisure education. Emphasis will be placed on the exploration of self in relation to leisure behavior. Instruction will also include: teaching methods, the learning of appropriate activities; and leisure counseling sessions. 3 credits.

RECR 292. *Internship in Recreation.* A semester-long, on-the-job learning experience designed to apply the principles of recreation. 1-18 credits.

RECR 295. *Special Topics in Recreation.* Selected topics in recreation which will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

RECR 300. *Pre-Internship Seminar.* Lecture, discussion, and lab experiences to prepare majors for their internships. Topics will include agency and college relationships, resume writing, self-assessment, professional standards, organizations and ethics, interviewing techniques, and placement opportunities. 1 credit.

RECR 301. *Therapeutic Recreation in Mental Health.* An exploration of socio-cultural and psycho-dynamic dimensions of mental health and mental illness. Students will draw from foundation of abnormal behavior; focus on functioning characteristics of different mental illnesses as determined by the DSM-IV, and the preventative and restorative functions of therapeutic recreation and application of the therapeutic recreation process. Prerequisites: PSYC 356, 320, 371. 3 credits.

RECR 303. *Therapeutic Recreation and Physical Disabilities.* In-depth study of predominant physical disabilities and implications for therapeutic recreation intervention. Includes focus on specific rehabilitation and habilitation services, activities and technologies; over-view of competitive and recreational sport adaptations; legislation and safety issues; and recreation and support organizations for people who are physically challenged. Prerequisites: BIOL 206, BIOL 207, RECR 371. 3 credits.

RECR 304. *Leisure and Aging: Therapeutic Services.* This course explores the process of aging, including biological and sociological aspects. Theories of aging, concepts of leisure and aging, and principles and practices related to delivery, planning, implementation, and evaluation of leisure services of older adults are investigated. Prerequisite: RECR 205. Co-requisite: RECR 320, 371 or permission of the Program Coordinator. 3 credits.

Recreation 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on recreation per semester. 1-18 credits.

RECR 311, 312. *Study Abroad.* Primarily intended for transfer of credit earned abroad in courses on recreation per semester. 1-18 credits.

RECR 320. *Facilitation Techniques in Therapeutic Recreation.* This course prepares therapeutic recreation students in the technical realm by identifying and applying the principles of planning, leading and evaluating therapeutic intervention (facilitation) techniques which are used to empower individuals with disabilities to overcome difficulties or obstacles. Prerequisites: PSYC 330, RECR 205, 250. 3 credits. SP

RECR 338. *Outdoor Education in the Schools.* Development of outdoor education theory and understanding of components and implementations of an outdoor education program in a K-12 curriculum. Utilization of outdoor skills to develop the ability to teach and broaden students' physical, social, and cognitive skills important in the educational process. Prerequisite: KINS 380. 2 credits.

RECR 340. *Introduction to Outdoor Adventure Skills.* This course will address the basic skills in canoeing, rock climbing, and orienteering. Students will learn the skills, techniques and safety factors involved in each activity and are able to transfer skills into practice. 3 credits.

RECR 350. *Ropes Course and Initiative Dynamics.* Provides physical and mental challenges through adventure activities. Leadership, communication, decision-making and problem solving will be enhanced. The development of creativity, ingenuity, and trust are essential elements that will be experienced throughout the course. 3 credits.

RECR 360. *Therapeutic Recreation for Children Disabilities.* This course is designed to prepare TR students for work with children challenged by illnesses, disabilities or environmental situations requiring particular sensitivity and specialized therapeutic interventions. Prerequisites: BIOL 206, 207, PSYC 330, RECR 320, 371. 3 credits.

RECR 371. *Program Planning in Leisure Services.* Application of the essential elements of programming within the context of recreation and leisure services. This course will address both the theory and techniques of recreation programming, reflecting a benefit-based approach; and designed to support programming with a socially purposeful end for varied constituent groups. Prerequisites: BIOL 206, 207, PSYC 330, RECR 205, 250. 3 credits.

RECR 375. *Leadership Development through Wilderness Pursuits.* Leadership development through a variety of outdoor experiences and situations. Demonstrations and practical applications of technical skills, problem solving, decision making, and group dynamics. Planning, implementation, and development of outdoor skills and knowledge for back-country travel. 3 credits.

RECR 390. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated as 391. 1-18 credits.

RECR 392. *Junior Internship.* A 10-12 week supervised practicum in clinical, community or outdoor therapeutic recreation settings during the summer after completion of the junior year. Prerequisites: RECR 301, 303, 304, 320, 360, 408, HLTH 160 or 260; and 2.25 overall GPA and 2.50 in major. 6 credits.

RECR 408. *Therapeutic Recreation: Professional Practice II.* Current principles and practice of therapeutic recreation will be studied and applied through the use of systematic programming. Emphasis placed on assessment, individual treatment plans, documentation and client evaluation; and advanced professional communication and behavior. Prerequisites: Taken semester prior to Junior Internship; and RECR 304, 320, 371. Co-requisites: RECR 301, 303, 360. 3 credits.

RECR 410. *Supervision and Administration of Leisure Services.* Application of management theory and techniques of leisure service delivery, including such areas as organization, supervision techniques, financing and budget, personnel, public relations, legal foundations and liability. Prerequisites: RECR 301, 303, 304, 320, 360, 392. 3 credits.

RECR 420. *Environmental Education Resources.* This course is designed to explore and provide ways to sensitize human beings to the environment. Emphasis will be placed on examining a variety of ways to interpret the envi-

ronment in order for people to develop environmental ethics and behaviors. Topics such as history and philosophy, environmental ethics, culture and environmental values and environmental education will be covered. Unique to this class will be the opportunity to apply class information to practical experience in teaching and the development of environmental projects. 3 credits.

RECR 437. *Group Dynamics*. Includes analyses of TRS group facilitation styles, skills and techniques. Content and exercises emphasize comprehension of small group behavior; group processes and dynamics; verbal and non-verbal communication, and effective problem-solving and decision-making. Prerequisite: RECR 392 or permission of instructor. 3 credits. SP

RECR 461. *Senior Seminar*. This course is the capstone course for the therapeutic recreation degree. The student will be provided opportunities for critical thinking and application of knowledge and skills acquired throughout the program; and an examination of modern trends and issues in current recreation literature and the leisure industry, from the philosophical basis of social responsibility for the public good. Senior internship and credentialing procedures will be addressed. Prerequisites: RECR 392, 408 and permission of the Program Coordinator. Co-requisites: RECR 410, 437, 470. 3 credits.

RECR 463. *Special Projects in Therapeutic Recreation*. Qualified students will pursue independent study projects and/or directed research under supervision of an instructor. Nature of study will depend on interests and needs of the students. 1-3 credits.

RECR 470. *Research in Health, Recreation, and Kinesiology*. Methods, techniques, and application of the research process related to a variety of functions typically found in health, physical education, and recreation professions. Designed to acquaint students with practical and applicable tools emphasizing research methodology and elementary data treatment through practical experiences, including computer use. Prerequisites: RECR 392, 408. Co-requisites: RECR 410, 437, 461. 3 credits. WR

RECR 487. *Practicum Experience in Outdoor Education*. Students will work in an outdoor education related position OR participate in an outdoor education program. Length and intensity of job and/or experience will directly relate to number of credits received (1-3). The experience will enable students to broaden their perspective about career choices and strengthen their knowledge, skills and experience in outdoor education. Students are expected to participate in an experience that will provide them an extended experience and exposure in an outdoor setting. 1-3 credits.

RECR 490. *Independent Study*. Individualized study. 1-18 credits.

RECR 492. *Senior Internship* A minimum of 14 weeks (560 hours) educational experience during the senior year designed to provide maximum opportunities for the student majoring in therapeutic recreation to participate in selected professional laboratory experiences. Spring only or permission from Program Coordinator. Prerequisites: Completion of all coursework, minimum GPA 2.50 TR content courses, and GPA 2.25 overall, permission of the Program Coordinator. 12 credits. \$100 fee.

RECR 495. *Special Topics in Recreation*. Selected topics in recreation which will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

RECR 498. *Honors Research in Recreation*. Students conduct research in recreation under the direction of a faculty member and the Senior Honors Research Committee. May be repeated as 499. 3 credits. WR

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