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LONGWOOD

2004-2005 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, 2004. The Catalog and related announcements remain in effect until June 1, 2005. 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 Allied Health Education Programs (CAAHEP). 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

FALL SEMESTER 2004

Residence halls open from 8:00 to 2:30 p.m. for new students move in

Welcome Week begins - August 26

Final registration - August 27

Upperclass students move into residence halls - August 28

Classes begin at 8:00 a.m. - August 30

Labor Day holiday - September 6

Last day to add or drop a class - September 7

Grade estimates due; pass/fail deadline - October 11

Fall Break - October 18-19

Classes resume at 8:00 a.m.; all undergraduate incompletes due from SP04 and SU04 - October 20

Deadline to withdraw with a "W" - October 20

Advising Begins - November 8

Advising Ends - November 19

Student holiday begins after classes - November 23

Classes Resume at 8:00 a.m. - November 29

Classes end; Graduate incompletes due for SP04 - December 10

Reading Day - December 11

Examinations - December 13-17

All grades due at 8:30 a.m. - December 20

SPRING SEMESTER 2005

Orientation for new students - January 14

Final registration - January 14

Classes begin - January 17

Last day to add or drop a class - January 24

Grade estimates due - February 28

Deadline to elect pass/fail option - February 28

All undergraduate incompletes due for F04 - March 7

Deadline for students to withdraw with a "W" - March 7

Spring Break begins after classes - March 11

Classes resume at 8:00 a.m. - March 21

Advising Begins - March 24

Advising Ends - April 6

All graduate incompletes due for SU04 and F04 - April 29

Reading Day - April 30

Examinations - May 2 - May 6

Senior Grades due at 8:30 - May 10

All grades due at 8:30 a.m. - May 11

Final audit for graduation candidates - May 13

Commencement - May 14

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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 a special group of advisors who participate in the Longwood Seminar program.

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 may 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.

Course numbers between 000 and 099 indicate foundation-level courses. These courses may be required of some students to master deficiencies in certain fundamental skill areas prior to enrolling in courses requiring those skills. Foundation level courses do not carry credit toward an undergraduate degree.

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.

Registration Procedures

Undergraduate students are expected to register in person with their advisor, in person in the Office of Registration or via WIN 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 to avoid a late registration fee.
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. (The degree-seeking student eligible for "Registration" who does not register prior to this final date incurs a late registration fee.)

Drop/Add Period

Students may make schedule adjustments (adds and/or drops) until the close of business on the sixth day of classes. A consultation with the advisor is encouraged for any change made during this period. 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 noon 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 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.

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 noon 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 this 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 suspended, 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.

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
- B: Above average work
- C: Average work
- D: Below average, but passing work
- P: Pass
- F: Failure

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.

Special Grading

- 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.*
- R: Re-enroll. This symbol indicates that a student has made satisfactory progress, but needs to repeat the course to reach the required exit proficiency level. The R grade will be used only in English 003 and Mathematics 004.
- 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 symbol indicates participation on a non-credit basis by students who meet certain minimum standards set by the course instructor. 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 symbol 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.)

A change in registration from "audit" to "credit" or from "credit" to "audit" must be effected by the end of the add period. 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 Hours

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

Under this system, 4 quality points are given for each credit on which an "A" grade is made; 3 quality points are given for each credit on which a "B" grade is made; 2 quality points are given for each credit on which a "C" grade is made; and 1 quality point is given for each credit on which a "D" grade is made. No quality points are given if a grade of "F" is made.

The term quality hours refers to the total number of hours on which the grade point average is calculated. This measure is derived from hours attempted by subtracting the equivalent credits for those courses that are foundation-level courses which are taken as pass/fail or under any other grading option which excludes calculation in the grade point average, those in which a grade of "I" was awarded, those in which a grade of "W" was awarded, and those which were taken for graduate credit.

Under the four point system, a student's grade point average may be computed by dividing the total number of quality points by the total number of quality hours.

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. 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 repeated grade will be included in grade point average calculations.

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 30th day of regularly scheduled classes and are available to students via WIN (Web Information Network) and academic advisors via the student information system.

Estimates are not recorded as part of the student's permanent academic record. They are, however, an important warning of academic risk to students and advisors.

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. B.A. or B.S., 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 (for example, the Comprehensive Test of Phonological Processing [C-TOPP] would currently be required for a petition to waive General Education Goal 10.)

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 semester and at the end of the last summer session. Students with cumulative grade point averages below 2.0 at the end of the spring semester will be notified that unless they raise their cumulative grade point average by the end of the last summer session they will be placed on probation at that time. Probation indicates serious academic difficulty and notice is placed on the student's academic record. 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 is a regular semester, spring and summer are combined as a regular semester **except** when a student has been readmitted after suspension); **OR**
2. Their cumulative grade point average falls below 1.0 with 1-23 quality hours at Longwood; **OR**
3. Their cumulative grade point average falls below 1.5 with 24 or more quality hours at Longwood.

Students are suspended at the end of the fall semester and at the end of the last summer session. Students with cumulative grade point averages that qualify for suspension under the above criteria at the end of the spring semester will be notified that unless by the end of the last summer session they raise their cumulative grade point average so that they no longer meet any of the above criteria they will be suspended at that time. Suspended students may not enroll in classes at Longwood for academic credit.

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 may elect to attend summer school after sitting out spring semester, however, the student will be subject to the probation and suspension policy at the end of the summer. A second suspension means required withdrawal from the institution for a minimum of five calendar years. Notice of suspension is placed on the student's academic record.

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 (spring and summer are not combined and a student can be re-suspended at the end of a spring 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. To a third-party agency as expressly designated in writing by the student.
5. As required by judicial order or court subpoena, or as may be required or permitted by law.
6. 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.
7. 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, Graham Building
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.

Written requests for a transcript 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 satisfied the Longwood's General Education Goals 1 - 9 and 11, 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.

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. Goal 10 is not fulfilled through articulation agreements. Foreign language study must be at the 201 level or higher.

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 MCCC.
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 Course

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 Studies

Nancy F. Krippel, Associate Provost & Director
Kathy Charleston, Assistant Director
Susan Finch, Secretary

(See Graduate Catalog www.longwood.edu/graduatestudies for further details)

Longwood offers graduate level programs leading to the degree of Master of Science with majors in Education, Environmental Studies and Sociology, and the degree of Master of Arts with a major in English. The graduate program is designed to provide capable students with opportunities for individual inquiry and to prepare qualified school personnel for assuming leadership roles in professional education. In the education major, areas of concentration include: Community and College Counseling, Curriculum and Instruction Specialist/Elementary Education, Curriculum and Instruction Specialist/English, Curriculum and Instruction Specialist/Modern Languages, Curriculum and Instruction Specialist/LD, E/BD, and Mild MR, Educational Leadership, Guidance and Counseling, Literacy and Culture, and School Library Media. The Special Education NK-12 Initial Licensure and Elementary Education PreK-6 Initial Licensure programs are available for persons with a baccalaureate degree in any discipline that wish to obtain a master's degree plus a teaching license in those two areas. In addition, licensure only programs in Educational Leadership, School Library Media and Special Education are available. In the English major, the areas of concentration include literature, education and writing, and secondary (6-12) initial licensure. The Environmental Studies major is a natural science based program and the Sociology major is a criminal justice based program.

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 Director of Graduate 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 Director of Graduate 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. Applications for graduate study are reviewed by the graduate admissions committee in each program on a rolling basis except in the two education counseling concentrations that only review applications three times a year after the published deadlines. For further information regarding admission to the graduate program, contact the Office of Graduate Studies, Longwood University, 434.395.2707 or graduate@longwood.edu or visit the web site at www.longwood.edu/graduatestudies. Specific requirements for admission are outlined in the *Graduate Catalog*.

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 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	B.A., B.S.
Biology	B.A., B.S.
Business Administration	B.S.B.A.
Chemistry	B.A., B.S.
Communication Studies	B.A.
Community Health Education	B.S.
Computer Science	B.A., B.S.
Criminology and Criminal Justice	B.S.
Economics	B.A., B.S.
English	B.A.
History	B.A.
Kinesiology	B.S.
Liberal Studies	B.A., B.S.
Mathematics	B.A., B.S.
Modern Languages	B.A.
Physics	B.A., B.S.
Political Science	B.A., B.S.
Psychology	B.S.
Social Work	B.A., B.S.
Sociology	B.A., B.S.
Therapeutic Recreation	B.S.
Visual and Performing Arts	B.A., B.M., B.F.A.
• 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	Physics
Art History	Criminology &	History	Political Science
Art, General	Criminal Justice	International Studies	Pre-Professional
Biology	Earth Science	Journalism &	Clinical Studies
Business Administration	Environmental Studies	Professional	Psychology
Chemistry	Economics	Writing	Sociology
Coaching	English	Mathematics	Spanish
Communications Studies	French	Music	Special Education
Computer Science	Geography	Outdoor Education	Theatre
Computer Security,	German	Philosophy	Women's Studies
Forensics, and Law	Graphic Design	Photography	

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 B.S. or B.A. degree in physics from Longwood and a B.S. 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 B.S. or B.A. degree in physics from Longwood University and a M.S. 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 B.S. or B.A. in physics from Longwood and a M.S. 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 B.S. in Biology from Longwood and a M.S. 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 B.S. 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 five degree programs offered. (Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Science in Business Administration 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. All students must pass proficiency tests in computer competencies.
7. 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.)
8. Not more than 14 hours of credit by correspondence.
9. Approval of the individual by the general faculty as a candidate for graduation.
10. 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.

Students must pass computer proficiency tests. Students are strongly encouraged to satisfy this requirement by the end of their sophomore year. Major programs may specify additional computer competencies.

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 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 10, 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 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, 336, 354, 359, 360; Geography 241, 352; Political Science 314, 336, 337, 375, 395, 469.

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

Art
Communication Studies
Dance
Literature
Modern Language
Music
Philosophy
Religion
Theatre

Social Sciences

Anthropology
Economics
Geography
History
Political Science
Psychology
Sociology
Criminology

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.

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 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, 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.

Computer Competency Requirement

Students must pass computer proficiency tests. Students are strongly encouraged to satisfy this requirement by the end of their sophomore year. Major programs may specify additional computer competencies.

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 graduation ceremonies. Graduating students will receive their diplomas on the day 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.

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 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 10, 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 College 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 |
| 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/4 credits |
| MUSC 102, 103, 104 | <i>Instrumental Ensemble</i> / 1 credit each |
| All 3 semesters in appropriate sequence (consecutive semesters preferable) are required in order to satisfy General Education Goal 4. | |
| MUSC105, 106, 107 | <i>Choral Ensemble</i> / 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 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

MATH 121	Functions and Graphs/3 credits
MATH 131	Mathematical Thinking/3 credits
MATH 171	Statistical Decision Making/3 credits
MATH 164	Precalculus/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
GNED 2F1	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/WSTU 106	Introduction to Women's Studies/3 credits
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ECON 111	Economic Issues for the 21 st 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 |
| HIST 200 | History of China/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. Goal 10 is not fulfilled through articulation agreements. Foreign language study must be at the 201 level or higher.

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, Yoga, Cycling, Multiple Activities, Swimming, Water Aerobics, Strength Training, or Restricted Activities.

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

CDIS 396	Ethics for Communication Disorders Professionals/3 credits
CMSC/MATH 350	Ethical Issues in Mathematics and Computer Science/3 credits
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
PHED 398	Ethics in Sports and Physical Education/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 earned 75 credit hours 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
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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.

COLLEGE OF BUSINESS AND ECONOMICS

Accredited by AACSB International – The Association to Advance Collegiate Schools of Business

Evelyn C. Hume, *Dean*

Melinda I. Fowlkes, *Assistant Dean*

Robert F. Dame, *Assistant Dean for External Affairs & Professional Development*

Janet C. Evans, *Executive Secretary to the Dean*

Kathy C. Dunnivant, *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, and Finance

Mary A. Flanigan, *Chair*

Department of Management, Marketing, and Computer Information Management Systems

C. Mitchell Adrian, *Chair*

McGaughy Professional Development Center

Robert F. Dame, *Director*

Regina L. Royster, *Education Support Specialist*

Department of Military Science

Master Sergeant Jim Carver, *Noncommissioned Officer in Charge*

College of Business and Economics

Evelyn C. Hume, *Dean*

Melinda I. Fowlkes, *Assistant Dean and Assistant Professor of Business*

Robert F. Dame, *Assistant Dean for External Affairs and Professional Development*

Mary A. Flanigan, *Department Chair and Associate Professor of Accounting*

C. Mitchell Adrian, *Department Chair and Associate Professor of Management*

Janet C. Evans, *Executive Secretary to the Dean*

Kathy C. Dunnavant, *Executive Secretary to the Faculty*

Faculty

Cheryl L. Adkins, Ph.D., *Professor of Management*

C. Mitchell Adrian, D.B.A., *Associate Professor of Management*

Frank W. Bacon, Ph.D., *Professor of Finance*

Raymond T. Brastow, Ph.D., *Associate Professor of Economics*

William P. Brown, Ph.D., CPA, *Associate Professor of Accounting*

Roman Cech, Ph.D., *Assistant Professor of Economics*

Robert J. Cochran, Ph.D., CPA, *Assistant Professor of Accounting*

Roy R. Creasey, M.S.E., *Lecturer in Management Science*

Glenn S. Darvick, Ph.D., *Assistant Professor of Information Systems*

Cheryl F. Davis, M.S., *Lecturer in Management*

Mary A. Flanigan, Ph.D., CPA, *Professor of Accounting*

Melinda I. Fowlkes, M.B.A., CPA, *Assistant Professor of Business*

John N. Gaskins, Ph.D., *Assistant Professor of Marketing*

Sally W. Gilfillan, M.S. Acct., CPA, *Associate Professor of Accounting*

Drew L. Harris, Ph.D., *Associate Professor of Management*

Claire R. LaRoche, J.D., M.B. A., *Assistant Professor of Business Law*

Linda K. Lau, Ph.D., *Assistant Professor of Information Systems*

David Lehr, Ph.D., *Assistant Professor of Economics*

Melanie B. Marks, Ph.D., *Associate Professor of Economics*

Ronald F. McPherson, Ph.D., *Associate Professor of Information Systems*

Wayne E. McWee, Ed.D., *Professor of Business*

Abigail H. O'Connor, M.B.A., *Lecturer in Marketing*

Bennie D. Waller, Ph.D., *Assistant Professor of Information Systems and Finance*

Linda B. Wright, Ph.D., *Associate Professor of Marketing*

DEGREE PROGRAMS

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 and economics and computer security, forensics and law.

COLLEGE OF BUSINESS AND ECONOMICS

The College of Business and Economics is one of 30 undergraduate-only business schools 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 strategic goals of the College of Business and Economics are defined as follows:

VISION: The College of choice for tomorrow's business leaders.

MISSION AND VALUES: Through learning partnerships, we prepare agile and effective leaders with the knowledge and skills to advance their careers, their organizations and their communities. We do this by living our values:

- Quality, innovation and continuous improvement in all we do.
- Critical thinking, formal analysis and continuous learning as life skills.
- A world-view that includes ethical responsibility, sustainable practice, teamwork with respect for the individual, diversity and internationalism.
- Creation and application of knowledge to the resolution of practical issues.
- Liberal arts as the foundation of all post-secondary education.

STRATEGIC GOALS:

- Gather customer and market-based input to ensure that all business school processes prepare students for the changing business environment.
- Establish a supportive and creative faculty culture.
- Create an exciting student environment that reflects a diverse society.
- Establish a curriculum that reflects the needs of a changing business world.
- Provide effective instructional resources.
- Promote value-added intellectual contributions.

DEGREE OUTCOMES

Students will:

- Have a broad-based general education and develop an awareness of the need for life-long learning.
- Acquire specific knowledge in accounting, computer information management systems, economics, finance, management, marketing, and retailing.

Students will develop the skills necessary to apply classroom knowledge in the workplace. Critical to their success is proficiency in:

- Analytical techniques: Develop methodologies; identify and analyze key issues; make sound inferences from data; use effective problem-solving techniques.
- Communication skills: Communicate effectively orally and in writing; organize and share information.
- Computer technology: Use computer applications in making decisions.
- Teamwork techniques: Interact effectively; be willing to act as a leader and value individual differences.
- Multicultural awareness: Appreciate cultural diversity; take multiple perspectives in human relations.

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 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
 - ◆ *for business majors:* ACCT 240, ACCT 242, CIMS 170, ECON 217, ECON 218, and MANG 275;
 - ◆ *for business minors:* ACCT 240, ACCT 242, ECON 217, and ECON 218;
- a business and economics GPA of at least 2.33;
- the completion of a minimum of 45 credits;
- submission of the College of Business & Economics admission application by the posted deadline the term prior to expected admission.

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 or 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 not be offered admission until such time as they do meet all criteria.

For purposes of eligibility, GPA for transfer students is computed on the basis of Longwood work only.

Admission to the College of Business & Economics as a 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” economics courses
 - ◆ *for economics majors*: CIMS 170, ECON 217, ECON 218, MANG 275 and 3 credits of upper level economics electives;
 - ◆ *for economics minors*: ECON 217 and ECON 218;
- a business and economics GPA of at least 2.33;
- the completion of a minimum of 30 credits;
- submission of the College of Business & Economics admission application by the posted deadline the term prior to expected admission.

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 economics 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 or 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 not be offered admission until such time as they do meet all criteria.

For purposes of eligibility, GPA for transfer students is computed on the basis of Longwood work only.

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 policies of Longwood University as described on pages 11-12 of this catalog.

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.

Probation and Suspension

The academic probation and suspension policies of Longwood University are described on pages 11-12 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 on page 10 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 Business Administration degree:

To be eligible for graduation, students seeking the BSBA degree in business must be in good standing with the university, must complete their respective programs with a G.P.A. of at least 2.33 in their major, and pass the Major Field Achievement Test (MFAT) for Business.

Bachelor of Arts Economics and Bachelor of Science 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 G.P.A. 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 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 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, College of Business and Economics.

BUSINESS ADMINISTRATION DEGREE PROGRAM

Students seeking a Bachelor of Science in Business Administration (B.S.B.A.) degree pursue a general course of business study that includes studying 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.

Students also gain in-depth business knowledge by concentrating in one of seven 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 (B.S.B.A.) must concentrate in one of the following seven 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.

Computer Information Management Systems: The CIMS concentration is designed to prepare students to plan, design, and implement 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.

Retailing: The retailing concentration provides students with background and skills leading to careers in retail store 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 MAJOR, B.S.B.A. 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 (plus 7 to 10 credits counted 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 Goal13)
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) (Computer Information Management Systems, Economics, Finance, Management, Marketing, and Retailing).

Information Systems:

ACCT 448	Accounting Information Systems/3 credits (Accounting)
CIMS 370	Principles of Management Information Systems/3 credits (Computer Information Management Systems, Economics, Finance, Management, Marketing, 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 (Computer Information Management Systems, Management, Marketing, and Retailing).

D. Business Concentration Requirements

In addition to completing the major requirements, each candidate for the B.S.B.A. 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, Retailing 21, Management 15, 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:

ACCT 345	Tax Accounting II/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/1-3credits

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 of the following:

CMSC 204	Introduction to Programming/3 credits
CIMS 372	COBOL Programming/3 credits
CIMS 375	Web Design and Development/3 credits
CIMS 475	Web Programming
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 of the following:

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
CIMS 471	Introduction to Systems Analysis and Design/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 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
*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 of the following (a minimum of two courses selected must have the MANG prefix):

MANG 364	Negotiation and Conflict Resolution/3 credits
MANG 365	Breakthrough Work Teams/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 360	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 of the following:

MARK 382	Professional Selling and Sales Force Management/3 credits
MARK 385	Marketing Channels Management/3 credits
MARK 387	Principles of Retailing/3 credits
MARK 480	Advertising/3 credits
MARK 481	International Business/3 credits
MARK 488	Electronic Marketing/3 credits
MARK 495	Special Topics in Marketing/1-3 credits

RETAILING – 21 credits

(May complete a Management or Marketing Internship, but it must be in a retail setting.)

MANG 465	Human Resource Management/3 credits
MANG 362	Organizational Behavior/3 credits
MARK 381	Marketing Research/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 489	Retail Strategy/3 credits

Select one of the following:

MARK 388	Services Marketing/3 credits
MARK 389	Retail Merchandising/3 credits
MARK 488	Electronic Marketing/3 credits

- E. General Electives: Accounting, 5 credits; Management, 15 credits; 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, or Retailing: 120; for Accounting: 122.

MINOR IN BUSINESS ADMINISTRATION

The College of Business and Economics offers a minor in Business Administration. 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
ANG 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

Select one of the following: (Students must select a course outside their major/concentration.)

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, B.S. 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 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 B.S. 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 of 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 of the following

SOCL 301	Issues in Criminal Justice/3 credits
SOCL 350	Power and Privilege: Social Stratification/3 credits
SOCL 360	Urban Sociology/3 credits
SOCL 375	Criminology/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 to 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 to how many of these credits can be taken as ECON.

F. Total Credits Required for a B.S. in Economics - 120.

ECONOMICS MAJOR, B.A. 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 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 57 - 64 credits (plus 1 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 310 and 319 listed above and foreign language general education goal 10)

D. General Electives 9 - 16 credits

E. Total Credits Required for B.A. in Economics with Concentration in International Economics – 120

MINOR IN ECONOMICS

The College of Business and Economics offers a minor in Economics. 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

Jim Carver, *Master Sergeant, Assistant Professor of Military Science*

Army ROTC (Reserve Officers' Training Corps) is a four- or two-year course of study, open to men and women, who are interested in exploring the possibility of earning a commission as an army officer during their college years and may be taken by students concurrently with their regular work. Credits earned in Military Science are counted as general elective hours and may be applied toward hours required to fulfill the graduation requirements for any degree.

Students enrolled in the Advanced Course receive a grant of up to \$2,000 per school year. Uniforms, books, and equipment for all courses are provided by the Army. Freshmen and sophomores may compete for ROTC scholarships that include all academic fees and tuition, and \$600 per year for books and supplies, plus a grant of up to \$6,000.

Hampden-Sydney students are also encouraged to enroll in military science classes and are also eligible for scholarships.

The Military Science program is divided into two phases: the Basic Course, 100-200 level classes and the Advanced Course 300-400 level classes. Students enrolled in the Basic Course do not incur any military obligation and are not required to take the Advanced Course unless under scholarship contract. The 100 and 200 level courses offered during the freshman and sophomore years serve two purposes: (1) they allow students to determine whether serving their country as Army officers will support their goals without making a military commitment, and (2) successful completion of these courses (if otherwise qualified) allows the student to enter the Advanced ROTC Program. Upon enrollment in the Advanced ROTC Program, the student must make a commitment to serve in the Army, and will receive a \$4,000 grant paid during his/her enrollment in the Advanced ROTC Program. The student is commissioned as a 2nd Lieutenant in the U.S. Army, U.S. Reserves, or the National Guard upon completing the Advanced ROTC Program and the requirements for graduation.

ACCOUNTING COURSE DESCRIPTIONS

Writing Intensive Courses **

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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.

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

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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. **

ACCOUNTING 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.

ACCOUNTING 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.

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

ACCOUNTING 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. **

ACCOUNTING 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. **

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 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.

ACCOUNTING 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

ACCOUNTING 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 GPA of 2.3 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.

ACCOUNTING 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.

ACCOUNTING 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS COURSE DESCRIPTIONS

Writing Intensive Course **

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in computer information management systems. 1-18 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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 CIMS 272, CIMS 372, or CMSC 204. 3 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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 370, or permission of the instructor. 3 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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. 3 credits.

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

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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 370 and 373. 3 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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 and permission of instructor. 3 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS. *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 37, CRIM 305, and one of the following: both CMSC 360 and 455; or CIMS 473; or SOCL 305. 3 credits.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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 GPA of 2.3 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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.

COMPUTER INFORMATION MANAGEMENT SYSTEMS 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

General Education Course *

Writing Intensive Course **

ECONOMICS 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. *

ECONOMICS 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. 3 credits. Prerequisite: EDUC 299.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 304. *Experimental Economics.* This course is project oriented. Students will work with the professor on grant-related research in order to learn about experimental design, protocol, and recruiting. Students will also work in groups on experimental projects that will be presented to the class. Prerequisite: Permission of the instructor. 3 credits.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

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

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 400. *Economics in Elementary School Classroom.* Teachers will learn how to make economics come alive in their classroom. Teachers will learn how to teach basic economics principles addressing scarcity, production, consumption, opportunity cost, markets, etc. Major focus will be hands-on activities for young students. Virginia SOLs will be discussed. Course taught through Longwood Center of Economic Education. Not for credit toward the economics major, minor, or concentration. 1 credit. Summer only.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 412. *Industrial Organization and Regulation.* Focus will be on organization of the firm and the impacts of regulation. Topics include industrial pricing practices, reasons why firms exist, why they vertically or horizontally integrate, and recent downsizing trends. The regulation component will address antitrust legislation, pricing regulations, and rate of return regulations such as those commonly imposed on public utilities. Prerequisite: ECON 217. 3 credits.

ECONOMICS 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.

ECONOMICS 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.

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ECONOMICS 415. *Teaching Environmental Economics.* 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 as credit towards economics major or minor in economics. Students cannot receive credit for both ECON 415/EDUC 415 and ECON 500 or both ECON 415/EDUC 415 and ECON 314. 3 credits.

ECONOMICS 461. *Senior Seminar.* Designed as a seminar for senior level economics students. The course will be project oriented. Emphasis placed on discussion and project presentation. Topics will vary by semester. Prerequisite: Senior status in economics or approval of instructor. Prerequisites: ECON 317, 318, 319, and 414. (ECON 318 & 414 may be taken concurrently with ECON 461.) 3 credits. **

ECONOMICS 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.

ECONOMICS 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 GPA of 2.3 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.

ECONOMICS 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.

ECONOMICS 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.

ECONOMICS 500. *Environmental Economics.* This course analyzes the economics of resource use, focusing on market based environmental reforms. Issues addressed include: animal extinction and common ownership problems, pollution, water and air regulation, garbage and recycling. This course is intended for students in the Masters in Environmental Studies program. Prerequisite: ECON 217. 3 credits. **

FINANCE COURSE DESCRIPTIONS

Writing Intensive Course **

FINANCE 250. *Personal Finance.* Basic fundamentals in selected areas of personal finance; role of the individual as a consumer and as an investor. 3 credits.

FINANCE 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.

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

FINANCE 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.

FINANCE 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.

FINANCE 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.

FINANCE 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.

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

FINANCE 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.

FINANCE 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 350. 3 credits. **

FINANCE 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 fall semester only. Prerequisite: FINA 350. 3 credits.

FINANCE 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 spring semester only. Prerequisite: FINA 350. 3 credits.

FINANCE 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. Prerequisite: FINA 350. 4 credits.

FINANCE 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.

FINANCE 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 GPA of 2.3 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.

FINANCE 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.

FINANCE 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

General Education Course*

Writing Intensive Course **

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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.**

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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. **

MANAGEMENT 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

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

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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.

MANAGEMENT 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. *

MANAGEMENT 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.

MANAGEMENT 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 GPA of 2.3 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.

MANAGEMENT 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.

MANAGEMENT 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 GPA of 2.3 or greater, FINA 350, MANG 360, MARK 380, and senior standing. 3 credits. **

MANAGEMENT 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

Writing Intensive Course **

MARKETING 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.

MARKETING 280. *Fundamentals of Marketing.* Fundamentals of marketing is a survey course designed for the nonbusiness major. This course will introduce the student to a broad range of marketing concepts, ideas, and topics for a variety of perspectives. 3 credits.

MARKETING 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.

MARKETING 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.

MARKETING 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.

MARKETING 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.

MARKETING 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.

MARKETING 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.

MARKETING 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.

MARKETING 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.

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

MARKETING 480. *Advertising.* 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.

MARKETING 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.

MARKETING 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 380, plus senior standing. 3 credits.

MARKETING 488. *Electronic Marketing.* Survey course designed to provide an overview of electronic commerce with an emphasis on e-retailing, consumer behavior on-line, Internet advertising, and on-line market research. Prerequisite: MARK 380. 3 credits.

MARKETING 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.

MARKETING 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.

MARKETING 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 GPA of 2.3 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.

MARKETING 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.

MARKETING 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

MILITARY SCIENCE 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, or permission of the department chair. 1 credit.

MILITARY SCIENCE 102. *Basic Leadership.* This course introduces the 'life skills' of problem solving, decision-making, and leadership designed to help students in the near-term as leaders on campus. The class will help students be more effective leaders and managers in the long-term, whether they serve in the military or as leaders in civilian life. Topics addressed include critical thinking, problem solving methods, leadership theory, followership, group cohesion, goal-setting and feedback mechanisms. Lessons are taught in a seminar format, emphasizing student discussions and practical exercises. Prerequisite: Freshman or sophomore class standing, or permission of the department chair. 1 credit.

MILITARY SCIENCE 201. *Military Leadership I: Individual Leadership Studies.* This course is designed to develop leadership through activities that focus on self-knowledge, self-confidence, individual leadership skills, teamwork skills, and leadership concepts. Topics include, but are not limited to, personal development, goal setting, communication, problem solving and decision-making. In-class activities include orienting and ropes classes. Prerequisite: Military Science 101 or permission of departmental chair. 2 credits.

MILITARY SCIENCE 202. *Military Leadership II: Leadership & Teamwork.* This course builds on the foundations set in MISC 201 and is designed to develop leadership through activities that focus on self-knowledge, self-confidence, and individual leadership skills, teamwork skills, and leadership concepts. Topics include, but are not limited to, personal development, goal setting, communication, problem solving, and decision-making. In-class activities include orienteering and leadership reaction course. Prerequisite: MISC 201 or permission of the departmental chair. 2 credits.

MILITARY SCIENCE 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.

MILITARY SCIENCE 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.

MILITARY SCIENCE 301 and 302. *Fundamentals of Military Leadership and Training I & II.* Instruction and case studies which build leadership competencies and military skills in preparation for future responsibilities as army officers. Specific instruction in the principles of war, decision-making processes, planning models, and risk assessment. Advanced leadership instruction focuses on motivational theory, the role and actions of leaders, and organizational communications. 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: Completion of MISC 202, MISC 204, or permission of the departmental chair. 4 credits.

MILITARY SCIENCE 305. *ROTC Advanced Camp Summer 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.

MILITARY SCIENCE 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.

MILITARY SCIENCE 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.

MILITARY SCIENCE 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

Judith R. Johnson, *Interim Dean*

Barbara J. Chesler, *Interim Associate Dean*

Peggy Ward, *Executive Secretary*

Department of Education, Special Education, and Social Work

Department of Health, Recreation, and Kinesiology

Department of Education, Special Education, and Social Work

Lissa A. Power-deFur, *Chair*

Kim Wingo, *Secretary*

Darlene Smith, *Secretary*

Stacey Wilkerson, *Secretary*

The Department of Education, Special Education, Social Work, and Communication Disorders offers:

1. A 40-credit undergraduate program in elementary education (PK-6) Liberal Studies is the required major for students who also register for the elementary education program.
2. A 40-credit undergraduate program in middle school education (6-8) Liberal Studies is the required major for students who also register for the middle school education program. Additional discipline specific courses may also be required.
3. A five-year program in special education with licensure in learning disabilities, emotional/behavioral disorders, and mild-moderate mental retardation K-12. Students must major in Liberal Studies and register for courses in the special education program. Students completing 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 in special education. Students must complete the fifth year to be endorsed to teach special education.
4. A B.S. or B.A. degree in Social Work.
5. A Master of Science in Education degree: Students interested in enrolling in one of the graduate programs need to consult the Longwood *Graduate Catalog*.

Admission to Teacher Preparation

Applications for admission into the Teacher Preparation Program are available from the Professional Services Office (Hull Building - telephone: extension 2331).

Students must complete an application for entry into the Teacher Preparation Program. Application and supporting materials must be on file in the Department of Education, Special Education, Social Work, and Communication Disorders by 5:00 p.m. the last day of classes at the end of the first semester of the sophomore year. Students transferring with at least junior status must complete the application by the end of the fourth week in their second semester at Longwood. Matriculated students in their sophomore, junior or senior year, for whom Education is not the declared program of study but who wish to enter the Teacher Preparation Program, must schedule an appointment with the Professional Services Office to determine the deadline for application based upon their individual circumstances.

Deadlines

Specific deadlines regarding the application process are available from the Professional Services Office (256 Hull Building - telephone: extension 2331).

Requirements for admission to Teacher Preparation are:

1. Completed application.
2. Student Evaluation Checklist completed for the student by course instructors in EDUC 245 and EDUC 260, or PHED 280 and PHED 380, or SPED 202 and SPED 220, or in EDUC 245 and discipline-

based introduction to teaching course. Two evaluations will be completed on each student and submitted directly to the chair of the department at the time final grades for these courses are submitted to the Office of Registration. Copies of these evaluations are made available to the student from the course instructor upon request.

3. Record of successful completion of PRAXIS I.
4. Minimum grade of "C" in all EDUC, SPED, PHED, KNSL or discipline-based professional courses. At least two such courses must be completed.
5. Demonstration of competency in written and oral English. All students must earn no less than a "C" in English 150.
6. Overall grade point average of 2.50.

Transfer students must apply for admission to Teacher Preparation by the third week of their second semester at Longwood. All criteria listed above apply to transfer students with the exception that the Student Evaluation Checklist may be completed for only one course, dependent on the student's schedule during the first semester at Longwood.

Licensure only students must apply for admission to Teacher Preparation and must be accepted by the end of their first semester of professional course work at Longwood. Students must hold a baccalaureate degree from an accredited institution. Students who received their baccalaureate degree within three years prior to making application to the Teacher Preparation program must meet criteria 1, 3, 5, and 6. Students who received their baccalaureate degree over three or more years prior to making application to the Teacher Preparation program must meet criteria 1 and 3. Two letters of recommendation from a licensed teacher or school administrator or from a previous college level instructor are also required of any Licensure Only student.

Admission to Student Teaching

Applications for admission to Student Teaching are available from the Professional Services Office (Hull Building - telephone: 2331).

Students must complete the application and make an appointment for an interview with the coordinator two semesters prior to the Professional Semester.

Deadlines

Specific deadlines regarding the application process are available from the Professional Services Office (256 Hull Building - telephone: 2331).

Requirements for admission to Student Teaching are:

1. Prior admission to Teacher Preparation Program.
2. Completed application.
3. Overall grade point average of at least 2.50.
4. Major grade point average of at least 2.50.
5. Recommendation by professors in the Health, Recreation, and Kinesiology Department, or by professors in the student's major department and in the Education, Special Education, Social Work Department. The Coordinator is responsible for obtaining these recommendations.

6. Demonstration of the physical and mental health necessary for the tasks associated with the teaching profession. Individuals who give evidence of a disability must demonstrate compensatory or supporting skills.
7. Evidence of the satisfactory completion of a broad background in general education.
8. Demonstration of adequate preparation in professional courses (EDUC, PHED, SPED, KNSL, professional courses in the student's major) with a minimum grade of *C* in each course and overall grade point average in professional courses of at least 2.75.
9. Grade of "Pass" in EDUC 299, Admission to Teacher Preparation. (Note: Normally students desiring admission to teacher preparation enroll in EDUC 299 in the first semester of the sophomore year. Students transferring to Longwood with at least Junior status should enroll in EDUC 299 during their first semester at Longwood. All other students must contact the Professional Services Office to determine the semester in which they should enroll in EDUC 299.)
10. Elementary, middle, secondary, and PK-12 teacher education students will not be permitted to enroll in 300-400 level EDUC courses without a grade of "Pass" in EDUC 299, Admission to Teacher Preparation. Special education students will not be permitted to enroll in SPED 321 or SPED/EDUC courses above this level without a grade of "Pass" in EDUC 299, Admission to Teacher Preparation.

A student denied admission into the Teacher Preparation Program or the Professional Semester may reapply when the acceptance criteria are met.

PRAXIS:

All prospective teachers seeking initial licensure in Virginia are required to take and submit *passing* scores on the PRAXIS. Information concerning the PRAXIS is available in the Department of Education, Special Education, Social Work, and Communication Disorders. PRAXIS scores must be sent to the Coordinator of Student Teaching and Field Services before a recommendation for licensure can be transmitted to the Virginia State Department of Education.

Longwood will recommend a student for a Virginia teaching license if:

1. A passing score is reported in all relevant portions of PRAXIS I & II
2. The grade in student teaching is *A*, *B*, or *C*
3. The overall grade point average is at least 2.50, and
4. The grade point average for the professional semester is at least 2.75

The Teacher Preparation Program at Longwood now requires passing scores on Praxis I for admission to Teacher Preparation. This insures that beginning with the class of 2002 the passing rate for program completers will be 100%.

EDUCATION PROGRAM

Faculty

Lee Banton, Ed.D., *Professor*
Barbara Chesler, Ed.D., *Associate Professor*
Carolyn Cooper, Ed.D., *Associate Professor*
Deborah Frazier, Ph.D., *Assistant Professor*
Frank Howe, Ph.D., *Professor*
Stephen Keith, Ed.D., *Assistant Professor*
Luther Kirk, Ed.D., *Associate Professor*
Marilyn Osborn, Ed.S., *Assistant Professor*
James Riley, Ph.D., *Assistant Professor*
Betty Jo Simmons, Ed.D., *Professor*
Gerry Sokol, Ed.D., *Assistant Professor*

ELEMENTARY AND MIDDLE SCHOOL EDUCATION PROGRAM

The Department of Education, Special Education, Social Work, and Communication Disorders offers a 40-credit program in elementary education and in middle school education. Students completing these programs will be licensed to teach in Virginia with an endorsement in nursery school and kindergarten through sixth grade (PK-6) and/or sixth through eighth grade (6-8). Because most of the Liberal Studies major and the Education course sequence are required for both elementary and middle school endorsement, students are encouraged to consider seeking endorsement for both.

The Liberal Studies Major has been designed specifically for students seeking licensure to teach with an Elementary or Middle School Endorsement and is required. Requirements for the B.A. or B.S. Degree in Liberal Studies are listed elsewhere in the Catalog. By carefully planning each semester's course work, students can use their electives to meet the requirements of the 40-credit elementary or middle school education program.. After completing the degree and program requirements, students receive a B.A. or B.S. Degree in Liberal Studies and a license to teach with 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.

Partnership Program

Elementary and middle education teacher candidates participate each week in a semester of Partnership Program courses (requiring EDUC 325, 326, 327, 450, 451, and 452 for licensure in either or both elementary and middle school licensure) consisting 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.

Elementary Endorsement Requirements

The 40-credit Elementary School 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 299	Admission to Teacher Preparation/0 credits
EDUC 325	Teaching Reading and Language Arts in the Elementary School/2 credits
EDUC 326	Teaching Reading and Language Arts in the Elementary Grades (PK-6)/2 credits
EDUC 450	Principles of Instruction (PK-8)/2 credits
EDUC 451	Curriculum in the Elementary School (PK-6)/2 credits

Practica: Two practica are required: one on the primary level and one on the middle school level

Take in first session of summer school at end of freshman or sophomore year:

EDUC 265 Practicum I – Primary or Middle School level/3 credits

Take fall or spring semester:

EDUC 305 Practicum in Early Childhood/3 credits (Prerequisite: EDUC 265)

OR

Take in first session of summer school at end of sophomore or junior year:

EDUC 370 Practicum II – Primary or Middle School Level/3 credits (Prerequisite: EDUC 265)

EDUC 380 Classroom Assessment/2 credits

EDUC 484 Media and Technology/1 credit

EDUC 487 Classroom Management and System Issues/3 credits

SPED 489 Survey of Exceptional Children/3 credits

(All of the above will be taken prior to enrolling in the Professional Semester. A minimum cumulative 2.5 GPA is required. See undergraduate catalog for other requirements.)

* Students must earn a “Pass” in EDUC 299 before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Professional Semester:

EDUC 400 Directed Teaching in the Elementary and Middle School /11 credits

OR

EDUC 401 Directed Teaching in the Elementary School / 11 credits

EDUC 488 Education Seminar/1credit

TOTAL CREDITS/40

Middle School Endorsement Requirements

Students wishing to teach at the middle school level, grades 6 - 8, have three options.

- 1) If they wish to teach a single subject, they may major in that subject and seek 6-12 endorsement in it. (See below.)
- 2) They may add middle grades (6-8) endorsement to the elementary endorsement (PK-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, Education 327 and 452. These students should select Education 401 for student teaching.
- 3) They may pursue middle school only endorsement by completing a reduced Liberal Studies core with two areas of concentration, by substituting middle school Education courses (Education 327 and 452) in place of elementary courses (Education 326 and 451) in the Elementary Endorsement requirements listed above, and by choosing Education 405 for student teaching. (See Liberal Studies catalog sections C, D, E, and F).

SPECIAL EDUCATION, K-12

Students desiring to teach special education on the K-12 level will need to complete the five-year Liberal Studies/Special Education degree programs. A B.A. or B.S. degree in Liberal Studies will be awarded upon completion of the fourth year and a M.S. 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.

Please read the undergraduate and graduate catalogs concerning the requirements relating to these two degrees.

SECONDARY EDUCATION PROGRAMS 6-12

Biology	History and Social Science
Chemistry	Mathematics
Computer Science	Physics
English	Political Science (Government)
History	

To teach on the secondary level, a student must have an advisor in one of the departments listed above. A form in the Office of Registration must be completed indicating which major has been selected and that the secondary education program has also been selected. Each student will then be assigned a major advisor as well as a professional advisor in the EDUC Department. With careful scheduling, a student can complete all degree and program requirements in four years.

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
*EDUC 299	Admission to Teacher Preparation/ 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 484	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
PED 489	Survey of Exceptional Children/3 credits

Methods course in the student's major/3 credits (Please see undergraduate catalog for course number and title)

* Students must earn a "Pass" in EDUC 299 before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Practicum:

Take in First Summer School session at end of freshman or sophomore year:

EDUC 265 Practicum I (middle school level)/3 credits

Take in First Summer School Session at end of sophomore or junior year:

EDUC 370 Practicum II (secondary level)/3 credits

(All courses listed above will be taken prior to enrolling in the Professional Semester. A minimum Cumulative 2.5 GPA is required. See undergraduate catalog for other requirements).

Professional Semester:

*EDUC 402	Directed Teaching in the Secondary School/11 credits
EDUC 488	Education Seminar/1 credit
TOTAL CREDITS/38	

*English majors take ENGL 482 instead of EDUC 402.

*Mathematics and computer science majors MATH 482 instead of EDUC 402

TEACHER EDUCATION PROGRAM PK-12

Art
Instrumental Music
Modern Languages: French, German, Spanish
Physical Education
Vocal/Choral Music

For students who want to teach art, modern languages (French, German, Spanish), music, or physical education on the PK-12 level, please see the undergraduate catalog for the courses that need to be taken. Each program has different requirements. An academic/professional advisor will be assigned by that department. A professional advisor in the EDUC Department will not be assigned, but professional advisors in EDUC will be glad to help at any time. 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
JOURNALISM: for secondary majors
PHYSICS: for science majors only

EDUCATION COURSE DESCRIPTIONS

Writing Intensive Courses **

Speaking Intensive Courses ***

A special fee is charged for all practicum and student teaching courses. †

EDUCATION 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.

EDUCATION 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.

EDUCATION 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.

EDUCATION 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. †

EDUCATION 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.

EDUCATION 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.

EDUCATION 299. *Admission to Teacher Preparation.* Required of all students applying for admission to teacher preparation programs. 0 credits.

EDUCATION 305. *Practicum in Early Childhood.* Study of the development of the preschool child and associated guidance, observation, teaching techniques and curriculum considerations. Prerequisite: EDUC 265. 3 credits.

EDUCATION 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in education. Prerequisite: EDUC 299. 1-18 credits.

EDUCATION 325. *Introduction to Teaching Reading and Language Arts in the Elementary and Middle School (PK-8).* Reading, both fiction and nonfiction, vocabulary, comprehension, speaking and listening skills, and study skills will be emphasized. Required for those seeking licensure at the elementary and/or middle school levels. Prerequisite: EDUC 260 or consent of the instructor. 2 credits.

EDUCATION 326. *Teaching Reading and Language Arts in the Elementary School (PK-6).* Adaptive rates of reading for emergent and early literacy development will be emphasized as well as word recognition, and skills for content fields such as comprehension, word study, vocabulary, phonics, process writing and handwriting (manuscript). Literature based and basal reading instruction techniques will be included. Required for those seeking licensure at the elementary levels. Prerequisite: EDUC 260 and EDUC 299 or consent of instructor. 2 credits.

EDUCATION 327. *Teaching Reading and Language Arts in the Middle School Grades (6-8).* Adaptive rates of reading for intermediate and fluent readers will be emphasized as well as vocabulary study. Skills for content fields such as comprehension, process writing, spelling, grammar, and handwriting (cursive) will also be included. Various reading programs and literature based and basal reading instruction will be emphasized to include different genres of literature, literary elements, and author studies. Required for those seeking licensure at the middle school levels. Prerequisite: EDUC 260 and EDUC 299 or consent of the instructor. 2 credits.

EDUCATION 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 EDUC 299. 3 credits. †

EDUCATION 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 structured group exercises and experience, out-of-class observations, readings and group discussion. Prerequisite: EDUC 299. 1 credit.

EDUCATION 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: EDUC 299. 2 credits.

EDUCATION 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: EDUC 299. 3 credits.

EDUCATION 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. Corequisite: EDUC 455. Prerequisite: EDUC 299. 2 credits.

EDUCATION 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: EDUC 260 and EDUC 299 or consent of the instructor. 2 credits.

EDUCATION 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: EDUC 260 and EDUC 299 or consent of the instructor. 2 credits.

EDUCATION 452. *Curriculum in the Middle School (6-8).* 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 6-8. Required for those seeking a teaching license with an endorsement to teach at the middle school level. Prerequisite: EDUC 260 and EDUC 299 or consent of the instructor. 2 credits.

EDUCATION 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: EDUC 245, 260, and 299. Corequisite: EDUC 430. 1 credit.

EDUCATION 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. Prerequisite: EDUC 299. 1 credit.

EDUCATION 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 299 and permission of instructor. 1 credit.

EDUCATION 484. *Media and Technology.* A laboratory course concerned with the utilization of instructional media and computer technology in the learning process. Prerequisite: EDUC 299. 1 credit.

EDUCATION 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. Prerequisite: EDUC 299. 3 credits.

EDUCATION 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: EDUC 299. 1-3 credits.

EDUCATION 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: EDUC 299. 3 credits.

The Professional Semester

All students in teacher education programs will participate in a professional semester in their senior year during the semester in which they engage in the student teaching practicum. The semester is divided into the ten-week practicum and a six-week flexible modular professional program. The semester offers a total of 18 semester hours credit.

EDUCATION 400. *Directed Teaching in the Elementary and Middle School* Required of all students in seeking elementary and middle school endorsements. Required of all students seeking licensure in grades PK-8. See prerequisites for student teaching. 11 credits. ***

EDUCATION 401 - *Directed Teaching in the Elementary School.* Required of all students seeking licensure to teach elementary school (grades PK-6). See prerequisites for student teaching. 11 credits.† ***

EDUCATION 402. *Directed Teaching in the Secondary School.* Required of all students in the secondary education curricula. See prerequisites for student teaching. 11 credits. †

EDUCATION 403. *Directed Elementary Teaching for Art and Music.* See prerequisites for student teaching. 6 credits. †

EDUCATION 404. *Directed Secondary Teaching for Art and Music.* See prerequisites for student teaching. 5 credits. †

EDUCATION 405 - *Directed Teaching in the Middle School.* Required of all students seeking licensure to teach middle school (grades 6-8). See prerequisites for student teaching. 11 credits. † ***

EDUCATION 406. *Directed Teaching in LD/EBD/MR.* Required of all students preparing to teach in Special Education. Directed teaching of students with mild to moderate disabilities (LD/EBD/MR). See prerequisites for student teaching. 11 credits. † ***

EDUCATION 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.

Note: All courses within the Professional Semester as well as other education courses, allow for the understanding and application of multi-cultural concepts.

Graduate Courses for Seniors:

See Director of Graduate Studies for details. Also see Graduate Catalog.

LIBERAL STUDIES-SPECIAL EDUCATION PROGRAM

Faculty

Rachel Mathews, Ed.D., *Associate Professor of Special Education*

Ruth L. Meese, Ph.D., *Professor of Special Education*

Christopher Jones, Ph.D., *Assistant Professor of Special Education*

Peggy L. Tarpley, Ph.D., *Associate Professor of Special Education and Area Coordinator*

Patricia Whitfield, Ph.D., *Associate Professor of Special Education*

Longwood offers a five-year Liberal Studies-Special Education Program leading to a Bachelor's Degree in Liberal Studies in 4 years and a Master's Degree with a concentration in Special Education in 5 years. This program is designed for students who want to become Special Education teachers. (See the Liberal Studies section of this Catalog.) A professional portfolio is developed during the five-year period. Students may choose to terminate their course work at the end of the fourth year (with 126 credit hours) with a Bachelor's Degree in Liberal Studies and not pursue the Master's Degree. However, students must complete the fifth year to become licensed to teach in Special Education.

Course Sequence - Special Education

YEAR 1

SPED 202

Intro to Special Education/3 credits

SPED 220

Practicum I/1 credit

YEAR 2

EDUC 299	Admission to Teacher Preparation/0 credits
SPED 306	Behavior Management, Part I/3 credits
SPED 305	Behavior Management, Part II/3 credits
SPED 316	Practicum in Behavior Management/1 credit

*Must be taken concurrently with SPED 305

** Students must earn a "Pass" in EDUC 299 before they will be permitted to enroll in SPED 321 or SPED/EDUC courses above this level.

YEAR 3

SPED 321	Reading and Language Arts for Students with LD, E/BD, and MR/3 credits
SPED 322	Mathematics, Science, and Social Studies Adaptations for Students with LD, E/BD, and MR/3 credits
SPED 323	Practicum in Reading Assessment and Tutoring/1 credit
	*Must be taken concurrently with SPED 321
SPED 325	Introduction to Assessment/3 credits
SPED 327	Practicum II/3 credits
SPED 375	Language and Language Disorders/3 credits

YEAR 4

SPED 482	Collaboration & Effective Communication Among School Personnel, Families, and Community Organizations/1 credit
EDUC 484	Media and Computer Technology/1 credit

Professional Semester

EDUC 406	Directed Teaching in LD, E/BD, and MR/11 credits
EDUC 488	Education Seminar/1 credit

YEAR 5

EDUC 502	Research Design/3 credits
EDUC 521	Human Growth and Development/3 credits
EDUC 524	Emergent and Early Literacy Instruction/3 credits
Or	
EDUC 525	Intermediate Literacy Education/3 credits
EDUC 530	Teaching Reading in the Content Areas/3 credits
EDUC 620	School Law/3 credits
SPED 516	Medical and Neurological Problems of Exceptional Students/3 credits
SPED 530	Characteristics and Needs of Students With LD, E/BD, & MR/3 credits
SPED 545	Psychoeducational Assessment/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 681, PSYC 523, PSYC 551, PSYC 660, ART 543, MATH 623, MUSC 546, or SCED 562. The course selected must not have been taken during the undergraduate years.

Special Education Minor

A special education minor may be pursued by students in any other major. Students who wish to minor take the following sequence of courses: 19 credits

16 Credits:

SPED 202	Intro to Special Education/3 credits
SPED 306	Behavior Management, Part I/3 credits
SPED 305	Behavior Management, Part II/3 credits
SPED 316	Practicum in Behavior Management/1 credit
	*Must be taken concurrently with SPED 310
SPED 325	Introduction to Assessment/3 credits
SPED 375	Language and Language Disorders/3 credits
OR	
CDIS 375	Language Disorders/3 credits

3 Credits from the following:

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

A special fee is charged for all practicum, student teaching, internship, and assessment courses. †

Writing Intensive Courses **

SPECIAL EDUCATION 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.

SPECIAL EDUCATION 220. *Practicum I.* This course is designed to provide students in special education with an early exposure to a wide variety of school climates. This will include observation of classroom interaction of teachers with students having learning disabilities, mental retardation, and emotional/behavioral disorders in segregated and integrated settings; assistance to the teacher in completing daily activities. 1 credit. †

SPECIAL EDUCATION 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.

SPECIAL EDUCATION 305. *Behavior Management Part I.* Strategies for developing positive behavior intervention plans and supports from behavioral, cognitive, ecological, psychoeducational, and psychodynamic theories. 3 credits.

SPECIAL EDUCATION 306. *Behavior Management Part II.* A survey of applied behavior analysis techniques used in the management of behavior of students. 3 credits. ** Must be taken concurrently with SPED 316.

SPECIAL EDUCATION 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in special education. 1-18 credits.

SPECIAL EDUCATION 316. *Practicum in Behavior Management.* A field experience to observe behaviors exhibited by students who are at risk, or who are diagnosed as having learning disabilities, emotional/behavioral disorders, or mild-moderate mental retardation. This course must be taken concurrently with SPED 306. 1 credit. †

SPECIAL EDUCATION 321. *Reading and Language Arts for Students with LD, E/BD, and MR.* Research-based strategies for teaching reading and Language Arts to Students with Learning Disabilities, Emotional/Behavioral Disorders, or Mild-Moderate Mental Retardation. Emphasis on teacher-directed instruction and direct instructional teaching models. 3 credits Must be taken concurrently with SPED 323. Prerequisites: EDUC 299 and SPED 202.

SPECIAL EDUCATION 322. *Mathematics, Science, and Social Studies Adaptations for Students with LD, E/BD, and MR.* Emphasis on strategies, accommodations, modifications, and collaboration for content areas such as mathematics, social studies, and science. Prerequisites: EDUC 299 and SPED 202. 3 credits.

SPECIAL EDUCATION 323. *Practicum in Reading Assessment and Tutoring.* A field experience tutoring students with learning disabilities, emotional/behavioral disorders, or mild-moderate mental retardation in reading. Prerequisite: EDUC 299. 1 credit. Must be taken concurrently with SPED 321. †

SPECIAL EDUCATION 325. *Introduction to Assessment.* This course is designed to introduce students to the assessment process in special education by addressing foundational knowledge & issues surrounding the construction of IEP's, curriculum-based measurement and assessment (CBM & 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. ** Prerequisites: SPED 202 and EDUC 299.

SPECIAL EDUCATION 327. *Practicum II.* Advanced teaching experience with students having mild/moderate learning and behavioral problems. Prerequisites: SPED 305, 306 and EDUC 299. 3 credits. †

SPECIAL EDUCATION 375. *Language and Language Disorders.* A study of normal development of language and delayed language acquisition resulting from environmental and organic causes. Prerequisite: EDUC 299. 3 credits.

SPECIAL EDUCATION 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. Prerequisite: EDUC 299. 1 credit.

SPECIAL EDUCATION 482. *Collaboration & Effective Communication Among School Personnel, Families, & Community Organizations.* This course is designed to investigate the interaction and communication techniques necessary for teachers to support a student with disabilities in the least restrictive environment. The focus is on a collaborative/consultation model to be used in consultations with parents, teachers, administrators, and community agencies involved in the education of students with disabilities. 1 credit. Prerequisites: SPED 202, 305, 306, 321, 322 and EDUC 299.

SPECIAL EDUCATION 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. Prerequisite: EDUC 299. 3 credits.

SPECIAL EDUCATION 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. Prerequisite: EDUC 299. 1-3 credits.

SPECIAL EDUCATION 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. Prerequisite: EDUC 299. 3 credits.

SPECIAL EDUCATION 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.

SPECIAL EDUCATION 530. *Characteristics of Students with Learning Disabilities, Emotional/Behavioral Disorders, or Mental Retardation.* Definitions, theories of etiology, characteristics, basis for various strategies and management, and criteria for placement of students with learning disabilities, emotional/behavioral disorders, and mental retardation. 3 credits.

SPECIAL EDUCATION 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. †

SPECIAL EDUCATION 575. *Career and Life Planning for Individuals with Disabilities.* 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.

SPECIAL EDUCATION 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.

SPECIAL EDUCATION 600. *Thesis Research.* This credit is awarded for the successful completion of a proposal, data collection, final thesis paper, and thesis presentation. If a student fails to complete the thesis during the semester enrolled, he/she may take an incomplete; however, the thesis must be finished by the end of the next academic semester. 3 credits.

SPECIAL EDUCATION 601. *Collaborative Special Education Research.* This credit is awarded for research conducted with a Longwood professor. A student will design, conduct, evaluate, discuss, and disseminate the results of his/her collaborative research project. The product of this research will be an article submitted for possible publication in a professional journal. Prerequisite: SPED 689. 3 credits.

SPECIAL EDUCATION 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.

SPECIAL EDUCATION 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. Prerequisite: Professional semester. 3 credits. †

Social Work Program

Dr. Theresa A. Clark, Area Coordinator

The specific aims of the Social Work Program are: (1) to provide students with opportunities to obtain knowledge, attitudes and skills appropriate for social work practice utilizing the “generalist - based perspective” at the baccalaureate level, and (2) to offer a background preparation for students intending to enter a graduate professional school of social work, law school, or related graduate program of study.

The Social Work Program’s curriculum is designed to help students develop generalist-based practice skills for professional activity with diverse populations of individuals, small groups, families, organizations and/or communities in order to enhance social functioning and create social contexts favorable for their maximum participation and self-direction. Program courses and two agency-based field instruction opportunities are systematically organized in order to produce professional social work graduates who are able to:

- Apply critical thinking skills
- Practice utilizing the values and ethical base of the social work profession
- Identify, apply, and respect the positive value of diverse populations
- Actively demonstrate the professional use of self
- Understand the forms, mechanisms, and impact of oppression and discrimination
- Identify and apply interventive change strategies to advance social and economic justice
- Understand the history of the profession of social work
- Analyze and explain the contemporary structure of the profession and its major issues
- Demonstrate generalist social work knowledge and skills in direct practice with micro, mezzo, and macro level systems
- Apply knowledge of bio-psycho-social variables that affect individual development and behavior
- Utilize and analyze diverse theoretical frameworks in the understanding, assessment, and direction of intervention with individuals and between individuals and social systems to include families, groups, organizations, and communities
- Analyze social policy and policy processes and determine impact on client systems, workers, and agencies
- Conduct and/or evaluate research studies (both qualitative and quantitative) and apply findings to the direction of practice
- Assess and apply, under supervision, an evaluation of their own professional practice interventions and those of other relevant systems
- Apply communication skills in diverse contexts differentially with client systems, colleagues, and members of the community
- Utilize social work supervision appropriate to direct generalist practice and continued personal professional development

- Function and practice within the structure of organizations and service delivery systems and, under supervision, seek necessary organizational change

SOCIAL WORK PROGRAM

Faculty

Edna V. Allen-Bledsoe, Ph.D., *Associate Professor of Social Work*

Theresa A. Clark, Ph.D., *Associate Professor of Social Work and Area Coordinator*

Kristen McAleavey-Eng, Ph.D., *Assistant Professor of Social Work*

George C. Stonikinis, Jr., M.S.W., *Associate Professor*

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 base. Program graduates frequently pursue advanced study in graduate schools and may be eligible for admission into advanced standing one-year M.S.W. degree programs. They may utilize their professional credentials for careers in the expanding opportunities for first-level, generalist-based, professional practitioners according to the standards of the National Association of Social Workers in such areas as:

Addiction Treatment	Foster Care
Adoption	Geriatric Services
Case Management	Health Care
Child Protective Services	Home Health Care
Child Welfare	Homelessness
Community Mental Health	Hospice Care
Criminal & Youth Court Services	Hospital Social Work
Crisis Intervention	International Social Work
Disaster Relief	Parenting Education
Domestic Violence	Policy Advocacy
Employee Assistance Programming	Rural Social Work
Family Planning	School Social Work
Family Preservation	Veterans Services

The faculty of the Social Work Program, reflecting the generalist orientation, focus on each student's personal and professional growth and development. Specifically, the Program faculty members individualize much of the student's education and actual agency-based instruction as they assist each student to develop a professional knowledge, skill and attitude base through strategically placed personalized evaluations and discussions of their education and process of professional emergence.

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 provided with 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 335, 336, 415, and 427) 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, B.A., B.S. DEGREE

- A. General Education Core Requirement. 41 credits
See General Education Requirements
- B. Additional Requirements for B.A. Degree. 6 credits
Additional Requirements for B.S. Degree. 7 credits
See Degree Requirements
- C. Major Requirements. 68 credits
- | | |
|----------|---|
| SOWK 101 | Introduction to Human Services/3 credits |
| SOWK 102 | Social Welfare and the Social Work Profession/3 credits |
| SOWK 240 | Social Policy and Issues in Social Welfare/3 credits |
| SOWK 280 | Human Behavior and the Social Environment I/3 credits |
| SOWK 281 | Human Behavior and the Social Environment II/3 credits |
| SOWK 310 | Minority Experiences: Human Development in Hostile Environments/3 credits |
| SOWK 320 | Social Work Research and Evaluation Design/3 credits |
| SOWK 335 | Junior Interventive Means Lab/1 credit |
| SOWK 336 | Interventive Means in Social Work/3 credits |
| SOWK 340 | Junior Field Integration/1 credit |
| SOWK 392 | Junior Internship in Social Work/5 credits |
| SOWK 401 | Senior Field Integration/2 credits |
| SOWK 404 | Social Welfare Administration/1 credit |
| SOWK 405 | Working with Special Populations/3 credits |
| SOWK 407 | Law and the Social Worker/1 credit |
| SOWK 408 | Jobs, Work, and Career Planning/2 credits |
| SOWK 415 | Inter-professional Communication: Techniques for the Survival of
Interventive Strategies/3 credits |
| SOWK 427 | Advanced Interventive Means/3 credits |
| SOWK 492 | Senior Internship in Social Work/12 credits (one credit satisfies General
Education Goal 15) |
| | Social Work Electives/11 credits |
- D. General Electives for B.A. Degree – 5 credits
General Electives for B.S. Degree – 4 credits
- E. Total Credits Required for B.A. or B.S. in Social Work - 120 credits

SOCIAL WORK COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

A special fee is charged for all Field Instruction courses. †

SOCIAL WORK 101. *Introduction to the Human Services.* The broad range of human professions and the nature and structure of human service organizations (schools, hospitals, welfare, corrections, mental health, environment, etc.) which deliver client services. Emphasis is placed on the common elements underlying “helping” actions of a wide variety of human services. Students preparing for a career in any human service area will be provided an orientation to systematic analysis of human service professions and systems. 3 credits. **

SOCIAL WORK 102. *Social Welfare and the Social Work Profession.* A study of the dynamic adjustment process between the American social welfare system and its societal, value, and historical context. Emphasis is placed on providing a conceptual, theoretical, and philosophical basis for analyzing institutional welfare and its relation to

individual and social needs, social justice, and a pluralistic and humanistic society. The emergence, current status, and future of professional social work practice are explored. Prerequisite: SOWK 101. 3 credits.

SOCIAL WORK 240. *Social Policy and Issues in Social Welfare.* Models of policy analysis and formulation are reviewed and the role of both social work and government are investigated. The characteristics of poverty, racism, sexism, power, and community are studied in relation to social welfare policy, social work practice, social planning, and programs and services. Prerequisite: SOWK 102. 3 credits. ***

SOCIAL WORK 280. *Human Behavior and the Social Environment I.* Utilizing a general systems approach, the student will develop a multi-level perspective of human behavior in the areas of personality development, self-concept formation, community and organizational systems, group processes, personal change dynamics, family systems, and life cycles. Concurrent focus is placed on practice relevancy of the theory base. Prerequisite: SOCL 101. 3 credits.

SOCIAL WORK 281. *Human Behavior and the Social Environment II.* A continuing exploration of theoretical contributions to the design and application of intervention strategies. The role of interpersonal influence is studied within the context of effective communication for planned change and effective skills are practiced. Prerequisites: SOWK 280, PSYC 101 and 4 credits of Biology.

SOCIAL WORK 292. *Internship in Social Work.* A semester-long, on-the-job learning experience designed to apply the principles of social work. 1-18 credits.

SOCIAL WORK 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.

SOCIAL WORK 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 resources. Prerequisite: 3 hours of Sociology and Psychology. 3 credits.

SOCIAL WORK 310. *Minority Experiences: Human Development in Hostile Environments.* With a special emphasis on the Black experience, the course will examine the impact of the conditions of institutionalized racism, sexism, and prejudice on the development of personality, capability, and self concept. Survival strategies, individual strengths and societal treatment of minorities will be analyzed in order to further develop skills for effective practitioner-client relationships. Prerequisite: SOCL 101. 3 credits.

SOCIAL WORK 311-312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in social work. 1-18 credits.

SOCIAL WORK 320. *Social Work Research and Evaluation Design.* The role of scientific inquiry in the continuing development of knowledge and practice skill, measures of accountability, needs assessment, and evaluation design is presented. Students conduct agency research and assessments and study the impact of applied scientific techniques on the design and delivery of professional practice. Prerequisite: MATH 171. 3 credits. **

SOCIAL WORK 335. *Junior Interventive Means Lab.* Laboratory experiences enabling the development and application of practice skills for direct practice. Emphasis is on levels of problems, systematic assessment and problem solving, and uniqueness of various interventive means. Corequisite: SOWK 336. 1 credit. Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 336. *Interventive Means in Social Work.* A generic approach to social work practice with the goal of achieving social justice and the fulfillment of human potential and needs. Students analyze problem situations, select goals and strategies of intervention and worker roles, develop skill in use of self and other resources

and assess effectiveness of intervention and services. Prerequisite: SOWK 281. Corequisite: SOWK 335. 3 credits.* Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 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 240 or permission of instructor. 3 credits.

SOCIAL WORK 340. *Junior Field Integration.* Seminar format provides a supplementary opportunity for generalizing principles and intervention approaches beyond the individual field instruction experience. Focus is on the systematic application of generalist practice principles, both traditional and innovative, in the formation of an integrated professional practice approach. Corequisite: SOWK 392. 1 credit.

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

SOCIAL WORK 392. *Junior Internship in Social Work.* Throughout the semester, a direct practice experience under the supervision of a field instructor. Application and continued growth of knowledge base, social work practice skills, and values are assessed. Termination of the field instruction will include a formal "Junior Evaluation" involving staff and student in an assessment of the student's candidacy for admission into the Social Work Program. Prerequisite: SOWK 336 and 2.25 GPA average overall and in major courses. 5 credits. † Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 401. *Senior Field Integration.* A concurrent seminar providing an opportunity for generalizing intervention skills and experience beyond the student's particular field instruction experience. 3 sessions (30 hours) at regional locations. Corequisites: SOWK 492, 404, 407. 2 credits.

SOCIAL WORK 404. *Social Welfare Administration.* An analysis of skills and understanding essentials for the translation of human service program goals into organizational structures. Emphasis is on organizational concepts and theories, administrative philosophies and actual analyses of structural change and operation of field experience agencies. Corequisites: SOWK 492, 401, 407. 1 credit.

SOCIAL WORK 405. *Working with Special Populations.* A presentation of the principles of majority-minority relationships within the context of diverse "special populations". The problems of minority status due to factors of race, sex, age, sexual preference, and cultural heritage are studied. Prerequisite: 3 hours of Sociology. 3 credits. ***

SOCIAL WORK 406. *Aging and Society.* An introduction to the psychological, social and economic realities of aging with an emphasis on perceiving the elderly as a minority group. Theories of the aging process will be analyzed in conjunction with intervention techniques. 1 credit.

SOCIAL WORK 407. *Law and the Social Worker.* Seminar on law as a resource in social work practice, with emphasis on areas where the two professions meet — such as public welfare, juvenile court, family law, adoptions, etc. Examines attitudes of law and social work toward each other. Corequisites: SOWK 492, 401, 404. 1 credit.

SOCIAL WORK 408. *Jobs, Work, and Career Planning.* The changing nature of work and securing a job are investigated regarding societal changes, the individual's stage in life, and public policy. Strategies for maintaining one's career goals throughout life are presented along with adaptive techniques for career planning. Each student will identify career goals, and explore specific opportunities and approaches to his career. Non-social work majors are encouraged. Prerequisite: 6 hours of social sciences. 2 credits.

SOCIAL WORK 415. *Inter-professional Communication.* Techniques for the Survival of Interventive Strategies. Study of effective professional role performance through the systematic integration and application of knowledge and theory in the design of inter-professional transactions and helping patterns; special attention to use of

a scientific practice base for determining effective professional action. Prerequisite: SOWK 336. 3 credits. Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 427. *Advanced Interventive Means.* Continued development of generic skills and values at the advanced level for professional practice. Emphasis is placed on integration of knowledge into techniques and strategies for human service delivery. Prerequisite: SOWK 392. 3 credits. ** Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 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.

SOCIAL WORK 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.

SOCIAL WORK 485. *Issues Related to Sex and Gender Differences.* A seminar on how sex differences and gendered behaviors are constructed and maintained. 3 credits.

SOCIAL WORK 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

SOCIAL WORK 492. *Senior Internship in Social Work.* Educationally-directed student learning in selected settings. Students learn by participating in the delivery of social services to individuals, small groups, families, organizations, and/or communities. At least 40 hours per week in an agency for 15 weeks. Prerequisite: SOWK 427 and 2.25 GPA average overall and in major courses. Corequisites: SOWK 401, 404 and 407. 12 credits. Only those students who are candidates for the degree in social work may be admitted.

SOCIAL WORK 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.

SOCIAL WORK 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.

Department of Health, Recreation, and Dance

Lisa M. Olenik, *Chair*

Chris Freeland, *Secretary*

The Department offers three B.S. degree programs, one in community health education, one in therapeutic recreation, and one in kinesiology with options in either teaching physical and health education, exercise science, or athletic training. The department also offers a teaching endorsement in driver education, and minor programs in health education, outdoor education, pre-professional clinical studies, and coaching. 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, Ph.D., *Professor of Physical Education*

J. Charles Blauvelt, Ph.D., *Associate Professor of Physical Education*

Allison Y. Colvin, Ed.D., *Assistant Professor of Physical Education*

Loretta E. Coughlin, M.S., *Lecturer in Physical Education*

Margaret A. Frederick, M.S., *Instructor of Athletic Training*

Sharon J. Gaunt, P.E.D. *Lecturer in Physical Education*

Charlotte L. Guynes, Ph.D., *Assistant Professor of Health Education*

Bette L. Harris, Ed.D., *Professor of Physical Education*

Joseph B. Kilby, M.S., *Lecturer in Physical Education*

Rena A. Koesler, Ph.D., *Professor of Recreation*

Chrystyna Kosarchyn, Ph.D., *Professor of Health Education*

Susan E. Lynch, Ph.D., CTRS, *Associate Professor of Therapeutic Recreation*

Sharon M. Menegoni, M.S., *Assistant Professor of Athletic Training*

Lisa M. Olenik, Ph.D., *Associate Professor of Physical Education and Recreation*

Cathy J. Roy, Ph.D., *Assistant Professor of Exercise Science*

Glenda P. Taylor, Ph.D., CTRS, *Associate Professor of Therapeutic Recreation*

Rodney Williams, B.A., *Artist-in-Residence, Dance*

COMMUNITY HEALTH EDUCATION PROGRAM

Faculty

Chrystyna Kosarchyn, Ph.D., *Program Coordinator, Professor of Health Education*

Charlotte L. Guynes, Ph.D., *Assistant Professor of Health Education*

The program in Community Health Education is designed to prepare students for a career in health education in community settings. As a profession that bridges the gap between health information and health practices, community health education offers employment opportunities in a variety of settings: community-based organizations and agencies such as public health departments and voluntary non-profit organizations; health care facilities such as clinics, hospitals, health maintenance organizations, and nursing homes; as well as in corporate settings. Graduates of this program are eligible to sit for the Certified Health Education Specialist (CHES) exam and to apply for advanced study in a variety of health education/health promotion graduate programs.

Admission to the Community Health Education Program requires an application process that must be completed by the second semester of the student's sophomore year which includes the following components:

- a. completion of written application
- b. a 2.5 overall grade point average (GPA)
- c. grades of C or better in English 150, HLTH 200 and 205, and BIOL 206 and 207

Furthermore, the following requirements must be met prior to the student's senior internship;

- a. the completion of all coursework
- b. a 2.5 overall GPA
- c. a 2.75 GPA in the major
- d. a recommendation from the instructor of HLTH 415

COMMUNITY HEALTH EDUCATION MAJOR, B.S. DEGREE

A. General Education Core Requirements. 41 credits

B. Additional Degree Requirements. 7 credits

BIOL 206	Anatomy and Physiology/4 credits*
MATH 171	Statistical Decision Making/3 credits

C. Major Requirements. 72 credits

Theory

HLTH 200	Introduction to Public Health/3 credits*
HLTH 205	Health and Wellness/3 credits*
HLTH 260	First Aid/3 credits
HLTH 275	Medical Terminology/2 credits
HLTH 315	Health Promotion Programming I/3 credits
HLTH 325	Human Diseases/3 credits
HLTH 366	Public Health Issues/3 credits
HLTH 415	Health Promotion Programming II/4 credits
HLTH 492	Internship in Public Health/12 credits (one credit satisfies General Education Goal 15)
HLTH 495	Special Topics/3 credits

Support Courses

BIOL 207	Anatomy and Physiology/4 credits*
ENGL 319	Technical Writing/3 credits
PSYC 101	Introduction to Psychology/3 credits
SOCL 370	Medical Sociology/3 credits
COMM 200	Fundamentals of Communication/3 credits
RECR 437	Group Dynamics/3 credits

Content Courses

Select five (5) courses from the following list:

HLTH 212	Human Sexuality/3 credits
HLTH 215	Physical Activity and Health/3 credits
HLTH 295	Special Topics/3 credits

HLTH 313	Drugs and Human Behavior/3 credits
HLTH 335	Nutrition/3 credits
HLTH 400	Environmental Health/3 credits
HLTH 430	Women's Health Issues/3 credits

D. Total Credits Required for B.S. Degree in Community Health Education - 120 hours

E. Courses in which students must have a grade of C or higher.*

F. All courses are not offered each semester - see course sequence outline on the Community Health Education website for when each course is offered.

KINESIOLOGY PROGRAMS

The Kinesiology curriculum offers programs of study leading to a Bachelor of Science degree in kinesiology in three areas: Athletic Training, Exercise Science, and in teaching Physical and Health Education (PHETE). All 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 options: Athletic Training, Exercise Science, or in Physical and Health Education Teacher Education (PHETE).

PHYSICAL AND HEALTH EDUCATION TEACHER EDUCATION PK-12 OPTION

Faculty

Sarah M. Bingham, Ph.D., *Program Coordinator, Professor of Physical Education*

J. Charles Blauvelt, Ph.D., *Associate Professor of Physical Education*

Allison Y. Colvin, Ed.D., *Assistant Professor of Physical Education*

Bette L. Harris, Ed.D., *Professor of Physical Education*

Lisa M. Olenik, Ph.D., *Associate Professor of Physical Education and Recreation*

PHYSICAL AND HEALTH EDUCATION TEACHER EDUCATION (PHETE)

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 certified 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 the end of the first semester in the sophomore year students complete an application which includes record 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, and possess an overall grade point average of 2.50. All physical education majors must make a minimum grade of "C" in the professional courses: KINS 350 and 380. 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 on the department of Health, Recreation and Kinesiology home page.

KINESIOLOGY, B.S. 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/4 credits
Math 171	
OR MATH 271	Statistical Decision Making/Applied Statistics/3 credits

C. Major Requirements. 83-84 credits

Professional Core

KINS 275	Foundations of Physical Education and Sport/3 credits
KINS 386	Biomechanics/4 credits
KINS 387	Physiology of Exercise/4 credits

TOTAL/11 credits

Teaching Option Activity Requirements

KINS 150	Fitness Education/1 credit
KINS 350	Skill Acquisition and Analysis I: Team Sports/3 credits
KINS 351	Skill Acquisition and Analysis II: Educational Gymnastics and Dance/3 credits
KINS 352	Skill Acquisition and Analysis III: Lifetime Activities/3 credits

Take 1-2 credits from the following:

PHED 211	Intermediate Swimming/1 credit
PHED 212	Lifeguarding and Emergency Water Safety/2 credits
PHED 315	Water Safety Instructor/2 credits

TOTAL CREDITS/11-12

Teaching Option Requirements

BIOL 207	Human Anatomy and Physiology II/4 credits
KINS 175	Introduction to the Profession of Health and Physical Education/1 credit
KINS 275	Foundations of Physical Education and Sport/3 credits
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 380	Pedagogy I: Orientation to Teaching Physical and Health Education/3 credits
KINS 381	Pedagogy II: Physical Education in the Elementary Schools/3 credits
KINS 382	Pedagogy III: Physical Education in Secondary Schools/3 credits
KINS 482	Directed Teaching in Elementary and Secondary Physical Education and Health/12 credits (one credit satisfied 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 212	Human Sexuality/3 credits
HLTH 260	Emergency Care and First Aid/3 credits
HLTH 313	Drugs and Human Behavior/3 credits
HLTH 335	Nutrition/3 credits
HLTH 465	Comprehensive School Health Education/3 credits
EDUC 430	Reading in the Content Area/2 credits

TOTAL CREDITS/61

D. Total Credits Required for B.S. Degree with Physical and Health Education with Teacher Education PK-12 Option – 131-132

Driver Education Endorsement

Any student may elect to take the following sequence of courses and become endorsed to teach driver education in secondary schools.

HLTH 260	Emergency Care and First Aid/3 credits **
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HLTH 301	Safety Education/3 credits
HLTH 302	Driver Education/3 credits
TOTAL/9 credits	

Total Credits Required for B.S. Degree with Physical and Health Education with Teacher Education PK-12 Option – 137-138

NON-TEACHING OPTIONS

ATHLETIC TRAINING

Faculty

Sharon M. Menegoni, M.S., *Program Coordinator, Assistant Professor of Athletic Training*
Margaret A. Frederick, M.S., *Clinical Coordinator, Instructor of Athletic Training*

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited program in athletic training 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 via the Athletic Training Education Program 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 of 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:

- a. written application;
- b. 75 hours of athletic training directed observation/work experience at one of the program's clinical sites;
- c. 30 semester hours of college course work;
- d. a 2.25 overall grade point average (GPA) and a 2.5 GPA or better in all physical education and athletic training major courses are required at the time of application;
- e. courses KINS 200, 210, BIOL 207, and CHEM 101 or BIOL 206;
- f. grades of C or better in KINS 200, 210, BIOL 206 and BIOL 207;
- g. completion of all Level I Skill Competencies and Proficiencies, and
- h. demonstrate appropriate clinical performance and conduct as determined by clinical instructor evaluations of the directed-observation experience.

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 National Athletic Trainers' Association 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 (CAAHEP).

Technical standards for program admission are published in the Athletic Training Education Program Curriculum Handbook.

KINESIOLOGY MAJOR, B.S. DEGREE

ATHLETIC TRAINING

A. General Education Core Requirements. 41 credits

The department requires PSYC 330 for the satisfaction of Goal 12.

B. Additional Degree Requirements. 7 credits

BIOL 206	Human Anatomy and Physiology I/4 credits
MATH 271	Applied Statistics/3 credits

C. Major Requirements. 82 credits

Professional Core

KINS 275	Foundations of Physical Education and Sport/3 credits
KINS 386	Biomechanics/4 credits
KINS 387	Physiology of Exercise/4 credits

TOTAL/11 credits

Athletic Training Option Requirements

Required Courses:

PHYS 101	General Physics I/4 credits*
PHYS 102	General Physics II/4 credits
BIOL 207	Human Anatomy and Physiology II/4 credits
HLTH 260	Emergency Health Care and First Aid/3 credits
HLTH 335	Nutrition/3 credits
HLTH 340	Pharmacology/2 credits
KINS 200	Introduction to Athletic Training/3 credits
KINS 210	Basic Skills in Athletic Training/3 credits
KINS 300	Injury Mechanism and Assessment I (Lower Extremity)/3 credits
KINS 310	Injury Mechanism and Assessment II (Upper Extremity)/3 credits
KINS 320	Therapeutic Modalities/2 credits
KINS 325	Therapeutic Exercise/3 credits
KINS 330	Injury Mechanism and Assessment III (Head, Neck and Spine)/3 credits
KINS 385	Sport Psychology/3 credits
KINS 410	Athletic Training Administration/2 credits
KINS 420	Medical Aspects of Athletic Training/2 credits
KINS 470	Research in Health, Recreation and Kinesiology/3 credits

Take one of the following:

CHEM 101	General Chemistry/4 credits*
or CHEM 111	Fundamentals of Chemistry/4 credits

TOTAL/50*

Clinical Requirements

KINS 371	Clinical Methods in Athletic Training I/2 credits
KINS 372	Clinical Methods in Athletic Training II/2 credits
KINS 471	Clinical Methods in Athletic Training III/2 credits
KINS 472	Clinical Methods in Athletic Training IV/2 credits
KINS 473	Clinical Methods in Athletic Training V/2 credits
KINS 492	Clinical Internship in Athletic Training/12 credits (one credit satisfies General Education Goal 15)

TOTAL/21 credits

- * 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.

D. Total Credits Required for B.S. Degree with Athletic Training Option - 130

EXERCISE SCIENCE

Faculty

Cathy J. Roy, Ph.D., *Program Coordinator, Assistant Professor of Exercise Science*

The Exercise Science Option is designed to provide students with a foundation in the sciences with emphasis in exercise, health, and sport sciences. Students enrolled in this option 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, B.S. DEGREE EXERCISE SCIENCE OPTION

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. 77-78 credits.

Professional Core

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 Organization and Administration of Health and
Physical Education Programs/3 credits

TOTAL/17 credits

Activity Requirements

PHED 116 Beginning Weight Training/1 credit

PHED 126 Beginning Yoga/1 credit

Take one of the following:

PHED 104 Beginning Tennis/1 credit

PHED 108 Beginning Golf/1 credit

PHED 120 Beginning Racquetball/1 credit

Take one of the following:

PHED 110 Non-Swimming/1 credit

PHED 111 Beginning Swimming/1 credit

PHED 112 Water Aerobics/1 credit

PHED 127 Aerobic Dancing/1 credit

PHED 211 Intermediate Swimming/1 credit

PHED 212 Lifeguarding and Emergency Water Safety/2 credits

PHED 315 Water Safety Instructor/2 credits

TOTAL/4 or 5 credits

Fitness Option 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 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 486	Exercise Testing and Prescription/3 credits
KINS 487	Clinical Exercise Physiology/3 credits
KINS 488	Exercise Intervention in Disease/3 credits
KINS 497	Special Projects/3 credits
HLTH 205	Health and Wellness/3 credits
HLTH 215	Physical Activity and Health/3 credits
HLTH 260	Emergency Care and First Aid/3 credits
HLTH 335	Nutrition/3 credits
COMM 101	Oral Communication/3 credits
MARK 280	Fundamentals of Marketing/3credits
OR MANG 360	Principles of Management/3credits
TOTAL/56credits	

D. Total Credits Required for B.S. Degree with Exercise Science Option – 125-126

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.**

THERAPEUTIC RECREATION PROGRAM

Faculty

Glenda P. Taylor, Ph.D., CTRS, *Program Coordinator, Associate Professor of Therapeutic Recreation*

Rena A. Koesler, Ph.D., *Professor of Recreation*

Susan E. Lynch, Ph.D., CTRS, *Associate Professor of Therapeutic Recreation*

The Bachelor of Science Therapeutic Recreation degree is an accredited program of the National Recreation and Park Association/American Association of Leisure and Recreation 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; specialized outdoor programs for adjudicated youth; long-term, sub-acute care; and day care facilities and nursing homes; residences for individuals with developmental disabilities, 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 experiential 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 during the first 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 community work with persons who may have illnesses, disabilities, and those who may be disadvantaged or disenfranchised from the community. 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 (May) of the sophomore year.

2. **Junior Internship**

Eligibility for junior internship requires the successful completion of all courses at the 100, 200, 300 level. The student must maintain a 2.50 GPA in all Therapeutic Recreation content coursework, and a 2.00 GPA overall. The junior internship reflects a minimum 320-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 2.00 GPA overall. The senior internship reflects a 560 hour, minimum of 14 weeks placement to be taken during Spring

semester Senior year, or summer for those students who have permission from the Program Director. 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, B.S. DEGREE

A. General Education Core Requirements. 41 credits

The department requires PSYC 356 for the satisfaction of General Education Goal 12.

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. 83 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 Education Programming/3 credits
RECR 250	Leisure Education and Counseling/2 credits
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 Recreation/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 260	Emergency Care and First Aid/3 credits
HLTH 275	Medical Terminology/2 credits
HLTH 340	Pharmacology/2 credits
BIOL 207	Human Anatomy and Physiology II/4 credits
PSYC 330	Life Span Developmental Psychology/3 credits
TOTAL/84 credits	

Must have a 2.00 overall and 2.50 in major courses**

D. Total Credits Required for B.S. Degree in Therapeutic Recreation – 131

MINORS

The Health, Recreation, and Kinesiology curricula offer minor programs in coaching, health education , outdoor education and pre-professional clinical studies.

COACHING MINOR

Sarah Bingham, Ph.D., *Program Coordinator, Professor of Physical Education*

Students interested in the coaching minor must enroll in 18 hours of specialized professional courses in physical education. Any student may elect to take the following sequence of courses for a minor in coaching:

HLTH 260	Emergency Care and First Aid/3 credits
KINS 200	Introduction to Athletic Training/3 credits
KINS 280	Motor Development/3 credits
KINS 385	Sport Psychology/3 credits
KINS 462	Organization and Administration of Health and Physical Education Programs/3 credits
KINS 486	Practicum/3-6 credits
TOTAL/18-21 credits	

HEALTH EDUCATION MINOR

Chrystyna Kosarchyn, Ph.D., *Program Coordinator, 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 (6 credits)

HLTH 205 Health and Wellness/3 credits

HLTH 325 Human Diseases/3 credits

Elective (12 credits)

Choose 4 courses:

HLTH 212 Human Sexuality/3 credits

HLTH 215 Physical Activity and Health/3 credits

HLTH 400 Environmental Health/3 credits

HLTH 313 Drugs and Human Behavior/3 credits

HLTH 335 Nutrition/3 credits

HLTH 430 Women's Health Issues/3 credits

TOTAL/18 credits

OUTDOOR EDUCATION MINOR

Rena A. Koesler, Ph.D., *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	Experiential and Outdoor Education Programming/3 credits
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RECR 340	Introduction to Outdoor Adventure Skills/3 credits (canoeing, rockclimbing, orienteering)
RECR 350	Ropes Course and Initiative Dynamics/2 credits
RECR 375	Leadership Development Through Wilderness Pursuits/3 credits
HLTH 260	Advanced First Aid and Emergency Care/3 credits
RECR 420	Environmental Education Resources/3 credits
RECR 487	Practicum Experience in Outdoor Education/1-3 credits
TOTAL/18-20 credits	

PRE-PROFESSIONAL CLINICAL STUDIES MINOR

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 majors: 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.

KINS 210	Basic Skills in Athletic Training/3 credits
KINS 300	Injury Mechanism & Assessment I (Lower Extremity)/3 credits
KINS 310	Injury Mechanism & Assessment II (Upper Extremity)/3 credits
KINS 320	Therapeutic Modalities/2 credits
OR	
KINS 330	Injury Mechanism & Assessment III (Head, Neck & Spine)/3 credits
KINS 325	Therapeutic Exercise/3 credits
OR	
KINS 420	Medical Aspects in Athletic Training/2 credits
KINS 386	Biomechanics/4 credits
OR	
KINS 387	Physiology of Exercise/4 credits
TOTAL/18 credits	

HEALTH PROGRAM COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

HEALTH EDUCATION 200. *Introduction to Public Health.* An introduction to the public health profession in terms of the various settings in which public health educators practice, the roles they play and the skills they need. Designed as the initial course for students in the public health education major, this course is open to non-majors as well. 3 credits.

HEALTH EDUCATION 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.

HEALTH EDUCATION 210. *World Health Issues.* Designed to help students develop an understanding of current health problems and issues in the world community, this course examines the cultural, geographic, environmental, social, economic and political influences on health status and health care systems of representative nations, especially those of the non-western world. 3 credits. *

HEALTH EDUCATION 212. *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.

HEALTH EDUCATION 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.

HEALTH EDUCATION 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.

HEALTH EDUCATION 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.

HEALTH EDUCATION 292. *Internship in Health Education.* A semester-long, on-the-job learning experience designed to apply the principles of health education. 1-18 credits.

HEALTH EDUCATION 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.

HEALTH EDUCATION 301. *Safety Education.* Concepts and theories of accident prevention, particularly as they relate to the use of the highways. 3 credits.

HEALTH EDUCATION 302. *Driver Education.* Classroom instruction and supervised experience in teaching practice driving. Prerequisites: valid Virginia driver's license and driving experience and HLTH 301. 3 credits.

HEALTH EDUCATION 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on health education per semester. 1-18 credits.

HEALTH EDUCATION 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. Prerequisites: BIOL 206. 3 credits.

HEALTH EDUCATION 315. *Health Promotion Programming I.* This course focuses on the development of skills necessary to assess individual and community health needs and to plan effective health education programs. Communicating health and health education concerns as well as acting as resources in health education are also addressed. Prerequisites: HLTH 205, three HLTH content electives or consent of instructor. 3 credits. ** and ***

HEALTH EDUCATION 325. *Human Diseases.* A study of communicable and chronic diseases with regards to disease description, description, etiology, signs and symptoms, diagnostic procedures, treatment, prognosis and prevention. Prerequisites: HLTH 205, BIOL 206 and 207 or consent of instructor. 3 credits. ***

HEALTH EDUCATION 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. Prerequisites: BIOL 206. 3 credits.

HEALTH EDUCATION 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.

HEALTH EDUCATION 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.

HEALTH EDUCATION 366. *Public Health Issues.* Identification and analysis of significant issues and problems which challenge the community's health and the American health care system. 3 credits. **

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

HEALTH EDUCATION 392. *Internship in Health Education.* A semester-long, on-the-job learning experience designed to apply the principles of health education. 1-18 credits.

HEALTH EDUCATION 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.

HEALTH EDUCATION 405. *Practicum.* Supervised field experience in community health education setting. 1-3 credits.

HEALTH EDUCATION 415. *Health Promotion Programming II.* A sequel to HLTH 315, this course addresses health promotion program implementation and evaluation and examines the coordination of the provision of health education services. Includes a practicum experience. Prerequisites: HLTH 315. 4 credits.

HEALTH EDUCATION 430. *Women's Health Issues.* An examination of women's health problems, their prevention and treatment. 3 credits.

HEALTH EDUCATION 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, 3 credits.

HEALTH EDUCATION 490. *Independent Study.* Individualized study. 1-18 credits.

HEALTH EDUCATION 492. *Internship in Health Education.* A semester-long, on-the-job learning experience designed to apply the principles of health education. 1-18 credits.

HEALTH EDUCATION 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.

HEALTH EDUCATION 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. **

DANCE COURSE DESCRIPTIONS

DANCE 127 (PHYSICAL EDUCATION 127). *Aerobic Dancing.* An aerobic activity which combines different styles of music with vigorous jazz and modern dance movements to increase cardiorespiratory 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.

DANCE 128 (PHYSICAL EDUCATION 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.

DANCE 129 (PHYSICAL EDUCATION 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.

DANCE 130 (PHYSICAL EDUCATION 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.

DANCE 131 (PHYSICAL EDUCATION 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.

DANCE 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.

DANCE 133 (PHYSICAL EDUCATION 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.

DANCE 136 (PHYSICAL EDUCATION 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.

DANCE 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.

DANCE 228 (PHYSICAL EDUCATION 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.

DANCE 229 (PHYSICAL EDUCATION 229). *Intermediate Ballet.* Emphasis on improving ballet skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANCE 230 (PHYSICAL EDUCATION 230). *Intermediate Jazz.* Emphasis on improving jazz dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANCE 231 (PHYSICAL EDUCATION 231). *Intermediate Modern Dance.* Emphasis on improving modern dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

DANCE 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

Writing Intensive Courses **

Speaking Intensive Courses ***

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 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 is discussed. 3 credits. Prerequisites: KINS 210, BIOL 207.

KINESIOLOGY 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 is discussed. 3 credits. Prerequisites: KINS 210, BIOL 207.

KINESIOLOGY 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: KINS 210. Corequisite: PHYS 102.

KINESIOLOGY 325. *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: KINS 210, 386, PHYS 101.

KINESIOLOGY 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 is discussed. 3 credits. Prerequisites: KINS 210, BIOL 207.

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 410. *Athletic Training Administration.* A practical approach to examination of the administration of athletic training programs including professional communications, the use of records and forms, budgeting, and facility design. 2 credits. Prerequisite or corequisite: KINS 330.** and ***

KINESIOLOGY 420. *Medical Aspects in Athletic Training.* A survey of clinical practices and other topics that relate Athletic Training to Sports Medicine. Focus is on skin conditions, congenital abnormalities, disease, special populations, and environmental factors. Epidemiology, counseling, and motor learning concepts are discussed. Prerequisite: BIOL 206, BIOL 207. 2 credits.

KINESIOLOGY 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.

KINESIOLOGY 472. *Clinical Methods in Athletic Training IV.* Continuation of advanced proficiency mastery in athletic injury management. Supervised clinical education and isokinetic evaluation and interpretation are covered. 2 credits. Prerequisite - Admission to the athletic training program.

KINESIOLOGY 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. Prerequisites -Admission to the athletic training program.

KINESIOLOGY 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 **

Speaking Intensive Courses ***

PHYSICAL EDUCATION 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. *

Choose one of the following sections:

Fitness Concepts through Aerobic Exercise

Fitness Concepts through Aerobic Dance

Fitness Concepts through Cycling

Fitness Concepts through Multiple Activities

Fitness Concepts through Restricted Activity

Fitness Concepts through Swimming

Fitness Concepts through Water Aerobics

Fitness Concepts through Weight Training

PHYSICAL EDUCATION ACTIVITY CLASSES

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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 103. *Beginning Gymnastics.* An introduction to beginning tumbling and apparatus skill. Emphasis is placed on correct technique and form. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 106. *Downhill Skiing.* Instruction in the basic skills of traversing hill, snowplow, stopping and parallel turns. Fee charged. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 113. *Beginning Synchronized Swimming.* Instruction in rhythmic swimming, figures and sculling techniques. Performance of basic routine to music. 1 credit.

PHYSICAL EDUCATION 114. *Beginning Scuba Diving.* Instruction in scuba diving skills in preparation for open water dives and certification. (Fee charged.) 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 117. *Beginning Canoeing.* Basic river paddling skills in canoeing culminating in river trip(s) in class I and class II white water. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 120. *Beginning Racquetball.* Basic skills and rules of the sport applied to the games of singles, doubles, and 3 player racquetball. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 127 (DANCE 127). *Aerobic Dancing.* An aerobic activity which combines different styles of music with vigorous jazz and modern dance movements to increase cardiorespiratory 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.

PHYSICAL EDUCATION 128 (DANCE 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, rumba, tango, samba, Lindy and fox trot. 1 credit.

PHYSICAL EDUCATION 129 (DANCE 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.

PHYSICAL EDUCATION 130 (DANCE 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.

PHYSICAL EDUCATION 131 (DANCE 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.

PHYSICAL EDUCATION 133 (DANCE 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.

PHYSICAL EDUCATION 134. *Track and Field.* Instruction in basic track and field events, rules, workouts, and testing. 1 credit.

PHYSICAL EDUCATION 136 (DANCE 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 202. *Intermediate Fencing.* Review of the basic skills. Emphasis on competitive fencing. 1 credit.

PHYSICAL EDUCATION 204. *Intermediate Tennis.* Instruction in spin serve, lob and advanced drive placement. Emphasis on singles and doubles playing strategies. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 209. *Intermediate Volleyball.* Review of the basic skills, offenses and defenses, strategies and rules. Instruction in intermediate to advance play and skills. 1 credit.

PHYSICAL EDUCATION 211. *Intermediate Swimming.* Instruction designed to improve skill in mastery of five basic strokes, water safety skills and diving. Prerequisites: able to swim the length of the pool using three (3) different strokes. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 213. *Intermediate Synchronized Swimming.* Junior level synchronized swimming. Figures and choreography of a routine. Prerequisite: pass screening test. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 223. *Intermediate Equestrian.* 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.

PHYSICAL EDUCATION 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: Beginning Camping or permission of instructor. 2 credits.

PHYSICAL EDUCATION 228 (Dance 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.

PHYSICAL EDUCATION 229 (Dance 229). *Intermediate Ballet.* Emphasis on improving ballet skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHYSICAL EDUCATION 230 (Dance 230). *Intermediate Jazz.* Emphasis on improving jazz dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHYSICAL EDUCATION 231 (Dance 231). *Intermediate Modern Dance.* Emphasis on improving modern dance skills and on allowing further opportunities for creating and learning dances. 1 credit.

PHYSICAL EDUCATION 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.

PHYSICAL EDUCATION 314. *Fitness Swimming.* Emphasis on competitive stroke with workouts designed for endurance and speed. 1 credit.

PHYSICAL EDUCATION 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

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 205. *Introduction to Exercise Science.* This course is designed to introduce freshman and transfer majors to such aspects of the discipline as the areas of study, 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.

KINESIOLOGY 275. *Foundations of Physical Education And Sport.* Survey of the historical philosophical bases of health and physical education. 3 credits. **

KINESIOLOGY 280. *Motor Development.* Movement changes throughout the lifespan and their implications for the curriculum in physical education. 3 credits.

KINESIOLOGY 292. *Internship in Physical Education.* A semester-long, on-the-job learning experience designed to apply the principles of physical education. 1-18 credits.

KINESIOLOGY 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.

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

KINESIOLOGY 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.

KINESIOLOGY 351. *Skill Acquisition and Analysis II: Educational Gymnastics and Dance.* The purpose of this course is to provide learning experiences that will lead to the development of basic skills in educational gymnastics and dance. The course will focus on how to plan, develop and implement gymnastic movements, routines, dance steps and sequences. 3 credits.

KINESIOLOGY 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.

KINESIOLOGY 362. *Organization and Administration of Intramurals.* Practice and theory in organizing and administering intramurals. 3 credits.

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 380. *Pedagogy I: Orientation to Teaching Physical and Health Education.* Orientation to the teaching-learning process that aims to increase student's understanding of the dimensions of effective teaching and to develop teaching skills and strategies under appropriate and controlled conditions. Corequisite: PHED 350. 3 credits. ***

KINESIOLOGY 381. *Pedagogy II: Physical Education in the Elementary Schools.* This second course 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 a developmentally appropriate physical education programs in elementary school. Issues such as diversity curriculum development, teaching techniques, and assessment of learning are discussed with special emphasis on the "Skill Themes" approach at the elementary school. Students will continue to teach in controlled environments as well as in the elementary school setting. Prerequisite: KINS 380. Corequisite: KINS 351. 3 credits.

KINESIOLOGY 382. *Pedagogy III: Physical Education in Secondary Schools.* This course allows students to refine and polish their teaching skills prior to student teaching. The course focus is on the secondary level of physical education and covers issues such as characteristics of learners, curriculum development, teaching techniques, and assessment of learning, with special emphasis on the "Sport Education" model of teaching physical education. Students will have a field teaching experience at the secondary level. Prerequisites: KINS 381. Corequisite: KINS 352. 3 credits. ***

KINESIOLOGY 385. *Sport Psychology.* An examination of the psychological dimensions which influence an athlete's skill acquisition and performance in the competitive environment. 3 credits.

KINESIOLOGY 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. **

KINESIOLOGY 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.

KINESIOLOGY 389. *Elementary School Health and Physical Education.* Health and physical education principles and activities for the elementary school. For elementary majors. 3 credits.

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

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 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.

KINESIOLOGY 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.
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KINESIOLOGY 399. *Advanced Exercise Physiology.* A study of the acute and chronic physiologic adaptations to upon anaerobic and aerobic energy metabolism, energy support systems, and adaptations to training. 3 credits.

KINESIOLOGY 462. *Organization and Administration of Health and Physical Education Programs.* Administrative theory applicable to a variety of settings including education, industry, health clubs, Y's. 3 credits. **

KINESIOLOGY 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.** and ***

KINESIOLOGY 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. 12 credits.

KINESIOLOGY 483. *Seminar in Teaching.* A seminar to examine the influence societal and educational factors have on education and teaching. Topics will include the historical purposes of education, current issues influencing education, and ways in which physical education and health are influenced by these larger issues. 2 credits. **

KINESIOLOGY 485. *Motor Learning and Control.* Processes and conditions influencing the acquisition and performance of motor skills. 3 credits.

KINESIOLOGY 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.

KINESIOLOGY 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. ***

KINESIOLOGY 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. ***

KINESIOLOGY 490. *Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

KINESIOLOGY 492. *Internship.* A semester-long, on-the-job learning experience designed to apply the principles of physical education. 1-18 credits.

KINESIOLOGY 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. Prerequisites: Permission of the Instructor.

KINESIOLOGY 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.

KINESIOLOGY 497. *Special Projects in Physical Education.* Independent study and research projects for qualified students. 1-3 credits.

KINESIOLOGY 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. **

RECREATION COURSE DESCRIPTIONS

Writing Intensive Courses **

Speaking Intensive Courses ***

RECREATION 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.

RECREATION 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.

RECREATION 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.

RECREATION 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. Prerequisite: RECR 110, or permission of the Program Coordinator. 3 credits.

RECREATION 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. Prerequisite or Co-requisite: RECR 111. 3 credits.

RECREATION 206. *Introduction to American Sign Language.* A practical study of deaf culture and the history, origin and techniques of American Sign Language (ASL) with application in a variety of settings providing services to members of the deaf community. 3 credits.

RECREATION 207. *Intermediate American Sign Language.* Provide students with additional American Sign Language structure, and sign language vocabulary. Emphasizes linguistic aspects of ASL, including classifiers, syntax, locatives, placement, and various sentence types. Develops skill in expressive/receptive use of language. Prerequisite: RECR 206. 3 credits.

RECREATION 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. Prerequisite or Co-requisite: RECR 111. 3 credits.

RECREATION 237. *Adventure Education 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. Prerequisite: RECR 205. 3 credits.

RECREATION 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. Prerequisite: RECR 110, 111, 120. 2 credits.

RECREATION 292. *Internship in Recreation.* A semester-long, on-the-job learning experience designed to apply the principles of recreation. 1-18 credits.

RECREATION 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.

RECREATION 301. *Therapeutic Recreation in Mental Health.* An exploration of socio-cultural and psychodynamic 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, RECR 205, 320, 371. 3 credits.

RECREATION 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.

RECREATION 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. Prerequisites: 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.

RECREATION 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, 338. 3 credits.***

RECREATION 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.

RECREATION 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 be able to transfer skills into practice. 3 credits.

RECREATION 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. 2 credits.

RECREATION 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.. Prerequisite: BIOL 206, 207, PSYC 330, RECR 250, 320, 371. 3 credits.

RECREATION 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.

RECREATION 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.

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

RECREATION 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. Prerequisite: RECR 301, 303, 304, 320, 360, 408, HLTH 260; and 2.0 overall GPA and 2.50 in major. 6 credits.

RECREATION 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-requisite: RECR 301, 303, 360. 3 credits.

RECREATION 410. *Supervision and Administration of Recreation.* 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. Prerequisite: RECR 301, 303, 304, 320, 360, 392. 3 credits.

RECREATION 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 environment 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.

RECREATION 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.***

RECREATION 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. Prerequisite: RECR 392, 408 and permission of the Program Coordinator, Co-requisite: RECR 410, 437, 470. 3 credits.

RECREATION 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.

RECREATION 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. Prerequisite: RECR 392, 408; Co-requisite: RECR 410, 437, 461. 3 credits.

RECREATION 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 per-

spective 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.

RECREATION 490. *Independent Study.* Individualized study. 1-18 credits.

RECREATION 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. Prerequisite: Completion of all coursework. Minimum GPA 2.50 TR content courses and GPA 2.00 overall. Permission of the Program Coordinator. 12 credits.

RECREATION 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.

RECREATION 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.**

COLLEGE OF ARTS AND SCIENCES

David P. Cordle, D.M., *Dean*
Joanna H. Baker, M.S., *Assistant Dean*
Cynthia Thompson, *Executive Secretary*

Interdisciplinary Programs

International Studies
Liberal Studies
Women's Studies

Departments

Department of Art
Department of Communication Studies and Theatre
Department of English and Modern Languages
Department of History, Political Science, and Philosophy
Department of Mathematics and Computer Science
Department of Music
Department of Natural Sciences
Department of Psychology
Department of Sociology, Anthropology, and Criminal Justice Studies

International Studies Program

International Studies Minor

Longwood offers an International Studies minor for those students who wish to devote a part of their education to learning about societies other than their own; it aims to give interested students an opportunity to supplement their academic major with a concentration of studies which will enhance an understanding of the larger world in which we must live and work.

Students who wish to participate in the minor should contact Dr. John Reynolds, Director of International Affairs, in Lancaster 124.

Requirements for 18-Credit Minor in International Studies

1. 9 credit hours in a modern language at the 201 level or above to include 330 (Culture and Civilization).

Note: Modern Language majors must take all 18 hours in number 2 below.

2. 9 credit hours chosen from the following (no more than two courses from any one discipline may be chosen):

ANTH 204	Language and Culture/3 credits
ANTH 316	People of Africa/3 credits
ANTH 317	Peoples of the Pacific/3 credits
ANTH 320	Folklore/3 credits
ART 261	History of Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits
BIOL 496	Research Projects in Biology/1-4 credits
CHEM 496	Research Projects in Chemistry/1-4 credits
ECON 307	Transition and Development to Free Markets/3 credits
ECON 319	International Economics/3 credits
GEOG 352	World Regional Geography/3 credits
GEOG 401	Geography of South and East Asia/3 credits
GEOG 402	Geography of Latin America/3 credits
GEOG 403	Geography of Europe/3 credits
GEOG 444	Political Geography/3 credits
GEOG 450	Geography of Contemporary Problem Areas/3 credits
GEOG 453	Geography of the Former Soviet Union/3 credits
HLTH 210	World Health Issues/3 credits
HIST 200	History of China/3 credits
HIST 307	United States Diplomatic History to 1898/3 credits
HIST 308	United States Diplomatic History from 1898/3 credits
HIST 314	Political History of Africa/3 credits
HIST 325	History of Latin America/3 credits
HIST 336	History of Japan/3 credits
HIST 355	Europe in the Nineteenth Century, 1815-1914/3 credits
HIST 356	Europe in the Twentieth Century, 1900-present/3 credits
HIST 359	Russian History to 1894/3 credits
HIST 360	Russian History Since 1894/3 credits
MARK 384	International Marketing/3 credits
PHIL 242	World Religions/3 credits
PHED/DANC 136	International Folk Dance/1 credit
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 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits
POSC 441	International Relations/3 credits
POSC 442	International Law and Organizations/3 credits
POSC 469	Soviet Diplomacy/3 credits
THEA 332	Non-Western Performance/3 credits

Students may also take part in trips abroad organized by Longwood and participate in programs of study at foreign universities.

International Affairs/Study Abroad

Students desiring a semester/full-year/summer term abroad must plan early for their study abroad experience by consulting with the academic advisor and the Office of International Affairs. Most students choose to study in the junior year, however, students are eligible to go overseas during the sophomore or senior years. Study abroad opportunities are open to students in all majors. Modern Language majors are required to study abroad for one semester although a full year is highly desirable. Non-language majors have a variety of options where the language of instruction is English.

All Federal, with the exception of Federal Work Study, state and institutional aid may be applied toward the costs of approved study abroad programs. Longwood has limited scholarship money available to defray study abroad expenses.

LONGWOOD IN AUSTRIA

Longwood, in affiliation with the New England Study Abroad Program at Salzburg, provides students with the opportunity to participate in either a Semester or Junior Year Abroad Program situated in one of Europe's most prominent cultural centers. Birthplace of Mozart and site of the renowned Salzburg Festival, the city has a long history as one of the premier music capitals of Europe.

Matriculated students at Longwood who have a minimum two years of college level German with a "B" average and overall GPA of 2.5 are eligible. Tuition costs for a semester or year are close to the regular costs for study at Longwood. Airfare, room and board, supplemental health insurance, and personal expenses are extra.

Like Austrian students, program participants are housed in private homes, residence halls or apartments near Salzburg.

LONGWOOD IN ENGLAND UNIVERSITY OF DERBY

Longwood offers a limited number of one-for-one exchange program places at the University of Derby for either fall or spring semesters. The program is open to all fields of study.

Students must have an overall 2.5 GPA to be eligible and have completed one year in residence at Longwood. Longwood tuition, room, board and other fees are paid directly to the home institution. Airfare, health insurance and personal expenses are extra. Housing is in university residence hall suites which are self-catered.

LONGWOOD IN FRANCE AIX-EN-PROVENCE AND AVIGNON

Students may take a semester or year at the Institute of American Studies at the Aix-en-Provence or Avignon Centers. Depending upon level of French proficiency, students may be assigned to either center for language, cultural, and other course study. Students are housed with carefully selected French host families. Program costs include tuition, room and partial board and a limited number of cultural programs and excursions. A minimum 2.5 overall GPA and a 3.0 in French is required.

LONGWOOD IN PARIS

Business majors who have completed two years of college level French may participate in either a semester or full-year student exchange program at the Ecole Commerciale in Paris. Courses are offered in accounting, management, finance and other business related areas. Full year students normally complete an internship with a French company during the second semester. Students are housed with French families. Costs are equivalent to Longwood tuition and fees with airfare, health insurance, and personal expenses extra.

LONGWOOD IN MARTINIQUE FORT-DE-FRANCE

A four-week summer intensive French language and culture immersion program is offered to students who have completed two years of college-level French. A maximum of six credits may be earned. Students are housed with carefully selected French families. Program costs include tuition, housing, board, and excursions. Airfare and health insurance are extra. A member of the Longwood Modern Language faculty accompanies and remains with the group during the first part of the program.

LONGWOOD IN NANTES/SAINT-NAZAIRE

Longwood students majoring in business and economics are eligible to study during the fall semester at the Ecole de Gestion et de Commerce of St.-Nazaire. Courses are offered in either French or English. Intensive language study is also available. A "mini" internship may be arranged with prior approval. Living arrangements are coordinated by the EGC main office.

LONGWOOD IN GERMANY HEIDELBERG

Longwood, in affiliation with Heidelberg College in Tiffin, Ohio offers students a semester or full year program at Heidelberg University, Germany's oldest university. Resting on the banks of the Neckar River in the Rhine-Moselle region of Germany, Heidelberg is situated in the heart of Europe.

Students must have successfully completed two years of college level German with a "B" average as well as 3.0 overall GPA. A variety of course work is offered including internships to qualified students at the end of the first semester. Exceptional research libraries are available in the areas of German-American Relations, American History, and Jewish Studies. Housing is provided in self-catering residence halls. Program costs include tuition, health insurance, program sponsored study trips and excursions. Housing fees are assessed upon arrival depending on actual hall assignments.

MARY IMMACULATE COLLEGE

Mary Immaculate is linked to the University of Limerick and offers undergraduate degrees in both education and the arts. Longwood students in Education may complete their practice teaching through this college. A minimum GPA of 2.5 is required for this program. A limited number of one-for-one exchanges is available.

LONGWOOD IN SPAIN VALENCIA

Longwood, in affiliation with the Institute of Spanish Studies in Valencia, offers academic year, semester, and summer program course work in Spanish conversation, composition, literature, history, culture and civilization among others. Located on the Mediterranean coast, Valencia enjoys a mild climate. Byzantine, Arab and later Spanish influences are evident throughout the city.

For academic year and semester students, two years of college level Spanish are required with an overall GPA of 2.5. Summer program students may begin intensive Spanish study or continue course work at more advanced levels. Students live with carefully selected Spanish families, and program cultural fieldtrips and activities are also included.

LONGWOOD IN VENEZUELA MERIDA

Academic year, semester, and summer programs are offered in collaboration with VENUSA, the Institute of International Studies and Modern Languages in Merida. Course work in Spanish conversation, composition, literature, history, and culture and civilization among others is offered. Merida is located in the highlands surrounded by Andean peaks and is a blend of Colonial Spain and modern day Venezuela.

Students attending the program during the academic year must have completed four semesters of college-level Spanish with an overall 2.5 GPA. Summer program students may begin an intensive language and culture program or enroll in advanced level courses. Housing with carefully selected families is provided as well as local field trips and cultural activities.

OTHER PROGRAMS

Longwood has on-going program relationships with the following institutions: Universities of Essex, Kent/Canterbury, York, Leicester, Goldsmiths college, and the University of Limerick. Contact the International Affairs for details.

In addition to study abroad opportunities, the Office of International Affairs sponsors on-campus programs and activities to promote international and cross-cultural awareness involving students, faculty, and staff.

LIBERAL STUDIES

Joanna Baker, *Program Coordinator*

LIBERAL STUDIES MAJOR AND TEACHER EDUCATION PROGRAM

The Liberal Studies program has been designed primarily for students seeking licensure to teach multiple subjects in Elementary, Middle or Special Education. The major in Liberal Studies provides a solid background in the main areas taught in Elementary and Middle Schools: the language arts, social sciences, mathematics, and the sciences. Faculty from a variety of Arts and Sciences disciplines have worked with faculty from the College of Education and Human Services to develop the program and coordinate it with the sequences of education courses leading to Elementary (PK-6), Middle (6-8) and Special Education licensure. The program is also intended to develop broadly informed individuals who understand contemporary issues, and will provide civic and professional leadership.

*** Students not seeking licensure can complete the major 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).

Every attempt has been made to state the major and minor requirements as clearly as possible. However, every student majoring in the program must maintain close communication with an academic advisor to plan and schedule the program. Faculty in the program are also happy to assist each student in this and in defining career goals and expectations.

The major in Liberal Studies is administered through the Office of the Dean of the College of Arts and Sciences. Students interested in discussing or enrolling in the program should consult with a program coordinator.

NOTE: The program does not guarantee that all of the courses listed will be offered every year.

LIBERAL STUDIES MAJOR, B.A., B.S.

A. General Education Core Requirements. 41 credits

Goal 12: Sociology 320 required

Goal 13: Philosophy 308 required

Goal 15: Satisfied by any practicum

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

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

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

ENGLISH/9 credits

ENGL 380

ENGL 382

ENGL 483

Children's Literature/3credits

Traditional and Modern Grammar/3 credits

Writing: Theory and Practice/3 credits

NATURAL SCIENCES/11 credits

BIOL 114	Fundamentals Life Science/4 credits
EASC 101	Physical Science/4 credits
EASC 300	The Dynamic Planet/3 credits

SOCIAL SCIENCES/9 credits

GEOG 241	Cultural Geography/3 credits
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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 Systems/3 credits (Required for licensure and satisfies General Education Goal 8)

MATHEMATICS/9 credits

MATH 309	Numeration Systems/3 credits
MATH 310	Functions, Probability, and Statistics/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	Elementary School Health and Physical Education
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ELECTIVE/three (3) credits from the following:

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

EDUCATION/40 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
*EDUC 299	Admission to Teacher Preparation/0 credits

PRACTICA: Two practica are required: one on the primary level and one on the middle school level

EDUC 265	Practicum I – Primary or Middle School level/3 credits
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Take in first summer session at end of freshman or sophomore year:

EDUC 370	Practicum II – Primary or Middle School Level/3credits (Prerequisite: EDUC 265)
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Take in first summer session at end of sophomore or junior year:

PARTNERSHIP SEMESTER

EDUC 325	Teaching Reading and Language Arts in the Elementary School/2 credits
EDUC 326	Teaching Reading and Language Arts in the Elementary Grades (PK-6)/2 cr.
EDUC 450	Principles of Instruction (PK-8)/2 credits
EDUC 451	Curriculum in the Elementary School (PK-6)/2 credits

EDUC 380	Classroom Assessment/2 credits
EDUC 484	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
SPED 489	Survey of Exceptional Children/3 credits

(All of the above will be taken prior to enrolling in the Professional Semester.
A minimum cumulative 2.5 GPA is required.
See Department of Education pages for other requirements.)

* Students must earn a "Pass" in EDUC 299 before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

Professional Semester:

EDUC 400	Directed Teaching in the Elementary and Middle School /11 credits
OR	
EDUC 401	Directed Teaching in the Elementary School / 11 credits
EDUC 488	Education Seminar/1credit

E. LIBERAL STUDIES MAJOR, ENDORSEMENT TO TEACH BOTH ELEMENTARY (PK-6) AND MIDDLE GRADES (6-8)/55-62 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 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:

Education 327	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.

ENGLISH

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 should be taken in place of ENGL 483)

MATHEMATICS

MATH 181	Finite Mathematics/3 credits
MATH 430	Teaching Middle School Mathematics/3 credits (Can be counted as the approved elective in Liberal Studies major)
• MATH 164	
OR MATH 261	Precalculus/ 3 credits <u>or</u> Differential and Integral Calculus/4 credits (One of these is required for licensure and satisfies the 3 credits of General Education Goal 5)

NATURAL SCIENCE

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

HIST 110	Modern Western Civilization/3 credits
•HIST 100	Foundations of Western Civilization/3 credits (Required for licensure and satisfies General Education Goal 7)

F. LIBERAL STUDIES MAJOR, MIDDLE SCHOOL ENDORSEMENT ONLY

(Grades 6-8: Two subjects) 36-44 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 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:

ENGLISH:

CONCENTRATORS/12 CREDITS

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

NONCONCENTRATORS/3 credits

ENGL 350 OR 382 OR 479

MATHEMATICS:

CONCENTRATORS/18 credits

MATH181	Finite Mathematics/3credits
MATH 309	Numeration Systems/3 credits
MATH 310	Functions, Probability, and Statistics/3 credits
MATH 313	Geometry and Reasoning/3 credits

OR

MATH 335	Geometry/3 credits
MATH 430	Teaching Middle School Mathematics
CMSC 121	Introduction to Computer Science/3credits

OR

CMSC 204	Introduction to Programming/3 credits
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NONCONCENTRATORS/3 credits

MATH 310 Functions, Probability, and Statistics/3 credits

- MATH 164** Precalculus/3 credits
(Required for licensure and Satisfies General Education Goal 5)

NATURAL SCIENCES:

CONCENTRATORS/11 credits

- | | |
|-----------------|--|
| BIOL 114 | Fundamentals of Life Science/4 credits |
| EASC 101 | Physical Science/4 credits |
| EASC 300 | The Dynamic Planet/3 credits |
- CHEM 101** General Chemistry/4 credits
(Required for licensure and Satisfies General Education Goal 6)

NONCONCENTRATORS/8 credits

BIOL 114	(Life Science)/4 credits
EASC 101	(Physical Science) OR EASC 300 (Dynamic Planet)/4 credits

SOCIAL SCIENCES

CONCENTRATORS/15 credits

HIST 110	Modern Western Civilization / 3 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
 ECON 111 Contemporary Issues and Social Policy
 OR 115 Economics for Educators
 • HIST 100 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)
 NONCONCENTRATORS Six (6) credit hours beyond General Education from the list above.

EDUCATION/40 credits.

Candidates for **Middle Grades Licensure only** must complete the following Education courses

- EDUC 245 Human Growth and Development/3 credits
 EDUC 260 Introduction to the Teaching Profession/2credits
 *EDUC 299 Admission to Teacher Preparation/0 credits
 PRACTICA: Two practica are required on the middle school level
 Take in first session of summer school at end of freshman or sophomore year:
 EDUC 265 Practicum I /3 credits
 EDUC 370 Practicum II/3 credits (Prerequisite: ED265)

PARTNERSHIP SEMESTER

- EDUC 325 Teaching Reading and Language Arts in the Elementary School/2 credits
 EDUC 327 Teaching Reading and Language Arts in the Middle School Grades (6-8)/2 credits
 EDUC 450 Principles of Instruction (N,K-8) /2 credits
 EDUC 452 Curriculum in the Middle School (6-8)/2 credits
 EDUC 380 Classroom Assessment/2 credits
 EDUC 484 Media and Technology/1 credit
 EDUC 487 Classroom Management and System Issues/3 credits
 SPED 489 Survey of Exceptional Children/3 credits
 (All of the above will be taken prior to enrolling in the Professional Semester.
 A minimum 2.5 GPA in both the Liberal Studies major and overall cumulative record is required. See Department of Education pages for other requirements.)

- * Students must earn a "Pass" in EDUC 299 before they will be permitted to enroll in any subsequent 300-400 level EDUC course.
- These courses are required in the major or concentration and also meet general education goal requirements.

Professional Semester:

- EDUC 405 Directed Teaching in the Middle School / 11 credits
 EDUC 488 Education Seminar/1credit

G. **SPECIAL EDUCATION ENDORSEMENT**(L/D, E/BD, Mild MR), grades N,K-12, 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. A B.A. or B.S. degree in Liberal Studies will be awarded upon completion of the fourth year and a M.S. 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.

H. **MINOR**/18-24 credits. Students who are not seeking a teaching endorsement must select a minor in one of the Liberal Arts and Sciences or in Economics. At least six credits in the Minor must be at the 300/400 level. (Students selecting this option 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.

- I. Total credits required for a B.A. or B.S. with Elementary Teaching Endorsement/128.
Total credits required for a B.A. or B.S. with Elementary and Middle School Teaching Endorsements/133-142.

Total credits required for a B.A. or B.S. with Middle School Teaching Endorsement in two concentrations: 120-125.

Total credits required for a B.A. or B.S. with Special Education Teaching Endorsement/127.

Total credits required for a B.A. or B.S. with a Minor in an Arts and Sciences discipline or Economics/120

Women's Studies Program

Pamela J. Tracy, *Director of Women's Studies*

The Women's Studies Minor at Longwood College offers students an interdisciplinary program that incorporates an understanding of gender perspectives in all areas of the curriculum. While reflecting the diversity of women's lives, the program examines the dynamics of race, class, and gender categories from the perspective of women in all their variety. The program encourages students to explore the world in which they live.

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

Requirements for 18-Credit Minor in Women's Studies

In order to complete a minor in Women's 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 12 hours at the 300 or 400 level) from the following courses.

ANTH/WSTU 106	Introduction to Women's Studies/3 credits
ANTH 325	Women and Society/3 credits
ART 360	Women in the Visual Arts/3 credits
COMM 370	Gender and Communication/3 credits
ENGL 260	Mythology/3 credits
ENGL 258	Women and Film/3 credits
ENGL 432	Women and Literature/3 credits
HLTH 430	Women's Health and Health Care 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 241	Marriage and the Family/3 credits
SOCL 325	Women and Society/3 credits
SOCL 351	Sociology of Domestic Violence/3 credits
SOCL 423	Women and Crime/3 credits
THEA 431	American Drama/3 credits
WSTU 295	Selected Topics/1-3 credits
WSTU 489	Directed Study/2-3 credits
WSTU 490	Independent Study/1-18 credits
WSTU 492	Internship in Women's Studies/1-6 credits
WSTU 495	Special Topics/1-6 credits

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

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

WOMEN'S STUDIES COURSE DESCRIPTIONS

WOMEN'S STUDIES 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.

WOMEN'S STUDIES 295. *Selected Topics.* Selected topics in Women's Studies. The topics will vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

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

WOMEN'S STUDIES 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 Studies, 2.5 GPA, and approval of the Director of Women's Studies. The work done in the Symposium will be evaluated by a faculty member designated by the Program Director, and cannot be *double-counted* at Longwood to meet the requirements of other disciplines. 2-3 credits.

WOMEN'S STUDIES 492. *Internship in Women's 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 Director of Women's Studies. Prerequisites: two courses in Women's Studies, 2.5 GPA, and permission of the Longwood Women's Studies Committee. 1-6 credits.

WOMEN'S STUDIES 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits.

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

For further information on the Women's Studies Minor at Longwood College, please contact Dr. Pamela J. Tracy, Department of Communication Studies and Theatre.

Department of Art

Randall W. Edmonson, *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, two 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

Faculty

Mark S. Baldridge, M.F.A., *Professor of Art*

Martin Brief, M.F.A., *Assistant Professor of Art*

John S. J. Burke, Ed.D., *Professor of Art*

Anna Cox, M.F.A., *Assistant Professor of Art*

Randall W. Edmonson, M.F.A., *Chair and Professor of Art*

Claire Black McCoy, Ph.D., *Assistant Professor of Art History*

Kelly Nelson, M.F.A., M.A., *Assistant Professor of Art*

Christopher M. Register, M.F.A., *Associate Professor of Art*

Mara Adamitz Scrupe, M.F.A., *Visiting Professor and Barbara L. Bishop Endowed Chair in Art*

John Williams, M.F.A., *Lecturer in Art*

The primary educational objective of the Department of Art is to provide quality baccalaureate degree programs in art education, graphic design, interior architecture 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.

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 chair for advising. 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.

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.

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. In addition, freshman majors are required to take a written assessment of their overall knowledge of art, which will be repeated in their senior year. These requirements help to assess the effectiveness of the program will determine each student's eligibility to continue in the art program, and insure a quality and relevant education for our majors.

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.

BACHELOR OF FINE ARTS DEGREE

Visual and Performing Arts

Art Education Concentration

(Leading to Teacher Endorsement)

- 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 Requirements:

HUMANITIES (3 credits) not in the discipline of the major.
 SOCIAL SCIENCES (3 credits) Students must take one of the following courses:
 History 200, 336, 354 or 360;
 Geography 241;
 Political Science 436, 437, 469
 OR 3 credits at the 202 or above level foreign language.

C. Major Requirements/56 credits.

Major Requirements:

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 Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits ART 461
Senior Seminar/2 credits	
TOTAL	20 credits

Art Education Concentration:

ART 155	Basic Processes and Principles of Photography/3 credits
ART 213	Ceramics I/3 credits
ART 216	Fibers: Weaving/3 credits
or ART 217	Fabrics: Surface Design/3 credits
ART 250	Printmaking I/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 313	Jewelry and Metal Work/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	27 Credits

Mini-concentration/9 credits. Select all 9 credits from any **one** category.

ART HISTORY

ART 301	Survey of Western Art in Europe/3 credits
ART 302	Survey of Western Art in Europe/3 credits
ART 360	Women in the Visual Arts/3 credits
ART 361	Realism and Impressionism/3 credits
ART 363	History of Greek and Roman Art and Architecture/3 credits
ART 364	History of Renaissance and Baroque Art and Architecture/3 credits
ART 367	History of Modern Architecture/3 credits
ART 369	American Art/3 credits

CRAFTS

ART 110	Crafts/3 credits
ART 214	Ceramics II/3 credits
ART 216	Fibers: Weaving
ART 217	Fibers: Surface Design
ART 218	Design in Stained Glass/3 credits
ART 224	Design in Wood/3 credits
ART 309	Enamels/3 credits
ART 324	Papermaking/3 credits
ART 325	Advanced Design in Wood/3 credits

ART 406	Ceramics Studio/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 419	Advanced Jewelry III/3 credits
ART 422	Advanced Casting II/3 credits

DRAWING AND PRINTMAKING

ART 230	Experimental Media in Drawing/3 credits
ART 251	Printmaking II/3 credits
ART 330	Illustration/3 credits
ART 351	Printmaking: Serigraphy/3 credits
ART 352	Lithography/3 credits
ART 430	Drawing Studio/3 credits
ART 450	Printmaking Studio/3 credits

GRAPHIC DESIGN

ART 221	Graphic Design I/3 credits
ART 225	Graphic Art Production I/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 322	Graphic Design and Production II/3 credits
ART 330	Illustration/3 credits
ART 254	Color Photography/3 credits

INTERIOR ARCHITECTURE

ART 101	Introduction to Interior Design/3 credits
ART 121	Introduction to Environmental Design Issues/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 304	Commercial Interior Design/3 credits
ART 306	Computer & Construction Documentation in Interior Design/3 credits
ART 404	Public Interior Space/3 credits
ART 405	Senior Interior Design Synthesis/3 credits

PAINTING

ART 271	Painting: Oil Media/3 credits
ART 371	Advance Painting/3 credits
ART 471	Painting Studio/3 credits

PHOTOGRAPHY

ART 255	Intermediate Photography/3 credits
ART 254	Color Photography/3 credits
Art 256	Digital Photography/3 credits
ART 355	Advanced Photography/3 credits
ART 456	Photography Studio/3 credits

D. Teacher Endorsement Requirements/17 credits

EDUC 245	Human Growth and Development/3 credits
EDUC 260	Introduction to the Teaching Profession/2 credits
EDUC 299**	Admission to Teacher Preparation/0 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 430	Teaching Reading in the Content Area/2 credits
EDUC 484	Media and Computer Technology Module/1 credit

EDUC 487	Classroom Management/3 credits
EDUC 488	Education Seminar/1 credit
SPED 489	Survey of Exceptional Children/3 credits

E. Practicum Requirements/14 credits.

EDUC 265	Practicum I/3 credits
EDUC 403	Directed Elementary Teaching for Art, Music, and Physical Education/6 credits
EDUC 404	Directed Secondary Teaching for Art, Music, and Physical Education/5 credits

*(Included in major requirements.)

**Students must earn a "Pass" in EDUC 299 before they will be permitted to enroll in any subsequent 300-400 level EDUC courses.

F. Total credits required for B.F.A. with a concentration in Art Education
(Leading to Teacher Endorsement) - 134

BACHELOR OF FINE ARTS DEGREE

Visual and Performing Arts

Art History Concentration

A. General Education Core Requirement/41credits.

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 Requirements:

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

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

History 200, 336, 354 or 360; Geography 241; Political Science 436, 437, 469 or 3 credits at the 202 or above level foreign language.

C. Major Requirements/47 credits.

ART 120	Foundations of Contemporary Design/3 credits
ART 130	Drawing I/3 credits
ART 131	Life Drawing/3 credits
ART 155	Basic Processes and Principles of Photography/3 credits
ART 223	Three-Dimensional Design/3 credits
ART 261	History of Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
Seven art history courses at the 300 or 400 level/21 credits	
ART 461	Senior Seminar/2 credits
TOTAL 47 credits	

D. General electives/26 credits.

E. Total credits required for B.F.A. with a concentration in Art History - 120.

BACHELOR OF FINE ARTS DEGREE

Visual and Performing Arts

Art Studio Concentration

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 Requirements:

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

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

History 200, 336, 354 or 360; Geography 241; Political Science 436, 437, 469 or 3 credits at the 202 or above level foreign language.

C. Major Requirements/58 credits.

1. Core Requirements/23 credits.

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 Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits
ART HISTORY at the 300 or 400 level/3 credits	
ART 461	Senior Seminar/2 credits
TOTAL	23 credits

2. Field of Concentration

Crafts, Painting, Photography, Drawing and Printmaking/24 credits

Graphic Design/30 credits

Interior Architecture/27 credits

Crafts:

Required

ART 155 Basic Processes and Principles of Photography/3 credits

ART 213 Ceramics I/3 credits

ART 216 Fibers: Weaving/3 credits or 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 351 Printmaking: Serigraphy/3 credits

Art 352 Lithography/3 credits

ART 381 Sculpture I/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
OR ART 419	Advanced Jewelry III/3 credits
ART 465	Advanced Crafts I/3 credits
TOTAL 24 credits	

Drawing and Printmaking

ART 221	Graphic Design I/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 250	Printmaking I/3 credits
ART 251	Printmaking II/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 330	Illustration/3 credits
ART 351	Printmaking: Serigraphy/3 credits
OR Art 352	Lithography/3 credits
ART 155	Basic Photography/3 credits
TOTAL 24 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 322	Graphic Design and Production II/3 credits
ART 326	Typography/3 credits
ART 421	Graphic Design for the Web and Multimedia/3 credits
Art 425	Graphic Design III/3 credits

Choose one of the following for 3 credits

ART 250	Printmaking I/3 credits
ART 251	Printmaking/3 credits
Art 351	Serigraphy/3 credits
ART 352	Lithography/3 credits

Choose one of the following for 3 credits

ART 230	Experimental Media in Drawing/3 credits
ART 270	Painting/3 credits
ART 330	Illustration 3/credits

Choose one of the following for 3 credits

ART 254	Color Photography/3 credits
ART 255	Intermediate Photography/3 credits
ART 256	Digital Photography/3 credits
TOTAL 30 credits	

Interior Architecture

ART 101	Introduction to Interior Architecture/3 credits
ART 121	Introduction to Environmental Design Issues/3 credits
ART 155	Basic Processes and Principles of Photography/3 credits
ART 230	Experimental Media in Drawing/3 credits
ART 304	Commercial Interior Architecture/3 credits

ART 306	Computer & Construction Documentation in Interior Architecture/3 credits
ART 367	History of Modern Architecture/3 credits
ART 404	Public Interior Space/3 credits
ART 405	Senior Interior Architecture Synthesis/3-6 credits
TOTAL 27 credits	

Painting

ART 155	Basic Processes and Principles of Photography/3 credits
ART 250	Printmaking I/3 credits
ART 270	Painting: Acrylic and Water-Based Media/3 credits
ART 271	Painting: Oil Media/3 credits
ART 309	Enamels/3 credits
ART 330	Illustration/3 credits
ART 351	Printmaking: Serigraphy/3 credits
ART 371	Advanced Painting/3 credits
TOTAL 24 credits	

Photography

ART 155	Basic Processes and Principles of Photography/3 credits
ART 254	Color Photography/3 credits
ART 256	Digital Photography/3 credits
ART 355	Advanced Photography/3 credits
ART 456	Photography Studio/3 credits
<i>Choose any two from below for a total of six credits:</i>	
Art 221	Graphic Design/3 credits
Art 250	Printmaking I/3 credits
ART 255	Intermediate Photography/3 credits
Art 251	Printmaking II/3 credits
Art 351	Serigraphy/3 credits
Art 352	Lithography/3 credits
TOTAL 24 credits	

3. Electives Art Studio

Crafts, Painting, Photography, Drawing and Printmaking/15 credits
 Graphic Design/3 credits
 Interior Architecture/12 credits

D. General electives/11 credits

E. Total credits required for B.F.A. with a Studio concentration - 120

MINORS

Minor in Art History

ART 261	History of Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits
4 ART HISTORY courses at 300 or 400 level/12 credits	
TOTAL 18 credits	

Minor in General Art

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

Choose one of the following:

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

Choose one of the following:

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 Prehistoric Ancient and Medieval Art in the Western World/3 credits
ART 262	History of Western Art: Renaissance to Contemporary/3 credits

OR any 300-400 level ART HISTORY course/3 credits

TOTAL 21 credits

Minor in Graphic Design

ART 125	Introduction to Studio Art/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 III/3 credits
ART 421	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 355	Advanced Photography/3 credits
ART 456	Photography Studio/3 credits
TOTAL	18 credits

ART COURSE DESCRIPTIONS

†A special fee is charged for all studio courses.

*General Education Courses **

*Writing Intensive Courses ***

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, contact the Art Department.

ART 101. Introduction to Interior Architecture. Emphasis is placed on the evaluation and design of residential dwellings. Students acquire the graphic skills needed to illustrate residential designs using basic architectural drawing techniques. 3 credits.

ART 110. *Crafts.* An understanding of the basic principles and techniques of functional and decorative hand crafts 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.

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. *

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. *

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

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. *

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 216. *Fibers: Weaving.* Study and use of natural, man-made and synthetic fibers in the design and use of on-and off-the-loom weaving processes. Exploration of a variety of basic techniques, including carding and spinning of wool, dyeing of fibers, construction and dressing of looms, and the knotting, braiding and twisting of fibers. 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 I.*** Exploration of traditional and contemporary printmaking techniques, processes and materials, such as collagraphs, woodcuts and linoleum cuts. 3 credits.
- ART 251. *Printmaking II.*** Exploration of printmaking as a medium of original expression with emphasis on relief and intaglio processes. 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 and Art 254 or permission of instructor.
- ART 261. *History of Prehistoric Ancient and Medieval Art in the Western World.*** Survey of the arts of ancient and medieval civilizations with emphasis on art as expressive of philosophy and culture. 3 credits. **
- ART 262. *History of Western Art: Renaissance to Contemporary.*** Chronological survey of western art and architecture from the fourteenth century to the present. 3 credits. **
- 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 304. *Commercial Interior Architecture.* An exploration of specification requirements and procedures for commercial design in retail stores, banks and restaurants through a variety of small to medium scale projects. Prerequisite: ART 101. 3 credits.

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.* Molding, dyeing, cutting, tearing, embossing, sewing, creasing and folding of hand-made paper with emphasis on texture, depth and color. 3 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 351. *Printmaking: Serigraphy.* The silk screen process of printing as an aesthetic expression. Prerequisites: ART 120, 250, and 251 or permission of instructor. 3 credits.

- ART 352. *Lithography*. Lithography techniques, processes and materials are explored through traditional and contemporary approaches as an aesthetic expression. 3 credits. Prerequisites: Art 120, 130.
- 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 361. *Realism and Impressionism*. Study of Realism and Impressionism in European art during the second half of the nineteenth century. Major themes include changes in the subject matter, the establishment of modernity as a cultural ideal, and the growing importance of formalism. 3 credits. **
- ART 362. *Modernist Art*. A study of the movements associated with 20th century modernism, including post-impressionism, surrealism, and abstract expressionism. Artists discussed include van Gogh, Cezanne, Picasso, Matisse, Giacometti, Pollock, and David Smith. 3 credits. **
- ART 363. *History of Greek and Roman Art and Architecture*. 3 credits. **
- ART 364. *History of Renaissance and Baroque Art and Architecture*. 3 credits. **
- ART 367. *History of Modern Architecture*. A survey of 19th and 20th century architecture. 3 credits. **
- ART 369. *American Art*. Survey from Colonial to 20th Century, including painting, sculpture, architecture and crafts. 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 404. *Public Interior Space*. Advanced interior architecture problems; experimental and innovative concepts; responses to public interior spaces in museums, schools, hospitals, health care centers and offices. Prerequisites: ART 101, 121, 304. 3 credits.
- ART 405. *Senior Interior Architecture Synthesis*. Emphasis on development of self expression and philosophy of interior architecture. Student-initiated interior architecture problems which 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 and 421 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 415. *Weaving and Textile Studio*. Independent concentration in choice of techniques available in weaving and textiles. Prerequisite: ART 216 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 120, 221, 225.

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: EDUC 299 or permission of instructor.

ART 443. *Problems in Art Education.* The student will select an area of art education for concentrated study through readings, research, experimentation and/or internship. Permission of instructor required for enrollment. Hours to be arranged. 3 credits.

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.* Open to students who have completed ART 120, 130, and 250, and if studying serigraphy or relief and intaglio, must have completed courses in these areas. The student will select an area of concentration and problems of specialization in media and technique. May be continued as ART 451, 452, and 453. Permission of instructor required for enrollment. 3 credits.

ART 456. *Photography Studio.* 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. May be repeated for credit. Prerequisites: ART 155, 254, 256, 355. 3 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.

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.

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.

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

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 Communication Studies and Theatre

Vacant, *Chair*

Cecelia Culler, *Secretary*

Faculty

Pamela Arkin, M.F.A., *Associate Professor of Theatre*

Eric Koger, M.F.A., *Assistant Professor of Theatre*

Gene Muto, M.F.A., D.A., *Professor of Theatre*

Patt Ness, M.F.A., *Assistant Professor of Theatre*

Lucinda Sinclair, Ph. D. *Assistant Professor of Communication Studies*

William Stuart, Ph.D., *Assistant Professor of Communication Studies*

Pamela Tracy, Ph.D., *Assistant Professor of Communication Studies & Director of Women's Studies*

COMMUNICATION STUDIES PROGRAM

MISSION STATEMENT

In order to provide a cohesive body of knowledge in the areas of Communication Theory, Research, and Practice, the Communication Studies Program at Longwood is committed to excellence in teaching, the advancement of knowledge in theory and technology, cultural enrichment, preparation for graduate study, and preparation for professional careers in the field. Through a wide variety of courses, which are specific to Communication Studies and interdisciplinary, we offer a program of study that is cooperative in nature with other departments and other schools within Longwood.

Communication Studies Major, B.A. Degree

A. General Education Core Requirements/41 credits.

B. Additional Degree Requirements/6 credits.

C. Major Requirements/38 credits.

Majors must complete all 26 credits of the Communication Studies Core, plus 12 credits of Communication Studies Electives. (See 1 and 2 below.)

1. Communication Studies Core/26 credits.

COMM 101	Oral Communication/3 credits
COMM 200	Fundamentals of Communication/3 credits
COMM 300	Advanced Communication Theory and Research/3 credits
COMM 310	Interpersonal Communication/3 credits
COMM 320	Mass Media Theory and Effects/3 credits
COMM 400	Legal and Ethical Communication/3 credits
COMM 410	Communication Technologies/3 credits
COMM 461	Senior Thesis/3 credits
COMM 492	Communication Internship/3 credits
(one credit of COMM 492 satisfies General Education Goal 15)	

2. Communication Studies Electives/12 credits.

(Please check the Undergraduate Catalog for prerequisites for courses in other departments.)

ART 120	Foundations of Contemporary Design/4 credits
ART 155	Basic Processes and Principles of Photography/3 credits

ART 225	Graphic Art Production I/3 credits
ART 322	Graphic Design II/3 credits
ART 327	Graphic Art Production II/3 credits
ART 355	Manipulation and Color in Photography/3 credits
ART 455	Electronic Photography/3 credits
ART 456	Photography Studio/3 credits
COMM 318	Broadcast Journalism/3 credits
COMM 330	Small Group Dynamics/3 credits
COMM 340	Nonverbal and Visual Communication/3 credits
COMM 350	Rhetoric and Persuasion/3 credits
COMM 360	Organizational and Professional Communication/3 credits
COMM 420	Intercultural Communication and Conflict/3 credits
COMM 470	Gender and Communication/3 credits
COMM 495	Special Topics In Communication Studies/1-3 credits
ENGL 210	Introduction to Journalism/3 credits
ENGL 213	Writing Non-Fiction/3 credits
ENGL 214	Technical Writing/3 credits
ENGL 258	Women and Film/3 credits
ENGL 350	Intro to Linguistics/3 credits
ENGL 470	Professional Writing/3 credits
MARK 280	Fundamentals of Marketing/3 credits
MARK 480	Advertising/3 credits
CIMS 170	Management Information Systems/3 credits
MANG 291	Business Communication/3 credits
THEA 215	Voice and Movement I/3 credits

D. Required Minor/18-24 credits.

All Communication Studies majors must have a minor from another area unless they have a double major, which will substitute for the required minor field of study. The minor must be made in consultation with the faculty advisor.

E. General Electives/11 – 17 Credits.

F. Total credits required for the B.A. in Communication Studies - 120

Minor Communication Studies_

18 Credit hours including:

COMM 101	Oral Communication/3 credits
COMM 200	Fundamentals of Communication/3 credits

And a selection of 12 credit hours from among the following courses:

COMM 300	Advanced Communication Theory and Research/3 credits
COMM 310	Interpersonal Communication/3 credits
COMM 318	Broadcast Journalism/3 credits
COMM 330	Small Group Dynamics/3 credits
COMM 340	Nonverbal and Visual Communication/3 credits
COMM 350	Rhetoric and Persuasion/3 credits
COMM 360	Organizational Communication/3 credits
COMM 400	Legal and Ethical Communication/3 credits
COMM 410	Communication Technologies/3 credits
COMM 420	Intercultural Communication and Conflict/3 credits
COMM 430	Crisis Communication/3 credits
COMM 470	Gender and Communication/3 credits
CIMS 291	Business Communications/3 credits

COMMUNICATION STUDIES COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

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

COMMUNICATION STUDIES 101. *Oral Communication.* Introduces students to the basic concepts of human communication, with special emphasis placed on competencies in oral communication. 3 credits.

COMMUNICATION STUDIES 200. *Fundamentals of Communication.* 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.

COMMUNICATION STUDIES 292. *Internship in Communication Studies.* A semester-long, on-the-job learning experience designed to apply the principles of communication studies. 1-18 credits.

COMMUNICATION STUDIES 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.

COMMUNICATION STUDIES 300. *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. 3 credits.

COMMUNICATION STUDIES 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. 3 credits. **

COMMUNICATION STUDIES 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses in communications studies. 1-18 credits.

COMMUNICATION STUDIES 318. *Broadcast Journalism.* 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. 3 credits.

COMMUNICATION STUDIES 320. *Mass Media Theory and Effects.* Explores the influences and limitations of the media in American society. Emphasis on theoretical and empirical explanations of both the impact of media on society and of society on the media. Students design and conduct a media effects research project. 3 credits. **

COMMUNICATION STUDIES 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. 3 credits.

COMMUNICATION STUDIES 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. 3 credits.

COMMUNICATION STUDIES 350. *Rhetoric and Persuasion.* Theory, research, and practice into the areas of rhetoric and persuasion. Study of the power and limitations of persuasion, coercion, influence, and argumentation. Topics range from ancient concepts of rhetoric to modern advertisements. 3 credits.

COMMUNICATION STUDIES 360. *Organizational and Professional Communication.* Study and practice of organizational structures and professional communication. Issues such as public relations, corporate impression management, damage control and crisis management, networks, management styles, task groups, information systems, and others will be addressed. Students will make professional presentations and write professional documents such as resumes, business letters, company reports, and press releases. 3 credits.

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

COMMUNICATION STUDIES 392. *Internship in Communication Studies.* A semester-long, on-the-job learning experience designed to apply the principles of communication studies. 1-18 credits.

COMMUNICATION STUDIES 400. *Legal and Ethical Communication.* Challenges students to consider the legal and ethical ramifications of various types of communication. Topics include freedom of speech, libel, sedition, obscenity, provocation, hate speech, invasion of privacy, verbal aggression, mass hysteria, and others. 3 credits. **

COMMUNICATION STUDIES 410. *Communication Technologies.* 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. 3 credits.

COMMUNICATION STUDIES 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. 3 credits. **

COMMUNICATION STUDIES 430. *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. 3 credits.

COMMUNICATION STUDIES 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, review for an exit exam in communications theory and communications technologies, assembling of a portfolio, completion of a professional resume, and the creation of a personal web site. 3 credits. **

COMMUNICATION STUDIES 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. 3 credits. **

COMMUNICATION STUDIES 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits.

COMMUNICATION STUDIES 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.

COMMUNICATION STUDIES 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. 1-3 credits.

COMMUNICATION STUDIES 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

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
IN 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
IN VISUAL AND PERFORMING ARTS**
Concentration in Theatre
Specialist in Performance
Specialist in Technology
Specialist in Theatre 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 B.F.A. Specialist program: Performance, Technology or Theatre Management. Longwood students are invited into the B.F.A. 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 B.F.A. 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. Students who are pursuing the B.A. degree in Theatre are required to have a minor field of study, unless they have a double major, which substitutes for the minor.

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 Ph.D. 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 M.F.A. programs in graduate schools.

There are three 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 M.F.A. 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**

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 M.F.A. 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.

C.) **Theatre Management**

This specialization is designed for students who want to pursue careers as box office, house, or company managers in professional theatres and for those who want to prepare for application to M.F.A. programs at graduate schools. Theatre management students work closely with the theatre faculty and staff, who act as mentors. Students are required to work in all front-of-house areas each year. This track is interdisciplinary, selective, and competitive; students' work and capabilities are reviewed each semester. (NOTE: Students in this track are not permitted to take more than 30 credit hours in the School of Business and Economics.)

GRADUATION REQUIREMENTS

CORE COURSES — REQUIRED OF ALL THEATRE STUDENTS

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
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)	

Take three credits from the following:

THEA 102	Theatre Performance/1 credit
THEA 103	Theatre Production/1 credit
TOTAL/26 credits	

BACHELOR OF ARTS DEGREE

Visual and Performing Arts

Theatre Concentration: Applied Theatre or Generalist

- A. General Education Core Requirements/41 credits.
- B. Additional Degree Requirements/6 credits.
(3 credits must be a foreign language at the 202 level or above.)
- C. Major Requirements. Applied Theatre/33-34 credits; Generalist/33 credits.
Applied Theatre:
 - Theatre Core/27 credits
 - Upper division theatre electives/6-7credits*Generalist:*
 - Theatre Core/27 credits
 - Upper division theatre electives/6 credits
- D. Minor and/or Education endorsement. 18-41 credits.
 - THEA 401 Methods of Teaching Theatre/3 credits
 - THEA 433 Creative Dramatics for the Classroom/3 creditsSee professional education requirements
(For those who are seeking careers in educational theatre, student teaching may be substituted for the Internship.)
- E. General Electives for B.A. in Communication Studies - 22-23 credits
- F. Total Credits Required for B.A. in Visual and Performing Arts, Theatre Concentration – 120
Total credits required for B.A. in Visual and Performing Arts, Theatre Concentration with Secondary Teaching Endorsement – 121-122

BACHELOR OF FINE ARTS DEGREE

Visual and Performing Arts

Theatre Concentration: Specialist in Performance, Specialist in Technology, or Specialist in Theatre Management

- A. General Education Core Requirements. 41 credits.
- B. Additional Degree Requirements. 6 credits.
(3 credits must be a foreign language at the 202 level or above.)
- C. Major Requirements. 54 credits.

SPECIALIST IN PERFORMANCE:

Theatre Core/26 credits

THEA 214	Stage Makeup for the Actor/3 credits
THEA 215	Voice and Mvmt I/3 credits
THEA 315	Voice and Mvmt II/3 credits
THEA 316	Acting II/3 credits
THEA 317	Acting III/3 credits
THEA 320	Directing/3 credits
THEA 413	Acting IV/3 credits
THEA 414	Voice and Mvmt III/3 credits
Upper-division Theatre Elective/3 credits	

SPECIALIST IN TECHNOLOGY:

Theatre Core/26 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 340	Scene Design/3 credits
THEA 342	Lighting Design/3 credits
THEA 344	Scene Painting/3 credits
THEA 345	Costume Design/3 credits

SPECIALIST IN THEATRE MANAGEMENT

(NOTE: Students in this track may not take more than 30 credit hours in the School of Business and Economics)

Theatre Core/20 credits*

THEA 275	Stage Management/3 credits
THEA 399	Theatre Management/3 credits
THEA 103	Theatre Production (Box Office Practicum) 3 credits plus

Business Core/24 credits

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
MANG 360	Principles of Management/3 credits

MANG 362	Organization Behavior/3 credits
MARK 380	Principles of Marketing/3 credits
MANG 465	Human Resource Management/3 credits
(*Students in this track are exempted from THEA 430 and THEA 431)	

D. General Electives/20 credits

E. Total credits required for B.F.A. in Visual and Performing Arts, Theatre Concentration - 120

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

General Education Course *

Writing Intensive Course **

THEATRE 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. *

THEATRE 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. *

THEATRE 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. *

THEATRE 113. *Acting I.* This studio course is an introduction to the art of performance in the theatre. 3 credits.

THEATRE 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.

THEATRE 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.

THEATRE 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.

THEATRE 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.

THEATRE 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.

THEATRE 292. *Internship in Theatre*. A semester-long, on-the-job learning experience designed to apply the principles of theatre. 1-18 credits.

THEATRE 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.

THEATRE 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.

THEATRE 311, 312. *Studies Abroad*. This course is intended for transfer of credit earned abroad in the study of theatre. Prerequisite: Permission. 1-18 credits.

THEATRE 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.

THEATRE 316. *Acting II*. This studio course is designed to develop fundamental acting skills through classroom exercises, scene study, and character analysis. Prerequisite: THEA 315 - minimum grade of C. 3 credits.

THEATRE 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.

THEATRE 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. **

THEATRE 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. **

THEATRE 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. **

THEATRE 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.

THEATRE 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 346 - minimum grade of C. 3 credits.

THEATRE 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.

THEATRE 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.

THEATRE 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 341 - minimum grade of C. 3 credits.

THEATRE 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.

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

THEATRE 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 101; ACCT, 240, 242; CIMS 170 - minimum grades of C. 3 credits.

THEATRE 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. 3 credits.

THEATRE 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.

THEATRE 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; GPA 2.5 minimum. 3 credits.

THEATRE 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. **

THEATRE 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. **

THEATRE 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. **

THEATRE 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. **

THEATRE 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. Prerequisite for liberal studies majors only: THEA 448.

THEATRE 447. *Design and Technology.* This is an advanced studies course in the technical aspects of theatrical production. Prerequisites: THEA 240 and permission. 3 credits.

THEATRE 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.

THEATRE 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. **

THEATRE 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits.

THEATRE 492. *Internship in Theatre.* A semester-long, on-the-job learning experience designed to apply the principles of theatre. 1-18 credits.

THEATRE 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.

THEATRE 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

Gordon Van Ness, *Chair*

Lisa Seamster, *Secretary*

ENGLISH PROGRAM

The English program of the Department of English and Modern Languages offers courses leading to the B.A. and M.A. 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. The faculty of the department are happy to assist each student in this planning and in defining individual career goals and expectations.

NOTE: The department does not guarantee that all of the courses listed will be offered every year.

Assessment

The Department requires student outcomes assessment testing prior to graduation.

Faculty

Susan Booker, Ph.D., *Assistant Professor of English*
Rhonda Brock-Servais, Ph.D., *Assistant Professor of English*
Dennis B. I. Burges, M.A., *Lecturer in English*
Jená A. Burges, Ph.D., *Associate Professor of English*
Don Butler, M.A., *Lecturer in English*
Mary Carroll-Hackett, M.F.A., *Assistant Professor of English*
Craig A. Challender, Ph.D., *Professor of English*
Martha E. Cook, Ph.D., *Professor of English*
Carolyn M. Craft, Ph.D., *Professor of English*
Kathleen T. Flanagan, Ph.D., *Professor of English*
C. Hood Frazier, Ph.D., *Associate Professor of English*
Michael C. Lund, Ph.D., *Professor of English*
Robert L. Lynch, Jr., Ph.D., *Assistant Professor of English*
Chris McGee, Ph.D., *Assistant Professor of English*
Carmen Phelps, Ph.D., *Assistant Professor of English*
Shawn Smith, Ph.D., *Assistant Professor of English*
Derek Taylor, Ph.D., *Assistant Professor of English*
Arthur Gordon Van Ness, III, Ph.D., *Professor of English*

Creative Writing

Faculty

Mary Carroll-Hackett, M.F.A., *Assistant Professor of English*
Craig Challender, Ph.D., *Professor of English*
C. Hood Frazier, Ph.D., *Associate Professor of English*

Journalism and Professional Writing

Faculty

Jená A. Burges, Ph.D., *Associate Professor of English*

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The major in English requires a minimum of 36 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, technical writing, and business management. The relatively low number of required hours for the major gives students flexibility either to develop their background in writing and literature further or to add expertise in a related field. Faculty advisors will be glad to review options and career paths with students. The concentration in Creative Writing requires an additional 37 hours of coursework and a portfolio

Majors seeking licensure for teaching secondary English should add to the major requirements ENGL 350, 381, 382, 479, and 480. These courses, as well as the required Education courses, and a 2.50 GPA, both cumulatively and in the major, must be completed before student teaching. Students licensed to teach secondary English can also gain endorsements to teach Economics, Geography, History, Journalism, Political Science, Communication Studies or Theater by adding a minor in those fields. (See "Add-On Endorsements" under Education.)

In addition to the English major, the concentration in Creative Writing, and secondary licensure, the department offers a minor in English, a minor in Journalism and Professional Writing, and a minor in Creative Writing.

The department offers a five-year plan for English majors who wish to obtain both the B.A. and the M.A. in English. There are two M.A. concentrations, one in literature (30 credit hours) and one in English Education and Writing (36 credit hours). To complete the M.A. in one additional year including summers, careful preparation of the student's course schedule is important; for assistance, students should consult the English Graduate Program Coordinator. Students will need to take six hours of graduate credit during the final semester of their senior year, or, for students doing an internship or student teaching that semester, during the preceding semester.

ENGLISH MAJOR, B.A. DEGREE

A. General Education Core Requirements. 41 credits

See General Education Requirements

The Department requires PHIL 308, 315 or 316, for the satisfaction of Goal 13.

ENGL 201, World Literature, will satisfy Goal 3 and is required for Secondary Teaching Licensure in English.

B. Additional Degree Requirements. 6 credits.

See Additional Degree Requirements for Bachelor of Arts

C. Major Requirements. 36 credits.

ENGL 321 British Literature I/3 credits

ENGL 322 British Literature II/3 credits

ENGL 323 British Literature III/3 credits

ENGL 324 British Literature IV/3 credits

ENGL 331 American Literature to 1865/3 credits

ENGL 332 American Literature 1865-1920/3 credits

ENGL 333 American Literature Since 1920/3 credits

Three 400-level courses (ENGL 411-452, 470, 490, 495, 498) plus ENGL 461, Literary Criticism: Senior Seminar/ 12 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 Traditional and Modern Grammar/3 credits

Additional Note: Students in the Creative Writing concentration who also desire secondary licensure should contact the English Education advisor 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. 50-53 credits.

Additional requirements for English:

ENGL 201	World Literature/3 credits (can be used to satisfy General Education Goal 3)
ENGL 350	Linguistics/3 credits
ENGL 381	Literature for Young Adults/3 credits
ENGL 382	Traditional and Modern Grammar/3 credits
ENGL 479	Writing: Theory and Practice for the Middle, Secondary, and College Classroom/ 3 credits
ENGL 480	The Teaching of English/3 credits

For endorsements to teach Journalism, Theatre, Economics, Geography, History or Political Science, see minors in these fields.

E. General Electives for B.A. in English – 37

F. Creative Writing Concentration Requirements — 37 credit hours and a Senior Portfolio

Required Professional Courses for all CW 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: 15 credit hours (5 courses)

Choose four courses from the following:

(Notes: At least two courses must be at the 400 level or above.

Additionally, at least one course should include substantial works from outside the student's primary genre.)

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 380	Children's Literature/3 credits
ENGL 381	Literature for Young Adults/3 credits
ENGL 362	Literature of Diversity/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
<i>Choose one of the following:</i>	
ENGL 411	Epic/3 credits
ENGL 413	The Novel/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 451	Continental Literature I/3 credits
ENGL 452	Continental Literature II/3 credits

Writing Core Requirements: 18 credit hours (6 workshop courses)

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.

The advanced workshop in the primary genre may be repeated once for credit.

Choose from the following tracks:

Poetry Track

Required Core Courses: (6-9 credit hours)

ENGL 317	Writing Poetry/3 credits
ENGL 477	Advanced Poetry Writing (may be repeated once for credit)/3-6 credits

Choose from the following, including at least one advanced workshop (9-12 credits):

ENGL 316	Writing Fiction/3 credits
ENGL 318	Writing Non-Fiction/3 credits
ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 476	Advanced Fiction Writing/3 credits
ENGL 478	Advanced Creative Nonfiction Writing/3 credits
ENGL 475	Advanced Dramatic Writing/3 credits

Fiction Track

Required Core Courses: (6-9 credit hours)

ENGL 316	Writing Fiction/3 credits
ENGL 476	Advanced Fiction Writing (may be repeated once for credit)/3-6 credits

Choose from the following, including at least one advanced workshop (9-12 credits):

ENGL 317	Writing Poetry/3 credits
ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 318	Writing Non-Fiction/3 credits
ENGL 477	Advanced Poetry Writing/3 credits
ENGL 475	Advanced Dramatic Writing/3 credits
ENGL 478	Advanced Creative Nonfiction Writing/3 credits

Creative Nonfiction Track

Required Core Courses: (6-9 credit hours)

ENGL 318	Writing Non-Fiction/3 credits
ENGL 478	Advanced Creative Nonfiction Writing (may be repeated once for credit)/3-6 credits

Choose from the following, including at least one advanced workshop (9-12 credits):

ENGL 317	Writing Poetry/3 credits
ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 316	Writing Fiction/3 credits
ENGL 477	Advanced Poetry Writing/3 credits
ENGL 475	Advanced Dramatic Writing/3 credits
ENGL 476	Advanced Fiction Writing/3 credits

Dramatic Writing Track

Required Core Courses: (6-9 credit hours)

ENGL 315	Introduction to Dramatic Writing/3 credits
ENGL 475	Advanced Dramatic Writing (may be repeated once for credit)/3-6 credits

Choose from the following, including at least one advanced workshop (9-12 credits):

ENGL 316	Writing Fiction/3 credits
ENGL 318	Writing Non-Fiction
ENGL 317	Writing Poetry
ENGL 476	Advanced Fiction Writing
ENGL 478	Advanced Creative Nonfiction Writing/3 credits
ENGL 477	Advanced Poetry 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. Total Credits Required for B.A. in English - 120
Total Credits Required for B.A. in English/Creative Writing Concentration - 120
Total Credits Required for B.A. in English with Secondary Teaching Endorsement - 130-133

MINORS

Minor in English

Choose one of the following:

- ENGL 321 British Literature I/3 credits
- ENGL 322 British Literature II/3 credits
- ENGL 331 American Literature to 1865/3 credits

Choose one of the following:

- ENGL 323 British Literature III/3 credits
- ENGL 324 British Literature IV/3 credits
- ENGL 332 American Literature 1865-1920/3 credits
- ENGL 333 American Literature Since 1920/3 credits

One 400-level course/3 credits

English electives, 200-level* and above/9 credits

TOTAL 18 credits

*Note: ENGL 201, 202, and 203 are designed to fulfill General Education Goal 3. These courses may not be used as English electives for the English minor or to fulfill degree requirements for Humanities courses.

Minor in Journalism and Professional Writing

- ENGL 210 Introduction to Journalism/3 credits
- ENGL 350 Linguistics/3 credits
- ENGL 470 Professional Writing/3 credits
- ENGL 492 Internship/3 credits

Journalism and Professional Writing electives/6 credits must be selected from the following:

- ART 221 Graphic Design I/3 credits
- ENGL 316 Writing Fiction/3 credits
- ENGL 317 Writing Poetry/3 credits
- ENGL 318 Writing Non-Fiction/3 credits
- ENGL 319 Technical Writing/3 credits
- ENGL 382 Traditional and Modern English Grammar/3 credits

TOTAL 18 credits

Minor in Creative Writing

Literature Core Requirements

- ENGL 324 British Literature IV/3 credits
- ENGL 333 American Literature since 1920/3 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 380 Children's Literature/3 credits
- ENGL 362 Literature of Diversity/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

6 credit hours (2 courses) in introductory level workshops

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
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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.

TOTAL 19 credits and the portfolio

ENGLISH COURSE DESCRIPTIONS

Note: ENGL 150, which satisfies Goal Two of the General Education requirements, is prerequisite to all other English courses.

General Education Courses *

Writing Intensive Course **

Speaking Intensive Course ***

ENGLISH 100. *Rhetoric and Research.* Reading and writing expository prose including the research paper. Oral presentation required. Prerequisite to ENGL 101. 3 credits.

ENGLISH 101. *Composition and Literary Analysis.* Expository writing including research, and an introduction to literary analysis. Close reading of and frequent writing on literature, primarily fiction and poetry, with extended study of one major work read serially. 3 credits.

ENGLISH 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. *

ENGLISH 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 B.A., B.M., or B.F.A. degree.** Prerequisite: ENGL 150.

* 3 credits.

ENGLISH 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 B.A., B.M., or B.F.A..** Prerequisite: ENGL 150. * 3 credits.

ENGLISH 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 B.A., B.M., or B.F.A.** Prerequisite: ENGL 150. * 3 credits.

ENGLISH 210. *Introduction to Journalism*. Fundamentals of newswriting and reporting for the student press. 3 credits. **

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

ENGLISH 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.

ENGLISH 311, 312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad. 1-16 credits per semester.

Writing Courses

ENGLISH 315. *Introduction to Dramatic Writing*. Writing the screenplay, play, and other forms of drama. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 316. *Writing Fiction*. The short story and other forms of fiction. 3 credits.

ENGLISH 317. *Writing Poetry*. Traditional and contemporary techniques in poetry. 3 credits.

ENGLISH 318. *Writing Non-Fiction*. Narrative nonfiction, article and feature writing, and other forms of literary journalism. 3 credits. **

ENGLISH 319. *Technical Writing*. A study and application of writing techniques for the dissemination of scientific and technical information. 3 credits. **

Courses in the Major Literary Periods

Note: These courses are designed primarily for English majors and minors.

ENGLISH 321. *British Literature I*. From the beginnings through the sixteenth century. Emphasis on such major works and writers as Beowulf, Chaucer, Spenser, Marlowe and Shakespeare. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 322. *British Literature II*. The late Renaissance through the age of Johnson, with emphasis on such major writers as Donne, Milton, Dryden, Swift, Pope, and Johnson. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 323. *British Literature III*. The Romantic and Victorian ages, with emphasis on such poets as Wordsworth, Coleridge, Keats, Tennyson, and Browning and such prose writers as Carlyle, Dickens, and Eliot. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 324. *British Literature IV.* The twentieth century. Emphasis on such major writers as Hardy, Yeats, Joyce, Lawrence, Woolf, and Lessing. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 331. *American Literature To 1865.* The beginnings through the period of the Civil War, with emphasis on such writers as Bradstreet, Franklin, Emerson, Hawthorne, Melville, Stowe, Douglass, and Whitman. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 332. *American Literature 1865-1920.* The age of realism and naturalism with emphasis on such major writers as Dickinson, Twain, James, Dreiser, Crane, Chopin, Chesnutt, and Wharton. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 333. *American Literature Since 1920.* The modern age with emphasis on such major writers as Eliot, Frost, Cather, Hemingway, Hughes, Faulkner, Wright, Rich, and Morrison. Prerequisite: completion of General Education Goal 3. 3 credits.

Other 300-level courses

ENGLISH 350. *Introduction to Linguistics.* An overview of structural, cognitive, social, and historical dimensions of language. Applies techniques of language analysis to a variety of language uses. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 356. *The Art of Film I.* Introduction to theory and techniques of the motion picture through screenings of classic and contemporary feature films. 3 credits.

ENGLISH 357. *The Art of Film II.* A study of major directors of film genres. 3 credits.

ENGLISH 358. *Women and Film.* A study of women directors and the history and conventions of portraying women in film. Prerequisites: ENGL 150. 3 credits.

ENGLISH 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.

ENGLISH 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.

ENGLISH 362. *Literature of Diversity.* Study of literature that represent the rich variety of people and beliefs in our world. Could include, but is not limited to, any British, American, or other ethnic literatures; queer studies; postcolonial literature, the Bible as literature. May be repeated for credit when the topic changes. Prerequisite: completion of General Education Goal 3. 3 credits.

ENGLISH 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.

ENGLISH 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.

ENGLISH 382. *Traditional and Modern English Grammar*. A brief consideration of the history of the English language and a detailed study of English sentence structure, using the perspectives of traditional, structural, and transformational-generative grammar. Prerequisite: completion of General Education Goal 3. 3 credits.

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

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

ENGLISH 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.

ENGLISH 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 Goals 2 and 3; 75 credit hours or permission of the Chair of the General Education Committee. 3 credits. *

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.

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 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. ** and ***

ENGLISH 425. *Shakespeare*. Extended study in the works of William Shakespeare. 3 credits. ** and ***

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.

- ENGLISH 431. *Arthurian Literature*. Comparative study of Arthurian material of various countries from the medieval through the modern periods. 3 credits. ** and ***
- ENGLISH 432. *Women and Literature*. Comparative study of the tradition of literature by and about women. 3 credits. ** and ***
- ENGLISH 441. *Ethnic Literature*. Comparative study of the literary tradition of an ethnic group such as Afro-American, Jewish, Chicano, or Native American peoples. 3 credits. ** and ***
- ENGLISH 442. *Regional Literature*. Comparative study of the literary tradition of a region, such as the American South, or Ireland. 3 credits. ** and ***
- ENGLISH 443. *Postcolonial Literature*. Study of literature written in English from countries during and after colonial contact with Britain, excluding the United States. 3 credits. ** and ***
- ENGLISH 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. ***
- ENGLISH 451. *Continental Literature I*. Study of ancient, medieval, and Renaissance European classics in translation. 3 credits. ** and ***
- ENGLISH 452. *Continental Literature II*. Study of European literature of the neo-classical, romantic, and modern periods in translation. 3 credits. ** and ***
- ENGLISH 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. ** and ***
- ENGLISH 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. 3 credits. ** and ***
- ENGLISH 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.
- ENGLISH 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.
- ENGLISH 477. *Advanced Poetry Writing*. An advanced workshop in writing poetry. Prerequisite: ENGL 317: Writing Poetry with a grade of C or higher. 3 credits.
- ENGLISH 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.
- ENGLISH 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. Prerequisite: ENGL 382 or ENGL 350. 3 credits. ***

ENGLISH 480. *The Teaching of English.* A study of current practices with emphasis on specific techniques and materials. 3 credits. ** and ***

ENGLISH 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 480 and 483 having been taken within two years of student teaching. Minimum cumulative and major GPA of 2.50. 11 credits. ***

ENGLISH 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 and EDUC 325 or ENGL 382 and SPED 321. 3 credits. ** and ***

ENGLISH 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.

ENGLISH 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.

ENGLISH 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.

ENGLISH 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.

ENGLISH 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.

ENGLISH 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. ***

ENGLISH 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

The Modern Languages program offers courses in French, German, and Spanish. The major in Modern Languages requires a concentration in one of these three languages (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.

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. 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. Greek, Latin, and Russian may be taken at Hampden-Sydney College.

ASSESSMENT

The Department requires student outcomes assessment testing prior to graduation.

FRENCH

Faculty

B. McRae Amoss, Ph.D., *Professor of French*

Wade Edwards, Ph.D., *Assistant Professor of French*

Francis X. Moore, III, Ph.D., *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.

GERMAN

Faculty

Geoffrey C. Orth, Ph.D., *Professor of German*

John F. Reynolds, Ph.D., *Professor of Modern Languages*

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

Ruth Budd, Ph.D., *Associate Professor of Spanish*

Lily Anne Goetz, Ph.D., *Professor of Spanish*

Guillermo Gray, M.A., *Lecturer in Spanish*

Laura Sánchez, M.A., *Lecturer 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, B.A. 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.

FRENCH CONCENTRATION/29 credits

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

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

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	

D. N,K-12 Teaching Endorsement. 37-40 credits.

(Students will have four field experiences — EDUC 265, 370, and two settings in FREN/GERM/SPAN 482. In accordance with state licensure regulations, these experiences must include settings at the elementary, middle, and secondary levels. Each student must make appropriate arrangements with Coordinator of Student Teaching and Field Services in the Department of Education to ensure that this requirement is met.)

FRENCH CONCENTRATION/40 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 430	Reading in Content Area/2 credits
EDUC 484	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
Professional Semester:	
FREN 482	Directed Teaching in the Elementary and Secondary French Classroom/11 credits
EDUC 488	Education Seminar/1 credit

GERMAN CONCENTRATION/40 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 430	Reading in the Content Area/2 credits
EDUC 484	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/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/37 credits

SPAN 400	Approaches to Teaching Spanish/3 credits
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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 484	Media and Technology/1 credit
EDUC 487	Classroom Management and System Issues/3 credits
EDUC 489	Survey of Exceptional Children/3 credits
Professional semester:	
SPAN 482	Directed Teaching in the Elementary and Secondary Spanish Classroom/11 credits
EDUC 488	Education Seminar/1 credit

- E. General Electives for B.A. degree - 41-44 credits
 General Electives for B.A. Degree with N,K-12 Teaching Endorsement - 4

F. Total Credits Required for B.A. in Modern Languages - 120

MINOR IN FRENCH, GERMAN, or SPANISH

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

Greek, Latin, and Russian may be available at Hampden-Sydney College.

FRENCH COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

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.

FRENCH 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.

FRENCH 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.

FRENCH 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 an appropriate placement test score. Followed by FREN 202. 3 credits.*

FRENCH 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.

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

FRENCH 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 B.A. degree.

FRENCH 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.

FRENCH 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.

FRENCH 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. ***

FRENCH 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. *

FRENCH 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. *

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

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

FRENCH 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.

FRENCH 401. *Advanced Grammar and Composition.* Syntax and grammar through written work. Prerequisite: FREN 202 or equivalent. 3 credits. **

FRENCH 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. ***

FRENCH 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. **

FRENCH 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. **

FRENCH 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. **

FRENCH 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. ** and ***

FRENCH 482. *Directed Teaching in the Elementary and Secondary French Classroom.* Required of all students seeking N,K-12 Teaching Licensure in French. Each student is assigned to work with qualified cooperating teachers in two selected school settings off campus, for five weeks in each setting. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of each 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 ten to eleven weeks (300 hours total). Prerequisite: completion of the Modern Language major (French concentration), the Study Abroad requirement, and a minimum cumulative and major GPA of 2.50. 11 credits.

FRENCH 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum.

FRENCH 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.

FRENCH 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.

FRENCH 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

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

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.

GERMAN 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.

GERMAN 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.

GERMAN 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.*

GERMAN 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.

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

GERMAN 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.

GERMAN 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.

GERMAN 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. ***

GERMAN 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.

GERMAN 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. ***

GERMAN 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. *

GERMAN 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. *

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

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

GERMAN 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.

GERMAN 401. *Advanced Grammar and Composition.* Syntax and grammar through written work. Prerequisite: GERM 202 or equivalent. 3 credits. **

GERMAN 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. ***

GERMAN 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. **

GERMAN 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. **

GERMAN 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. **

GERMAN 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. ** and ***

GERMAN 482. *Directed Teaching in the Secondary German Classroom.* Required of all students seeking N,K-12 Teaching Licensure in German. Each student is assigned to work with qualified cooperating teachers in two

selected school settings off campus, for five weeks in each setting. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of each 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 ten to eleven weeks (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.

GERMAN 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum.

GERMAN 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.

GERMAN 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.

GERMAN 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.

JAPANESE COURSE DESCRIPTIONS

JAPANESE 101. *Introduction to Japanese.* Development of basic oral expression and listening comprehension of the Japanese language. Introduction to basic socio-cultural aspects of modern Japan. No previous study of Japanese required or expected. Three lecture hours and one practical reinforcement period per week, and required language lab work. 4 credits.

JAPANESE 102. *Elementary Japanese II.* The skills of basic oral expression and listening comprehension are further developed. Prerequisite: Japanese 101. Three lecture and one practical reinforcement periods, and language lab work. 4 credits.

SPANISH COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

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.

SPANISH 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.

SPANISH 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.

SPANISH 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.

SPANISH 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 particularities of Spanish and Latin American cultures. Prerequisite: SPAN 102 or an appropriate placement test score. Followed by SPAN 202. 3 credits.*

SPANISH 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.

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

SPANISH 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 B.A. degree.

SPANISH 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. ***

SPANISH 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.

SPANISH 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. ***

SPANISH 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.

SPANISH 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. ***

SPANISH 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. *

SPANISH 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. *

SPANISH 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.

SPANISH 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.

SPANISH 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. *

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

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

SPANISH 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.

SPANISH 401. *Advanced Grammar and Composition.* Syntax and grammar through written work. Prerequisite: SPAN 202 or equivalent. 3 credits. **

SPANISH 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. ***

SPANISH 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. **

SPANISH 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. **

SPANISH 415, 416. *Hispanic Authors.* Study of a particular Hispanic author. Prerequisites: SPAN 341 and 352. 3 credits. **

SPANISH 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. **

SPANISH 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. ** and ***

SPANISH 482. *Directed Teaching in the Elementary and Secondary Spanish Classroom.* Required of all students seeking N,K-12 Teaching Licensure in Spanish. Each student is assigned to work with qualified cooperating teachers in two selected school settings off campus, for five weeks in each setting. Settings will be chosen among elementary, middle and secondary levels. The student teacher follows the schedule of each 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 ten to eleven weeks (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.

SPANISH 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.

SPANISH 490. *Directed Study.* Individualized study; recommended only when material cannot be covered in scheduled courses. By permission of department head. 6 credits maximum.

SPANISH 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.

SPANISH 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.

SPANISH 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.

RELIGION

Faculty

Carolyn Craft, Ph.D. , *Professor of English*

RELIGION COURSE DESCRIPTIONS

General Education Courses *

RELIGION 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. *

Note: Other religion courses may be available at Hampden-Sydney College.

Department of History, Political Science and Philosophy

William R. Harbour, *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 and philosophy are open to all students.

The Department offers a major in History and the Social Sciences, History, and Political Science designed for students who wish to teach at the secondary school level. 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 engaged in extensive research projects and exceptional Internship programs may also qualify for academic awards and financial support from the Fund for Student Research, Internships, and Public History.

The Department is committed to full participation in the Longwood program for the assessment of student outcomes. History and political science majors may be 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 standardized and/or department tests used in the program.

HISTORY PROGRAM

Faculty

David J. Coles, Ph.D., *Assistant Professor of History*

James W. Crowl, Ph.D., *Associate Professor of History*

Geoffroy C. de Laforcade, Ph.D., *Assistant Professor of History*

Steven W. Isaac, Ph.D., *Assistant Professor of History*

James R. Munson, Ph.D., *Associate Professor of History*

Larissa M. Smith, Ph.D., *Assistant Professor of History*

Deborah Welch, Ph.D., *Associate Professor of History*

The major in history requires completion of HIST 100 or 110 (whichever is not selected for General Education) HIST 221 and 222, at least one credit of an internship or directed research, and 28 credits in additional history courses selected in consultation with a departmental advisor. Students must take HIST 461 (Senior Seminar), and, of the remaining 27 credits required, a minimum of six credits each in American and Non-American history. Qualified students find Internships with national and state historical associations, museums, historical parks, and a wide range of state and local government offices.

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. Majors may choose to undertake

teacher preparation in history and social science or teacher preparation in history or teacher preparation in political science (see page 187). Those interested in a secondary education endorsement must complete HIST 300 and coursework in history, political science, geography, economics, and psychology/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 or in history are required to have a cumulative grade point average and departmental major average of at least 2.5 before student teaching. Students must complete PRAXIS I exam during their sophomore year and PRAXIS II exam during their senior year.

The optional public history concentration requires completion of HIST 100 or 110 (whichever is not selected for General Education), HIST 221 and 222, and 45 credits in upper-level courses, including 30 hours in history, 9 in archeology/anthropology, and 6 in political science. Successful completion of an internship is required of all public history majors. It is recommended that students add electives in anthropology, art history, or political science.

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, and economics.

Major programs in history require completion of a modern foreign language at the 202 level or higher. For those seeking Secondary Education certification, HIST 300 (POSC 300) must be taken in addition to the 37 credits in History stipulated below (in C. Major Requirements).

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. Political Science majors must take POSC 331 to satisfy Goal 13.

No grade below "C" in major course work is accepted for graduation.

MINOR IN HISTORY

Students seeking a minor in history are required to complete 18 credits of work, including History 100 or 110 (whichever is not selected for General Education), HIST 221 and 222, and 9 elective credits in upper-level history courses chosen in consultation with a departmental advisor.

HISTORY MAJOR, B.A. DEGREE

A. General Education Core Requirements. 41 credits

B. Additional Degree Requirements. 6 credits.

C. Major Requirements. 37 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.

American History Electives/6 credits.

Non-American History Electives/6 credits.

Additional History Electives/15 credits.

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: 36 credits.

E. Total credits required for B.A. in History - 120

HISTORY MAJOR, B.A. DEGREE

Public History Concentration

- A. General Education Core Requirements. 41 credits
- B. Additional Degree Requirements. 6 credits
- C. Major Requirements. 54 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 318 Museum Studies/3 credits
 - HIST 319 Archival Management/3 credits
 - HIST 405 Virginia History/3 credits
 - HIST 461 Senior Seminar/1 credit
 - HIST 492 Internship in Public History/3 credits
(one credit satisfies General Education Goal 15)
 - Elective: Take three courses (9 credits) of American History (300 level or above)
 - Elective: Take two courses (6 credits) of Non-American History (200 level or above)
 - ANTH 296 Field Methods in Archaeology/6 credits
 - ANTH 320 Folklore/3 credits
 - POSC 150 American Government/3 credits
 - POSC 370 Public Administration/3 credits
- D. General Electives: 19 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 B.A. in History with concentration in Public History - 120

HISTORY MAJOR, B.A. 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
 - 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
 - Take all of the following courses:
 - 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/3 credits
or POSC 356	Constitutional Rights and Liberties/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 three courses:

HIST 305	Modern America, 1914 –1945/3 credits
HIST 306	Modern America, 1945-present/3 credits
HIST 310	American Social and Intellectual History/3 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 B.A. in History with concentration in Pre-Law - 120

TEACHER PREPARATION IN HISTORY AND SOCIAL SCIENCE (B.A.)

A. General Education Core Requirements. 41 credits

Majors are required to take either POSC 331 or 332 for General Education Goal 13.

B. Additional Degree Requirements. 6 credits

C. Major Requirements. 58 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/POSC 461	Senior Seminar/1 credit

Choose six 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 309	American Social and Intellectual History/3 credits
HIST 310	American Social and Intellectual History/3 credits
HIST 313	History Through Film/3 credits
HIST 317	Introduction to Historic Preservation/3 credits
HIST 318	Introduction to Museum Studies/3 credits
HIST 320	African-American History/3 credits
HIST 321	The History of Women in America/3 credits
HIST 322	The American West/3 credits
HIST 324	American Indian History/3 credits
HIST 362	The Vietnam War/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
<i>Choose six credits from the following European History courses:</i>	
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 357	England Before the Tudors, 55 B.C. to 1485/3 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 463	European Historiography/3 credits
HIST 465	Tudor/Stewart England, 1485-1714/3 credits
HIST 466	Georgian England, 1714-1815/3 credits
HIST 468	European Intellectual History from the Enlightenment/3 credits

Choose six credits from the following Non-Western History courses:

HIST 200	History of China/3 credits
HIST 314	Political History of Africa/3 credits
HIST 325	History of Latin America/3 credits
POSC 314	Political History of Africa/3 credits
POSC 337	Asian Governments and Politics/3 credits
POSC 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits

Choose six credits from the following:

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

Take all of the following courses (these courses satisfy state licensure requirements):

SOCL 101	Principles of Sociology/3 credits (may satisfy General Education Goal 8)
PSYC 101	Introduction to Psychology/3 credits (may satisfy General Education Goal 8)
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
ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits

D. Secondary Education Licensure Grades 6-12. 38 credits

(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

E. Total credits required for B.A. in History/Social Science with Secondary Education Endorsement - 143

TEACHER PREPARATION IN HISTORY (B.A.)

A. General Education Core Requirements. 41 credits

Majors are required to take either POSC 331 or 332 for General Education Goal 13.

B. Additional Degree Requirements. 6 credits

C. Major Requirements. 52 credits

(plus 6 hours included in General Education and 3 hours included in Licensure Requirements)

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/POSC 461	Senior Seminar/1 credit

Choose six 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 309	American Social and Intellectual History/3 credits
HIST 310	American Social and Intellectual History/3 credits
HIST 313	History Through Film/3 credits
HIST 317	Introduction to Historic Preservation/3 credits
HIST 318	Introduction to Museum Studies/3 credits
HIST 320	African-American History/3 credits
HIST 321	The History of Women in America/3 credits
HIST 322	The American West/3 credits
HIST 324	American Indian History/3 credits
HIST 362	The Vietnam War/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

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 357	England Before the Tudors, 55 B.C. to 1485/3 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 463	European Historiography/3 credits
HIST 465	Tudor/Stewart England, 1485-1714/3 credits
HIST 466	Georgian England, 1714-1815/3 credits
HIST 468	European Intellectual History from the Enlightenment/3 credits

Choose six credits from the following Non-Western History courses:

HIST 200	History of China/3 credits
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HIST 314	Political History of Africa/3 credits
HIST 325	History of Latin America/3 credits
POSC 314	Political History of Africa/3 credits
POSC 337	Asian Governments and Politics/3 credits
POSC 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits
<i>Take all of the following courses (these courses satisfy state licensure requirements):</i>	
SOCL 101	Principles of Sociology/3 credits (may satisfy General Education Goal 8)
PSYC 101	Introduction to Psychology/3 credits (may satisfy General Education Goal 8)
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
ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 217	Principles of Economics (Micro Emphasis)/3 credits

D. Secondary Education Licensure Grades 6-12. 38 credits

(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

E. Total credits required for B.A. in History with Secondary Education Endorsement – 137

HISTORY COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Courses ***

HISTORY 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. *

HISTORY 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. *

HISTORY 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.

HISTORY 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. *

HISTORY 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. *

HISTORY 292. *Internship in History.* A semester-long, on-the-job learning experience designed to apply the principles of history. 1-18 credits.

HISTORY 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.

HISTORY 300 (Political Science 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 ***

HISTORY 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. ***

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 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. **

HISTORY 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. **

HISTORY 311,312. *Studies Abroad.* Students conduct research in history under the direction of a faculty member. 3 credits.

HISTORY 313. *History Through Film.* A viewing of some fourteen films that contain historical interpretation. Reviews and discussions with historians as to interpretation will follow. The class will meet once a week. 3 credits.

HISTORY 314 (Political Science 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. **

HISTORY 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

HISTORY 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

HISTORY 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. **

HISTORY 319. *Archival Management.* An introduction to the archival profession, including the acquisition, accessioning, arrangement and description, preservation, and referencing of archival records. 3 credits.

HISTORY 320. *African-American History.* A survey of the black experience in America from the Colonial Era to the present. Prerequisite: HIST 221 or permission of instructor. 3 credits. **

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 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. ***

HISTORY 325. *History of Latin America.* A survey of Latin American history from its pre-Columbian roots to the present. 3 credits. **

HISTORY 336. *History of Japan.* Japanese political and cultural history, with emphasis upon the modern period. The opening of Japan, the Meiji Restoration, modernization, the rise of militarism, the American occupation, and current issues are stressed. 3 credits. **

HISTORY 351. *Medieval Europe.* A study of the political, economic, and social institutions, and the religious and intellectual developments in Medieval Europe. 3 credits. **

HISTORY 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. **

HISTORY 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. **

HISTORY 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. **

HISTORY 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. **

HISTORY 357. *England Before the Tudors, 55 B.C. To 1485.* A study of the political, economic, and social factors that shaped England prior to the Reformation. 3 credits.

HISTORY 358. *France Since 1815.* The history of major developments in French politics, culture, and society in the modern era. 3 credits. **

HISTORY 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. **

HISTORY 360. *Russian History Since 1894.* Russia from the reign of Nicholas II to the present, with emphasis upon the factors leading to the collapse of the monarchy and the revolutions of 1905 and 1917, and upon the subsequent construction and evolution of the Soviet system. Little emphasis upon diplomacy or foreign policy. 3 credits. **

HISTORY 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.

HISTORY 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.

HISTORY 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.

HISTORY 365 (PHILOSOPHY 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.

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

HISTORY 392. *Internship in History.* A semester-long, on-the-job learning experience designed to apply the principles of history. 1-18 credits.

HISTORY 402. *American Historiography.* The writing and interpretation of American history. Recommended for history majors. Prerequisites: HIST 221 and 222. 3 credits. **

HISTORY 405. *Virginia History.* A survey of Virginia history from colonial times to present. Prerequisite: History 221 and 222 or permission of instructor. 3 credits.. ** and ***

HISTORY 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.

HISTORY 410 (HISTORY 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 particular focus on the causes of the war, on military operation 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.

HISTORY 455 (POLITICAL SCIENCE 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.

HISTORY 460. *History Seminar.* Offered on demand; open to junior and senior history majors. 1-3 credits.

HISTORY 461. *Senior Seminar.* Capstone course in history. Research, writing, and assessment of student outcomes. Required of majors in history. 1 credit. ** and ***

HISTORY 463. *European Historiography.* The writing and interpretation of history in Europe since the Renaissance. Prerequisite: HIST 110, or permission of instructor. 3 credits. **

HISTORY 465. *Tudor-Stuart England, 1485-1714.* The social, political, economic, and religious forces of one of England's most dynamic periods examined in the context of the sixteenth-century Renaissance and Reformation and the seventeenth-century Intellectual Revolution. Research paper or critical book analyses required. Background in Western Civilization recommended. 3 credits. **

HISTORY 466. *Georgian England, 1714-1815.* England in the 18th century, with emphasis upon political, social, and cultural trends. Topical reports by students. 3 credits. **

HISTORY 468 (PHILOSOPHY 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. ** and ***

HISTORY 469 (Political Science 469). *Soviet Diplomacy.* An analysis of the diplomacy and foreign policy of Soviet Russia, 1917 to 1991, with emphasis upon the political machinery and motivating forces that determine foreign policy. 3 credits.

HISTORY 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.

HISTORY 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

HISTORY 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.

HISTORY 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.

HISTORY 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. **

POLITICAL SCIENCE PROGRAM

Faculty

David S. Calihan, Ph.D., *Associate Professor of Political Science*

N. Scott Cole, Ph.D., *Assistant Professor of Political Science*

William R. Harbour, Ph.D., *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 31 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.

Majors in political science seeking an endorsement for secondary teaching in Virginia should be thoroughly familiar with the professional education requirements listed elsewhere in this catalog. These majors pursue teacher preparation in history and social science (see page 211). To qualify for the secondary student teaching practicum, majors must complete POSC 150 with no less than a grade of B.

The optional pre-law concentration requires completion of HIST 100 or 110 (whichever is not taken for General Education credit), HIST 222, POSC 150 and 216, and 34 credits in additional courses, including 25 credits in political science, 3 in history, 3 in psychology, and 3 in accounting. It is also strongly recommended that students add an elective in writing skills (ENGL 470).

The optional global politics concentration requires 43 credits as outlined on page 219.

Political science majors may earn either the Bachelor of Science or Bachelor of Arts degree. For Teacher Preparation in History and Social Science, please see History major.

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, B.A., B.S. DEGREE

A. General Education Core Requirements. 41 credits

Majors must take POSC 331 to satisfy Goal 13.

- B. Additional Degree Requirements, B.A. degree. 6 credits
Additional Degree Requirements, B.S. degree. 7 credits
- C. Major Requirements. 40 credits
- | | |
|----------|---|
| HIST 100 | Foundations of Western Civilization/3 credits (satisfies General Ed Goal 6) |
| 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 370 | Public Administration/3 credits |
| POSC 455 | Constitutional History of the United States/3 credits |
| POSC 461 | Senior Seminar/1 credit |
- 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)
- 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 375 | Latin American Politics and Government/3 credits |
| POSC 395 | African Politics and Government/3 credits |
- Political Science Electives/9 credits
- D. General Electives:
- B.A. Political Science/33 credits.
B.S. Political Science/32 credits.

E. Total credits required for B.A., B.S. in Political Science - 120

POLITICAL SCIENCE MAJOR, B.A., B.S. DEGREE
Pre-Law Concentration

- A. General Education Core Requirements. 41 credits
Majors must take POSC 331 to satisfy General Education Goal 13.
- B. Additional Degree Requirements, B.A. Degree. 6 credits.
Additional Degree Requirements, B.S. Degree. 7 credits.
- C. Major Requirements. 37 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 230	Administration of Criminal Justice/3 credits
POSC 332	Political Philosophy/3 credits
POSC 355	Constitutional Rights and Liberties/3 credits
or POSC 356	Constitutional Rights and Liberties/3 credits
POSC 455	Constitutional History of the United States/3 credits
POSC 461	Senior Seminar/1 credit

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

Take the following courses:

PSYC 101 Introduction to Psychology/3 credits

ACCT 240 Principles of Accounting I/3 credits

PHIL 300 Logic/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 3 credits from the following courses:

HIST 305 Modern America, 1914-1945/3 credits

HIST 306 Modern America, 1945-present/3 credits

HIST 310 American Social and Intellectual History/3 credits

D. General Electives for B.A. – 36 credits

General Electives for B.S. – 35 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 B.A., B.S. in Political Science with a concentration in Pre-Law - 120

POLITICAL SCIENCE MAJOR, B.A. DEGREE

Global Politics Concentration

A. General Education Core Requirements. 41 credits.

Majors must take POSC 331 to satisfy Goal 13.

B. Additional Degree Requirements, B.A. degree. 6 credits.

C. Major Requirements. 43 credits (plus 1 hour included in General Education)

1. Core Political Science Courses (18 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

HIST 308 United States Diplomatic History/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

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 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/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
ECON 111	Contemporary Economic Issues and Social Policy/3 credits
ECON 218	Principles of Economics/3 credits
GEOG 352	World Regional Geography/3 credits

4. Senior Seminar (1 credit)

POSC 461	Senior Seminar/1 credit
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D. General Electives: 30 credits.

Total credits required for B.A. in Political Science with a Concentration in Global Politics - 120

TEACHER PREPARATION IN POLITICAL SCIENCE (GOVERNMENT) (B.A.)

A. General Education Core Requirements. 41 credits

Majors must take POSC 331 to satisfy General Education Goal 13.

B. Additional Degree Requirements. 6 credits

C. Major Requirements. 52 credits

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 370	Public Administration/3 credits
POSC 455	Constitutional History of the United States/3 credits
POSC 461	Senior Seminar/ 1 credit

Choose twelve hours from the following:

POSC 314	Political History of West 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 343	American Foreign Policy/3 credits
POSC 350	The American Presidency/3 credits
POSC 375	Latin American Politics and Government/3 credits
POSC 395	African Politics and Government/3 credits
POSC 441	International Relations/3 credits
POSC 442	International Law and Organizations/3 credits

Take all of the following courses (these courses satisfy state licensure requirements):

SOCL 101	Principles of Sociology/3 credits (may satisfy General Education Goal 8)
PSYC 101	Introduction to Psychology/3 credits (may satisfy General Education Goal 8)
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

ECON 111
ECON 217

Contemporary Economic Issues and Social Policy/3 credits
Principles of Economics (Micro Emphasis)/3 credits

D. Secondary Education Licensure Grades 6-12. 38 credits

(One credit of the 11-hour directed teaching experience satisfies General Education Goal 15.)

POSC 300 Teaching History and the Social Sciences in the Secondary School/3 credits

Total credits required for B.A. in Political Science with Secondary Education Endorsement – 137

POLITICAL SCIENCE COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Courses **

Speaking Intensive Courses ***

POLITICAL SCIENCE 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. *

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 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 credit. *

POLITICAL SCIENCE 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. *

POLITICAL SCIENCE 292. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits.

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 300 (HISTORY 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 certification. Prerequisites: EDUC 245 and 260. 3 credits ***

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

POLITICAL SCIENCE 314 (HISTORY 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. **

POLITICAL SCIENCE 331 (PHILOSOPHY 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.*

POLITICAL SCIENCE 332 (PHILOSOPHY 332). *Modern Political Philosophy.* Survey of modern political theories and philosophies, including the contributions of Machiavelli, Hobbes, Locke, Rousseau, Burke, and Marx. 3 credits. *

POLITICAL SCIENCE 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. ** and ***

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 341. *American Political Thought to the Civil War.* An introduction to the principal thinkers and the central themes in American political thought. 3 credits. **and ***

POLITICAL SCIENCE 342. *American Political Thought 1860 to the Present.* An introduction to the principal thinkers and the central themes in American political thought. 3 credits. **and ***

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 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. ***

POLITICAL SCIENCE 370. *Public Administration.* Survey of the premises and issues of public bureaucracies, and of principal activities of policy administrators, including personnel management, budgeting, decision-making, intergovernmental relations, and relations with courts, elected officials, and private organizations. 3 credits.

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 392. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits.

POLITICAL SCIENCE 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. ** and ***

POLITICAL SCIENCE 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. **

POLITICAL SCIENCE 441. *International Relations.* Study of the factors conditioning international politics, with emphasis upon the foreign policies of major powers. 3 credits. **

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 455 (HISTORY 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.

POLITICAL SCIENCE 460. *Political Science Seminar.* Open to juniors and seniors; offered on demand. 1-3 credits.

POLITICAL SCIENCE 461. *Senior Seminar.* Capstone course in Political Science. Research, writing, and assessment of student outcomes. Required of majors in Political Science. 1 credit. **and ***

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 469 (HISTORY 469). *Russian Diplomacy.* An analysis of the diplomacy and foreign policy of Soviet Russia, 1917 to 1991, with emphasis upon the political machinery and motivating forces that determine foreign policy. 3 credits.

POLITICAL SCIENCE 490. *Directed or Independent Study in Political Science.* Must be approved by the head of the department. May be repeated as. 1-18 credits.

POLITICAL SCIENCE 492. *Internship in Political Science.* A semester-long, on-the-job learning experience designed to apply the principles of political science. 1-18 credits.

POLITICAL SCIENCE 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.

POLITICAL SCIENCE 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. **

PHILOSOPHY PROGRAM

Faculty

Eric Moore, Ph.D., *Assistant Professor of Philosophy*

Paul V. Moriarty, Ph.D., *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 which 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.

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

Philosophy electives (two additional courses from philosophy, POSC 331, POSC 332).

TOTAL 18 credits

PHILOSOPHY COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Course **

PHILOSOPHY 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. **

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 213. *Survey of Nineteenth Century Philosophy.* A survey of the development of western 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.

PHILOSOPHY 292. *Internship in Philosophy.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits.

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 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. *

PHILOSOPHY 311, 312. *Studies Abroad.* Primarily intended for transfer of credit earned abroad in courses on Philosophy. 1-16 credits per semester.

PHILOSOPHY 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.*

PHILOSOPHY 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.*

PHILOSOPHY 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.

PHILOSOPHY 331 (POLITICAL SCIENCE 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.*

PHILOSOPHY 332 (POLITICAL SCIENCE 332). *Modern Political Philosophy.* Survey of modern political theories and philosophies, including the contributions of Machiavelli, Hobbes, Locke, Rousseau, Burke, and Marx. 3 credits. *

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 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.

PHILOSOPHY 365 (HISTORY 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.

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

PHILOSOPHY 392. *Internship in Philosophy.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits.

PHILOSOPHY 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.

PHILOSOPHY 468 (HISTORY 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. **

PHILOSOPHY 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.

PHILOSOPHY 492. *Internship.* A semester-long, on-the-job learning experience designed to apply the principles of philosophy. 1-18 credits.

PHILOSOPHY 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.

PHILOSOPHY 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*

Chalie Shelton, *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 mathematics 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. Students who are preparing to teach and who are majoring in fields other than computer science may be endorsed to teach computer science by minoring in computer science.

MATHEMATICS PROGRAM

Faculty

William P. Abrams, Ph.D., *Professor of Mathematics*

John E. Arehart, Ed.D., *Associate Professor of Computer Science and Mathematics*

C. E. Davis, *Assistant professor of Mathematics Education*

Sharon Emerson-Stonnell, Ph.D., *Associate Professor of Mathematics*

Jacqueline A. Hall, Ph.D., *Associate Professor of Mathematics*

Virginia Lewis M.S., *Lecturer in Mathematics Education*

Leigh Lunsford, Ph.D., *Assistant Professor of Mathematics*

Stanley J. McCaslin, M.S., *Lecturer of Computer Science*

Gary T. Nelson, Ph.D., *Professor of Mathematics Education*

Jeffery H. Peden, Ph.D., *Associate Professor of Computer Science*

Carol L. Rezba, Ed.D., *Assistant Professor of Mathematics Education*

David Shoenthal, Ph.D., *Assistant Professor of Mathematics*

Robert P. Webber, Ph.D., *Professor of Computer Science and Mathematics*

All mathematics majors are required to take a core of mathematics courses (MATH 261, 262, 300, 343, 361, and 371). The remaining courses will be selected from one of two concentrations — pure mathematics, or applied mathematics. Mathematics majors who have completed Mathematics 262 may not enroll in a 100-level mathematics course.

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 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, B.A., B.S. 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. B.S. Degree Additional Degree Requirements/7 credits.
Students seeking the B.S. degree must take CMSC 204 as their Mathematics or Computer Science elective.
B.A. Degree Additional Degree Requirements/6 credits.

C. Major Requirements/37-39 credits.

All Majors

MATH 261	The Differential and Integral Calculus/4 credits (3 of these 4 credits satisfy General Education Goal 5).
MATH 262	The Differential and Integral Calculus/4 credits
MATH 300	A Transition to Advanced Mathematics/3 credits
MATH 343	Linear Algebra/3 credits
MATH 361	Calculus III/4 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 EDUC 370/1-3 credits	
(1 credit satisfies General Education Goal 15)	

CHOOSE ONE

Concentration I (Pure Mathematics)

MATH 342	Introduction to Modern Algebra/3 credits
MATH 335	Advanced Euclidean Geometry/3 credits
or MATH 336	Survey of Modern Geometries/3 credits
MATH 462	Advanced Calculus/3 credits

*Elective 300-400 level Mathematics/6 credits

*Elective 300-400 level Mathematics or Computer Science/3 credits

TOTAL 18 credits

Concentration II (Applied Mathematics)

MATH 405	Numerical Analysis/3 credits
MATH 460	Differential Equations/3 credits
MATH 472	Introduction to Mathematical Statistics/3 credits
CMSC 206	Data Structures in Advanced Programming/3 credits

*Elective 300-400 level Mathematics/3 credits

*Elective 300-400 level Mathematics or Computer Science/3 credits

TOTAL 18 credits

*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	Functions, Probability, and Statistics/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

CMSC 300 may be substituted for MATH 300. It is recommended that Concentration One Majors take MATH 300. Both may be taken for credit.

D. Secondary Teaching Endorsement, grades 6-12/38 credits.

See professional education requirements

Additional endorsement requirement/5 credits

MATH 245 History of Mathematics/2 credits

MATH 451 The Teaching of High School Mathematics/3 credits.

E. General Electives (non-teaching majors) - 35-38

F. Total Credits Required for B.A., B.S. in Mathematics - 120

Total Credits Required for B.S. in Mathematics with Secondary Teaching Endorsement - 128-130

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

MATH 261 The Differential and Integral Calculus

MATH 262 The Differential and Integral Calculus

**Electives: Twelve credits consisting of Math 271 or mathematics at the 300 level or higher

TOTAL: 18 – 22 credits

**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 Functions, Probability, and Statistics/3 credits

MATH 313 Geometry and Reasoning/3 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.

MATH 164 Precalculus/3 credits

MATH 181 Finite Mathematics/3 credits

OR MATH 343 Linear Algebra/3 credits

MATH 261 The Differential and Integral Calculus/4 credits

OR MATH 267 Applications of Calculus/4 credits

MATH 309 Numeration Systems/3 credits

MATH 310 Functions, Probability, and Statistics/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

CMSC 121 Introduction to Computer Science/3 credits

OR CMSC 204 Introduction to Programming/3 credits

TOTAL 25 credits

MATHEMATICS COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Course **

Speaking Intensive Course***

MATHEMATICS 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.

MATHEMATICS 121. *Functions and Graphs.* Graphical, numerical, and algebraic approaches to modeling with functions. Emphasizes constructing models based on linear, exponential, power, and trigonometric functions. 3 credits. *

MATHEMATICS 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, iP, fractals, chaos. Basic number theory and modular arithmetic applied to cryptology, check digit schemes, and music theory. Introductory statistics and finance. 3 credits. *

MATHEMATICS 164. *Precalculus.* A study of functions with an emphasis on exponential, logarithmic, and trigonometric functions in order to prepare the student for calculus. 3 credits.*

MATHEMATICS 171. *Statistical Decision Making.* An elementary statistics course designed to show the student how statistics is used in problem solving and decision making. Topics include measures of central tendency and variability; elementary probability concepts; the binomial, normal and Chi-square distributions, correlation and regression; and hypothesis testing. Special emphasis is placed upon the proper use of statistics in real life situations. 3 credits. *

MATHEMATICS 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; solving systems of linear equations using Gauss-Jordan elimination; matrix algebra; solutions of inequalities; linear programming, including the graphical methods and introduction to the simplex method; introductory probability; introduction to calculus; and mathematics of finance. 3 credits.

MATHEMATICS 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.

MATHEMATICS 261, 262. *The Differential and Integral Calculus.* A unified course dealing with the basic ideas of calculus and analytic geometry. Prerequisite for MATH 262: successful completion of 261. Students who do not make a C or better in 261 should have the consent of the chair before enrolling in 262. 4 credits.

MATHEMATICS 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. *

MATHEMATICS 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 majors. 3 credits.

MATHEMATICS 292. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits.

MATHEMATICS 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.

MATHEMATICS 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, countability, algebraic and completeness properties of the reals. 3 credits. **

MATHEMATICS 309. *Numeration Systems.* A study of different numeration systems. The development and characteristics of ancient numeration systems, base numeration systems and the real number system will be studied. Problem solving is emphasized. 3 credits.

MATHEMATICS 310. *Functions, Probability and Statistics.* Examines functions, probability and statistics in the context of real life situations and will include student investigations and hands on activities. Prerequisite: MATH 309 and proficiency in computer spreadsheets, or permission of instructor. 3 credits.

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

MATHEMATICS 313. *Geometry and Reasoning.* A basic study of polygons, polyhedra, measurement, transformational geometry, coordinate geometry, descriptive statistics, graphical methods and empirical and theoretical probabilities and their uses. 3 credits.

MATHEMATICS 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.

MATHEMATICS 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 formal proof, constructions, higher Euclidean geometry, finite geometries, and non-Euclidean geometries. Prerequisite/corequisite: MATH 261. 3 credits.

MATHEMATICS 336. *Survey of Modern Geometries.* A study designed to widen and enlarge the horizons of the students through an examination of some of the geometric developments since the time of Euclid. The characteristics and interrelatedness of various geometries—topological, projective, affine, similarity, Euclidean, non-Euclidean and inversion—will be briefly examined through transformations. Prerequisite: MATH 300. 3 credits.

MATHEMATICS 342. *Introduction to Modern Algebra.* Sets and mappings, integers, general algebraic systems, groups, rings, and fields. Prerequisite: MATH 300. 3 credits.

MATHEMATICS 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 dual spaces. Prerequisite: MATH 262 or consent of department chair. 3 credits.

MATHEMATICS 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 342 or consent of instructor. 3 credits.

MATHEMATICS 350 (COMPUTER SCIENCE 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. * and ***

MATHEMATICS 351. *Introduction to Topology.* Topological spaces, continuous mappings, homeomorphisms, compactness, connectedness, metric spaces, and other selected topics in point set topology. Prerequisite: MATH 361. 3 credits.

MATHEMATICS 361. *Calculus III.* Advanced topics in calculus not considered in MATH 261, 262. Prerequisite: MATH 262. Students who do not make C or better in 262 should have consent of the chair before enrolling. 4 credits.

MATHEMATICS 371. *Introduction to Probability and Statistics.* Theory of probability; expected values of random variables; discrete and continuous probability distributions. Prerequisite: MATH 361. 3 credits.

MATHEMATICS 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.

MATHEMATICS 392. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits.

MATHEMATICS 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 204 or equivalent. 3 credits.

MATHEMATICS 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.

MATHEMATICS 435 (COMPUTER SCIENCE 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 371.204, MATH 261. 3 credits.

MATHEMATICS 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.

MATHEMATICS 460. *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 361. 3 credits.

MATHEMATICS 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. ** and ***

MATHEMATICS 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.

MATHEMATICS 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 361 and 371. 3 credits.

MATHEMATICS 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.

MATHEMATICS 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. ***

MATHEMATICS 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. ***

MATHEMATICS 492. *Internship in Mathematics.* A semester-long, on-the-job learning experience designed to apply the principles of mathematics. 1-18 credits. ***

MATHEMATICS 495. *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 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

MATHEMATICS 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.

MATHEMATICS 595. *Special Topics in Mathematics.* 1-3 credits. Selected topics in mathematics. The topics may vary from semester to semester. May be repeated for credit when topics change. 1-3 credits.

COMPUTER SCIENCE PROGRAM

Faculty

John E. Arehart, Ed.D., *Associate Professor of Computer Science and Mathematics*

Stanley J. McCaslin, M.S., *Lecturer of Computer Science*

Jeffery H. Peden, Ph.D., *Associate Professor of Computer Science*

Robert P. Webber, Ph.D., *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, B.A., B.S. DEGREE

- A. General Education Core Requirements/41 credits.
Majors are required to take Phil 300 for general education goal 12;
CMSC 350 for general education goal 13.
- B. B.A. Degree Additional Degree Requirements/6 credits.
B.S. Degree Additional Degree Requirements/ 7 credits.
Students seeking a B.S. degree cannot take a 100-level Computer Science course as their Mathematics or Computer Science elective.
- C. Major Requirements/56-58 credits.
- | | |
|--|---|
| CMSC 204 | Introduction to Programming/3 credits |
| CMSC 206 | Data Structures in Advanced Programming/3 credits |
| CMSC 300 | Discrete Mathematics for Computer Science/3 credits |
| CMSC 301 | Computer Organization and Assembler Language Programming/3 credits |
| CMSC 306 | Computer Organization/3 credits |
| CMSC 308 | Organization of Programming Languages/3 credits |
| CMSC 310 | Introduction to Operating Systems and Computer Architecture/3 credits |
| CMSC 316 | Object-Oriented Programming/3 credits |
| CMSC 360 | Computer Network Theory/3 credits |
| CMSC 362 | Theory of Databases/3 credits |
| CMSC 461 | Seminar in Computer Science/3 credits |
| CMSC 492 or CMSC 490 or EDUC 370/1-3 credits | (satisfies General Education Goal 15) |
| ENGL 319 | Technical Writing/3 credits |
| MATH 261 | The Differential and Integral Calculus/4 credits
(3 of these 4 credits satisfy General Education Goal 5) |
| MATH 262 | The Differential and Integral Calculus/4 credits |
| MATH 271 | Applied Statistics/3 credits |

Four courses, one of which must be any mathematics or computer science course at the 200 level or above, and the remaining three of which must be any computer science courses at the 300 level or above.

MATH 300 may be substituted for CMSC 300. Both may be taken for credit.

- D. General Electives: B.A./B.S. degree - 16-17
- E. Total Credits Required for B.A. or B.S. degree - 120
Computer Science Majors are required to take Philosophy 300 for general education goal 12,
CMSC 350 for general education goal 15, and are exempt from general education goal 5.

MINOR IN COMPUTER SCIENCE

A minor in computer science shall consist of 18 credit hours of 200-level or higher computer science courses, at least 12 hours of which must be at the 300 or 400 level.

COMPUTER SCIENCE COURSE DESCRIPTIONS

General Education *

Writing Intensive Course **

Speaking Intensive Course***

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 204. *Introduction to Programming.* An introductory course in computer science emphasizing programming and algorithm development. Topics will include basic language structures, assignment, iteration, control flow, language and programmer defined variable types, and basic data manipulation models. 3 credits.

COMPUTER SCIENCE 206. *Data Structures in Advanced Programming.* A one-semester course in advanced programming utilizing data structures and models. The course emphasizes advanced programming techniques in the manipulation of data structures. Prerequisite: CMSC 204. 3 credits.

COMPUTER SCIENCE 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 204 or permission of the instructor. 3 credits.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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 206. 1 credit.

COMPUTER SCIENCE 292. *Internship in Computer Science.* A semester-long, on-the-job learning experience designed to apply the principles of computer science. 1-18 credits.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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 206. 3 credits.

COMPUTER SCIENCE 301. *Computer Organization and Assembler Language Programming.* Assembler language programming; addressing techniques; internal storage structure; machine-level representation of instructions and data; sub-routines. Prerequisites: Computer Science 206 or consent of instructor. Fall only; 3 credits.

COMPUTER SCIENCE 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 206. 3 credits.

COMPUTER SCIENCE 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 206 or permission of instructor. 3 credits. **

COMPUTER SCIENCE 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 206. 3 credits.

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

COMPUTER SCIENCE 316. *Object-Oriented Programming.* A course in the techniques of object-oriented programming in an object-oriented programming language. Topics covered include inheritance, function and operator overloading, object construction, visibility, information hiding, and multiple inheritance. Prerequisite: CMSC 206. 3 credits.

COMPUTER SCIENCE 350. (MATHEMATICS 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. * and ***

COMPUTER SCIENCE 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 204. 3 credits.

COMPUTER SCIENCE 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 204. 3 credits.

COMPUTER SCIENCE 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 206. 3 credits. **

COMPUTER SCIENCE 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 publically available graphics application programming interface. Other topics will include the mathematics to manipulate geometric objects. Prerequisites: CMSC 206, MATH 261. 3 credits.

COMPUTER SCIENCE 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 206. 3 credits.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 392. *Internship in Computer Science.* A semester-long, on-the-job learning experience designed to apply the principles of computer science. 1-18 credits.

COMPUTER SCIENCE 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 206. 3 credits. ***

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 435. (MATHEMATICS 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, Laplace and z-transforms, priority queuing, and basic computer simulation techniques. Prerequisite: CMSC 371.204, MATH 261. 3 credits.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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 204 and a background in discrete mathematics. 3 credits.

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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. ***

COMPUTER SCIENCE 492. *Internship in Computer Science.* A semester-long on-the-job learning experience designed to apply the principles of computer science. 1-18 credits. ***

COMPUTER SCIENCE 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.

COMPUTER SCIENCE 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

For Graduates and Advanced Undergraduates

COMPUTER SCIENCE 505. *Computers in Mathematics Education.* Techniques and existing programs in computer-assisted instruction, computer-managed instruction, simulation and modeling. Offered on demand. 3 credits.

Department of Music

Patricia D. Lust, *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.

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

Faculty

All music faculty teach in each of the music degree programs listed below.

Charles E. Kinzer, Ph.D., *Associate Professor of Music*
 Lisa B. Kinzer, D.M.A., *Associate Professor of Music*
 Patricia D. Lust, D.M., *Professor of Music*
 Dennis Malfatti, M.M., *Assistant Professor of Music*
 Gordon L. Ring, D.Mus.A., *Professor of Music*
 Christopher L. Swanson, M.M., *Assistant Professor of Music*
 Thomas A. Williams, M.M., *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 either German or French.

- 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 or German)/3 credits (at 202 level or above)
 Humanities/3 credits not in the discipline of music
- C. Major Requirements. 53 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 119	Introduction to Computer Applications in Music/1 credit
MUSC 137	Music Literature/3 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 (satisfies General Education Goal 15)
Music Electives/5-8 credits	
Ensembles/8 credits	
Applied Primary/10 credits	
TOTAL/53 credits	

D. General Electives: 20 credits

E. Total Credits Required for Bachelor of Arts with a Concentration in Music - 120

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, Music History, 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. Major Requirements. 48-51 credits. (choose choral or instrumental track)

Choral Track

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/3 credits
MUSC 140	Diction for Singers I/2 credits
MUSC 141	Diction for Singers II/2 credits (voice primary)
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 340	Instrumental Survey/3 credits
MUSC 341	Conducting/2 credits
MUSC 342	Advanced Choral Conducting/2 credits

MUSC 483 Applied Music Capstone Course/3 credits (satisfies General Education Goal 15)
 Applied Primary/12 credits
 TOTAL 48-51 credits

Instrumental Track

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/3 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 165 Strings/1 credit
 MUSC 167 Percussion/1 credit
 MUSC 205 Vocal Ensemble/2 credits
 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 343 Advanced Instrumental Conducting/2 credits
 MUSC 361 Brass/1 credit
 MUSC 363 Woodwinds/1 credit
 MUSC 483 Applied Music Capstone Course/3 credits (satisfies General Education Goal 15)

Applied Primary/12 credits

TOTAL 47-50 credits

D. Education Requirements

Choral Track

MUSC 145 Introduction to Music Education/1 credit
 MUSC 345 Practicum in Elementary School/1 credit
 MUSC 346 Practicum in Junior High or Middle School/1 credit
 MUSC 347 Practicum in High School/1 credit
 MUSC 441 Elementary School Methods and Materials/3 credits
 MUSC 442 Choral Methods and Materials/2 credits
 EDUC 245 Human Growth and Development/3 credits
 EDUC 380 Classroom Assessment/2 credits
 EDUC 403 Directed Elementary Teaching for Art and Music/6 credits
 EDUC 404 Directed Secondary Teaching for Art and Music/5 credits
 EDUC 484 Media and Technology/1 credit
 EDUC 487 Classroom Management and System Issues/3 credits
 EDUC 488 Education Seminar/1 credit
 SPED 489 Survey of Exceptional Children/2 credits
 TOTAL 32 credits

Instrumental Track

MUSC 145 Introduction to Music Education/1 credit
 MUSC 345 Practicum in Elementary School/1 credit

MUSC 346	Practicum in Junior High or Middle School/1 credit
MUSC 347	Practicum in High School/1 credit
MUSC 441	Elementary School Methods and Materials/3 credits
MUSC 443	Instrumental Methods and Materials/2 credits
MUSC 444	Marching Band Fundamentals/1 credit
EDUC 245	Human Growth and Development/3 credits
EDUC 380	Classroom Assessment/2 credits
EDUC 403	Directed Elementary Teaching for Art and Music/6 credits
EDUC 404	Directed Secondary Teaching for Art and Music/5 credits
EDUC 484	Media and Technology/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
TOTAL 34 credits	

- E. Total Credits Required for Bachelor of Music with a
Concentration in Education - 126-129

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, Music History, 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. Major Requirements. 67-75 credits.

Voice Primary

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/3 credits
MUSC 140	Diction for Singers I/2 credits
MUSC 141	Diction for Singers II/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)

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 243	Piano Accompanying/1 credit

MUSC 313	Form and Analysis/3 credits
MUSC 332	History of Music/3 credits
MUSC 341	Conducting/2 credits
MUSC 436	Vocal Literature/2 credits
MUSC 483	Applied Music Capstone Course/3 credits (satisfies General Education Goal 15)

Applied Primary/19 credits

Ensembles/8 credits
Music Electives/6 credits
TOTAL: 67-70 credits

Piano Primary

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/3 credits
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 243	Piano Accompanying/1 credit
MUSC 264	Intermediate Piano II/1 credit
MUSC 313	Form and Analysis/3 credits
MUSC 319	Keyboard Improvisation/2 credits
MUSC 332	History of Music/3 credits
MUSC 335	Piano Duet and Duo-Piano Literature/2 credits
MUSC 341	Conducting/2 credits
MUSC 435	Piano Literature/2 credits
MUSC 483	Applied Music Capstone Course/3 credits (satisfies General Education Goal 15)

Applied Primary/19 credits

Ensembles/10 credits
Music Electives/6 credits
TOTAL 69 credits

Instrumental Primary

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 117	Composition/1 credit
MUSC 119	Introduction to Computer Applications in Music/1 credit
MUSC 137	Music Literature/3 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)

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 343	Advanced Instrumental Conducting/2 credits
MUSC 414	Counterpoint/2 credits
MUSC 433	Instrumental Literature/2 credits
MUSC 483	Applied Music Capstone Course/3 credits (satisfies General Education Goal 15)
Applied Primary/19 credits	
Ensembles/10 credits	
Music Electives/9 credits	
TOTAL 72-75 credits	

D. Electives (all concentrations)/1-4 credits

E. 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, Music History, 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. Major Requirements. 64 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 119	Intro. to Computer Applications in Music/1 credit
MUSC 137	Music Literature/3 credits
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 243	Piano Accompanying/1 credit
MUSC 264	Intermediate Piano II/1 credit
MUSC 313	Form and Analysis/3 credits
MUSC 319	Keyboard Improvisation/1 credit
MUSC 332	History of Music/3 credits
MUSC 335	Piano Duet and Duo-Piano Literature/2 credits
MUSC 341	Conducting/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 Music Capstone Course/3 credits (satisfies General Education Goal 15)
MUSC 492	Piano Internship/8 credits
Applied Primary/17 credits	
TOTAL 64 credits	

D. Electives/9 credits

E. 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.

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/3 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/3-5 credits

Ensembles/4 credits

TOTAL 20 credits

MUSIC COURSE DESCRIPTIONS

A special fee is charged for all individual applied music courses. †

General Education Courses *

Writing Intensive Course **

Speaking Intensive Course ***

PRIVATE APPLIED STUDY. By special permission of the Chair of the Music Department. A special fee is charged for private study. 1 credit. †

MUSIC 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.

MUSIC 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.

MUSIC 115. *Sightsinging and Dictation.* Ear training through sightsinging and dictation. 2 periods; 1 credit each semester. Must be taken concurrently with MUSC 113.

MUSIC 116. *Sightsinging and Dictation.* Continuation of 115 which is prerequisite. 2 periods; 1 credit. Must be taken concurrently with MUSC 114.

MUSIC 117, 118, 217, 218, 317, 318, 417, 418. *Composition.* Instruction in techniques of composing music. Prerequisite: Music 113, 115 or consent of instructor. May be repeated for credit. 1 class and 1 private lesson; 1 credit.

MUSIC 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.

- MUSIC 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. 3 credits. ** and ***.
- MUSIC 140. *Diction for Singers I*. Study of phonetics and the International Phonetic Alphabet. Accurate pronunciation in English, Latin and Italian. 2 periods. 2 credits.
- MUSIC 141. *Diction for Singers II*. Study of phonetics and the International Phonetic Alphabet. Accurate pronunciation in German and French. Prerequisite: Music 140. 2 periods. 2 credits.
- MUSIC 145. *Introduction to Music Education*. Survey of the role, quality, and value of music in school curricula. Ideas and techniques reflective of learning. Students will take Praxis I as a component of this course. Music Majors only. 1 period; 1 credit.
- MUSIC 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.
- MUSIC 164. *Beginning Piano II*. Continuation of Music 163 with individually assigned repertoire. Prerequisite: Music 163. Must be taken concurrently with MUSC 114.1 credit.
- MUSIC 213. *Theory of Music*. Continuation of 114 including chromaticism and altered chords. Prerequisite: MUSC 114. 2 credits. Must be taken concurrently with MUSC 215.
- MUSIC 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.
- MUSIC 215. *Sightsinging and Dictation*. Continuation of 115, 116 which are prerequisites. 2 periods; 1 credit each semester. Must be taken concurrently with MUSC 213.
- MUSIC 216. *Sightsinging and Dictation*. Continuation of 215 which is a prerequisite. 2 periods, 1 credit each semester. Must be taken concurrently with MUSC 214.
- MUSIC 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. *
- MUSIC 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. *
- MUSIC 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.
- MUSIC 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. *
- MUSIC 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. *
- MUSIC 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.
- MUSIC 243. *Piano Accompanying*. Study and practical application of accompanying other musicians. Recommended for keyboard majors. 2 periods; 1 credit.
- MUSIC 263. *Intermediate Piano I*. Continuation of Music 164 with the addition of improvisation. Prerequisite: Music 164. 1 credit.

MUSIC 264. *Intermediate Piano II*. Continuation of Music 263. Prerequisite: Music 263. 1 credit.

MUSIC 292. *Internship in Music*. A semester-long, on-the-job learning experience designed to apply the principles of music. 1-18 credits.

MUSIC 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.

MUSIC 311, 312. *Studies Abroad*. Primarily intended for transfer of credit earned abroad in courses on music per semester. 1-18 credits.

MUSIC 313. *Form and Analysis*. Harmonic and formal analysis of compositions of each period. Prerequisite: Music 214. 3 credits.

MUSIC 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.

MUSIC 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.

MUSIC 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: Music 314. 1 credit.

MUSIC 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 each semester. ** and ***

MUSIC 332. *History of Music II*. History of music of western civilization from 1750 to the present, with examples. Open to non-music majors only with permission of instructor. 3 credits each semester. Prerequisite: MUSC 331. ** and ***

MUSIC 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.

MUSIC 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.

MUSIC 341. *Conducting*. Technique of the baton; score reading; rehearsal procedures; vocal and instrumental conducting. 2 credits.

MUSIC 342. *Advanced Choral Conducting*. Continuation of Music 341 which is prerequisite. 2 periods. 2 credits.

MUSIC 343. *Advanced Instrumental Conducting*. Continuation of Music 341 which is prerequisite. 2 credits.

MUSIC 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.

MUSIC 346. *Practicum in Junior High or Middle School*. Students, through observation and participation, are introduced to the daily routine and music curriculum (instrumental or choral) in the junior high or middle school. 1 credit.

- MUSIC 347. *Practicum in High School.*** Students, through observation and participation, are introduced to the daily routine and music curriculum (instrumental or choral) in the high school. 1 credit.
- MUSIC 365. *Vocal Techniques.*** Voice class for instrumental majors. Study of vocal techniques, literature and diction. One small-class instruction per week. Prerequisites: Music 115 and 116. 1 credit.
- MUSIC 390. *Directed or Independent Study.*** Must be approved by the head of the department. May be repeated as 391. 1-18 credits.
- MUSIC 392. *Internship in Music.*** A semester-long, on-the-job learning experience designed to apply the principles of music. 1-18 credits.
- MUSIC 412. *Arranging.*** Study and practice of arranging in different voice and instrument combinations with attention to style, range, form, and difficulty. Prerequisite: Music 214. 2 periods; 2 credits.
- MUSIC 413. *Advanced Analysis.*** Introduction to Schenkerian analysis, set theory. Continuation of Music 313, which is prerequisite. 2 periods; 2 credits.
- MUSIC 414. *Counterpoint.*** Strict and free counterpoint; motivic development; invertible counterpoint. Prerequisite: Music 137, 214. Offered on demand. 2 credits.
- MUSIC 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.
- MUSIC 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.
- MUSIC 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.
- MUSIC 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. **
- MUSIC 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.
- MUSIC 435. *Piano Literature.*** Study of the literature of the piano through performance and listening. 2 periods. 2 credits.
- MUSIC 436. *Vocal Literature.*** Study of the literature of the voice through performance and listening. 2 periods. 2 credits.
- MUSIC 437. *Music of the Theatre.*** Study of opera, operetta, and incidental music. Prerequisites: MUSC 331, 332. 3 credits.
- MUSIC 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.
- MUSIC 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.

MUSIC 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.

MUSIC 443. *Instrumental Methods and Materials.* Study of all the band and orchestral instruments. Embouchure and technical development; rehearsal techniques; fundamentals of marching, materials. Prerequisites: Music 341. 2 credits.

MUSIC 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.

MUSIC 445. *Piano Pedagogy I.* Techniques and materials of teaching piano individually and in groups. Observation and teaching of demonstration groups. 2 periods. 2 credits.

MUSIC 446. *Vocal Pedagogy.* Study of the principles of voice production and voice teaching. Laboratory with beginning voice students. 2 periods. 2 credits.

MUSIC 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.

MUSIC 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. 3 credits.

MUSIC 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

MUSIC 492. *Internship.* A one-semester, on-the-job learning experience designed to apply the principles of music. 1-18 credits.

MUSIC 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.

MUSIC 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. **

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.

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.

MUSIC 165. *Strings.* 1 credit.

MUSIC 167. *Percussion.* 1 credit.

MUSIC 361. *Brass.* 1 credit.

MUSIC 363. *Woodwinds.* 1 credit.

APPLIED ELECTIVE CLASSES

MUSIC 151, 152. *Piano Class.* Piano for non-majors. Study of piano composition techniques, sightreading, and theory. Class taught in electronic piano lab. 1 credit.

MUSIC 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.

MUSIC 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. *

MUSIC 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. *

MUSIC 201, 401. *String Ensemble*. Open to all Longwood students who have experience in playing stringed instruments. 1 credit.

MUSIC 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.

MUSIC 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.

MUSIC 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.

MUSIC 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.

MUSIC 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.

MUSIC 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.

MUSIC 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.

MUSIC 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 Natural Sciences

Charles D. Ross, *Chair*

Betty J. Woodie, *Fiscal Manager*

Francis D. Twombly, *Director of Laboratory Services and Hazardous Waste Manager*

The Department offers majors in biology, chemistry, and physics; minors are available in biology, chemistry, earth science, environmental studies, geography, 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 other institutions in dual-degree engineering; pre-professional medical programs prepare students to transfer to professional schools in a number of health-oriented professions. The Department of Natural Sciences 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 Natural Sciences requires senior majors to take a comprehensive achievement test appropriate for their major. The purpose of the test is to assess the progress of the majors and the effectiveness of the program. This test is given only in the spring semester.

BIOLOGY PROGRAM

Faculty

Consuelo J. Alvarez, Ph.D., *Assistant Professor of Biology*

David W. Buckalew, Ph.D., *Assistant Professor of Biology*

Patrick Crumrine, Ph.D., *Assistant Professor of Biology*

Lynn M. Ferguson, Ph.D., *Professor of Biology*

Alix D. Fink, Ph.D., *Assistant Professor of Biology and Area Coordinator of Biology*

Mark L. Fink, Ph.D., *Assistant Professor of Science Education*

G. Edward Hooks III, Ph.D., *Assistant Professor of Biology*

Dana P. Johnson, M.S., *Lecturer in Biology*

Mary E. Lehman, Ph.D., *Associate Professor of Biology*

Donald A. Merkle, Ph.D., *Associate Professor of Biology and Director of Health Pre-Professional Programs*

Anthony L. Palombella, Ph.D., *Assistant Professor of Biology*

The biology major at Longwood provides fundamental 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 provide a broad background in the biological program, each student must take the unity of life, the diversity of life, evolution, genetics, ecology, ethics of biology and unifying biological principles. In addition, students must choose to specialize in one of the following tracks: Molecular, Ecology, Organismic or Health. The Health Track is restricted to those students who plan to pursue a career in medicine, dentistry, veterinary medicine, or other health-related areas. A student who is in another major may obtain a biology minor. The minor program requires 8 semester hours at the introductory level, 8 hours at the 200 level or above, 4 hours at the 300 level or above, and 4 hours of electives for a total of 24 semester hours. Students are encouraged to enroll in a program of honors study or in a research project in biology.

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 biology. This program consists of courses required for a biology major, and 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, B.A., B.S. 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 B. A. Degree – 6 credits

Foreign Language/3 credits

Humanities/3 credits

Additional Degree Requirements for B. S. 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 205 Organic Chemistry for Biologists I/3 credits

OR CHEM 305 Organic Chemistry I/3 credits

CHEM 206 Organic Chemistry for Biologists II/3 credits

OR 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 tracks:

Ecology:

BIOL 300 Biostatistics and Experimental Design/4 credits

BIOL 361 Aquatic Ecology/4 credits

OR BIOL 430 Conservation Biology/4 credits

Choose one of the following:

BIOL 500 Field Ornithology/6 credits

BIOL 505 Field Mammalogy/6 credits

BIOL 541 Field Ecology/6 credits

BIOL 543 Field Botany/6 credits

BIOL electives/6 credits

Molecular:

BIOL 304	Microbiology/4 credits
BIOL 412	Biochemistry/4 credits
BIOL 426	Cell Biology/4 credits
Biology electives/8 credits	

Organismic:

BIOL 303	Vertebrate Morphology/4 credits
BIOL 306	Vertebrate Physiology/4 credits
BIOL 307	Plant Form and Function/4 credits
Biology electives/8 credits	

Health:

BIOL 206	Human Anatomy and Physiology/4 credits
BIOL 207	Human Anatomy and Physiology/4 credits
BIOL 304	Microbiology/4 credits
BIOL 412	Biochemistry/4 credits
Biology Electives/4 credits	

The health track is designed for students planning post-graduate study leading to a health career, such as medicine, dentistry, veterinary medicine, nursing, physical and occupational therapy, and medical technology.

- D. General Electives B.A. Degree (non-teaching majors)/15 credits
General Electives B.S. Degree (non-teaching majors)/14 credits
- E. Secondary Teaching Endorsement, Grades 6-12. 42 credits
Must take SCED 352/4 credits and EASC 300/3 credits 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 B.A. or B.S. in Biology - 120
Total Credits Required for B.A. in Biology with Secondary Teaching Endorsement - 151
Total Credits Required for B.S. in Biology with Secondary Teaching Endorsement - 148

BIOLOGY MINOR

Students who are interested in pursuing a biology minor should contact the area coordinator. 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 beginning an understanding of environmental issues. 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:

BIOL 364	Man and the Environment/3 credits
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 500	Field Ornithology/6 credits
BIOL 505	Field Mammology/6 credits
BIOL 541	Field Ecology/6 credits
BIOL 543	Field Botany/6 credits
EASC 520	Stream Processes and Landforms/6 credits

Total required hours: 24

* *Biology majors seeking this minor must take Chemistry 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

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

BIOLOGY 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 hours and one 2-hour lab period. 4 credits. *

BIOLOGY 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, evo-

lution, 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.

BIOLOGY 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 make at least a C- in this course before taking advanced courses. 3 lecture and one 2-hour lab periods. 4 credits.

BIOLOGY 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 make at least a C- in this course before taking advanced courses. 3 lecture and one 2-hour lab periods. 4 credits.

BIOLOGY 126. *Essential Laboratory Techniques (CHEMISTRY 126, EARTH SCIENCE 126, PHYSICS 126).* Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

BIOLOGY 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 laboratory periods. 4 credits each semester.

BIOLOGY 292. *Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. 3-15 credits.

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

BIOLOGY 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. ***

BIOLOGY 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.

BIOLOGY 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. Prerequisite: BIOL 121 and 122. 3 lecture and two 2-hour lab periods. 4 credits. ***

BIOLOGY 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 3-hour lab periods. 4 credits. **

BIOLOGY 307. *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. Prerequisites: BIOL 122. 3 lecture and one 2-hour lab period. 4 credits.

BIOLOGY 310. *Diagnostic Microbiology.* A study of various human pathogens and the diseases they cause, with emphasis on host-pathogen interaction including host defense mechanisms, virulence factors, and an in-depth review of the major bacterial and viral disease agents. The lab will focus on the use of diagnostic media and identification techniques used to identify disease agents. Prerequisites: BIOL 304 and CHEM 305. 3 lectures and one 3-hour lab period. 4 credits.

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

BIOLOGY 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.

BIOLOGY 324. *Genetics.* A study of classical and modern genetics, including the mechanisms for the replication, continuation, variation of regulation and expression of genetic information. 3 lecture and one 3-hour lab periods. 4 credits.

BIOLOGY 341 (EARTH SCIENCE 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.

BIOLOGY 360. *Terrestrial Ecology.* An advanced study of ecological principles governing the operation of terrestrial ecosystems. Major topics covered include plant and animal responses to abiotic factors, species interactions, processes controlling ecosystems structure and function, and major terrestrial biomes. Research techniques and advanced statistical analysis at the population, community, and ecosystem level will also be considered. Laboratory normally includes local field trips and an extended field trip to the mountains. Prerequisite: BIOL 341. 3 lecture and one 3-hour laboratory periods. 4 credits.

BIOLOGY 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.

BIOLOGY 364. *Man and the Environment.* A consideration of local, national and international environmental problems. Three lecture periods. 3 credits. **

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

BIOLOGY 392. *Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. 3-15 credits.

BIOLOGY 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. Prerequisite: BIOL 324. 3 lecture periods. 3 credits. **

BIOLOGY 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. Prerequisite: BIOL 324. Corequisite or prerequisite: BIOL 341. 3 lecture periods. 3 credits. **

BIOLOGY 412 (CHEMISTRY 412). *Biochemistry.* A study of the chemistry of proteins, carbohydrates, lipids and nucleic acids in biological systems. Prerequisite: CHEM 206 or CHEM 306 or permission of instructor. 3 lecture and one 3-hour lab period. 4 credits.

BIOLOGY 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.

BIOLOGY 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, mitochondria, ribosomes, endoplasmic reticula, plastids, nuclei and nucleoli. Prerequisite: BIOL 121 and 122. 3 lecture and one 3-hour lab periods. 4 credits. **

BIOLOGY 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. ***

BIOLOGY 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.

BIOLOGY 471. *Ornithology.* Identification, classification and morphology of birds common to Virginia. Saturday field trips. Prerequisites: BIOL 122 and permission of instructor. 3 lecture/lab periods. 2 credits.

BIOLOGY 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.

BIOLOGY 485. *The Ethics of Biology.* A study of basic ethical principles coupled with student-led discussions of how these principles apply to contemporary personal and professional biological concerns. Open only to biology majors and minors. 1 credit. *

BIOLOGY 490. *Directed or Independent Study.* Must be approved by the head of the department. 1-18 credits.

BIOLOGY 492. *Internship in Biology.* A semester-long, on-the-job learning experience designed to apply the principles of biology. 3-15 hours.

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

BIOLOGY 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.

BIOLOGY 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. **

BIOLOGY 500. *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.

BIOLOGY 505. *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.

BIOLOGY 530. *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 part of a functional team. Students will prepare a comprehensive and holistic recovery plan for a threatened or endangered species. 4 credits.

BIOLOGY 541. *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: Biology 122 or permission of instructor. 6 credits.

BIOLOGY 543. *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.

ENVIRONMENTAL STUDIES COURSE DESCRIPTIONS

ENVIRONMENTAL STUDIES 516. *Environmental Ethics.* A study of how the principles of ethical theory can be applied to contemporary environmental controversies. Questions addressed will include, "What is nature?" "Are humans a part of nature?" "Do natural entities/beings such as animals, trees, rivers, and ecosystems have intrinsic value?" and "Do anthropocentric, zoocentric, and ecocentric ethical viewpoints have different implications for environmental policy?" Each student will be involved in leading class discussions and will conduct a substantial term paper/research paper on an environmental philosophy topic. 3 credits.

ENVIRONMENTAL STUDIES 550. *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 non-

parametric 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. Students will be required to give one oral presentation based on statistical analyses conducted in a publication from a scientific journal. A short written summary of this presentation will be required. 3 lecture and one 2-hour lab periods. 4 credits.

ENVIRONMENTAL STUDIES 560. *Water Pollution.* This course will review the causes, sources, and effects of pollution on aquatic environments (freshwater, groundwater, estuary and marine). Currently available technological, behavioral, and legal solutions will also be reviewed. Prerequisites: BIOL 341 or BIOL 541; EASC/GEOG 354 or EASC 554; or permission of instructor. One 3 hour lecture a week. 2 to 4 field trips per semester. 3 credits.

ENVIRONMENTAL STUDIES 564. *Environmental Issues.* An in-depth study of the major environmental issues challenging modern society, including a close examination of the causes of these issues and an analysis of corrective measures that could be applied to each. Major topics addressed are population dynamics; resource use, abuse, management, and conservation; consequences of pollution, deforestation, biodiversity loss and climate alteration. Emphasis is placed on establishing eccentric ethical viewpoints and developing Earth-sustainable systems. Prerequisite: BIOL 341 or BIOL 541. 3 credits.

BIOLOGY MAJOR, B.S. DEGREE

Medical Technology Concentration

(Roanoke Memorial Hospital, Fairfax Hospital)

A. General Education Core Requirement. 41 credits

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

B. B. S. Degree Additional Degree Requirements – 7 credits

Mathematics/3 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements. 45 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/4 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/4 credits

CHEM 306 Organic Chemistry II/4 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)

Fairfax Hospital/36 credits

Roanoke Memorial Hospital/42.5 credits

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

- D. Total Credits Required for B.S. in Biology with
 Medical Technology Concentration affiliated with Fairfax Hospital - 129
 Total Credits Required for B.S. in Biology with Medical Technology Concentration affiliated with Roanoke
 Memorial Hospital - 135.5
 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, B.S. DEGREE

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

This option allows a student who gets accepted into a professional program after three years to count their first year of professional school as their senior year as a Biology major. All students in these majors should follow this program if their second choice for a major would be Biology. See sections relating to these majors that follows for additional information.

- A. General Education Core Requirement. 41 credits.
- B. B. S. Degree Additional Degree Requirements – 7 credits
 Mathematics 171 or 261/3-4 credits
 CHEM 111/4 credits
- C. Major Core Requirements. 49 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/4 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/4 credits |
| CHEM 306 | Organic Chemistry II/4 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/3 credits | |
| <i>Major Requirements from Professional Schools</i> | |
| 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. This test is given only in the spring. Students should plan to take this test their junior year unless they will be at Longwood their senior year.

HEALTH PRE-PROFESSIONAL PROGRAMS

Faculty

Donald A. Merkle, Ph.D., *Program Director for Health Pre-Professionals*

Representatives of our Affiliated Institutions

C. Barrie Cook, M.D., Medical Director, *School of Medical Technology, The Fairfax Hospital, Falls Church*

Janet T. Hiler, MT(ASCP), Program Director, *Roanoke Memorial Hospital, Roanoke*

Amy Shoemaker, M.T. (ASCP) MBA, *Program Director, Fairfax Hospital, Falls Church*

Samuel F. Vance, M.D., Medical Director, *School of Medical Technology, Roanoke Memorial Hospital, Roanoke*

The Department of Natural Sciences is successful in preparing students for careers in medical technology, dental hygiene, occupational therapy, physical therapy, nursing, pharmacy, medicine, dentistry, and other health related professions. Students spend two-three years at Longwood taking the required coursework for transfer into the professional program at another institution. By working closely with an academic advisor, students can prepare for transfer into programs at any professional institution. Completion of Longwood's pre-professional program, however, does not guarantee admission to the professional program. Admission to these programs is 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. Links to professional schools and specific requirements may be found at: <http://web.lwc.edu/staff/dmerkle/preprof.htm>

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/4 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	Oral Communication/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 63 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 chemistry 121.

PRE-NURSING (MCV AND UVA)

Changes in the nursing curricula at both MCV SCHOOL OF NURSING and UVA 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. Don Merkle for assistance.

PRE-OCCUPATIONAL THERAPY (VCU-MCV)

PLEASE NOTE THAT MCV IS CURRENTLY IN THE PROCESS OF CHANGING THIS PROGRAM TO A M.S. LEVEL PROGRAM WHICH WOULD REQUIRE STUDENTS TO HAVE AT LEAST 3, IF NOT 4, YEARS OF COLLEGE BEFORE ADMISSION.

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
ENGL 100	Rhetoric and Research/3 credits
ENGL 150	Writing and Research/3 credits
PSYC 101	Introduction to Psychology /3 credits
PSYC 221	Life-Span Developmental Psychology/3 credits
PSYC 356	Abnormal Psychology/3 credits

Psychology elective/3 credits

SOCL 101 Principles of Sociology/3 credits

Sociology elective/3 credits

MATH 171 Statistical Decision Making/3 credits

Computer Science elective/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/48 credits

TOTAL/93 credits

*Students are encouraged to pursue further study in Biology, Psychology, and Sociology.

Applicants to MCV should have many hours of work-related experience.

CHEMISTRY PROGRAM

Faculty

Patrick G. Barber, Ph.D., *Professor of Chemistry*

Dr. Lee Friedman, Ph.D., *Assistant Professor of Chemistry*

Jeremy M. Lloyd, Ph.D., *Assistant Professor of Science Education*

Gary P. Lutz, Ph.D., *Assistant Professor of Chemistry*

Melissa C. Rhoten, Ph.D., *Assistant Professor of Chemistry and Chemistry Area Coordinator*

Keith B. Rider, Ph.D., *Assistant Professor of Chemistry*

The chemistry major at Longwood provides graduates with the necessary background to pursue graduate studies or a career in industry, government, medicine, and other health-related fields. There are three tracks in the chemistry program – regular, professional, and pre-pharmacy. The regular program is designed for students taking chemistry along with a second major, preparing to enter the teaching profession, or preparing for medical or other health-related professional schools. The professional program is designed to meet the needs of students planning to enter a graduate program in chemistry or another of the sciences. The professional program is the one that prepares graduates for the greatest variety of post-Longwood opportunities. The pre-pharmacy program is designed to meet the specific entrance requirements for the Schools of Pharmacy at Shenandoah and Virginia Commonwealth Universities, but it is general enough to meet the requirements for most other pharmacy schools. Chemistry majors graduating from Longwood have completed advanced degrees at graduate schools in Virginia and other states. They also have been able to step into jobs in state and federal laboratories and industrial facilities.

The requirements for the chemistry major include courses in general chemistry, organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry, and special interest electives. Students are encouraged to enroll in research courses in Chemistry in order to increase their competence in working in a laboratory. Superior students are encouraged to complete a chemistry Honors Project or a Research Project. The program in chem-

istry is rigorous, but it is flexible enough for students to take a second major. Students are encouraged to consider additional studies in biology, mathematics, physics, and computer science.

Students majoring in other areas may elect to minor in chemistry. The chemistry minor requires 24 semester hours: general chemistry (8 hours), organic chemistry (8 hours), quantitative analysis (4 hours), and a chemistry elective (4 hours).

No grade below C- on 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 (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 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, Regular Track (B.A., B.S. DEGREE)

A. General Education Core Requirement. 41 credits

PHYS 201 is strongly recommended for General Education Goal 6.

B. Additional Degree Requirements for B. A. Degree

Humanities. 3 credits

Foreign Language (202 Level or above). 3 credits

Additional Degree Requirements for B. S. Degree

MATH 262. 4 credits

CHEM 111. 4 credits

Major Requirements. 42-43 credits

Core Chemistry Courses. 33-34 credits

CHEM 112 Fundamentals of Chemistry II/4 credits

CHEM 232 Quantitative Analyses/4 credits

CHEM 270 Inorganic Chemistry/3 credits

CHEM 305 Organic Chemistry I/4 credits

CHEM 306 Organic Chemistry II/4 credits

CHEM 361 Chemistry Seminar I/1 credit

CHEM 461 Chemistry Seminar II/1 credit

PHYS 202 University Physics II/4 credits

MATH 261 Differential and Integral Calculus/4 credits
(satisfies Goal 5 general education requirement)

Non-teaching majors choose at least one credit from the following (satisfied in Goal 15 general education requirement)

CHEM 292 Internship in Chemistry/1-15 credits

CHEM 390 Directed or Independent Study/1-18 credits

CHEM 392 Internship in Chemistry/1-15 credits

CHEM 490 Directed or Independent Study/1-18 credits

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

Required Courses. 7-8 credits

CHEM 351 Instrumental Analysis I/4 credits

CHEM 352 Instrumental Analysis II/4 credits

Choose one course from the following:

CHEM 400 Physical Chemistry I/4 credits

CHEM 401 Quantum Mechanics/3 credits

Chemistry Electives. 1-6 credits.

D. General Electives for non-teaching majors. 30-33 credits

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

Must take SCED 352/4 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 B.A., B.S. in Chemistry - 120

Total credits required for B.A., in Chemistry with secondary teaching endorsement - 135-136.

Total credits required for B.S. in Chemistry with secondary teaching endorsement - 132-133

CHEMISTRY MAJOR, Professional Track (B.S. Degree)

A. General Education Core Requirement. 41 credits

PHYS 201 is strongly recommended for General Education Goal 6.

B. Additional Degree Requirements for B. S. Degree – 7 credits

MATH 262/4 credits

CHEM 111/4 credits

Major Requirements. 46-51 credits.

Core Chemistry Courses (42 credits)

PHYS 202 University Physics II/4 credits

CHEM 112 Fundamentals of Chemistry II/4 credits

CHEM 232 Quantitative Analyses/4 credits

CHEM 270 Inorganic Chemistry/3 credits

CHEM 305 Organic Chemistry I/4 credits

CHEM 306 Organic Chemistry II/4 credits

CHEM 307 Organic Laboratory I/1 credit

CHEM 308 Organic Laboratory II/1 credit

CHEM 351 Instrumental Analysis I/4 credits

CHEM 352 Instrumental Analysis II/4 credits

CHEM 361 Chemistry Seminar I/1 credit

CHEM 400 Physical Chemistry II/4 credits

CHEM 401 Quantum Mechanics/3 credits

CHEM 461 Chemistry Seminar II/1 credit

MATH 261 Differential and Integral Calculus/4 credits

(satisfies Goal 5 general education requirement)

Choose at least one credit from the following (satisfies Goal 15 general education requirement)

CHEM 292 Internship in Chemistry/1-15 credits

CHEM 390 Directed or Independent Study/1-18 credits

CHEM 392	Internship in Chemistry/1-15 credits
CHEM 490	Directed or Independent Study/1-18 credits
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 (4-9 credits) – can be chosen from CHEM 371-376, 412, 492, 496, or 498	

D. General Electives for professional chemistry majors: 26 credits

E. Total credits required for B.S. in Professional Chemistry - 120

Chemistry Major, Pre-Pharmacy Track (B.S. Degree)

A. General Education Core Requirement. 41 credits
 PHYS 201 is strongly recommended for General Education Goal 6.

B. Major Requirements. 42-43 credits.

Core Chemistry Courses. 34 credits

CHEM 111	Fundamentals of Chemistry I/4 credits
CHEM 112	Fundamentals of Chemistry II/4 credits
CHEM 232	Quantitative Analyses/4 credits
CHEM 270	Inorganic Chemistry/3 credits
CHEM 305	Organic Chemistry I/4 credits
CHEM 306	Organic Chemistry II/4 credits
CHEM 307	Organic Chemistry Lab I/1 credit
CHEM 308	Organic Chemistry Lab II/1 credit
CHEM 461	Chemistry Seminar II/1 credit
PHYS 202	University Physics II/4 credits
MATH 261	Differential and Integral Calculus/4 credits (satisfies Goal 5 general education requirement)

Choose at least one credit from the following (satisfies Goal 15 general education requirement)

CHEM 292	Internship in Chemistry/1-15 credits
CHEM 390	Directed or Independent Study/1-18 credits
CHEM 392	Internship in Chemistry/1-15 credits
CHEM 490	Directed or Independent Study/1-18 credits
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

Required Courses. 7-8 credits

CHEM 351	Instrumental Analysis I/4 credits
CHEM 352	Instrumental Analysis II/4 credits

Choose one course from the following:

CHEM 400	Physical Chemistry I/4 credits
CHEM 401	Quantum Mechanics/3 credits

Chemistry Electives. 1-6 credits.

C. Additional Pharmacy School Requirements (MCV/VCU). 18-22 credits

BIOL 121	The Unity of Life/4 credits
BIOL 122	The Diversity of Life/4 credits
MATH 171	Statistical Decision Making/3 credits
MATH 262	Differential and Integral Calculus/4 credits
COMM 101	Oral Communication/3 credits
Additional Pharmacy School Requirements (Shenandoah)	

BIOL 121	The Unity of Life/4 credits
BIOL 122	The Diversity of Life/4 credits
BIOL 304	Microbiology/4 credits
MATH 262	Differential and Integral Calculus/4 credits
COMM 101	Oral Communications/3 credits
ECON 217/218	Micro- or Macroeconomics/3 credits
General Elective (either from Longwood or transferred from pharmacy school) 16-21 credits	
Total credits required for B.S. in chemistry (pre-pharmacy) – 120 credits	

CHEMISTRY COURSE DESCRIPTIONS

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive **

Speaking Intensive ***

CHEMISTRY 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. *

CHEMISTRY 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.

CHEMISTRY 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: CHEM 111, acceptable math placement score, MATH 164 or permission of instructor. Chemistry majors must make at least a C- in this course before taking advanced chemistry courses. 4 credits.

CHEMISTRY 126. *Essential Laboratory Techniques (BIOLOGY 126, EARTH SCIENCE 126, PHYSICS 126).* Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

CHEMISTRY 205. Organic Chemistry I. First semester of a two-semester course designed to illustrate how the fundamental principles, basic classes of compounds and common reactions in organic chemistry relate to biological systems. Emphasis is placed on classes of compounds like alkanes, alkenes, alkynes, alkyl halides and alcohols. Prerequisite: 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 in order to complete the degree requirements for organic chemistry.

CHEMISTRY 206. Organic Chemistry II. Second semester of a two-semester course designed to illustrate how the fundamental principles, basic classes of compounds and common reactions in organic chemistry relate to biological systems. Other classes of compounds like carboxylic acids, amines, aldehydes and ketones are introduced. Special emphasis is placed on major classes of compounds found in living systems (Carbohydrates, Nucleic Acids, Proteins, and Lipids for example). Prerequisite: CHEM 205. The course consists of three 1-hour lecture periods per week (3 credits). A one-credit laboratory class (CHEM 308) is also required in order to complete the degree requirements for organic chemistry.

CHEMISTRY 232. *Quantitative Analyses.* 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.**

CHEMISTRY 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.

CHEMISTRY 292. *Internship in Chemistry.* A semester-long, on-the-job learning experience designed to apply the principles of chemistry. 3-15 credits.

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

CHEMISTRY 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: 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.

CHEMISTRY 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, ¹³C 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.

CHEMISTRY 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 205 or CHEM 305.

CHEMISTRY 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. The course consists of one 3-hour laboratory period per week (1 credit).

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

CHEMISTRY 351. *Instrumental Analysis I.* 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 232. 3 lecture, one 3-hour lab periods. 4 credits.**

CHEMISTRY 352. Instrumental Analysis II. A continuation of CHEM 351, including chromatographic and mass spectrometric methods of analysis. Develops familiarity with both instrument physics and the physical chemistry of measurement. Prerequisite: CHEM 232. 3 lecture, one 3-hour lab periods. 4 credits.**

CHEMISTRY 371-376. Special Courses in Chemistry. Specialized courses for small groups of students. The course titles and descriptions listed below represent some of the special areas covered. 1-4 credits.

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

Environmental Chemistry 372. 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.

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

Laboratory Safety 374. A study of laboratory safety equipment, hazards from chemical reaction, toxins, carcinogens, corrosives, and radiation. 2 lecture periods; 2 credits.

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

Chemistry 376. *Advanced Laboratory Techniques.* A study of modern laboratory techniques. 3 credits.

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

CHEMISTRY 392. *Internship in Chemistry.* A semester-long, on-the-job learning experience designed to apply the principles of chemistry. 3-15 credits.

CHEMISTRY 400. *Physical Chemistry I.* A study of thermodynamics, equilibria, kinetics, solution properties, and electrochemistry. Prerequisite: CHEM 232; MATH 261 or 267, or permission of instructor. 3 lecture, one 2-hour lab periods. 4 credits. **

CHEMISTRY 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, one 2-hour lab periods. 3 credits.

CHEMISTRY 412 (BIOLOGY 412). *Biochemistry.* A study of the chemistry of proteins, carbohydrates, lipids, and nucleic acids in biological systems. Prerequisite: CHEM 206 or CHEM 306 or permission of instructor. 3 lecture periods; 3 credits. (Or 4 credits with one 3-hour lab period.)

CHEMISTRY 461. *Chemistry Seminar.* Reports and discussions of topics of current interest in the field of chemistry. Open to qualified students. Introduction to chemical literature. May be repeated. 1 credit. ***

CHEMISTRY 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.

CHEMISTRY 481. *Advanced Chemical Laboratory Problem Solving.* Laboratory practice involving the use of instruments and other techniques to solve chemical problems. 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 and must then complete them. One 6-hour laboratory period. 2 credits.

CHEMISTRY 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

CHEMISTRY 492. *Internship in Chemistry.* A semester long, on-the-job learning experience designed to apply the principles of chemistry. 3-15 credits.

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

CHEMISTRY 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. ***

CHEMISTRY 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.**

CHEMISTRY 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.

CHEMISTRY 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: CHEM 232 or permission of instructor. 4 credits.

CHEMISTRY 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: CHEM 232 or permission of instructor. 4 credits.

EARTH SCIENCES PROGRAM

Faculty

Lynn M. Ferguson, Ph.D., *Professor of Biology and Earth Science*

Joseph E. Garcia, Ph.D., *Associate Professor of Geography and Earth Science/Geography Area Coordinator*

David S. Hardin, Ph.D., *Assistant Professor of Geography*

Edward L. Kinman, Ph.D., *Assistant 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 and offers graduate level courses for partial fulfillment of the M.S. in Environmental Studies (see Longwood Graduate Catalog).

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 Earth Science electives
TOTAL 18 credits

EARTH SCIENCE COURSE DESCRIPTIONS

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course **

EARTH SCIENCE 101. *Physical Science.* A survey of basic physics and chemistry needed for a cross-disciplinary major. 3 lecture and one 2-hour lab periods; for Liberal Studies majors and other students seeking teaching endorsement. 4 credits.

EARTH SCIENCE 126. *Essential Laboratory Techniques.* (BIOLOGY 126, CHEMISTRY 126, PHYSICS 126). Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

EARTH SCIENCE 210. *Physical Geology.* An introduction to the natural physical environment, the materials and processes which shape the earth's crust. Specific topics include minerals, rocks, earthquakes, volcanoes, the ocean, and plate tectonics. Also the effects of streams, waves, ground water, ice, wind, and gravity on the surface of the earth. 3 lecture and one 2-hour lab periods; 4 credits.*

EARTH SCIENCE 220. *Astronomy.* Descriptive study of the solar system, stars, galaxies, and cosmology. 3 lecture and one 2-hour lab periods; 4 credits.

EARTH SCIENCE 252 (GEOGRAPHY 252). *Physical Geography.* A study of the earth's physical landscape, the dynamics of the natural systems which form it and the interrelationships between the systems. Included are investigations of human impacts on the earth's system. 3 lecture periods. 3 credits.

EARTH SCIENCE 261 (GEOGRAPHY 261). *Meteorology.* A study of the basic weather phenomena and processes including the elements for modern weather forecasting. 3 lecture and one 2-hour lab periods; 4 credits.

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

EARTH SCIENCE 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. 2 lecture and one 2-hour lab period. 3 credits.

EARTH SCIENCE 310. *Historical Geology.* An introduction to the methods, assumptions, and current interpretations of the evidence concerning the origin and evolution of the earth and its life forms. Emphasis on the geologic history of the United States. Co-or prerequisite EASC 210 or permission of instructor. 3 lecture and one 2-hour lab periods; 4 credits.

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

EARTH SCIENCE 341 (BIOLOGY 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.

EARTH SCIENCE 353 (GEOGRAPHY 353). *Geography of Virginia.* Geographical appraisal of Virginia, including the geology, landforms, soils, climate, economic minerals, original vegetation, and human geography of Virginia, emphasizing settlement of population, agriculture, industries and transportation. 3 lecture periods. Prerequisite: GEOG 201 and permission of instructor. 3 credits.

EARTH SCIENCE 354 (GEOGRAPHY 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.

EARTH SCIENCE 355 (GEOGRAPHY 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.

EARTH SCIENCE 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.

EARTH SCIENCE 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.

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

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

EARTH SCIENCE 410 (Geography 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.

EARTH SCIENCE 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

EARTH SCIENCE 492. *Internship in Earth Science.* A semester-long, on-the-job learning experience designed to apply the principles of earth science. 1-18 credits.

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

EARTH SCIENCE 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.

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EARTH SCIENCE 510. *Geomorphology.* This seminar will examine the major geomorphic processes that affect the surface of the earth. The focus of the course will be on geomorphic processes that are most relevant to the landscape of Virginia and how these local features fit within the context of landform development theories. The 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 credits.

EARTH SCIENCE 554. *Hydrology.* An introductory survey of hydrology, with emphasis 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. Graduate students will be expected to participate in seminar discussions of readings pertinent to environmental issues in hydrology. 3 credits.

EARTH SCIENCE 555. *Climatology.* EASC 555 is an introductory survey of climatology. The dynamics and general circulation of the atmosphere will be qualitatively examined. Emphasis will be on surface and upper level atmospheric linkages in the midlatitudes and will include discussion of tropospheric waves, jet streams and cyclogenesis. The goal of this course will be to explore regional climatic patterns and anomalies with a fundamental understanding of synoptic atmospheric processes.

EARTH SCIENCE 520. *Stream Processes and Landforms.* This course will examine the dynamics of rivers and the landforms which result from streamflow. Students will learn laboratory, field and analytical techniques to evaluate drainage basin, streamflow, and channel form characteristics. The human impact on fluvial systems, particularly urbanization and erosive land use, will be discussed with regard to current models of river channel changes. Students are expected to attend all field trips. Offered during summer session. Prerequisite: EASC/GEOG 354, EASC 554, or permission of instructor. 6 credits.

SCIENCE EDUCATION COURSE DESCRIPTIONS

SCIENCE EDUCATION 330 (MATH 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 these courses simultaneously. 1.5 credits each. Corequisite: MATH 330.

SCIENCE EDUCATION 352. *Science for Secondary Teachers.* A comprehensive methods course for teaching the 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. 4 credits.

SCIENCE EDUCATION 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.

GEOGRAPHY PROGRAM

Faculty

Joseph E. Garcia, Ph.D., *Associate Professor of Geography and Geography/Earth Science Area Coordinator*
David S. Hardin, Ph.D., *Assistant Professor of Geography*
Edward L. Kinman, Ph.D., *Assistant Professor of Geography*

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 |
| <i>Choose minimum of 3 credits from the following:</i> | |
| GEOG 241 | Cultural Geography/3 credits |
| GEOG 242 | Economic Geography/3 credits |
| GEOG 252 | Physical Geography/3 credits |
| GEOG 261 | Meteorology/4 credits |
| GEOG 354 | Hydrology/3 credits |
| GEOG 355 | Climatology/3 credits |
| GEOG 358 | Map Design and Analysis/4 credits |
| GEOG 410 | Geomorphology/3 credits |
| GEOG 444 | Political Geography/3 credits |
| GEOG 450 | Geography of Contemporary Problem Areas/3 credits |
| <i>Choose minimum of 3 credits from the following:</i> | |
| GEOG 352 | World Regional Geography/3 credits |
| GEOG 353 | Geography of Virginia/3 credits |
| GEOG 401 | Geography of South and East Asia/3 credits |
| GEOG 402 | Geography of Latin America/3 credits |
| GEOG 403 | Geography of Europe/3 credits |
| GEOG 404 | Geography of the U.S. and Canada/3 credits |
| GEOG 405 | Geography of Africa/3 credits |
| GEOG 453 | Geography of the former Soviet Union/3 credits |
| 9 credits of Geography electives | |
| TOTAL 18 credits | |

GEOGRAPHY COURSE DESCRIPTIONS

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course **

GEOGRAPHY 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. *

GEOGRAPHY 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. *

GEOGRAPHY 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.

GEOGRAPHY 242. *Economic Geography.* Relation of geographic factors to economic conditions in determining the nature and location of the several productive occupations and the distribution of the output of these occupations, including their transportation and marketing. Prerequisite: GEOG 201 and permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 252 (EARTH SCIENCE 252.) *Physical Geography.* A study of the earth's physical landscape, the dynamics of the natural systems which form it and the interrelationships between the systems. Included are investigations of human impacts on the earth's systems. 3 lecture periods. 3 credits.

GEOGRAPHY 261 (EARTH SCIENCE 261). *Meteorology.* A study of the basic weather phenomena and processes including the elements for modern weather forecasting. 3 lecture and one 2-hour lab periods; 4 credits.

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

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

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

GEOGRAPHY 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.

GEOGRAPHY 353. (EARTH SCIENCE 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. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 354 (EARTH SCIENCE 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.

GEOGRAPHY 355 (EARTH SCIENCE 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.

GEOGRAPHY 358 (EARTH SCIENCE 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.

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

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

GEOGRAPHY 401. *Geography of South and East Asia.* Regional analysis of the physical geography and problems in the economic and political geography of South and East Asia. Emphasis on China, Japan, and India. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 402. *Geography of Latin America.* Regional and systematic analysis of the geography of Latin America, including treatment of physical, cultural and economic characteristics of the several regions and countries within Latin America. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 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.

GEOGRAPHY 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.

GEOGRAPHY 405. *Geography of Africa.* A regional analysis of the geographical factors influencing the culture and economics of the African continent. Special emphasis will be placed on the present state of economic development. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 410 (EARTH SCIENCE 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.

GEOGRAPHY 444. *Political Geography.* Geographic factors in major nations of the world and how they affect international relations, with analysis of the current strategic position of the U.S. and the reorganization of the post-Cold War World. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 450. *Geography of Contemporary Problem Areas.* A physical, economic, historical, and cultural analysis of selected regions and nations in the news. A background for understanding present day conditions, and the social significance of the events occurring in these areas. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 453. *Geography of the Former Soviet Union.* An evaluation of people, land, climate, resources and space as they bear on the economic developments and political prospects of the former Soviet Union. Prerequisite: GEOG 201 or permission of instructor. 3 lecture periods. 3 credits.

GEOGRAPHY 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.

GEOGRAPHY 492. *Internship in Geography.* A semester-long, on-the-job learning experience designed to apply the principles of geography. 1-18 credits.

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

GEOGRAPHY 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. **

PHYSICS PROGRAM

Faculty

Michael Langham, Ph.D., *Assistant Professor of Physics*

Wayne K. Meshejian, M.S., *Assistant Professor of Physics*

Michelle Parry, Ph.D., *Associate Professor of Physics and Area Coordinator of Physics*

Charles D. Ross, Ph.D., *Associate Professor of Physics, Director of Pre-Engineering Programs and
Chair of the Department of Natural 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, B.A., B.S. 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 B.A. Degree – 6 credits

Additional Degree Requirements for B. S. Degree – 7 credits

MATH 261 The Differential and Integral Calculus/4 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements. 46 credits.

CHEM 111 Fundamentals of Chemistry I/4 credits
(satisfied by Additional Degree Requirements)

CHEM 112 Fundamentals of Chemistry II/4 credits

MATH 262 The Differential and Integral Calculus/4 credits

MATH 361 Calculus III/4 credits

MATH 460 Differential Equations/3 credits

PHYS 202 University Physics II/4 credits

PHYS 321 Modern Physics/4 credits

PHYS 332	Classical Electricity and Magnetism/4 credits
PHYS 342	Electronics and Circuit Theory/4 credits
PHYS 352	Mechanics/4 credits
Physics Elective/4 credits	

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

CHOOSE ONE

Concentration I (Physics)

PHYS 400	Unifying Principles of Physics/4 credits
PHYS 401	Quantum Mechanics/3 credits

Concentration II (Engineering)

Engineering Electives/7 credits – fulfilled at transfer institution

Recommended elective for all physics majors:

CMSC 204 Introduction to Computer Programming/3 credits

D. General electives for non-teaching majors – 26-27.

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

Must take SCED 352/4 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 B.S./B.A. in Physics - 120

Total credits required for B.A. in Physics with Secondary Teaching Endorsement - 139

Total credits required for B.S. in Physics with Secondary Teaching Endorsement - 140

PHYSICS MAJOR, B.S. or B.A. 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 B.A. degree – 6 credits

B. S. Degree Additional Degree Requirements – 7 credits

MATH 261 The Differential and Integral Calculus/4 credits

CHEM 111 Fundamentals of Chemistry I/4 credits

C. Major Requirements. 73-75 credits

BIOL 121 The Unity of Life/4 credits

BIOL 122 Diversity of Life/4 credits

BIOL 304 Microbiology/4 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 205	Organic Chemistry I for Biologists/3 credits
Or CHEM 305	Organic Chemistry I/4 credits
CHEM 206	Organic Chemistry II for Biologists/3 credits
Or CHEM 306	Organic Chemistry II/4 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/3 credits
MATH 460	Differential Equations/3 credits
PHYS 202	College Physics/4 credits
PHYS 321	Modern Physics/4 credits
PHYS 332	Classical Electricity and Magnetism/4 credits
PHYS 342	Electronics and Circuit Theory/4 credits
PHYS 352	Mechanics/4 credits
PHYS 400	Unifying Principles of Physics/4 credits
PHYS 401	Quantum Mechanics/3 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 204 Introduction to Computer Programming/3 credits.

D. Total credits required for a B.A. in Physics with Pre-Medicine or Biophysics Concentration - 124-126

E. Total credits required for a B.S. in Physics with Pre-Medicine or Biophysics Concentration - 121-123

PHYSICS COURSE DESCRIPTIONS

A special fee is charged for all courses with laboratories.

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

PHYSICS 101. General Physics I. An introduction to the basic concepts of mechanics. Physics and pre-engineering majors must make at least a C- in this course before taking advanced physics courses. 3 lecture and one 2-hour lab periods. 4 credits. *

PHYSICS 102. General Physics II. A study of heat, sound, light, electricity and magnetism. Prerequisite: PHYS 101. Physics and pre-engineering majors must make at least a C- in this course before taking advanced physics courses. 3 lecture and one 2-hour lab periods. 4 credits.

PHYSICS 126. Essential Laboratory Techniques (BIOLOGY 126, CHEMISTRY 126, EARTH SCIENCE 126). Good laboratory techniques, skills and safe practices are taught by actual practice in the laboratory. 1 credit.

PHYSICS 201. University Physics. Similar to PHYS 101, but with the calculus used throughout. Pre- or corequisite: MATH 261. Offered on demand. 3 lecture and one 2-hour lab periods. 4 credits. *

PHYSICS 202. University Physics. Similar to PHYS 102, but with the calculus used throughout. Prerequisite: PHYS 201. Offered on demand. 3 lecture and one 2-hour lab periods. 4 credits.

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

PHYSICS 295. *Internship in Physics.* A semester-long, on-the-job learning experience designed to apply the principles of physics. 1-18 credits.

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

PHYSICS 321. *Modern Physics.* A survey of modern developments in electron, atomic, and nuclear physics. Prerequisites: PHYS 101, 102 or 201, 202. Prerequisite or corequisite: MATH 261. 3 lecture and one 2-hour lab periods. 4 credits. **

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

PHYSICS 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.

PHYSICS 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.

PHYSICS 332. *Classical Electricity and Magnetism.* Electric and magnetic fields, potentials, resistance, inductance, and capacitance, polarization, magnetic materials, Maxwell's equations. Prerequisite: MATH 361. 4 lecture periods. 4 credits.

PHYSICS 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 D.C. and A.C. analysis and synthesis of transistor amplifier circuits, OP amps, and elementary logic circuits. Prerequisite: PHYS 102 or PHYS 201 and MATH 261. 3 lecture and one 2-hour lab periods. 4 credits. **

PHYSICS 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.

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

PHYSICS 392. *Internship in Physics.* A semester-long, on-the-job learning experience designed to apply the principles of physics. 1-18 credits.

PHYSICS 400. *Unifying Principles of Physics.* A course that unified 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. ***

PHYSICS 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, one 2-hour lab periods. 3 credits.

PHYSICS 490. *Directed or Independent Study.* Must be approved by the head of the department. May be repeated. 1-18 credits.

PHYSICS 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: Restricted to physics and pre-engineering majors who have earned a minimum of 60 credits. 15 credits. **

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

PHYSICS 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. ***

PHYSICS 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. **

DUAL-DEGREE ENGINEERING PROGRAM

B.S. in Physics Granted by Longwood and a second degree:

M.S. Degree in Engineering Granted by University of Virginia or Old Dominion University

OR

M.S. Degree in Applied Physics Granted by Christopher Newport University

OR

B.S. 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 B.S. 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 B.S. 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 the same as for the Longwood Physics major, except for the specific electives below:

Required Electives:

CNU:

CMSC 204	Introduction to Computer Programming/3 credits
CMSC 206	Data Structures in Advanced Programming/3 credits
CMSC 315	The C Programming Language/3 credits

Solid State Physics Option:

CHEM 400	Physical Chemistry I/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 204	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/3 credits
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 B.S. program will only accept certain Longwood General Education courses for transfer. Students electing this option should see the Dual-degree Engineering Program Director for details.

In the M.S. 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 B.S. 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.

Department of Psychology

Jennifer M. Apperson, Ph.D., *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, Ph.D., *Associate Professor of Psychology*

Christopher A. Bjornsen, Ph.D., *Associate Professor of Psychology*

David M. Carkenord, Ph.D., *Associate Professor of Psychology*

Eric L. Laws, Ph.D., *Assistant Professor of Psychology*

David B. Stein, Ph.D., *Professor of Psychology*

Registration for internship and independent research opportunities in psychology requires a 2.50 GPA.

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, B.S. 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 233	Research Methods in Psychology/4 credits
PSYC 234	Quantitative Methods in Psychology/3 credits
PSYC 251	Introduction to Biopsychology/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 492	Internship in Psychology (satisfies General Education Goal 15) (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 371	Infant and Child Development/3 credits
PSYC 373	Adolescent Development/3 credits
PSYC 375	Psychology of Adulthood and Aging/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 330	Life Span Developmental
PSYC 295	Special Topics in Psychology
PSYC 311	Study Abroad
PSYC 312	Study Abroad
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	Applied Behavior Analysis
PSYC 452	Psychopharmacology
PSYC 470	Psychology of Terrorism and Homeland Security
PSYC 489	Symposium in Psychology (Washington Center)
PSYC 490	Independent Research in Psychology
PSYC 492	Internship in Psychology (Applied or Research)
PSYC 495	Special Topics in Psychology

D. General electives for B.S. in Psychology – 29-31 credits.

E. Total credits required for B.S. in Psychology – 120.

MINOR

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 **

Speaking Intensive Course ***

PSYCHOLOGY 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.

PSYCHOLOGY 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. 4 credits. **

PSYCHOLOGY 234. *Quantitative Methods in Psychology.* Introduction to the principles and techniques of experimental design and statistical analysis. 3 credits.

PSYCHOLOGY 251. *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. 3 credits.

PSYCHOLOGY 292. *Internship in Psychology.* A semester-long, on-the-job learning experience designed to apply the principles of psychology. 1-18 credits.

PSYCHOLOGY 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.

PSYCHOLOGY 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. 3 lecture and one double-lab period. 4 credits. **

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

PSYCHOLOGY 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. 3 lectures and one-double lab period. 4 credits. **

PSYCHOLOGY 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. 3 lecture and one double-lab period. 4 credits. **

PSYCHOLOGY 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. 4 credits

PSYCHOLOGY 324. *Learning.* Examination of the classic and contemporary literature in animal learning and motivation. Prerequisites: PSYC 233 and 234. 3 lecture and one double-lab period. 4 credits. **

PSYCHOLOGY 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. 3 credits.

PSYCHOLOGY 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. 3 credits.

PSYCHOLOGY 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. 3 credits. ***

PSYCHOLOGY 356. *Abnormal Psychology.* Diagnostic classifications and models of adult behavior disorders. 3 credits.

PSYCHOLOGY 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. 3 credits.

PSYCHOLOGY 360. *Consumer Psychology.* Study of the psychological relationship between individuals who receive services and purchase goods and those organizations who provide such services and goods. 3 credits. ***

PSYCHOLOGY 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. 3 credits.

PSYCHOLOGY 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. 3 credits. ***

PSYCHOLOGY 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 psychopathology. 3 credits. ***

PSYCHOLOGY 375. *Psychology of Adulthood and Aging.* A review of major changes taking place in late adulthood. Changes in sensory processes, cognitive functions, and social relations will be explored. The effects of these changes on the psychological health of the individual as well as ways of coping with these stressors will be covered. 3 credits. ***

PSYCHOLOGY 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. 3 credits. ***

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

PSYCHOLOGY 392. *Internship in Psychology.* A semester-long, on-the-job learning experience designed to apply the principles of psychology. 1-18 credits.

PSYCHOLOGY 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. 3 credits. ***

PSYCHOLOGY 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. 3 credits. ***

PSYCHOLOGY 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.

PSYCHOLOGY 423. *Theories of Personality.* An examination of the major theories of personality including analytical, cognitive and behavioral theories. 3 credits.

PSYCHOLOGY 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.

PSYCHOLOGY 440. *Applied Behavior Analysis.* 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. 3 credits.

PSYCHOLOGY 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. 3 credits.

PSYCHOLOGY 457. *History and Systems of Psychology.* The development of psychology from ancient to modern times. Prerequisite: 6 hours of psychology. Open only to psychology majors and minors. 3 credits. **

PSYCHOLOGY 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. **

PSYCHOLOGY 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. ** and ***

PSYCHOLOGY 470. *Psychology of Terrorism and Homeland Security.* This course will include defining and understanding the terrorist organizations, the psychology they use to intimidate, the psychology of terrorist

recruitment, the psychological, economic and political goals of terrorist organizations. This course also covers the psychology of living in a new world under the everyday threat of terrorism and the new laws restricting freedom and increasingly empowering law enforcement. It includes understanding the psychological impact of being a victim of a terrorist act. 3 credits.

PSYCHOLOGY 489. *Symposium in Psychology.* The department grants academic credit for successful participation in symposium programs sponsored by the Washington Center. A symposium involves 40 to 60 hours of lectures, panel discussions, workshops, site visits, and 9 contact hours in bi-weekly small discussion groups over a 2 to 3 week period in Washington, DC. Interested students, who must have at least a 2.5 GPA, should contact the head of the Department of Psychology and gain approval for participation. The work done in the symposium will be evaluated by a faculty member designated by the department head in cooperation with the Washington Center. By permission of instructor. 2-15 credits.

PSYCHOLOGY 490. *Independent Research in Psychology.* A directed research project administered by qualified specialists in the department. By permission of instructor. 1-6 credits.

PSYCHOLOGY 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.

PSYCHOLOGY 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.

PSYCHOLOGY 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

Lee Bidwell, *Chair*

Beverly Hottle, *Secretary*

The Department of Sociology, Anthropology, and Criminal Justice Studies offers undergraduate majors and minors in sociology, anthropology, and criminology and criminal justice. Additionally, 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. Students majoring in sociology or in anthropology may earn either the B.A. or B.S. degree. Students majoring in criminology and criminal justice will earn a B.S. degree.

Students with a GPA below 2.25 will not be accepted as majors. Students may reapply after their GPA has increased to 2.25.

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, human services 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.

The sociology major may specialize in concentrations in Family Studies or Pre-Law. The anthropology major will be exposed to the four fields of anthropology: archaeology, physical anthropology, cultural anthropology, and linguistics. Of particular interest to Criminology and 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.

Although students may take up to 15 credit hours in Internship (CRIM 492 and SOCL 492) and Professional Study in Criminal Justice (CRIM 496), only six credit hours of these courses will earn quality points (A, B, C, and D grades). All credits earned beyond six credits will be assigned Pass/Fail grades.

Through a variety of activities, the department attempts to provide students with a program of breadth and depth characteristic of the Longwood educational experience. The department sponsors a Sociology and Anthropology Club, an American Criminal Justice Association - Lambda Alpha Epsilon Club, and a chapter of Alpha Kappa Delta, the international sociology honor society. In addition, 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 Senior in the Department of Sociology, Anthropology, and Criminal Justice Studies Award.

General education requirements for the student majoring in sociology, anthropology, and criminology and 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 and 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 Wynne. The administrative office of the department is located in Room 106.

SOCIOLOGY PROGRAM

Faculty

Lee D. Millar Bidwell, Ph.D., *Professor of Sociology*

William Burger, Ph.D., *Associate Professor of Sociology and Criminal Justice*

Debra S. Kelley, Ph.D., *Associate Professor of Sociology and Criminal Justice*

Kenneth B. Perkins, Ph.D., *Professor of Sociology*

Michael P. Phelan, Ph.D., *Assistant Professor of Sociology and Criminal Justice*

Carla M. Riden, Ph.D., *Assistant 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, B.A., B.S. 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, B.A. 6 credits.

Additional Degree Requirements, B.S. 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
SOCL 346	Basic Statistics/3 credits
SOCL 389	Sociological Theory/3 credits
SOCL 461	Senior Seminar in Sociology/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

Sociology electives/18 credits

TOTAL 41 credits

D. No grade below C- is accepted for graduation in major course work.

E. General Electives B.A. Degree: 32 credits

General Electives B.S. Degree: 31 credits

F. Total Credits Required for B.A. or B.S. in Sociology - 120

SOCIOLOGY MAJOR, B.A., B.S. 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. B.A. 6 credits.
Additional Degree Requirements. B.S. 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 |
| SOCL 346 | Basic Statistics/3 credits |
| SOCL 389 | Sociological Theory/3 credits |
| SOCL 461 | Senior Seminar in Sociology/3 credits |
| PSYC 373 | Adolescent Development/3 credits |
| SOWK 337 | Family and Children's Services/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 |

Choose three credits from the following:

- | | |
|----------|---|
| SOCL 331 | Social Gerontology/3 credits |
| PSYC 375 | Psychology of Adulthood and Aging/3 credits |
| RECR 304 | Leisure and Aging/3 credits |

Choose three credits from the following:

- | | |
|------------------|--|
| SOCL 325 | Women 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 |
| TOTAL 41 credits | |

- D. No grade below C- is accepted for graduation in major course work.
- E. General Electives B.A. Degree: 32 credits
General Electives B.S. Degree: 31 credits
- F. Total Credits Required for B.A. or B.S. in Sociology with a Concentration in Family Studies- 120

SOCIOLOGY MAJOR, B.A., B.S. 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

- B. Additional Degree Requirements, B.A. 6 credits.
Additional Degree Requirements, B.S. 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
SOCL 346	Basic Statistics/3 credits
CRIM 375	Criminology/3 credits
SOCL 376	Sociology of Law/3 credits
SOCL 389	Sociological Theory/3 credits
SOCL 461	Senior Seminar in Sociology/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

Sociology electives*/12 credits

TOTAL/41 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 B.A. Degree: 32 credits
General Electives B.S. Degree: 31 credits

- F. Total Credits Required for B.A. or B.S. in Sociology with a Concentration in Pre-Law - 120

Minor in Sociology

SOCL 101	Principles of Sociology/3 credits
SOCL 102	Contemporary Social Problems/3 credits
SOCL 345	Social Research/3 credits

SOCL 389 Sociological Theory/3 credits
Sociology electives/6 credits
TOTAL 18 credits

SOCIOLOGY COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Courses **

Speaking Intensive Courses ***

SOCIOLOGY 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. *

SOCIOLOGY 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. *

SOCIOLOGY 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. **

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 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. **

SOCIOLOGY 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.

SOCIOLOGY 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. 3 credits.

SOCIOLOGY 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. 3 credits.

SOCIOLOGY 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. **

SOCIOLOGY 311, 312. *Studies Abroad.* These courses are primarily intended for transfer of credit earned abroad in courses on sociology. 1-18 credits.

SOCIOLOGY 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.

SOCIOLOGY 321 (ANTHROPOLOGY 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.

SOCIOLOGY 325 (ANTHROPOLOGY 325). *Women and Society.* In this course students study of women's history, roles, and contributions to society through readings in anthropology and sociology. The effects of gender, race and ethnicity in the lives of women are emphasized. 3 credits.

SOCIOLOGY 326. *The Sociology of the Civil Rights Movement.* This course examines the social and intellectual presuppositions that led to the Civil Rights Movement. Included in the course is an examination of the different approaches to equality that have developed by noted black and white intellectuals including Booker T. Washington, W. E. B. Du Bois, Marcus Garvey, Martin Luther King, Jr., and Malcolm X. The impact of technological changes and the consequences of various Supreme Court decisions on the Civil Rights Movement also are discussed. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 345. *Social Research.* In this course students learn the logical basis for conceptualization and research in sociology. Research design, concept formation, data collection, data reduction, data analysis, and data interpretation are studied. Emphasis is placed on the application of methods to various aspects of research projects undertaken by members of the class. Offered fall semester. Open to Juniors and Seniors only. 3 credits. **

SOCIOLOGY 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. **

SOCIOLOGY 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.

SOCIOLOGY 351. *Sociology of Domestic 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 abuse (physical and sexual) 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 domestic violence theories and research. Prerequisite: SOCL 101 or SOCL 102 or permission of instructor. 3 credits.

SOCIOLOGY 355 (ANTHROPOLOGY 355). *The Community.* Students review theories of community and analyze representative community studies. 3 credits.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 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.

SOCIOLOGY 455 (ANTHROPOLOGY 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.

SOCIOLOGY 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. ** ***

SOCIOLOGY 490. *Directed Independent Study.* Individualized study. Must be approved by the head of the department. 1-18 credits.

SOCIOLOGY 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 2.50 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. 1-15 credits. ***

SOCIOLOGY 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 2.50 or higher to be eligible. 3 credits.

SOCIOLOGY 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.

ANTHROPOLOGY PROGRAM

Faculty

Brian D. Bates, Ph.D., *Assistant Professor of Anthropology*

Douglas M. Dalton, Ph.D., *Professor of Anthropology*

James W. Jordan, Ph.D., *Professor of Sociology and Anthropology*

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 2.25 will not be accepted as majors. Students may reapply after their GPA has increased to 2.25.

ANTHROPOLOGY MAJOR, B.A., B.S. DEGREE

A. General Education Core Requirement. 41 credits.

Anthropology majors may not use ANTH 101 for Goal 9

Sociology majors must take PHIL 308, 315 or 316 to satisfy Goal 13

Sociology majors must take ANTH 296, 490, 492 or 498 to satisfy Goal 15

B. Additional Degree Requirements, B.A. 6 credits

Additional Degree Requirements, B.S. 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 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

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	Women and Society/3 credits
ANTH 355	The Community/3 credits
Anthropology electives/6 credits	
TOTAL 41 credits	

D. No grade below C- is accepted for graduation in major course work.

E. General Electives B.A. Degree: 32 credits
General Electives B.S. Degree: 31 credits

F. Total Credits Required for B.A. or B.S. in Anthropology - 120
NOTE: Three hours of Archaeology Field School may count as Anthropology 202.

MINOR IN ANTHROPOLOGY

Minor Requirements

ANTH 101	Introduction to Anthropology/3 credits
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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	Women and Society/3 credits
ANTH 355	The Community/3 credits
Anthropology electives/6 credits	
TOTAL 18 credits	

ANTHROPOLOGY COURSE DESCRIPTIONS

General Education Course *

Writing Intensive Course **

Speaking Intensive Course ***

ANTHROPOLOGY 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. *

ANTHROPOLOGY 106/WOMEN'S STUDIES 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. *

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ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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. ***

ANTHROPOLOGY 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.

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

ANTHROPOLOGY 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. **

ANTHROPOLOGY 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.

ANTHROPOLOGY 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. **

ANTHROPOLOGY 317. *Peoples of the Pacific.* Historical and contemporary descriptions of the varieties of peoples and cultures in Polynesia, Micronesia, and Melanesia. 3 credits. **

ANTHROPOLOGY 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.

ANTHROPOLOGY 321 (SOCIOLOGY 321). *Supernatural Belief Systems.* An investigation of the social aspects of religion, its forms of organization, and its relationships to other institutions. 3 credits.

ANTHROPOLOGY 325 (SOCIOLOGY 325). *Women and Society.* An introduction to the study of women's roles, contributions, and perception of society through readings in anthropology and sociology. The focus will be on the effects of gender, race and ethnicity in the lives of women. 3 credits.

ANTHROPOLOGY 350. *Advanced Archaeology.* 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. Prerequisite: ANTH 101. 3 credits.

ANTHROPOLOGY 355 (SOCIOLOGY 355). *The Community.* Review of theories of community and analysis of representative community studies. 3 credits.

ANTHROPOLOGY 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.

ANTHROPOLOGY 450. *Archaeological Theory and Cultural Resource Management.* 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; cultural resource management, including various laws and policies in the U.S. and Virginia; archaeological curation and museum presentation; estimating and bidding archaeological projects; and post-excavation analysis and report preparation. Prerequisite: ANTH 350. 3 credits.

ANTHROPOLOGY 455 (SOCIOLOGY 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.

ANTHROPOLOGY 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. **

ANTHROPOLOGY 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. ***

ANTHROPOLOGY 490. *Directed Independent Study.* Individualized study. Must be approved by the head of the department. 1-18 credits.

ANTHROPOLOGY 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. May be repeated. Prerequisite: 18 hours of anthropology. Student's cumulative GPA must be 2.50 or above to be eligible for internship. Must be arranged in advance with program director or department chair. No more than 15 total credits may be earned. Variable credit: 1-15 hours per semester. ***

ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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.

ANTHROPOLOGY 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. **

CRIMINOLOGY AND CRIMINAL JUSTICE

Faculty

Lee D. Millar Bidwell, Ph.D., *Professor of Sociology*

William Burger, Ph.D., *Associate Professor of Sociology and Criminal Justice*

Debra S. Kelley, Ph.D., *Associate Professor of Sociology and Criminal Justice*

Kenneth B. Perkins, Ph.D., *Professor of Sociology*

Michael P. Phelan, Ph.D., *Assistant Professor of Sociology and Criminal Justice*

Carla M. Riden, Ph.D., *Assistant Professor of Sociology*

Criminology and Criminal Justice Major, B.S. Degree

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.

A. General Education Core Requirement. 41 credits

Criminology/Criminal Justice majors may not use SOCL 102 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, B.S. 7 credits.

C. Major Requirements. 41 credits

CRIM 100 Survey of Criminal Justice/3 credits

CRIM 200 Introduction to Corrections/3 credits

CRIM 210 Introduction to Policing/3 credits

CRIM 375 Criminology/3 credits

CRIM 461 Senior Seminar in Criminology and Criminal Justice/3 credits

SOCL 102 Contemporary Social Problems/3 credits

SOCL 345 Social Research/3 credits

SOCL 346	Basic Statistics/3 credits
SOCL 389	Sociological Theory/3 credits
POSC 355	Constitutional Law and Liberties I/3 credits

Choose three credits from the following (one credit of these three credits fulfills General Education Goal 15):

CRIM490	Directed Independent Study/3 credits
CRIM 492	Internship in Criminology and Criminal Justice/3 credits
CRIM 496	Professional Study in Criminal Justice/3 credits

Choose 9 credits from the following:

CRIM 201-CRIM 499	
SOCL 205	Deviance/3 credits
SOCL 232	Minority Groups/3 credits
SOCL 233	Race, Class, and Gender/3 credits
SOCL 241	Sociology of Marriage and the Family/3 credits
SOCL 326	Sociology of Civil Rights Movement/3 credits
SOCL 350	Power and Privilege: Social Stratification
SOCL 351	Sociology of Family Violence/3 credits
SOCL 360	Urban Sociology/3 credits
SOCL 376	Sociology of Law/3 credits
POSC 230	Administration of Justice
POSC 356	Constitutional Rights and Liberties II/3 credits
TOTAL 41 credits	

D. No grade below C- is accepted for graduation in major course work.

E. General Electives B.S. Degree: 31 credits

F. Total Credits Required for B.S. in Criminology and Criminal Justice - 120

Minor in Criminology and Criminal Justice

CRIM 100	Survey of Criminal Justice/3 credits
CRIM 375	Criminology/3 credits
SOCL 345	Social Research/3 credits
Criminology/Criminal Justice electives/9 credits	
TOTAL 18 credits	

Minor in Computer Security, Forensics, and Law

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

Choose three credits from the following:

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
TOTAL 21 credits

CRIMINOLOGY AND CRIMINAL JUSTICE COURSE DESCRIPTIONS

General Education Courses *

Writing Intensive Courses **

Speaking Intensive Courses ***

CRIMINOLOGY/CRIMINAL JUSTICE 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 sub-systems 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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. 3 credits.

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 311, 312. *Studies Abroad.* These courses are primarily intended for transfer of credit earned abroad in courses on sociology. 1-18 credits.

CRIMINOLOGY/CRIMINAL JUSTICE 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. **

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 375. *Criminology.* This course provides an analysis of the nature, extent and distribution of crime, emphasizing theories of and research on causation, prevention, treatment, and other public policy efforts. Prerequisite: Sociology 101 or 102 or permission of instructor. 3 credits.

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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. ** ***

CRIMINOLOGY/CRIMINAL JUSTICE 490. *Directed Independent Study.* Individualized study. Must be approved by head of department. 1-18 credits.

CRIMINOLOGY/CRIMINAL JUSTICE 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 2.50 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. 1-15 credits. ***

CRIMINOLOGY/CRIMINAL JUSTICE 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.

CRIMINOLOGY/CRIMINAL JUSTICE 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. Prerequisites: 18 hours of sociology courses. Sociology seniors only. 3-15 credits. ***

CRIMINOLOGY/CRIMINAL JUSTICE 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.

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