
Christopher Newport College



1985-86 Catalog

Christopher Newport College Catalog

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The *Christopher Newport College Catalog* is published by the College in April of each year.

Student Responsibility for Catalog Information

Students are held individually responsible for the information contained in the *Christopher Newport College Catalog*. Failure to read and comply with College regulations will not exempt students from whatever penalties they may incur.

NOTE: Students beginning their programs of study at Christopher Newport College should retain this *College Catalog* for use as a reference in their degree program requirements, etc.

Inquiries will receive prompt attention if addressed to:

Christopher Newport College
50 Shoe Lane
Newport News, VA 23606-2988

Most administrative offices are open Monday through Friday, 8 a.m. to 5 p.m.

Christopher Newport College reserves for itself and its departments the right to supplement, withdraw or change this *College Catalog*. Interpretations of matters in this *College Catalog* are the responsibility of the Vice President for Academic Affairs. The President of Christopher Newport College has final authority in the interpretation.

Christopher Newport College, as an affirmative action/equal opportunity institution, does not discriminate in admission, employment, or any other activity on the basis of race, sex, color, age, religion, national origin, physical handicap, or political affiliation.

Directory

Administrative Assistance

Admission	Office of Admissions (804) 599-7015
Alumni Programs	Office of Alumni Affairs (804) 599-7268
Continuing Studies	(804) 599-7158
Financial Aid	Office of Financial Aid (804) 599-7170
Financial Affairs	Business Office (804) 599-7042
Housing Referrals	Office of Student Life (804) 599-7260
Registration Events	Office of the Registrar (804) 599-7155
Transcripts from CNC	Office of the Registrar (804) 599-7155
Transfer Evaluations	Office of Admissions (804) 599-7015

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Academic Calendar 1985-1986

Mini Session 1985

May

15, Wednesday	Registration and classes begin
16, Thursday	Drop/add and late registration
27, Monday	Classes will meet — Memorial Day

June

3, Monday	Classes end and final examinations
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Summer Session 1985

June

4, Tuesday	Registration	A
5, Wednesday	Classes begin	S
5-6, Wed-Thu	Drop/add and late registration	E

July

4, Thursday	Holiday — No classes	S
8, Monday	Classes end	I
9, Tuesday	Final examinations	O
		N

July

10, Wednesday	Registration	B
11, Thursday	Classes begin	S
11-12, Thu-Fri	Drop/add and late registration	E

August

12, Monday	Classes end	S
13, Tuesday	Final examinations	I
		O
		N

June

4, Tuesday	Registration	C
5, Wednesday	Classes begin	S
5-10, Wed-Mon	Drop/add and late registration	E

July

4, Thursday	Holiday — No classes	S
		I
		O
		N

August

5, Monday	Classes end (Mon/Wed classes)
7, Wednesday	Final examinations (Mon/Wed classes)
8, Thursday	Classes end (Tue/Thu classes)
9, Friday	Final examinations (Tue/Thu classes)

Academic Calendar 1985-1986

Fall Semester 1985

August

20-21, Tue-Wed	Registration
26, Monday	Classes begin, 8:00 a.m.
26-30, Mon-Fri	Drop/add and late registration

September

2, Monday	Classes will meet — Labor Day
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October

12, Saturday	Fall recess begins, 12:00 noon
17, Thursday	Fall recess ends, 8:00 a.m.
21, Monday	Mid-term grades due
25, Friday	Last day for course withdrawal without grade penalty and to elect Pass/Fail option

November

11-14, Mon-Thu	Early registration, Spring Semester, 1986
27, Wednesday	Thanksgiving recess begins, 10:00 p.m.

December

2, Monday	Thanksgiving recess ends, 8:00 a.m.
7, Saturday	Classes end, 12:00 noon
9-14, Mon-Sat	Final examinations
16, Monday	Final grades due, 12:00 noon

January

12, Sunday	Commencement
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Spring Semester 1986

January

14-15, Tue-Wed	Registration
20, Monday	Classes begin, 8:00 a.m.
20-24, Mon-Fri	Drop/add and late registration

March

14, Friday	Mid-term grades due
15, Saturday	Spring recess begins, 12:00 noon
24, Monday	Spring recess ends, 8:00 a.m.
28, Friday	Last day for course withdrawal without grade penalty and to elect Pass/Fail option

April

14-17, Mon-Thu	Early registration, Fall Semester, 1986
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May

3, Saturday	Classes end, 12:00 noon
5-10, Mon-Sat	Final examinations
12, Monday	Final grades due, 12:00 noon
18, Sunday	Commencement

Department Chairmen by School

School of Letters and Natural Science

Dr. Jouett L. Powell, Dean	599-7036
Biology, Chemistry, and Environmental Science	
Dr. Harold N. Cones.	599-7061
Computer Science	
Mr. David E. Game.	599-7241
English	
Dr. Albert E. Millar.	599-7071
Mathematics	
Dr. John J. Avioli.	599-7081
Modern and Classical Languages & Literatures	
Mrs. D. Doris Reppen.	599-7107
Philosophy and Religious Studies	
Dr. John A. Hoaglund.	599-7085
Physics	
Dr. George R. Webb.	599-7082

School of Business and Economics

Dr. Algin B. King, Dean	599-7184
Accounting and Finance	
Mr. James N. Shaver.	599-7055
Economics	
Dr. H. Marshall Booker.	599-7174
Management and Marketing	
Dr. Albert E. Avery.	599-7139

School of Social Science and Professional Studies

Dr. Robert J. Durel, Dean	599-7052
Arts and Communication	
Dr. Rita C. Hubbard.	599-7073
Education	
Mr. John E. Jenkins.	599-7069
History	
Dr. Timothy E. Morgan.	599-7225
Leisure Studies and Physical Education	
Mr. James N. Hubbard III.	599-7216
Military Science	
CPT Apolonio B. Garcia.	599-7169
Political Science and Governmental Administration	
Dr. Buck G. Miller.	599-7091
Psychology	
Dr. Robert W. Herrmann.	599-7108
Sociology and Social Work	
Mrs. Ruth L. Kernodle.	599-7114

Introduction to Christopher Newport College

Purpose

Christopher Newport College is a four-year, non-residential, comprehensive, state-supported, urban, coeducational college offering undergraduate educational programs designed to serve the large metropolitan area of Newport News, Hampton, and several surrounding counties. The student body consists primarily of those who reside in the immediate area, but who represent a rich variety of cultural and educational backgrounds. The College is committed to teaching, research, and service with the emphasis in providing quality instruction. Research is conducted in areas of faculty interest and competence, as required by and as a necessary complement to the teaching process. Organized and sponsored research is conducted as it involves the College's public service relationship to the citizens whom it serves.

Christopher Newport College is also committed to a core of liberal arts studies. Building upon these, it seeks to develop and maintain programs of professional education that respond to students' learning interests. As part of its general mission, the College is committed to new ways of implementing liberal and professional programs which value the students' learning needs and prior life experiences, and which combine theoretical knowledge and practical problem-solving. Such programs provide opportunities for self-development and a number of career options to citizens of all ages.

As an urban institution, the College is committed to education as a total community process. This is manifest in several ways: (1) Christopher Newport College serves a primarily local student body; (2) It makes use of the community as an instructional resource; (3) The College draws upon the cooperation and talent of those who reside on the Virginia Peninsula; and (4) Faculty and staff contribute significantly to the community in areas such as consulting and serving on local and state committees and service organizations.

The College is organized and instruction is provided to take into consideration the life-long learning interests and needs of a largely part-time and mobile student body. The College offers programs of equivalency testing and other non-traditional means of earning college-level academic credit, and it cooperates with other colleges and local agencies with diverse missions. In these ways the College expands its learning resources and offers advising programs and transfer credit policies to meet the needs of CNC students, many of whom transfer from other institutions.

Christopher Newport College is the youngest four-year college in the Commonwealth of Virginia. At the same time, it came into being as part of the oldest academic institution in the Commonwealth. For this reason, then, it combines the best of both long heritage and the contemporaneous. CNC was established and authorized by the Virginia General Assembly, in its 1960 session, as a branch of the College of William and Mary. The College derives its name from Captain Christopher Newport, the English mariner who was among the most important men connected with the permanent settling of Virginia. It was Captain Newport who was put "in sole charge and command" of the small squadron of three vessels which made the historic voyage, culminating with the landing at Jamestown in 1607. Although established as a two-year college, CNC became a four-year, baccalaureate institution in 1971, and, in July of 1977, became totally independent of the College of William and Mary.

The College first enrolled 171 students in September of 1961, at its initial home, a

former public school building in downtown Newport News, provided through the generosity of the City of Newport News and its School Board. The City of Newport News then purchased the site of the present campus, a 75-acre tract deeded to the Commonwealth of Virginia in 1963. Since the construction of Christopher Newport Hall in 1964, the College has added many buildings and other facilities to its suburban campus: two natural science facilities; a behavioral science and arts and letters classroom building; a library; a student center complex; a gymnasium facility; a services and warehousing facility; an administrative and faculty office building; a tennis court facility; a 400-meter track and field complex; a soccer complex; and a greenhouse.

During the latter part of the Fall Semester of 1983, the College took occupancy of the new Campus Center addition. This 25,000 square-foot addition has expanded Campus Center facilities to include enlarged cafeteria facilities; an enlarged game room; offices for the Campus Center administration and food services, the Office of Counseling and Career Services, a significantly enlarged College restaurant and snack bar, a bookstore, the Office of Student Life, student lounges, and a re-designed theatre foyer.

Accreditation

Christopher Newport College was given full independent accreditation as a four-year, baccalaureate degree-granting institution in November of 1971, and was reaccredited in December of 1975, by the Southern Association of Colleges and Schools. The baccalaureate program in social work is accredited by the Council on Social Work Education.

Location

The College is located in suburban Newport News, midway between Williamsburg and Norfolk. The campus is accessible to residents in the cities of Newport News, Hampton, Williamsburg, Virginia Beach, Chesapeake, Portsmouth, Smithfield, Gloucester, Poquoson, and the many surrounding counties.

Organization

The College derives its financial support from the Virginia General Assembly and from the tuition and fees paid by its students. The affairs of the College are directed by the Board of Visitors of Christopher Newport College, appointed by the Governor of Virginia. The President of the College, appointed by the Board of Visitors, is the delegated authority over the administration and the courses of instruction of the College. To assist the President in the administration of the College, there are three vice presidents: the Vice President for Academic Affairs; the Vice President for Financial Affairs; and the Vice President for Student Affairs. Appointments to these positions, other administrative offices, and the faculty and staff of the College are made by the Board of Visitors of Christopher Newport College, upon the recommendation of the President. The academic areas of the College are divided into the School of Social Science and Professional Studies, the School of Letters and Natural Science, and the School of Business and Economics, each administered by a School Dean. Individual faculty members are responsible to the School Deans and to the Vice President for Academic Affairs in all matters pertaining to instruction.

Campus and Buildings

Christopher Newport Hall

Named after the captain of the Susan Constant and commander of the three small English ships which landed in Jamestown in 1607, this building was completed in 1964. It houses the Departments of English and History, as well as classrooms, a 200-seat lecture hall, student computer facilities, the College Computer Center, and faculty offices.

Gosnold Hall

Completed in 1965, this building contains more than 40,000 square-feet of classroom, office, and laboratory space. It was named after Captain Bartholomew Gosnold, Christopher Newport's vice admiral in command of the Godspeed on the Jamestown voyage. Gosnold Hall houses the Department of Computer Science, part of the Department of Arts and Communication, the Department of Mathematics, and the Department of Physics. It contains a 200-seat lecture hall, a variety of physics and computer science laboratories, art studios, classrooms, and faculty offices.

Ratcliffe Gymnasium

Captain John Ratcliffe commanded the third ship on the Jamestown voyage, the Discovery. Ratcliffe Gymnasium was named in his honor. Completed in 1965, this building serves as the center of the Department of Leisure Studies and Physical Education's and the College's intercollegiate and intramural athletic activities. The building contains two gymnasiums, classrooms, a weight training room, and physical activities rooms.

The New Science Building

Opened for use in the fall semester of 1984, the 28,000 square foot New Science Building contains 19 ultra-modern, newly-equipped science laboratories with associated support facilities, including a computer network. The building houses the offices and laboratories of the Department of Biology, Chemistry, and Environmental Science.

Wingfield Hall

Completed in 1970, this building of 20,000 square-feet was named in honor of Edward Maria Wingfield, the first President (or Governor) of the Jamestown Colony. The building houses the Departments of Modern and Classical Languages and Literatures, Philosophy and Religious Studies, and Psychology, as well as language laboratories, psychology laboratories, classrooms, and faculty offices.

The Campus Center

Although the original Campus Center building was completed in 1973, recent additions and renovations have expanded total square-footage from its original 30,000 square feet to the current 58,000 square feet. The first phase of expansion, completed in December of 1983, included such facilities as a new and enlarged cafeteria, a new College restaurant and snack bar, offices for student affairs and campus center personnel, a new and enlarged game room, and a patio dining area. Phase II, the re-design of the original first floor, includes a new and enlarged College Bookstore, the Office of Student Life, the Campus Police Office, TV and study lounges, and a new theatre foyer. The second phase of construction was completed in early Spring, 1984. The building also houses the CNC Theatre, a 390-seat center, theatre scenography shops, faculty offices for the Department of Arts and Communication, and many classrooms and meeting rooms.

Services Building

Completed in 1979, this building houses custodial services, the Office of Buildings and Grounds, repair shops, and office space.

The Administration Building

In December of 1980, construction was completed on this four-story, 40,000 square-foot building. This administrative and faculty office facility houses the Office of Admissions (first floor); the Office of the Registrar, Office of Financial Aid, and Business Office (second floor); approximately 40 faculty offices and the Office of the Dean of the School of Business and Economics (third floor); and the Office of the Vice President for Academic Affairs, Vice President for Financial Affairs, Vice President for Student Affairs, Development, Public Relations, Continuing Studies, and the Office of the President (fourth floor). Among the academic departments housed on the third floor are those of Accounting and Finance, Economics, Management and Marketing, Political Science, and Sociology and Social Work.

Captain John Smith Library/Smith Hall

The first phase of the library was completed in the Fall of 1967. The library was named in honor of Captain John Smith, the adventurer, explorer, and author who was a promoter and organizer of the Virginia Company of London and who landed with colonists in Jamestown in 1607.

With the completion of the second phase of the facility in 1979, the library now contains more than 34,000 square-feet and has a seating capacity of 400. The Smith Hall office annex at the South end of the building houses the Departments of Education, Military Science, the faculty lounge, mail room, and duplicating services.

Continuing Education and Community Service

Director: Agnes L. Braganza

Assistant Director: Norma J. Brown

The continuing education program is an integral part of Christopher Newport College's expression of its mission as an urban institution committed to education as a total community process. The Office of Continuing Education and Community Service serves the lifelong learning interests and professional requirements of diverse populations on the Peninsula and surrounding areas. Continuing education extends the College's academic resources and develops programs for specific educational and training needs in the business and civic communities.

The Office of Continuing Education and Community Service is responsible for non-credit courses, conferences and seminars sponsored by the College for the community.

The College's adult continuing education program provides a wide variety of learning experiences ranging from business development workshops, leadership seminars, liberal arts classes, and short courses in leisure activities. The Office of Continuing Education and Community Service offers in-company training tailored to meet specific needs of local businesses and industries.

The office has the flexibility necessary to explore innovative approaches to adult education and to address the needs of individuals, civic organizations, governments, businesses and industries, the military and other groups in the College constituency. Costs vary according to the course offered. Admission to the College is not required for any noncredit course, seminar, or workshop.

Continuing Education Unit (CEU) certificates are awarded to students attending courses designated for this credit. The CEU is nationally recognized verification for the student's active participation in a structured and approved continuing education program. A certificate is useful in professional development and other areas of learning. The certificate is awarded at the end of the course or seminar and is designed for personnel files. The office maintains permanent records of CEU's that have been awarded.

The Office of Continuing Education and Community Service is a vehicle through which Christopher Newport College expresses its commitment to the community with such activities as The Board Bank, the Peninsula Leadership Institute, Plug-In-Peninsula for newcomers,

and adult re-entry programs. Working with the CNC Bureau of Business and Economic Research of the School of Business and Economics, the office publishes the monthly *Peninsula Business-Economic Report*. The Office of Continuing Education and Community Service is responsive to the public and welcomes contacts from the communities which it serves.

To be placed on the mailing list, or for further information, call the Office of Continuing Education and Community Service at 599-7158 or 599-7093.

Curriculum

The courses and workshops in the continuing education program include these and other topics:

Business and Professional

American Management Association Extension Institute Certificate in Management Program series.

- Small Business Management
- Communication Skills
- Marketing
- Advertising and Promotion
- Time Management
- Assertiveness Training
- Myers-Briggs Testing
- Financial Management
- Computers in Management
- Writing for Managers
- Sales Techniques
- Supervisory Skills
- Leadership Training
- Career Development
- Investments and Real Estate
- Accounting

Enrichment

- French
- German
- Arabic
- Sign Language
- Writers' Conference
- Public Speaking
- Study Skills
- Spanish
- Chinese
- Great Books
- History of the Chesapeake
- Writing Fiction
- S.A.T. Preparation

Leisure Skills

- Sailing: Beginning & Intermediate on Deep Creek
- Sailing Classroom Sessions
- Golf
- Karate: Adult & Children
- Photography

Captain John Smith Library

Library Director: Wendell A. Barbour

Bibliographic Instruction/Online Services Librarian: Hugh Treacy

Media Services Librarian: Leslie Werner

Readers' Services Librarian: Marilyn Loesch

Reference Librarian: Mary Daniel

Technical Services Librarian: Jennilou Grotevant

As the intellectual center of Christopher Newport College, Captain John Smith Library has an attitude of service toward interrelating research skills (information finding) with the subject curriculum. The library has a dynamic approach to collection development which seeks to involve interaction with the faculty to build the resources which will support and enhance the essential elements of the college—curriculum and instruction. Students in all of the schools will find collections geared to their area of study, as well as broader collections supporting the intellectual and personal growth so essential to a core of liberal arts studies. Smith Library maintains an open stack policy for its approximately 150,000 volumes. It has a circulating collection of 85,000 volumes and receives approximately 17,500 items and has special facilities for videotaping and playback, micro-computer use, sound recording, and listening stations (records and cassettes). The library is composed of six departments with seven librarians and 10 library assistants, organized to provide students and faculty easy access to its resources and services.

Smith Library offers instructional programs which seek to reach all students on the campus. The goal of these classes is to provide not only basic orientation in the use of the library, but to lead the student to deal critically with the information at hand. These programs seek to integrate the information needs of all the disciplines on the campus with the ability of the library to provide this information both through traditional and electronic means.

This service orientation is implemented by the provision of several public services. Those of particular interest to CNC students are:

Reference

The library offers full-time professional reference services in support of the scholarly pursuits of the students. It contains a reference collection of over 6,500 volumes which includes encyclopedias, dictionaries, atlases, business and statistical sources as well as the major index-

ing services appropriate to undergraduate liberal arts study. A professional librarian staffs the area in order to provide orientation and instruction in the resources and to give individual assistance with questions and projects. There are several special services offered through reference. Two that are popular with CNC students are individualized consultation on term papers and research projects and a "hot topics" bibliographic service in which the reference librarians identify subjects of timely or special interest and subsequently do an electronic search in order to provide a comprehensive bibliography on the topic. Since CNC is located in an area rich in library resources, if a desired book is not in the collection, it may be located in the area through the catalogs of other area libraries. Catalogs located in reference include the microfiche catalog of Virginia Library Resources (CAVALIR), which lists many books cataloged by 78 member libraries in Virginia.

While the scholarly needs of the College have always transcended the collection, the information explosion has forced Smith Library to become involved in developing new links to national library and commercial networks so that, in effect, the library resources of the nation are available to CNC students. This is achieved through electronic access.

Online Services

Smith Library has access to DIALOG, the largest and most powerful information retrieval system available today. It contains approximately 150 databases, covering science, technology, medicine, business, law, economics, the social sciences and humanities. Materials are indexed from journals, books, symposia, reviews, popular magazines and selected institutional/government publications. Students may contact any of the public services librarians to see if this service is appropriate for their library use. The service will then be performed electronically and will produce a printed bibliography on the subject in which information is sought.

Interlibrary Loan

If materials needed for library research are not located in the Captain John Smith Library, they may be requested through Interlibrary Loan. The library uses one of the major bibliographic networks, OCLC, in order that interlibrary loans may be processed with speed and efficiency. It takes about two weeks for the materials to be in the hands of the requester.

Media Services

Media Services provides audiovisual materials and equipment. Special areas within the department offer individual and group viewing/listening. A listening center provides stereo record, audio-cassette and reel to reel, and radio listening stations. The preview room is used for video cassette previewing, on-air viewing (via cable), and limited television production. Media Services also provides facilities for limited production of AV materials. AV materials and equipment are intended primarily

for support of instruction.

Browsing Collection

The browsing collection is composed of popular reading material, ranging from fiction and mysteries to cookbooks, biographies and critical works on American society. The collection also contains paperback selections, and books received from local book reviewers. This service provides recreational reading for both students and faculty.

In his book *Megatrends*, John Naisbett postulates that we now mass produce information the way we used to mass produce cars, and he believes that the new source of power is not money in the hands of a few, but information in the hands of many. The library faculty is committed to serving such information needs by providing the necessary services and skills to handle information critically so that it may be used to form valid conclusions and to make informed decisions.

Computing Services

The College maintains a comprehensive, up-to-date computing facility located in Newport Hall Room 105. Both the administrative and academic computers are housed in the Computer Center.

The Hewlett-Packard 3000 Series III computer is used to maintain all administrative records for the College. Information such as student course records, billing data, and admissions data are available on-line to the various College administration offices.

The PRIME-750 computer is used to support instruction and research at the College. It has six megabytes of main memory and can support up to 96 interactive sessions simultaneously. Six hundred megabytes of on-line disk storage are contained on two drives. A 1600 bits per inch magnetic tape drive and a 600 line per minute printer round out the peripheral equipment maintained within the Computer Center. Both interactive and batch processing are supported on the PRIME-750. Compilers

and utilities include BASIC-V, FORTRAN-IV and FORTRAN-77, COBOL, PASCAL and Sheffield PASCAL and PMA (an assembly language). Utilities include the SPSS-X and MINITAB statistical packages, the INFO data base management system, and the SLAM simulation sybsystem.

A renovated Computer Science laboratory is available for student and faculty use in Room 110 of Newport Hall. Thirty-two hardwired terminals and a 300 line per minute printer are located in the Computer Science laboratory. In addition, eight rotary dial-up data lines allow those students with personal computers or terminals at home to access the PRIME-750. These lines operate at 300 baud, full duplex.

A microcomputer laboratory with approximately 45 microcomputers is planned for installation prior to the Fall 1985 semester to support instruction in this burgeoning field of Computer Science.



Student Services

Office of Admissions

The Office of Admissions, located in Room 113 of the Administration Building, provides the following services: (1) Reviewing and acting upon applications for admission to the College; (2) Conducting credit evaluations for students transferring from other institutions; (3) Providing general counseling on selecting a college or courses at CNC; (4) Referring students to the appropriate academic department for in-depth academic counseling and program planning; (5) General and academic counseling of personnel at Langley AFB and Fort Eustis; (6) Coordinating the campus tour program for interested persons; (7) Providing printed materials, such as the *College Catalog*, brochures concerning academic programs, etc; and (8) Determining eligibility for in-state tuition privileges for all applicants to the College. For details, please refer to the "Classification as a Virginia Student" subsection in the "Payments and Fees" section of this Catalog.

Christopher Newport College, as an affirmative action/equal opportunity institution, does not discriminate in admission, employment, or any other activity with regard to age, sex, race, color, religion, national origin, physical handicap, or political affiliation. The College offers several admissions options designed to suit the applicant's educational goals and background. The two principal status options are Classified and Unclassified.

Admission

Classified Status

A classified student seeks immediate admission into a particular baccalaureate degree program. Most freshmen and transfer applicants enter under this status. Students planning to use financial aid must be admitted under this status.

Unclassified Status

Students who plan to take a limited number of credit hours, rather than pursue a baccalaureate degree, normally enter under this status. Those who have been away from school for a long period of time, or have weak academic backgrounds, are also encouraged to apply under this status. Students in unclassified status earn academic credit in the same way classified students do. Unclassified students are generally not eligible for financial aid.

Fees

All persons applying for admission to the College must submit a **\$10 Application Fee**. This **Application Fee** will not apply to auditors, students taking only Non-Credit College-Preparatory courses, Summer Session students, cross-registrants from other institutions, Riverside Nursing School students, and Senior Citizens. The **Application Fee**, in the form of a check or a money order made payable to Christopher Newport College, must accompany the application for admission. If a student pays the **Application Fee** but does not enroll in coursework for two consecutive semesters (summers excluded), the fee must be paid upon re-entry to the College. If the student does not enroll in the semester for which (s)he originally applied, the **Application Fee** may be carried forward only to the next semester. ***This fee is non-refundable and may not be applied to other fees.***

Persons who initially apply for admission as Classified students and those requesting to change their status to Classified must submit a **\$10 Classified Status Fee**. This fee is in addition to the **Application Fee**. **The Classified Status Fee is a one-time, non-refundable fee which may not be applied to other fees.** If a student does not enroll in the semester for which (s) he originally applied as a Classified student, the **Classified Status Fee** may be carried forward only to the next semester (summers excluded).

Changing to Classified Status

Admission to unclassified status does not mean that a student cannot enter classified status at a later date. Students must apply for such a change prior to enrollment in the last 30 credit hours applicable to a degree program at CNC, but preferably prior to the last 60 hours. Forms for this change are available in the CNC Office of Admissions. Application does not mean acceptance; acceptance comes only after an affirmative review of the applicant's records by the College Committee on Admissions.

Full-time Status

The College defines full-time status to be 12 credit hours or the equivalent (including non-credit preparatory work and physical education courses). The average full-time course load at CNC is 15 credit hours.

Part-time Status

Those enrolled in less than 12 credit hours (including non-credit preparatory work and physical education courses) are considered part-time students. Either classified or unclassified students may request or be assigned to part-time status when this seems to be academically beneficial.

Conditional Status

Occasionally, an applicant for admission to unclassified status cannot obtain the required documentation (transcript, etc.) in time for registration. In this case, with the consent of the Dean of Admissions and Records, (s) he may be admitted as a conditional student. A conditional student requesting more than a normal part-time program may be considered for admission as a full-time student **only** if unofficial copies of transcripts are provided. The College will be forced to cancel the registration of any student whose records, upon arrival, indicate that (s) he is ineligible for admission. If the Office of Admissions does not have the records of a conditional student by the end of the semester in which the student applied, the College will be unable to release grade reports, transcripts, or other scholastic records at CNC.

Application Deadlines

Applicants for admission to the College must present their applications on forms provided by the College's Office of Admissions. Applicants wishing to enter as classified students should file their applications for the fall semester by August 1, and for the spring semester by December 15. After these deadlines, applicants may be required to apply under unclassified status. For a list of deadlines and documentation requirements for admission to the College, applicants should refer to the *Summary of Required Documentation for Admission to CNC*.

Classified Status

Freshmen Applicants: Requirements

The general requirements for freshman admission to Christopher Newport College are as follows:

1. Graduation from an accredited secondary school or its equivalent, as shown by examination. The College recommends those units associated with college-preparatory programs. Students who plan to major in mathematics, science or engineering should choose their options accordingly.
2. An overall grade average of "C" or better, and upon graduation, to be ranked in the top-half of their class.
3. Acceptable scores on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board. The College will also evaluate scores on any other standardized tests administered by the student's secondary school. Applicants for the spring (January) semester must take the SAT no later than December; otherwise, scores reach the College too late for processing. Applicants should normally present a minimum total score of 800 on the SAT. If an applicant's score falls below 400 on either the verbal or mathematics portion of the test, but (s)he is otherwise qualified for admission, the applicant will be assigned to appropriate courses as a condition of admission.
4. Recommendation by the secondary school principal or counselor is optional.

Documentation Requirements

The following documentation must be submitted in addition to the application for admission:

1. *Secondary School Transcript*: The transcript request form, available in the CNC Office of Admissions, should be delivered to the secondary school with instructions specifying the date that it should be sent to the College. The following factors should be considered: (1) Early consideration is given to an applicant who has taken the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or plans to take it by December of his/her senior year, and who has a strong secondary school record ("B" average or better). If these criteria are met, the applicant should request that the secondary school transcript, with his/her grades through the junior year, be returned to the CNC Office of Admissions immediately; (2) After mid-year senior grades, consideration is given to the applicant to whom the early consideration applies, in which case the applicant should have his/her secondary school transcript sent immediately after senior grades are available. Any applicant who has already graduated from high school should have this record sent to the CNC Office of Admissions immediately.

G.E.D. Certificate holders: An applicant who has completed the military or civilian high school equivalency tests should furnish the following information: (1) G.E.D. Certificate and scores; (2) Partial high school record (the transcript request form should be sent to the last school the student attended); (3) Official records of any preparatory work taken since the student left high school, such as USAFI courses, adult education courses, etc.

2. *Scholastic Aptitude Test (SAT) of the College Entrance Examination Board:* Each applicant for admission to the freshman class is required to take the SAT. The College requires that applicants take the SAT no later than December; otherwise scores reach the College too late for processing. A student may arrange to take the test through the guidance office of his/her school. An applicant who is no longer in school may obtain an application for the SAT by writing to the Educational Testing Service, Box 592, Princeton, New Jersey 08540. American College Test (ACT) scores will be accepted in lieu of SAT scores.

Transfer Applicants: Requirements

In order to qualify for admission to the College as a classified student, the transfer applicant must be in good academic standing at the last regionally accredited college attended and normally present a collegiate grade point average of 2.0 (on a 4.0 scale) or better.

Documentation Requirements

The following documentation must be submitted, in addition to the application for admission:

1. *Secondary School Transcript:* If the applicant has completed less than a full year (24-30 semester hours or 36-40 quarter hours) of college work applicable to a baccalaureate degree, or if the college credits have been acquired through extension or correspondence work, the applicant should ask the principal of his/her secondary school to send an official record of courses taken at that school to the CNC Office of Admissions. A community college student in a technical/occupational program may be considered but must submit the secondary school record in addition to his/her college record(s).

Applicants for the spring semester (January) should have all transcripts sent to the College immediately. Applicants in the first semester of their college career must have mid-semester grades sent to the CNC Office of Admissions as soon as they are available.

2. *College Transcripts:* The applicant must request that all colleges (s) he has attended send to Christopher Newport College official transcripts of his/her records. The student who is currently enrolled in a college or university should have the official transcript sent after completion of the first semester (or the second quarter) of the current academic year. An applicant who has completed less than one semester, trimester, or quarter at another college or university must present an official transcript from that college or university. ***Concealment of previous attendance at another college or university is cause for cancellation of the student's admission and registration.***

The College currently has several articulation ("2 + 2") agreements with area (Virginia Community College System) colleges. Students interested in the details of such programs should contact their community college counselor.

A new or readmission applicant who has been suspended or placed on probation from this or any other institution for non-academic, social, or disciplinary reasons may be denied admission to the College.

Transfer Credit Evaluations

The Office of Admissions will carefully review all application materials and will inform the applicant in writing of its decision. In addition to weighing grades and test scores, the Office of Admissions takes into account, when relevant, evidence of the applicant's maturity, professional or military experience, co-curricular activities, community involvement, letters of recommendation, and the applicant's own educational and career objectives. Upon due acceptance, applicants are entitled to register and receive college credit for all work satisfactorily completed.

Courses Taken Elsewhere

The Dean of Admissions and Records will evaluate the credits of a student who transfers to the College from another regionally accredited institution of higher learning and will issue to the student a written statement of transferable credits. Up to a maximum of 92 semester hours of transfer credit will be given for courses which carry a passing grade and are comparable to courses offered by colleges similar in aims and purposes to those of Christopher Newport College. No more than 66 semester hours of credits may be transferred from courses taken in a junior or public community college. However, when a Virginia Community College student enters into a program agreement contract ("2 + 2 Program") with Christopher Newport College, the maximum allowable transfer credit will be 68 semester hours.

A student may transfer a maximum of 21 semester hours in courses representing the applied arts and sciences, including skill in a musical instrument, ceramics, arts and crafts, and the like.

No more than 60 semester hours may be applied toward the degree for work completed in extension, special institute, or correspondence courses, or credit earned from the College Entrance Examination Board (CEEB) Advanced Placement Program, the College-Level Examination Program (CLEP), U.S. military schools, or departmental placement examinations. Students already at the College who take credit-bearing courses offered by another institution must first receive written permission from the appropriate School Dean at CNC. This requirement applies to classified students only.

Unclassified Status

The College recognizes its obligation to students whose interests and backgrounds are not necessarily served through immediate participation in the College's degree programs but who could benefit from portions of the curriculum or special programs offered by the College. To meet this need, the College permits individuals to enroll as unclassified (i.e., non-degree seeking) students in both day and evening classes (when space is available). Unclassified students may be in several categories, including (1) students who, at the time they enroll, do not wish to pursue a degree program, (2) students whose prior academic records indicate that they would benefit by taking courses of their choosing before they commit themselves to a degree program, and (3) students who want to earn academic credit applicable to a degree from another college or university.

Unclassified students receive academic credit in the same manner as classified students, and they are expected to meet prerequisites for individual courses, unless officially excused by the Vice President for Academic Affairs.

Unclassified Applicants: Requirements

An applicant without prior college attendance must (1) be a graduate of an accredited secondary school or (2) have earned a G.E.D. Certificate. An applicant with prior college attendance will be considered on the basis of his/her college record(s). *If an applicant has been placed on academic suspension by the college (s) he had previously attended, the applicant may be considered for admission to Christopher Newport College (as an unclassified student) after at least one semester or two quarters have passed.*

For the student who requests unclassified (non-degree seeking) status, the College requires his/her previous, official academic records for counseling and advising purposes only. During registration and late registration, any student who does not have immediate access to such academic records may be admitted to the College as an unclassified student, but limited to a courseload of no more than seven semester hours. Such limitations will be removed by the Office of Admissions after records are received and reviewed.

An unclassified student may be permitted to carry a full-time academic courseload only if his/her prior academic records indicate sufficient aptitude and preparation. In some cases, the applicant for full-time admission may be limited to a part-time or minimum full-time courseload for the first semester of work at the College.

Documentation Requirements

The following documentation must be submitted in addition to the application for admission:

1. *Secondary School Transcript:* A high school graduate must request that an official transcript of his/her record be sent to the CNC Office of Admissions.

2. *G.E.D. Certificate:* An applicant who has earned a G.E.D. certificate must request that an official transcript of his/her G.E.D. certificate (with sub-scores), as well as an official transcript of his/her high school grades, be sent to the CNC Office of Admissions.

3. *College Transcripts:* Although the applicant should have official transcripts from all colleges that (s) he attended sent to CNC for advising purposes, an official transcript from the last college attended is required.

4. *Degree Holders:* Students who have a degree from another college must have the registrar from that school indicate so, in writing, to the CNC Office of Admissions.

Students admitted under Unclassified Status are generally not eligible to receive financial aid.

Admission Based on Equivalency Test (G.E.D.)

The College will consider for admission adults who have satisfactorily completed the military or civilian high school equivalency tests. If the applicant lacks the necessary preparation in specific high school subjects, (s) he may be placed into college-preparatory courses only. See those courses numbered in the 000 series in the Departments of English and Mathematics for course descriptions.

Early Admission Without High School Graduation

Students with strong academic abilities may be considered for admission to the College following completion of their junior year of high school. Such students should have taken a well-rounded program of studies, including English, college-preparatory mathematics, sciences, social sciences, and foreign languages.

In addition to the official high school transcript, Scholastic Aptitude Test (SAT) scores, and application as a classified student, the applicant is encouraged to submit any special evidence of preparation for college, such as special projects, etc. The high school counselor will be asked to speak directly to the question of the student's maturity and readiness for college. Any student interested in early admission should have an interview with an admissions officer before filing his/her application.

Enrichment Program for High School Students

The College invites the above-average high school student who has completed the work of the junior year to apply for admission to the College as a part-time unclassified student in the High School Enrichment Program. A primary objective of this program is to bridge the gap between high school and college and to afford the college-bound student the experience of learning in the college setting prior to graduation from high school.

More than 45 courses from 18 academic disciplines are available. College credit for these courses is awarded and may be used toward a degree at Christopher Newport College or may be transferred to another college or university. The transfer and evaluation of credits earned in college-level courses prior to high school graduation depend, however, on the decision of the receiving institution.

Applicants interested in this program must schedule an interview with a CNC admissions officer, who will explain the details of the program and issue application materials. Special admission requirements for the High School Enrichment program include: (1) An above-average academic high school record in college-preparatory courses and acceptable aptitude and achievement test scores, (2) Evidence of interest and determination to meet the challenge of college-level work, and (3) Written recommendation of the high school principal, headmaster, or guidance counselor. Since the College considers that the purpose of this program is for the academic enrichment of the student, enrollment in the program is limited to areas of study not normally available to the student in his/her high school.

Non-Credit College-Preparatory Program

Any student who registers for only non-credit, college-preparatory courses or who is limited to only non-credit, college-preparatory courses at the time of admission, may not register for regular academic courses until his/her academic performance has been reviewed by the faculty members teaching those courses and by the College Admissions Committee.

International Students

This school is authorized under Federal Law to enroll nonimmigrant alien students. International students must complete applications for admission for the Fall Semester by July 1, and for the Spring Semester by November 15.

Applicants who are not American citizens are required to do the following: (1) submit an application as a classified (i.e., degree-seeking student), (2) have official, translated transcripts from all secondary schools and colleges sent to the CNC Office of Admissions, and (3) submit Scholastic Aptitude Test (SAT) scores and the Test of English as a Foreign Language (TOEFL) scores to the CNC Office of Admissions. Refugees in the United States who cannot obtain official copies of their academic records must achieve a satisfactory score on a U.S. high school equivalency test.

International students should be certain that they have adequate funds before coming to the United States for study. As a non-residential, state supported institution, the College cannot provide either dormitory facilities or financial aid to foreign students.

Senior Citizens

Senior citizens (60 years of age or older) who are residents of the Commonwealth (for tuition purposes) have special opportunities for enrollment at Christopher Newport College or other state-supported colleges. Senior citizens may register for and attend courses at reduced tuition rates. Enrollment in non-credit courses (Continuing Studies) or in credit-bearing courses should be on an auditing basis. Refer to the section on payments and fees for details concerning eligibility requirements and other procedures.

Servicemembers' Opportunity Colleges

Christopher Newport College has been designated as an institutional member of Servicemembers' Opportunity Colleges (SOC), a group of over 400 colleges and universities providing voluntary postsecondary education to members of the military throughout the world. As a SOC member, Christopher Newport College recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and education. SOC has been developed jointly by educational representatives of each of the Armed Services, the Office of the Secretary of Defense and a consortium of 13 leading national higher education associations; it is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community and Junior Colleges (AACJC). Information on SOC is available in the Office of Admissions.

Advanced Placement/Credit by Examination

Students may earn advanced placement and/or credit through the following means:

1. *The Advanced Placement Program of the College Entrance Examination Board:* This program offers to students the opportunity to qualify for advanced placement and credit in American history, art, biology, chemistry, English, European history, French, German, Latin, mathematics, music, physics, and Spanish. Applicants for advanced placement should plan to take the College Board Advanced Placement Test offered each May by secondary schools teaching Advanced Placement (AP) courses. The College will evaluate test results and send written notification of its decision to the student.

2. *English Department Advanced Placement:* Students who have had an unusually excellent background in literature and writing, either in school or in life experiences, may arrange for advanced placement in English so as to be excused from ENGL 101-102, or at least ENGL 101. The Department of English provides three methods by which students may receive advanced placement:

- (a) The College-Level Examination Program (CLEP) testing program. Students may apply only the CLEP English General Examination (with essay) toward credit at CNC. Student taking the CLEP English General Examination (without essay) must submit a supplementary impromptu theme with the examination through the Office of Counseling and Career Services.

(b) The Advanced Placement program. Successful completion of Advanced Placement (AP) courses in secondary school and a grade of 5 on the AP English examination will earn the student credit for ENGL 101-102. A student earning a grade of 3 or 4 may apply for credit (see **Note** below) or take the CLEP general examination with essay.

(c) A's and B's all the way through secondary school in college-bound English sections, and an SAT verbal score of at least 600. The student must voluntarily submit to an advanced placement examination administered by the CNC Department of English. The Chairman's Advisory Committee scores the test and, in some cases, grants credit for ENGL 101-102.

Note: A student who gets a "B" or better in ENGL 101 or ENGL 102 at CNC may be allowed, with permission of the instructor and the Vice President for Academic Affairs, to take ENGL 102 (or ENGL 104) and ENGL 201 (or ENGL 205/ENGL 207) simultaneously.

3. *The College Level Examination (CLEP) program of the College Entrance Examination Board:* Christopher Newport College is a test center for the administration of the CLEP general and subject examinations. For details on earning credit through CLEP, please refer to the *Counseling and Career Services* section of this catalog.

Note: No more than 60 semester credits earned through special institutions, accredited correspondence study, examination (including CLEP), extension division study, or advanced placement in an academic department at CNC may be applied toward a CNC degree. These credits cannot be used to qualify the student for graduation with honors.

Auditing Students

An individual who wishes to take courses on an auditing basis should contact the Office of Admissions for a special application form. Auditors are not required to furnish any academic documentation.

Summer Session Applicants

Applicants interested only in summer session courses of study should contact the Office of Admissions for a *Summer Session Bulletin*, which includes the application form for admission. The *Summer Session Bulletin* is usually available by mid-April.

A new or readmission applicant who has been suspended or placed on probation from this or any other institution for non-academic, social, or disciplinary reasons may be denied admission to the College.

Admissions Summary

Type of Application	H. S. Transcript	S.A.T. Scores	Interview	Deadline	Notices (See Below)
Classified Status					
Freshman	Yes	Yes	Optional	8/1	1
Styron Scholar	Yes	Yes	Yes	3/15	2, 3
Early Admission	Yes	Yes	Yes	8/1	3
Transfer (less than 24 credits)	Yes	Optional	Optional	8/1	1, 4
Transfer (more than 24 credits)	No	No	Optional	8/1	4
Foreign Student	Yes	Yes	Yes	7/1	2, 4, 5
Unclassified Status					
No Prior College(s)	Yes	No	Optional	8/1	1
Prior College(s)	No	No	Optional	#	6
Four-Year College Graduate	No	No	Optional	#	2, 7
High School Enrichment	Yes	Yes	Yes	8/1	3
Auditor	No	No	No	#	2

Deadline is end of first week of classes.

1. GED Certificate required if high school not completed; 2. Special application required; 3. Letter(s) of recommendation required; 4. Official transcripts from all prior colleges required; 5. TOEFL test scores required; 6. Official transcript from last college attended is required; 7. Degree confirmation (not a transcript) is required.

Office of Student Life

The Office of Student Life organizes and/or coordinates the campus student activities program, student government, on-campus student employment program, and new student orientation; it also offers a listing service for off-campus housing. In addition, the Director of Student Life is administratively responsible for the Campus Center Building and the Office of Graphics and Publications.

Student Employment Program

Students interested in on-campus (non-work/study) employment should consult the Office of Student Life, which maintains a list of on-campus positions, administers the hiring procedures, and establishes pay scales. Records of employment of student employees are maintained to provide reference information for those students seeking full-time employment. For information about job availability, contact the Office of Student Life in Room 189 of the Campus Center Building, or call 599-7260.

Orientation

The Office of Student Life is responsible for offering orientation for all new freshmen. This extensive program includes placement testing, faculty advisement, and early registration for those students admitted early enough to participate. Orientation programs are offered during the summer for students entering in the fall semester and in January for students entering in the spring semester. Programs are geared to assist students in adjusting to the demands of student life at CNC.

In addition, the College has also begun a Parent/Family Orientation program to help families of entering CNC freshmen understand the academic and social aspects of college life, the commuting experience, and the kinds of problems families of new students may encounter. These programs are offered in both the fall and spring semesters.

Off-Campus Housing

Although Christopher Newport College does not offer any on-campus dormitory facilities, the Office of Student Life has a listing of nearby off-campus housing. The College lists only those who request such listing and who maintain a policy on non-discrimination. Both group and individual listings are available. The College accepts no responsibility in lease agreements and lists only on a space available basis. For information call 599-7260.

Student Association

All regularly enrolled students at CNC are members of the Student Association. The officers are elected each April by general vote of the student body and begin their year in office immediately following spring commencement. The major function of SA is to provide a forum for the expression of student views and interests to the faculty and administration of the College. The Governing Board is comprised of the Executive Council, President, three Vice Presidents, Student Auditor, and representatives from all funded clubs and organizations on campus.

Campus Program Board

The Campus Program Board is comprised of students representative of the various constituencies in the student body, student affairs staff members, and full-time teaching faculty. The board is charged with a major role in the budgetary process for all clubs and organizations approved and sanctioned by the Student Association. In addition, most general student activities are planned by an active sub-committee with final approval by the full Board. The Board solicits individual or small group requests for events, speakers, activities, etc. By offering cultural, intellectual, and spiritual programs, the Campus Program Board contributes to the quality of campus life.

Clubs and Organizations

Christopher Newport College encourages students to participate in the extra-curricular life of the College as well as in its academic life. A number of social, religious, service, and interest organizations have been established. The Student Association has budgetary responsibility for all sanctioned clubs and organizations on campus. Students interested in creating additional clubs are encouraged to consult with the Director of Student Life.

A list of the currently active clubs and organizations is as follows: Alpha Chi, Alpha Phi Omega, American Marketing Association, Biology Club, Captain's Players, Concert Music Club, Equestrian Club, German Club, Government Club, History Club, Horticulture Club, Intervarsity Christian Fellowship, Juggling Society, Minority Students' Association, Philosophy Club, Ranger Club, Running Club, Sailing Club, Sigma Tau Delta, Sociology/Social Work Club, Spanish Club, Studio A, and Unique Individuals.

Fraternities and Sororities

Since the independence of Christopher Newport College in 1977, the Greek movement has become an integral part of campus life. In 1980-81 an All Greek Council was formed to guide and assist in the Greek life on campus. The current local and national groups are: Alpha Kappa Alpha, Alpha Kappa Psi, Delta Sigma Theta, Pi Kappa Sigma, Sigma Pi, and Sigma Tau Gamma.

Intramurals

The Student Director of Intramurals and three Assistant Directors coordinate a wide variety of activities that over 800 members of the student body participate in annually. The team activities are: Flag football; powder-puff football; volleyball; basketball; softball; bowling; and soccer. Individual activities include: Arm-wrestling; backgammon; foul-shooting; frisbee; golf; horseshoes; ping-pong; pool; racquetball; superstars; tennis; track and field relays; turkey trot; video games; and weight-lifting.

Campus Ministry

Through United Campus Ministries, a campus minister is available to serve the students of Christopher Newport College. United Campus Ministries is an ecumenical group of administrators, faculty, students, clergy, and laity, directly or indirectly involved with the College, who have a common interest in religious ministry at the College. The campus minister works with students on an informal basis, is available in times of crisis, and initiates and carries out programs with student advisors that promote community within the College and/or bring a religious and spiritual dimension to issues of concern to the College community. The office is in CC204 and the phone is 595-7604.

Student Publications

The Publications Review Board is charged with the responsibility of recommending editors and reviewing all procedures, guidelines, and practices for the three major student publications. The board is comprised of the Director of Student Life, the Student Auditor, faculty advisors, and student editors of the publications. The Office of Student Life encourages students interested in journalism, creative writing, art, and photography to investigate the student publications listed below:

The Captain's Log, the College's official student newspaper, offers practice in journalistic writing, advertising, and photography. It is printed more than twenty times per year and covers all areas of interest on the campus.

Currents, the campus literary magazine, publishes semiannually the creative artwork, writing, and photography of interested students, faculty, and staff.

Intercollegiate Athletics

Christopher Newport College has an intercollegiate sports program for both men and women. The College competes at the Division III level of NCAA and is a member of the DIAC (Dixie Intercollegiate Athletic Conference). Current intercollegiate sports for men are soccer, cross-country, basketball, golf, tennis, indoor and outdoor track, and baseball. The sports currently offered for women are tennis, cross-country, indoor and outdoor track, volleyball, basketball, and softball.

The College teams play under the name *Captains* and *Lady Captains*. The school colors are royal blue and silver. Students interested in participating in varsity athletic programs should contact the Office of Intercollegiate Athletics at 599-7025. Persons interested in cheerleading should contact this office for further information.

Campus Police

The Campus Police Office is located in Room 238 of the Campus Center Building. Campus Police are responsible for the protection of life and property, prevention of crime, preserving peace and order, the investigation of crimes and complaints, and the enforcement of federal, state, and local laws within the confines of the CNC campus. Campus Police are available 24 hours a day, and the phone number is 599-7100. The 24-hour EMERGENCY telephone number is 599-7253.

Safety is a function of the Campus Police, who are responsible for conducting fire and safety inspections. Fire or safety hazards should be reported to the Campus Police, at 599-7053.

Students, faculty, staff, and College visitors wishing to use College parking facilities must register their motor vehicle at the Campus Center information desk, at which time a parking permit will be issued. Persons registering motor vehicles on campus must have liability and physical property insurance in force, a valid motor vehicle operator's license, and a valid registration card for the vehicle(s) they wish to register. All unregistered vehicles parked on the College campus will be subject to a fine. Students, faculty and staff must park in the designated parking lots. Regulations concerning parking on the College campus are available at the Campus Center information desk or in the Campus Police office.

A lost and found service is maintained by the Campus Police office. Property lost or found on the College campus should be reported to the Campus Police.

Office of Counseling and Career Services

The Office of Counseling and Career Services offers a wide array of services designed to assist students in meeting their personal growth needs, administers the CLEP, helps students in making career decisions and in securing part-time or full-time employment. This office periodically publishes a newsletter which features topics related to careers and personal development. The newsletter, entitled *Onward 'n' Upward*, is then made available at locations throughout the campus.

Counseling

Many students find it helpful to discuss personal problems with one of the center's professionally trained counselors who can provide an objective ear to identify problems and a way to effectively deal with them. Students may discuss freely and confidentially their feelings, problems, or interests concerning educational and vocational decisions, marital and family relations, as well as personal challenges.

Counselors and psychologists in the center also have a wide variety of experiences in conducting outreach groups and mini-workshops. Such groups and workshops are available to students who would like to learn more about themselves and others and to develop effectiveness in interpersonal relationships. Group offerings include such topics as Career Explorations, Women's Support, Minority Self-Help, Decision Making, Assertiveness Training, Test Anxiety Management, College Survival Skills, and other related areas. For students just entering the College, the center administers placement tests to assist the new student in selecting courses consistent with his/her own interests and academic background.

Career Development

A focal point of the career planning activities is a series of career programs scheduled throughout the year. These informative programs are designed to enable students to learn about various career fields. The office also sponsors programs to assist students in developing interviewing skills and in writing resumes. In addition, an up-to-date career library containing information on career opportunities, employer characteristics, interviewing and job-finding skills, and graduate professional schools is maintained.

Counseling and Career Services also offers tests to determine a student's abilities, personality and vocational interests. Students may utilize computer-assisted career data search which provides up-to-date information on careers, employment outlook, etc. Also available are information booklets on such tests as the GRE, GMAT, LSAT, etc.

Placement Services

The Office of Counseling and Career Services assists students in locating part-time and full-time positions. Placement activities revolve around a computerized registry of students looking for positions and a job data bank which identifies employers with openings. Students about to graduate may also participate in the on-campus recruiting program when corporations and organizations conduct on-campus interviews.

Students are encouraged to make an appointment with a counselor at the center, room 146, Campus Center, or by calling 599-7046.

CLEP

The College-level Examination Program (CLEP) is also administered through the Office of Counseling and Career Services. Through CLEP, students may earn college credit for knowledge achieved outside the classroom. This knowledge may have been acquired through correspondence and university extension courses, educational television, on-the-job training, independent study, travel, or reading. CLEP examinations provide a means whereby the student may demonstrate his/her knowledge with a potential for saving time and money. For specific information on CNC's CLEP acceptance policy, test dates, and fees, contact the CLEP administrator in the Office of Counseling and Career Services.

CLEP Subject Examinations

Individuals who have acquired knowledge of a subject through wide and careful reading, independent study, non-accredited instruction, or some other method have the opportunity to earn college credit through examination.

Subject exams, considered for credit at CNC are: American Government, American History I and II, American Literature, Analysis and Interpretation of Literature, General Biology, Calculus with Elementary Functions, College Algebra, College Algebra-Trigonometry, College Composition, Educational Psychology, English Literature, General Chemistry, General Psychology, Human Growth and Development, Introductory Business Law, Introductory Macroeconomics, Introductory Microeconomics, Introductory Marketing, Introductory Sociology, Trigonometry, Western Civilization I and II.

In order to avoid the possibility of duplicated credit, students who have received collegiate instruction in any subject should consult with the Vice President for Academic Affairs before proceeding to attempt a CLEP subject exam in the same area. Students may take subject exams in their majors provided they plan to take at least 12 credits of work in their major at the College. Consult other sections of the *College Catalog* for a complete statement of academic requirements.

A Christopher Newport College student may take a subject exam in a course which s(he) has failed and receive credit with a qualifying CLEP score. When CLEPing a previously failed course, the student must be authorized to take the examination before it is attempted, either by his/her faculty advisor or the Office of the Registrar.

A brochure listing examinations for which credit may be given, scores required, and a guide to the policies of Christopher Newport College may be obtained from the CLEP Testing Center located in the Office of Counseling and Career Services.

CLEP General Examinations

Students who have earned no more than one semester of credit for a course related to CLEP General Exam, and who by their work or other experience feel they have gained substantial knowledge, are eligible to take the General Examinations. It should be emphasized that the general-level examinations are equivalent to end-of-year exams and require more than a cursory knowledge of the areas. Each test in the General Exam battery may yield six credits toward the Distribution Requirements of the College.

Christopher Newport College will accept CLEP General Examination scores from other test centers, but credit for the CLEP score will be based on the CNC standard.

The General Examination battery consists of: English Composition w/essay (English 101-102); Humanities (six credits in humanities requirements); Mathematics (six credits for a beginning math course); Natural Sciences (six credits in science); Social Sciences-History (six credits toward distribution in the social science).

English Composition w/essay is given four times per year; January, April, June and October.

Language Placement Examinations

Credit can also be earned in French, German, Latin, or Spanish by means of a departmental placement test. Successful completion of the examination may yield the student from four to 14 hours of credit and may satisfy the language distribution requirement.

Application for Placement Examinations must be made through the Chairman of the Department of Modern and Classical Languages and Literature, phone 599-7107.



Office of Financial Aid

Christopher Newport College offers financial assistance to qualified students who wish to defray part of their total college expenses. The College participates in a variety of programs, most of which are administered through the Office of Financial Aid. Types of aid include scholarships, grants, loans, and student employment. Although most of the financial aid programs are for students who are determined to have financial need, there are some programs that use criteria other than financial need for selection of recipients. Applications and additional information may be obtained at the Office of Financial Aid in Room 239 of the Administration Building or by calling (804) 599-7170.

The College offers a number of awards each year to qualified students who have been accepted for admission as classified (degree-seeking) students. Some of these awards are available only to Virginia residents, while others may be given without regard to state residency. Most financial aid offered is based on established financial need and scholastic achievement. Financial need can be defined as the difference between the cost of education at Christopher Newport College and the amount of money an applicant and his/her family can make available from their income and assets to meet the expense of that education.

A student must be enrolled as a classified student on at least a half-time basis, must be in good academic standing and be making satisfactory academic progress to be eligible for most financial aid programs. Some programs require full-time enrollment.

Financial aid is awarded for one academic year only, but may be renewed for succeeding years upon reapplication and continued eligibility. The deadline for applying for CNC-administered financial aid is May 1 for consideration in the following academic year. Later deadlines are established on an annual basis for the Pell Grant and Guaranteed Student Loan programs. Contact the Office of Financial Aid for these deadlines.

An entering student must be accepted for admission before receiving a decision letter regarding financial aid. Announcements of financial aid decisions for on-time applicants are normally made by July 1. The applicant will be notified in writing by the Office of Financial Aid.

Application Requirements

To be considered for financial aid, a student must comply with the following:

1. Be enrolled or accepted for enrollment at CNC as a classified student.
2. File an application for financial aid with the CNC Office of Financial Aid by May 1. This application must be completed annually.
3. File a Financial Aid Form (FAF) with the College Scholarship Service. The results must be received by the Office of Financial Aid by May 1. (Allow four to six weeks for processing). The FAF must be filed each year the student applies for financial aid.

Financial Aid Available at CNC

The following federal and state financial aid programs are available at CNC:

Federal

Pell Grants
Supplemental Education Opportunity Grants (SEOG)
College Work-Study (employment)
National Direct Student Loan (NDSL)
ROTC Scholarships

State

State Law Enforcement Officers Education Program (SLEOEP)
Virginia State Student Loans (VSSL)
Virginia State Student Scholarships (VSSS)
Virginia Transfer Grant (VTG)
Virginia War Orphans Education Program Scholarship

Private Scholarships— Made available by private donors in varying amounts, these scholarships are based on financial need and/or other specific features prescribed by the donor.

- Margaret Ann Webb Abbit Memorial Scholarship
- Federal APD of Tidewater Scholarship
- Allied Corporation
- Alumni Association Scholarship
- Ann Milner Amott Scholarship
- (Junior Woman's Club of Newport News)
- James H. Cale Memorial Scholarship
- Christopher Newport College General Scholarship
- James Thomas Clark, IV Memorial Scholarship
- Hampton Roads Classification and Compensation Scholarship
- Coats and Clark, Incorporated Scholarship
- Tom Fiscella Memorial Scholarship
- Daisy Garland and Sidney Harmon Scholarship
- Wallace P. Greene Memorial Scholarship
- Earl R. and Leon Q. Hatten Scholarship
- Leon Hodge Memorial Scholarship
- Thomas J. Hundley Memorial Scholarship
(Hampton-Newport News Board of Realtors)
- Granville P. Meade Scholarship
- Louis Morewitz Scholarship
- Peninsula Rotary Club Scholarship
- Rotary Club of Newport News Endowment Scholarship
- Styron Scholarships
- Warwick Rotary Club Memorial Endowment Scholarship

- Helen Mugler White Scholarship
(Hilton Village Junior Woman's Club)
- William D. Wolf Memorial Endowment Scholarship
- Madeline W. Zodda Memorial Endowment Scholarship

Please consult the *CNC Financial Aid Guide*, available in the Office of Financial Aid, for specific information on the application procedures and eligibility criteria for federal, state and private programs.

Student Loans

Students not eligible for the programs listed above or who need assistance in addition to those programs may want to consider the following student loan programs for additional resources:

Guaranteed Student Loans – Guaranteed Student Loans are made to eligible students by commercial lenders such as banks and credit unions. The maximum loan is \$2,500 per academic grade level. The loan is not based on financial need unless the combined adjusted gross income of the student and parents exceeds \$30,000. If such is the case, the student must demonstrate financial need. The interest on the loan is paid for the student by the federal government while (s) he is enrolled on at least a half-time basis (six credit hours). Six months after the student graduates or leaves college for other reasons, repayment of the principal must begin. Interest begins to accrue to the borrower when repayment begins. The current interest rate for new borrowers is 8%. Virginia residents who cannot find a lender may apply for a Guaranteed Student Loan through the Virginia Education Loan Authority (VELA). Students needing assistance in finding a lender should contact the Office of Financial Aid.

PLUS Loan Program – The PLUS Loan Program is a non-need-based source of loan funds available to parents of dependent undergraduate students and to independent undergraduate students. Parents of dependent students may borrow up to \$3,000 yearly and independent students may borrow up to \$2,500 yearly. Parent borrowers must begin repayment within 60 days. The interest rate on a PLUS loan is currently 12%. The lenders are participating banks, savings and loan associations and credit unions. Students may contact the Office of Financial Aid for assistance in finding a participating lender.

Short-term Emergency Loans

The John Stephen Rasmussen Memorial Fund – This emergency loan fund was established by the community in 1972 in memory of John Stephen Rasmussen, a 21-year-old student who lost his life in a fire while in the act of saving others. He was posthumously awarded a Carnegie Medal. Students may borrow, interest free, sums (funds permitting) for a period not to exceed 30 days. The applicant should have a student identification card available when applying to the CNC Business Office.

Emergency Loan Fund – An emergency loan fund was established in 1967 by the Sophomore Class in honor of President James C. Windsor. Students may borrow, interest free, sums (funds permitting) for a period not to exceed 30 days. The applicant should have a student identification card available when applying to the CNC Business Office.

Satisfactory Progress

Students receiving financial aid must remain in good academic standing and must be making satisfactory progress toward the completion of their degree. Please refer to the *CNC Financial Aid Guide* for an explanation of what constitutes good academic standing and satisfactory academic progress. This information can also be obtained by calling the Office of Financial Aid.

Estimated Costs

Budget planning for attendance at CNC should consider both direct and indirect costs. The direct charges are tuition and fees. Please refer to the Payments and Fees section of this Catalog for a listing of tuition and fees. Indirect costs are the normal expenditures for living. Estimated living expenses are discussed in detail in the *CNC Financial Aid Guide*.

Additional Information

Students interested in receiving financial aid are strongly encouraged to obtain a copy of the *CNC Financial Aid Guide* and read it thoroughly. You may obtain a copy from the Office of Financial Aid in Room 239 of the Administration Building or by calling (804) 599-7170. Additional questions, concerns or information requests should be directed to the staff of the Office of Financial Aid.

Office of the Registrar

The Office of the Registrar, located in room 213 of the Administration Building provides information to students concerning their enrollment, academic record, degree requirements, etc. This office provides the following services: 1) registration, 2) change of schedules, 3) grade reports, 4) maintenance of permanent academic records, 5) certification of enrollment, 6) certification of graduation, 7) transcripts, and the publication of the *Registration News* including the schedule of classes and registration instructions.

Students should consult the Office of the Registrar for questions concerning the academic calendar, registration, location and meeting times of courses, dropping or adding courses, withdrawals, verification of records, degrees, graduation, and academic status including probation and suspension.

Special Services for the Handicapped

The Office of the Registrar provides special scheduling services for handicapped students. Handicapped students should contact this office **prior to registering for classes** to make arrangements for such scheduling.

Academic Policies and Regulations

The academic policies stated hereafter apply to all students who register at Christopher Newport College. Matters of interpretation of these policies are decided by the Vice President for Academic Affairs or his designate.

Program Planning and Placement

Prior to registration, the Office of Counseling and Career Services administers placement tests to freshmen, new transfer students, and new full-time unclassified students. Such students meet with an advisor to discuss the results of these tests and plan a program for the coming semester. In the subsequent semester, students who declare a major will be assigned to the department chairman or another faculty member in their major. Undecided students may consult their initial advisor. All other currently enrolled students must meet with their advisor prior to each registration. Unclassified students who register for fewer than seven credits are not required to meet with an advisor.

Registration

The College has established a pre-registration procedure for the fall and spring semesters and the summer session. This procedure is published prior to each semester, in time for students to take advantage of this option. The student who pre-registers for the fall semester must pay all tuition and fees or make other arrangements with the Business Office by the announced deadline date in August; the student who pre-registers for the spring semester must complete all financial arrangements with the College by the announced deadline in January, in order to reserve class space. The student who enrolls only in evening classes and wishes to pre-register is subject to the above regulations concerning tuition and fees. Upon payment of tuition and fees, the student is registered and needs only to begin classes at the designated times. Freshmen and transfer students are expected to attend an orientation program before registering.

The student who wishes to enroll in classes but who did not pre-register must be present on the designated days for general registration (see the College Calendar for the exact dates). All financial arrangements must be made before registration is considered to be valid.

Late Registration Fee

A non-refundable fee of \$15 will be charged each student registering during the late registration period.

Changes in Registration

After registering for a program of courses, whether in day or evening classes, the student may make course changes only through the Office of the Registrar on a *Schedule Change* form. ***Unless a course change is made in this manner, it will not be recognized as valid by the College.***

Add/Drop

A *Schedule Change* form for adding or dropping a course must be obtained from the Office of the Registrar and completed by the student.

Registration is normally open for five academic days at the beginning of each semester. During this time, a student may add or drop courses, or make other schedule changes. ***No courses may be added after this period. Courses dropped during the prescribed add/drop period do not become part of the student's permanent record.***

Withdrawal from a Course

Students may withdraw from a course(s) during the *withdrawal without penalty* period which lasts from the end of the *add/drop* period to approximately nine weeks into the semester (see College calendar for date) by completing the withdrawal form. Withdrawals during this time will be recorded with a grade of "W".

After the last day to *withdraw without penalty* until the last day of class and before examinations begin, students may withdraw from a course(s) and a grade of "F" if failing or "W" if passing will be assigned by the instructor who must sign the withdrawal form (obtained in the Office of the Registrar).

Withdrawal from the College

Withdrawal from the College means that the student ceases to attend all classes, and is no longer enrolled in the College. Any student who desires to withdraw from the College should do so by written application to the Registrar. Unless a withdrawal is made in this manner, it has no official standing, and will not be recognized as valid by the College. No student may withdraw after the last day of classes before the final examination period. When a student withdraws from the College, the grade in each course is determined as if the withdrawal were from that course.

Medical Withdrawal

A student who wishes to withdraw from the College for medical reasons must have a letter sent to the Office of the Registrar by a physician, testifying that the student is incapable of completing his/her academic work because of medical reasons. Upon receipt of that letter, all grades for the semester in question will be noted as "W" on the student's transcript.

Unofficial Withdrawal

A student who withdraws from a course or from the College without notifying the Office of the Registrar will receive a grade of "F" in each course taken.

Auditing a Course

A student may audit a course, with the approval of his/her advisor, if class size permits. An auditing fee equal to in-state tuition for each semester credit is charged. The student registered on an audit basis is subject to attendance regulations as specified by the instructor, but is not required to take tests or the final examination. With the instructor's permission, the student may complete any of the required assignments. The student who audits a course receives no regular letter grade, but his/her permanent record will indicate *Audit* for that course. A change from *Audit* to *Credit* may be made only during the scheduled add/drop period. If a student registered on an auditing basis fails to comply with the attendance regulations specified by the instructor, the instructor may change the final notation for the course from "Audit" to "Withdrawal," with the latter entered on the permanent record. Out-of-state students must make necessary financial arrangements with the College Business Office before the change is effective. A student may change from *Credit* to *Audit* up to the last day of class if passing.

Independent Study

The purpose of Independent Study is to enable qualified students with junior or senior standing (see "Classification of Students") to enrich their programs through directed reading or independent research, under faculty supervision and for college credit. The goals of the Independent Study, the prerequisites, stages, and grading procedures are agreed upon in writing by the student and the faculty member directing the Independent Study. This should be done by the end of the pre-registration period for the session in which the Independent Study is to be carried out.

Independent Study is ordinarily limited to the students' major or minor fields of study, where they have qualified themselves by previous academic training. Students may take a maximum of three hours of independent study in one session, and a maximum of six hours in their total academic program. Independent Study may be offered in both regular and summer sessions. Students must have an overall Grade Point Average (GPA) of 2.50 to qualify for Independent Study. A copy of the Independent Study form must be filed with the appropriate department chairman within five days of its being signed by both student and faculty member. Written approval of the department chairman or of the majority of the department's faculty is needed before Independent Study can be directed by adjunct faculty or conducted off-campus. Independent Study Forms are available in the Office of the Registrar. A student must present a properly completed and approved Independent Study Form at the Registrar's Office at the time of registration in order to enroll in any independent study course.

Cross-Registration Program

The College offers its degree-seeking students with a 2.0 cumulative grade point average, an opportunity to take up to nine credit hours in total through the cross registration program at any of the participating Virginia Tidewater Consortium colleges. A participating student can only register during the regular fall and spring semesters, and only for courses not available at CNC during the current or subsequent regular semester. The coursework taken through this program will appear on the permanent record card as resident credit. The required form must be obtained from the Office of the Registrar.

Class Attendance

The College expects that students will regularly attend all of their scheduled classes. An educational system based largely upon classroom instruction and analytical discussion depends upon the faithful attendance of all students in the course. Irregular attendance detracts from the student's learning and prevents participation in the important intellectual exchanges that occur among students and instructors. Therefore, the College expects and encourages regular class attendance.

The College does not, however, establish specific attendance policies; these are established at the discretion of the individual schools, departments, and/or instructors. A student with excessive absences will receive a grade of "F" upon the instructor's recommendation. If excessive absences are caused by an extreme emergency and the student is penalized by the instructor, the student may appeal the decision through the Grade Appeal Policy. Other regulations are as follows:

1. Missing a class meeting does not in any way lessen the student's responsibility for that part of the course which has been missed.
2. Instructors may differentiate between excused and unexcused absences and authorize makeup tests when appropriate.

Examinations

The examinations given at the end of each semester take place at times announced on the examination schedule, which is published in the *Registration News*. Students are required to take all of their final examinations at the times scheduled, unless excused as noted below (see *Absence From Examination*). The College does not authorize re-examination, nor will changes be permitted unless the student has examinations scheduled in four consecutive periods. Applications for changes in the schedule for above reasons should be made to the Office of the Registrar before the examination.

Absence from Examinations

A student may request to be excused from taking an examination at the prescribed time, by presenting an acceptable reason for the expected absence to the instructor **before** the examination. An excuse on the grounds of illness will be accepted when it is verified by a physician and received by the Registrar. The instructor should be notified as soon as possible, if illness or any other emergency causes a student to be absent from an examination. If the instructor cannot be notified, the student should notify the Office of the Registrar as soon as possible.

Grading System

Grade and Meaning	Grade Point Value Per Semester Hour
A (Excellent)	4
B (Above Average)	3
C (Average)	2
D (Minimum Passing)	1
F (Failed to meet minimum requirements)	0
I (Incomplete) Not computed in cumulative grade point average.	
P (Pass) Not computed in cumulative grade point average.	
R (Student should repeat course) Applies only to Non-Credit College Preparatory courses.	
W (Withdrew) Within prescribed time or passing when dropped prior to last day of classes.	
AU (Audited course) No degree credit.	

Grade Point Average

The Grade Point Average (GPA) is computed by dividing the total number of academic hours attempted into the total number of grade points earned.

Incomplete Grade

An "I" grade is given when the student has postponed with the consent of the instructor, the completion of required assignments, or when the student was absent from the final examination due to illness or any other emergency. If the postponed work has not been completed by the end of the next semester, the "I" grade automatically becomes a grade of "F", unless the instructor authorizes in writing to the Registrar, an extension of time to make up the incomplete.

Grades for Repeated Courses

A course in which a grade of "D" or "F" has been earned may be retaken with the permission of the student's advisor. The original grade, with a line through it, will remain on the student's permanent record. Only the grade, credits, and quality points for the most recent enrollment will be counted toward the degree.

Required or distribution courses in which "D" or "F" has been earned may be repeated no more than twice (for a total of three enrollments). Other courses in which "D" or "F" is earned may be repeated only once (for a total of two enrollments).

The Pass/Fail Option

Senior Pass/Fail Option

Seniors (see "Classification of Students" section) may take one elective course each semester on a Pass/Fail basis except for Distribution, major, and concentration or program requirements. Seniors, no matter how many semesters they are so classified, may exercise the *Senior Pass/Fail Option* no more than TWICE. Students must file the Pass/Fail form in the Office of the Registrar by the deadline date for withdrawal without a grade penalty.

Total Pass/Fail Credits

A total of THREE (3) courses recorded as Pass/Fail on the transcript may be offered toward graduation, including courses offered as Pass/Fail ONLY and courses elected under the *Senior Pass/Fail Option*. Successfully challenged courses (see "Challenge" section) are NOT counted toward the three allowed toward graduation as herein specified. Exceptions are authorized by the Vice President for Academic Affairs on the recommendation of the Degrees Committee.

Grade Reports

A grade report is sent at the end of each semester to each student. A mid-semester grade report is sent to each classified freshman which indicates the academic progress in each course at that point. Mid-semester grade reports are not sent to unclassified students and are not recorded on the student's permanent record.

Dean's Academic Honor List

A student who, in any semester has been enrolled in at least 12 credit hours, and has earned no grade below a "C" in academic subjects, and who makes a grade point average of at least 3.25 is placed on the Dean's Academic Honor List for the following semester.

Full-time and Part-time Status

The normal full-time courseload includes a minimum of 12 credits and normally a maximum of 18 credits, 15 credits being considered an *average* full-time courseload. In any semester, a student is defined as part-time if, during that semester, (s) he is registered for 11 or fewer credits. The College may either require or advise a student to carry a part-time courseload for academic or other reasons.

Overload Schedule

With the written consent of his/her advisor, a student may carry 18 credits in a semester, or 15 credits in the (entire 12-week) summer session. Any student desiring to carry more than 18 credits in a semester, or more than 15 credits in the entire summer session must formally petition the Academic Status Committee before registration. The petition must be submitted in writing to the committee, through the Office of the Registrar. The committee may recommend that permission to carry such an overload be granted to an exceptionally able student in truly compelling circumstances. Final disposition of such recommendations is decided by the Vice President for Academic Affairs. Petitions should be addressed to: Secretary, Academic Status Committee, Office of the Registrar, Christopher Newport College, 50 Shoe Lane, Newport News, VA 23606-2988.

Permission To Take Courses Elsewhere

For the protection of the classified (degree-seeking) student concerned, prior written approval for courses to be taken at other institutions must be granted by the appropriate School Dean. Also, students enrolled in the last 30 credits of their programs must petition the Degrees Committee, c/o the Office of the Registrar, Christopher Newport College, 50 Shoe Lane, Newport News, Va 23606-2998. The *Request to Take Courses Elsewhere* form is available in the Office of the Registrar.

Forgiveness Policy

A student who has not taken any courses at the College for a period of two years may apply to the Registrar, acting for the College Committee on Academic Status, to have his/her past academic record at CNC forgiven. After his/her return to the College the student must complete 12 semester hours with a 2.00 quality point average before applying for forgiveness. The record of forgiven courses will remain on the student's transcript, but it will be noted that these courses have been forgiven. Such forgiven courses will not fulfill any academic requirements, nor will they be computed in the student's new grade point average.

Classification of Students

Students, both full-time and part-time, are classified as follows:

Freshman: From 1 through 23 credits

Sophomore: A minimum of 24 credits and 48 grade points

Junior: A minimum of 54 credits and 108 grade points

Senior: A minimum of 85 credits and 170 grade points

Challenging a Course

Students who have become exceptionally knowledgeable through life experiences in the subject matter of certain courses offered at the College may challenge these courses. The student may earn credit for such courses upon demonstrating proficiency through evaluation procedures established by each academic department at the College. Only those courses which do not appear on the student's CNC transcript or any other college transcript may be challenged. When a course is successfully challenged, a grade of "P" (Passed) and the corresponding credits will be entered on the student's permanent record. No entry will be made on the student's permanent record if the challenge is unsuccessful. A student is allowed to challenge a particular course only once. Students are directed to the brochure *Procedures on Challenging Courses*, available in the College Office of Admissions.

Continuance in College

Through an instructional program supplemented by counseling and faculty advising, the College attempts to give students every encouragement to maintain a satisfactory level of academic achievement. The College expects the student to make reasonable academic progress. Unless the student demonstrates the incentive and ability to meet the minimum scholastic requirements, the College cannot justify the student's continuance at the College.

Minimum Standards for Continuance

While evaluation of academic progress is made at the end of each semester, the evaluation of the student's academic records is generally not made until completion of at least 15 credit hours of academic courses. The unclassified student will have his/her academic record evaluated at intervals of 15 semester hours, this evaluation being done in the interest of the student and in consideration of the student's stated goals.

The student who achieves less than the minimum standard as stated below will be suspended or put on academic probation. The student may appeal this action to the Academic Status Committee, which will advise the Vice President for Academic Affairs on the merits of the appeal and make recommendations to the Vice President for Academic Affairs concerning its disposition. The student who achieves the minimum standard but who does not make reasonable progress in any given semester will receive a written warning from the Academic Status Committee.

Credit Hours Attempted	Minimum Good Standing	Eligible for Probation	Eligible for Suspension
15-29	1.50	1.00-1.49	.99 or less
30-44	1.70	1.30-1.69	1.29 or less
45-59	1.80	1.50-1.79	1.49 or less
60-74	1.90	1.75-1.89	1.74 or less
75-89	1.98	1.90-1.97	1.89 or less
90 or more	2.00	1.96-1.99	1.95 or less

In addition to meeting this minimum standard of academic performance, the student is expected to maintain each semester a 2.00 grade point average in his/her major field of study. Transfer students will be expected to meet the minimum requirements for the total credit hours attempted at CNC, and the total number of credit hours accepted by CNC as transferable from the previous college(s) attended. Transfer students who make little or no progress toward graduation after 15 credit hours at CNC will be considered for academic warning, academic probation, or suspension from the College.

A student who is not profiting from his/her stay at the College or whose influence is considered detrimental to the best interests of the College may be required to withdraw from the College.

Academic Warning

Any student who has earned a minimum standard for continuance, but who has not made reasonable academic progress in any given semester will be issued a letter of Academic Warning. This letter will review the student's progress to date and may require the student to limit his/her academic load. No notation will be made on the student's permanent record.

Academic Probation

Any student approaching the minimum standards for continuance will be considered for academic probation. The student on academic probation may register for no more than four courses while on probation, and the notation *Academic Probation* will be placed on the student's permanent record. If a student on academic probation pre-registers for more than four courses (s) he is required to reduce his/her course load to four courses or 13 semester hours.

Academic Suspension

The student who is academically suspended may not register for credit in any classes at the College for at least one semester, except with the written permission of the Vice President for Academic Affairs, given after consultation with the Academic Status Committee. The notation *Academic Suspension* is placed on the student's permanent record. If a student suspended from the College is permitted by another college to take courses there, (s) he should realize that ***credit hours earned while not in good standing may not be acceptable as credit at Christopher Newport College.***

Academic Dismissal

A student who again falls below the minimum academic standards after two suspensions will be academically dismissed from the College. The notation *Academic Dismissal* will be placed on the student's permanent record. Students dismissed from Christopher Newport College may, after a minimum of three calendar years, apply for admission to the College. Such students will be considered as new students, and their previous records at Christopher Newport College will be considered as part of the relevant materials for the application to the College.

Appeals to the Academic Status Committee

A suspended student has the right to appeal for reconsideration, a recommendation made by the Academic Status Committee. Students suspended for any given semester and desiring reinstatement for the upcoming semester should secure a *Student's Academic Suspension Appeal* form from the Office of the Registrar and indicate any circumstances which may affect the decision.

Reinstatement Procedures

Any suspended student who wishes to re-enter the College after at least one semester (excluding the summer session) has elapsed, must apply to the Academic Status Committee for reinstatement in good standing. Students must obtain a *Reinstatement Form* from the Office of the Registrar. Most colleges will not consider for admission a student who is not in good standing at his/her former college; therefore, reinstatement at Christopher Newport College should be sought before application is made to another college.

Students who have been academically suspended twice may apply for reinstatement, but it must be pointed out that the Committee often does not recommend the reinstatement of such a student. **A student who has been reinstated is not automatically re-admitted to the College.** The Committee may recommend that the student not be re-admitted to Christopher Newport College. A student reinstated may seek admission to another college.

In order to apply for reinstatement, the student must contact the Office of the Registrar for information. The deadlines for receipt of requests for reinstatement are as follows:

Reinstatement for summer	May 1
Reinstatement for fall	August 1
Reinstatement for spring	January 1

Declaration of Major

Classified (degree-seeking) students should declare a major field of study not later than the end of the sophomore year, or the completion of 54 credits. A *Declaration of Major* form must be filed with the Office of the Registrar. Each academic department reserves the right to approve the student's application to major in that department. Changes in the student's choice of major may not be made after the student has registered for the first semester of the senior year, except with the written approval of the College Committee on Degrees and the acceptance of the change by the new academic department.

Double Major

With the written approval of the academic department chairman concerned, classified (degree-seeking) students may designate a second concurrent major area of study, provided that they meet all requirements of BOTH academic departments, including the distribution requirements, supporting, and concentration courses. The appropriate request form should be filed with the Office of the Registrar.

Two baccalaureate degrees will not be awarded, but a notation recognizing the completion of the requirements for the second major will be posted on the student's transcript. In order to have this notation posted, the student must have satisfied all requirements of both major programs.

Declaration of Minor

Students may declare a minor field of study no later than the first semester of the senior year, unless approved in writing by the Degrees Committee. A *Declaration of Minor* form must be filed with the Office of the Registrar. The minor field of study will include from 15 to 21 credits of coursework above the 100-level, as determined by the department of the minor field.

Second Baccalaureate Degree

Students who already hold a baccalaureate degree and who wish to become candidates for a second degree must earn a minimum of 30 credits *in-residence* at Christopher Newport College before a second degree may be granted. In addition, all distribution requirements and major departmental requirements must be satisfied. Permission to become a candidate for the second baccalaureate degree will be granted by the Admissions Committee with concurrent approval of the chairman of the academic department in which the student desires to pursue the second degree.

Courses of Instruction

Courses of instruction appear in numerical order within each academic department. Since the College's academic structure is organized in three schools, the *College Catalog* follows the same format. Therefore, courses of instruction are presented within the School of Letters and Natural Science; the School of Business and Economics; and the School of Social Science and Professional Studies, respectively. The following is a synopsis of the academic departments and interdepartmental programs within each of the three Schools of the College.

The School of Letters and Natural Science

Department of Biology, Chemistry, and Environmental Science; Department of Computer Science; Department of English; Department of Mathematics; Department of Modern and Classical Languages and Literatures; Department of Philosophy and Religious Studies; and Department of Physics.

The School of Business and Economics

Department of Accounting and Finance; Department of Economics; and Department of Management and Marketing.

The School of Social Science and Professional Studies

Department of Arts and Communication; Department of Education; Gerontology Program; Department of History; Department of Leisure Studies and Physical Education; Department of Military Science; Department of Political Science and Governmental Administration; Department of Psychology; and Department of Sociology and Social Work.

The "Special Academic Programs" section immediately follows these three Schools and lists the Honors Program and the Interdisciplinary Studies Program.

Within the course descriptions, courses numbered 100-series are primarily for freshmen, 200-series for sophomores, 300-series for juniors, and 400-series for seniors. A continuous course sequence, indicated by a hyphen between course numbers (e.g. ENGL 101-102), covers a field of closely related materials, and the first semester must ordinarily precede the second unless permission is granted by the appropriate academic department chairman. If a course is made up of two closely related semesters, but the second semester may be taken first, the course numbers are separated by a comma (e.g. ENGL 207, 208).

The triple of numbers enclosed in parentheses following the title of the course have the following meanings: The **first** number refers to the number of credit hours awarded for successful completion of the course; the **second** number refers to the number of weekly lecture hours in the course; the **third** number refers to the number of weekly laboratory, practicum, or studio hours in the course. A course designated as (4-3-2), for example, refers to a four-credit course, which has three lecture hours and two laboratory/practicum/studio hours each week. Following the credit hour designation is an indication as to when that course is normally offered. Where such designations do not appear, please consult with the appropriate academic department chairman.

Degrees

The College awards the following baccalaureate degrees: The **Bachelor of Arts (BA)** degree in Biology, Economics, Elementary Education, English, Fine and Performing Arts, French, German, History, Interdisciplinary Studies, International Culture and Commerce, Leisure Studies, Mathematics, Philosophy, Political Science, Psychology, Social Work, Sociology, and Spanish; the **Bachelor of Music (BM)** degree with concentrations in composition, music history, performance, and music theory; the **Bachelor of Science (BS)** degree in Applied Physics (Microelectronics), Biology, Chemistry, Computer Science, Interdisciplinary Studies, Leisure Studies, Mathematics, and Psychology; the **Bachelor of Science in Accounting (BSA)** degree; the **Bachelor of Science in Business Administration (BSBA)** degree with concentrations in Accounting, Economics, Finance, Management, Marketing, and Real Estate; the **Bachelor of Science in Governmental Administration (BSGA)** degree with concentrations in Community Planning, Corrections, Criminal Justice Administration, International Studies, Policy Studies, and Public Management; and the **Bachelor of Science in Information Science (BSIS)** degree.

Affiliated Degrees

In an effort to expand its learning resources, the College has entered into several cooperative academic agreements with other senior educational institutions. The following degrees are offered by the cooperating institution: the **Bachelor of Science in Nursing (BSN)** degree by Old Dominion University; the **Master of Environmental Management (MEM)** degree and the **Master of Forestry (MF)** degree by Duke University. Information concerning the BSN, MEM, and MF degrees is available by contacting the CNC Department of Biology, Chemistry, and Environmental Science.

In addition to these graduate degrees, the College offers a two-year pre-engineering curriculum for students wishing to pursue a baccalaureate degree in engineering at Virginia Tech or Old Dominion University. This program is discussed in the physics section of the *College Catalog*; further information may be obtained by contacting the Department of Physics.

General Requirements for Graduation

Students are expected to plan a curriculum, including distribution, major or concentration, and elective offerings. Although the College offers assistance to students in this regard, it is ultimately the students' responsibility to ensure that their academic programs properly fulfill all requirements for the degree sought, as set forth in the appropriate *College Catalog*.

General Requirements (All programs)

1. A total of 120 semester hours and two semesters of physical education *activities* courses or their equivalent, with a grade point average (GPA) of 2.00 (4.00 maximum) are required for graduation.
2. In courses applied toward the major field of study, students must achieve a minimum grade point average (GPA) of 2.00 (4.00 maximum), with no more than two grades below C.
3. Students must become classified (officially degree-seeking) prior to beginning the last 30 credits in their academic program. (The application for classification is available in the Office of Admissions.)
4. At least 30 of the last 36 credits, including the last 12 credits within the major field, must be taken *in-residence*. *Students enrolled in the Servicemembers' Opportunities Colleges (SOC) program may fulfill the 30-credit residency requirement at any time, in the course of satisfying degree requirements.*
5. At or before the end of the sophomore year (fourth semester), classified (degree-seeking) students must choose a major field of study. For an initial declaration of major field or a change from the major field already declared, students file a "Declaration of Major" form with the Office of the Registrar. Students are then assigned an academic advisor, who assists students in planning their programs of study. Students should refer to school and departmental listings in the *College Catalog* for specific requirements.
6. Of the total credits required for graduation:
 - a) Students may present only 42 credits in their major field, but may elect not to include among these hours introductory courses (100-200 level) in that major field. (Refer to the departmental listings for further information.)
 - b) No more than 60 percent of the minimum credits (usually 124) required toward a degree may come from courses in the disciplines of the School of Business and Economics.
 - c) Students may present a maximum of three semesters of physical education activities courses toward the degree. Military veterans with 186 or more consecutive days of active duty in the U.S. armed forces may receive up to four semester hours of physical education activities credit toward their degree, thereby fulfilling the College's physical education distribution requirement.
 - d) Students may present a maximum of 12 credits in any combination of *Elementary Topics* (courses numbered 295), *Intermediate Topics* (courses numbered 395), and *Advanced Topics* (courses numbered 495), in any given field.
 - e) Students may select as electives any academic courses of particular interest to them, provided that all necessary prerequisites have been met.
7. Students must file the *Intent to Graduate* form, available in the Office of the Registrar, and any substitution of any requirement for graduation with the Office of the Registrar, according to the following schedule:

One Year In Advance of Graduation

- a) For spring graduation, no later than the last day of the previous spring semester.
 - b) For winter graduation, no later than the last day of the previous fall semester.
8. The student may choose to fulfill either the general requirements for graduation set forth in the catalog that is in effect when (s)he becomes a classified (degree-seeking) student at the College, or the general requirements in the catalog that is in effect at the time that the student formally declares his/her major field of study or the catalog in effect when (s)he graduates. The student must fulfill, however, the major concentration requirements in effect when the choice of major or concentration is formally declared. A student who leaves the College for a period of a full academic year or more after formally declaring a major field of study, may be required to meet the major or concentration requirements that are in effect when (s)he re-enters the College.
9. Graduation with honors:
The minimum grade point averages (GPA's) required in order to be graduated Cum Laude, Magna Cum Laude, or Summa Cum Laude are:

<i>Cum Laude</i>	3.50 GPA
<i>Magna Cum Laude</i>	3.67 GPA
<i>Summa Cum Laude</i>	3.75 GPA

Eligibility for each honor requires that, at the time of graduation, the respective minimum GPA be equalled or exceeded **both** in the graduate's "overall GPA" (based upon the graduate's **entire** student academic record, including any grades and credits earned at other accredited institutions as well as those earned at Christopher Newport College) **and** in the graduate's "CNC GPA" (based upon only that part of the graduate's academic record comprising grades and credits earned at Christopher Newport College).

NOTE: For purposes of illustration, a graduate whose overall and CNC GPA's are, respectively 3.80 and 3.60, would graduate Cum Laude because the 3.60 overall GPA precludes any higher honor. Similarly a graduate whose overall and CNC GPA's are respectively, 3.40 and 3.70 would be precluded from graduation with any honors by the 3.40 overall GPA.

Distribution Requirements for each of the College's seven degree programs are found on the following chart.

Distribution and Other Degree Requirements

DISTRIBUTION REQUIREMENTS	BA DEGREE		BM DEGREE		BS DEGREE	
	REQUIREMENT	(CR)	REQUIREMENT	(CR)	REQUIREMENT	(CR)
	ENGL 101-102, or ENGL 103-104†	(6)	ENGL 101-102, or ENGL 103-104†	(6)	ENGL 101-102, or ENGL 103-104†	(6)
	One of the sequences: ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201-202; MUSC 201, 202; PHIL 201, 202; THEA 210, 211; or any two: CLST 201; FREN 251; FREN 252; GERM 251; GERM 252; MLAN 205; MLAN 206; SPAN 251; SPAN 252.	(6)★	One of the sequences: ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201-202; MUSC 201, 202; PHIL 201, 202; THEA 210, 211; or any two: CLST 201; FREN 251; FREN 252; GERM 251; GERM 252; MLAN 205; MLAN 206; SPAN 251; SPAN 252.	(6)★	One of the sequences: ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201-202; MUSC 201, 202; PHIL 201, 202; THEA 210, 211; or any two: CLST 201; FREN 251; FREN 252; GERM 251; GERM 252; MLAN 205; MLAN 206; SPAN 251; SPAN 252.	(6)★
	One of the sequences: †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)	(8-10)★	One of the sequences: †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)	(8-10)★	One of the sequences: †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)	(8-10)
	PHIL 101-102; or any two: MATH 105, 110, 125, 130, 135; or MATH 140; or, at the discretion of the Department of Mathematics, advanced placement beyond MATH 140.	(4-6)★	PHIL 101-102; or any two: MATH 105, 110, 125, 130, 135; or MATH 140; or, at the discretion of the Department of Mathematics, advanced placement beyond MATH 140.	(4-6)★	PHIL 101-102; or any two: MATH 105, 110, 125, 130, 135; or MATH 140; or, at the discretion of the Department of Mathematics, advanced placement beyond MATH 140.	(4-6)★
	Two of the sequences: HIST 101-102 or 201-202, (not both); POLS 101-102; ECON 201-202; PSYC 201-(202 or 203); SOCL 200-(any other 200-level sociology course).	(12)★	Two of the sequences: HIST 101-102 or 201-202, (not both); POLS 101-102; ECON 201-202; PSYC 201-(202 or 203); SOCL 200-(any other 200-level sociology course).	(12)★	Two of the sequences: HIST 101-102 or 201-202, (not both); POLS 101-102; ECON 201-202; PSYC 201-(202 or 203); SOCL 200-(any other 200-level sociology course).	(12)★
	One of the sequences: FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	(6-14)★	One of the sequences: FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	(6-14)★	One of the sequences: FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	(6-14)★
	Two (2) LSPE activities courses†	(2-4)★	Two (2) LSPE activities courses†	(2-4)★	Two (2) LSPE activities courses†	(2-4)★
	There are no additional requirements peculiar to the BA degree.		See departmental entry for Arts and Communication.		A second laboratory science sequence is required.	

★ For each degree, one of the "starred" requirements may be waived.
(The waiver of a distribution requirement does not affect course prerequisites, does not alter departmental requirements, and does not change the total number of credits required for a degree.)

† See appropriate departmental entry in this Catalog for further information.

Distribution and Other Degree Requirements

BSGA DEGREE	BSIS DEGREE	BSBA DEGREE	BSA DEGREE
REQUIREMENT (CR)	REQUIREMENT (CR)	REQUIREMENT (CR)	REQUIREMENT (CR)
ENGL 101-102, or ENGL 103-104† (6)	ENGL 101-102, or ENGL 103-104† (6)	ENGL 101-102, or ENGL 103-104† (6)	ENGL 101-102, or ENGL 103-104† (6)
One of the sequences: (6) ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201-202; FREN 251, 252; GERM 251, 252; MLAN 205, 206; MUSC 201, 202; PHIL 201, 202; SPAN 251, 252; THEA 210, 211.	One of the sequences: (6)★ ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201, 202; FREN 251, 252; GERM 251, 252; MLAN 205, 206; MUSC 201, 202; PHIL 201, 202; SPAN 251, 252; THEA 210, 211; or, SPCH 201 in combination with either CLST 201 or one of the 22 courses named above.	One of the sequences: (6)★ ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201, 202; FREN 251, 252; GERM 251, 252; MLAN 205, 206; MUSC 201, 202; PHIL 201, 202; SPAN 251, 252; THEA 210, 211; or, SPCH 201 in combination with either CLST 201 or one of the 22 courses named above.	One of the sequences: (6)★ ENGL 201, 202; ENGL 205, 206; ENGL 207, 208; FNAR 201, 202; FREN 251, 252; GERM 251, 252; MLAN 205, 206; MUSC 201, 202; PHIL 201, 202; SPAN 251, 252; THEA 210, 211; or, SPCH 201 in combination with either CLST 201 or one of the 22 courses named above.
One of the sequences: (8-10) †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or, in the case of transfer students, any two-semester natural science course for non-science majors. (Transfer students may satisfy this requirement with 8 to 10 semester hours of freshman geology, astronomy, or other laboratory science course that considers one area of science through the full academic year.)	One of the sequences: (8-10) †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)	One of the sequences: (8-10) †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)	One of the sequences: (8-10) †BIOL 101/101L-101/102L; CHEM 103/105-104/106; CHEM 121/125-122/126; PHYS 103-104 (with labs); PHYS 201-202 (with labs); or any two-semester natural science sequence for non-science majors. (Transfer students may satisfy this requirement with 8-10 hours of freshman geology, astronomy, or other laboratory science courses that fulfill the laboratory science requirement at the original institution.)
PHIL 101-102; or (4-6) any two: MATH 105, 110, 125, 130; or MATH 140; or, at the discretion of the Department of Mathematics, advanced placement beyond MATH 140.	MATH 125, and (7) MATH 140	MATH 125; and (6-7) either MATH 110 or, if advanced placement is indicated by placement test, a suitable alternative mathematics course.	MATH 125; and (6-7) either MATH 110 or, if advanced placement is indicated by placement test, a suitable alternative mathematics course.
Any 12 credits (12) in the social sciences, chosen in consultation with the advisor.	ECON 201-202; (12)★ PSYC 201; and one of the following courses: HIST 101, HIST 102, HIST 201, HIST 202; POLS 101, POLS 102; PSYC 202; SOCL 200; or any other 200-level sociology course.	ECON 201-202; and (12) six additional credits chosen from: HIST 101-102, 201-202, POLS 101-102; PSYC 201-202; SOCL 200, 201, 220, 225.	ECON 201-202; and (12) six additional credits chosen from: HIST 101-102, 201-202, POLS 101-102; PSYC 201-202; SOCL 200, 201, 220, 225.
CPSC 210, or (3) ACCT 201		CPSC 210 (3)	CPSC 210 (3)
One of the sequences: (6-14)★ FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	One of the sequences: (6-14)★ FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	One of the sequences: (6-14)★ FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)	One of the sequences: (6-14)★ FREN 101-102-201-202 GERM 101-102-201-202 LATN 101-102-201-202 SPAN 101-102-201-202 (advanced placement possible†)
Two (2) LSPE (2-4) activities courses†	Two (2) LSPE (2-4)★ activities courses†	Two (2) LSPE (2-4)★ activities courses†	Two (2) LSPE (2-4)★ activities courses†
See departmental entry for Political Science and Governmental Administration.	See departmental entry for Computer Science.	See "School of Business and Economics."	See "School of Business and Economics."

★For each degree, one of the "starred" requirements may be waived.
(The waiver of a distribution requirement does not affect course prerequisites, does not alter departmental requirements, and does not change the total number of credits required for a degree.)

† See appropriate departmental entry in this Catalog for further information.



The School of Letters and Natural Science



Dear Student:

The School of Letters and Natural Science involves departments and academic disciplines which are both ancient and recent, verbal and numerical, book-based and machine-based. You can study the writings of Homer and Socrates, the proofs of Pythagoras, and the sayings of the Buddha as well as the latest computer language, modern grammar, and the principles of robotics. You can learn French or Calculus, German or Fortran, metaphysics or engineering, Islam or genetics. You may read William Wordsworth and James Joyce or program a Prime computer in Pascal. And, in whatever specific way you engage the Letters and Natural Science curriculum, you will be considering those methods and ideas and will be employing those skills which have remained basic throughout the history of western civilization and which are now central to the attention of educators throughout this country. You will be led to read critically and to write clearly and persuasively. You will be

taught to think logically and to compute carefully and powerfully. You will be encouraged to investigate nature perceptively and to imagine uses of technology not yet available. In short, you will be enabled to live in the modern world with resources from the history of western, even world, culture.

The faculty and programs of the School of Letters and Natural Science are divided into eight departments with a total of 50 faculty members. In addition to devoting substantial energy to providing the liberal arts core of each CNC student's education, the School offers 14 major baccalaureate programs of study, many more minor programs and concentrations within majors, and a number of pre-professional programs (pre-forestry, pre-medical, pre-dental, pre-engineering, and journalism). The faculty members of the School are highly trained, actively involved with the new trends and research in their fields, and dedicated to teaching as a professional privilege and responsibility. We believe that the CNC faculty is the most competent, student-related, and teaching-oriented faculty in the Commonwealth. We believe that CNC students will tell you the same.

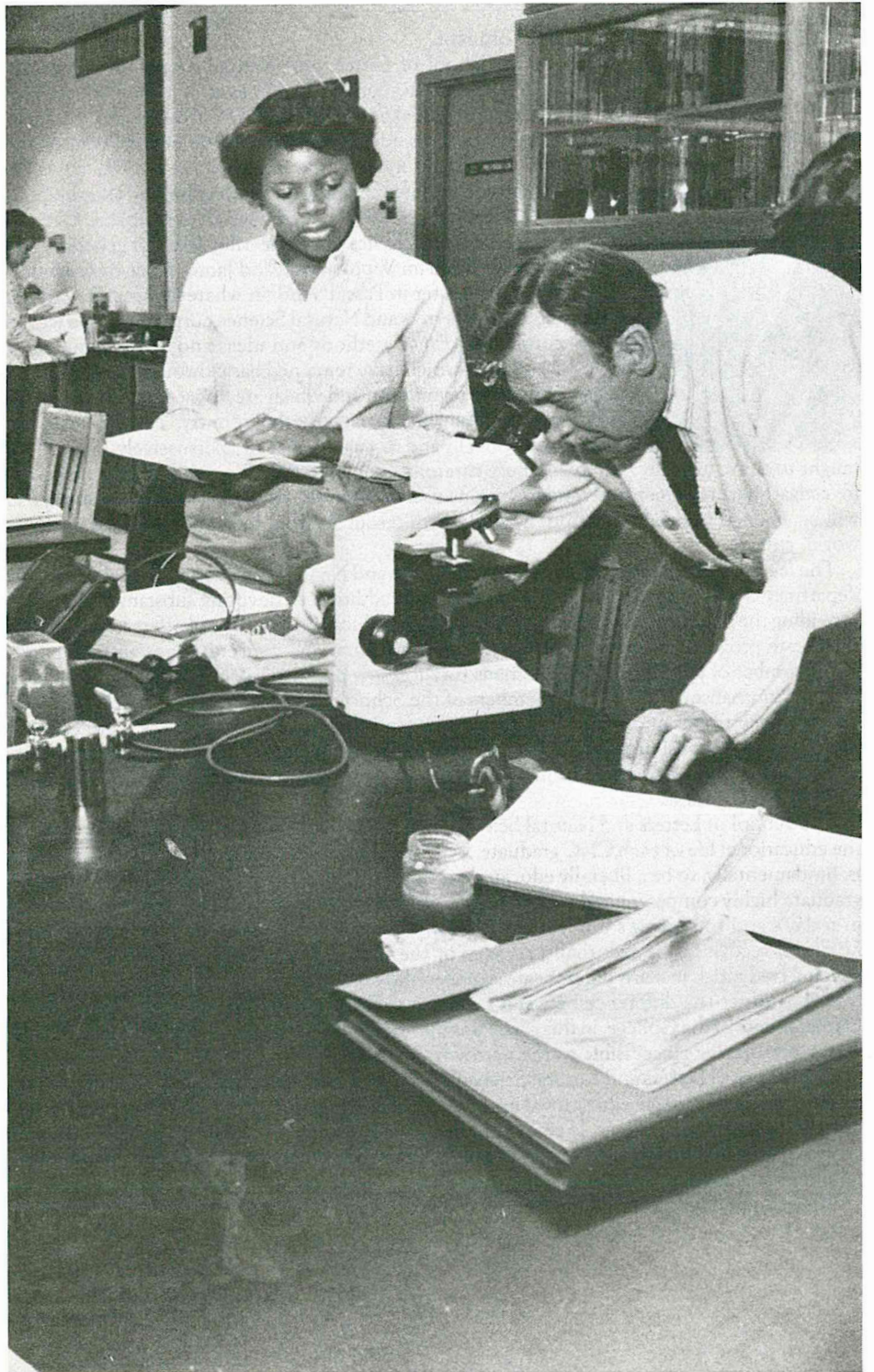
The School of Letters and Natural Science with its curricula and faculty plays a large role in the educational life of each CNC graduate. To be an alumnus of Christopher Newport College is, fundamentally, to be a liberally educated person. This is not to say that the College does not graduate highly competent and well-trained specialists in many of the fields of highest demand in today's and tomorrow's job market; for quite the contrary is, in reality, the case. It does, however, recognize the fact that graduates of the College, in addition to possessing highly coveted credentials in many different areas of specialization share a common academic experience that constitutes the difference between a narrow technician and a liberally educated person. Each graduate of the College, in this way, gains the capacity to meet and to shape his or her future with a perspective inaccessible to the narrowly educated.

The School of Letters and Natural Science offers, then, a diverse curriculum, an outstanding faculty, and an invaluable educational experience. This experience occurs in a very special community—a community of people young and old, male and female, black and white, student and professor—united in their dedication to pursue knowledge, understanding, truth, and human fulfillment. Join us!

With all good wishes for your continued success, I am

Sincerely,

Jouett L. Powell, Dean
School of Letters and Natural Science



Biology, Chemistry, and Environmental Science

Department Chairman: Professor Harold N. Cones

Professor Emeritus: Wise

Professors: Bankes, Cones, Edwards, Markusen, Olson, Pugh, Sacks

Associate Professors: Chang, Mollick

Assistant Professors: Simmons, Weiss

Instructor: Davis

The aims of the curriculum and faculty in Biology, Chemistry, and Environmental Science are to acquaint students with the body of knowledge in these disciplines and to teach them to apply this knowledge usefully and responsibly.

Biology

The biology program is organized to enable the major student to survey the entire field of biology and also specialize in one of various areas, including botany, cell biology-biochemistry, microbiology-genetics, environmental science, ornamental horticulture, the premedical-predental-preveterinary area, teaching, or zoology. A student may also specialize in parks, open space, recreation and natural resource management. Courses that are a part of the affiliated Bachelor of Science in Nursing (BSN) degree with Old Dominion University are also offered by the department. These courses serve students who wish to complete their undergraduate work in specialized programs, including health and agricultural programs, at other institutions.

Chemistry

The study of chemistry provides a wide range of opportunities in the physical and biological sciences as well as related areas. Chemistry is often called the *central science* because an understanding of matter and the changes it undergoes underlies the other science areas. At CNC, students have the advantages of instruction in small classes, well-equipped and faculty-directed laboratories, and considerable individual attention. In addition to providing skills which prepare students for a wide range of job opportunities, directly or after graduate school, the curriculum and faculty seek to help students gain a better understanding of the world through an increased knowledge and appreciation of the chemical processes that affect our everyday lives.

Cooperative Programs

Christopher Newport College has a cooperative program with the Duke University School of Forestry and Environmental Studies, leading to the BS from Christopher Newport College and the Master of Forestry or Master of Environmental Management Degree from Duke. Students in this program attend Christopher Newport College for the first three years of the open program, then transfer to Duke for the final two years. During the three years at Christopher Newport College, the student must complete at least 94 semester credits, including the distribution courses required by CNC, plus courses required by Duke as prerequisites for their program. Upon the completion of 30 semester credits of the two-year program at Duke, CNC will award the student the BS degree. Upon the completion of 30 or more semester credits and all appropriate requirements for the degree, Duke University will award the appropriate master's degree. Students interested in entering this cooperative program should contact Dr. Weiss, advisor for the program.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Science degree in Biology

The Bachelor of Science degree in Biology requires a minimum of 40 credits in biology, 16 of which must be taken at the 300- and 400-level. Students pursuing this degree are expected to take the laboratory course that corresponds to each biology lecture course. Biology courses are to be selected with the aid of the student's departmental advisor. In addition, students pursuing this degree must successfully complete a minimum of six and a maximum of 10 credits in non-natural science electives. If the usual supporting courses required for this degree are inappropriate for the student's goals, the student and his/her advisor may prepare an

alternate program of study for departmental approval, at the beginning of the junior year or earlier. An alternate program of study is usually necessary for students pursuing the Bachelor of Science degree in Biology with a concentration in ornamental horticulture. Students interested in this program should contact Dr. Banks.

Students pursuing the Bachelor of Science degree in Biology may elect not to include BIOL 101-102 among the credits counted in their major. If students so elect, the Office of the Registrar must be notified prior to the completion of 90 credits. Students who earn grades of A or B in BIOL 101 may receive department approval to substitute an upper-level (300-400) biology course for BIOL 102. Students wishing to submit such a request for course substitution must do so in writing to the chairman of the department at least two weeks prior to the beginning of the preregistration period.

The Bachelor of Science degree in Biology requires: Either BIOL 307 or BIOL 414-414L; BIOL 313-313L; BIOL 490-491; either BIOL 300, 305, 308, or 310; CHEM 121-122, 125-126, 315, 321-322, and 326; MATH 140; and either PHYS 103-104 or PHYS 201-202; and 16 additional semester hours of Biology electives at the 300-400 level. Recommended electives include MATH 125 and CPSC 220.

The Bachelor of Arts degree in Biology

No more than 41 credits in biology, including BIOL 101-102, may be applied toward the Bachelor of Arts Degree in Biology. Students pursuing this degree must successfully complete three courses in mathematics, which are to be selected in consultation with their advisors. Also, students pursuing this degree may not waive either the Humanities or Social Science Distribution Requirements. Students in this degree program who do not declare a minor in another academic discipline must successfully complete a minimum of 18 credits (excluding all other departmental requirements) from at least two of the following academic disciplines: Chemistry, Computer Science, Mathematics, Philosophy and Religious Studies, Physics, and Psychology. Students in this degree program

are expected to take the laboratory course that corresponds to each biology lecture course. Students who earn grades of A or B in BIOL 101 may receive departmental approval to substitute an upper-level (300-400) biology course for BIOL 102.

The Bachelor of Arts degree in Biology requires: Either BIOL 307 or BIOL 414-414L; BIOL 313-313L; BIOL 490-491; either BIOL 300, 305, 308, or 310; either BIOL 309, 312, 403, 404, 409, or 418; CHEM 103, 104, 105, and 106; either FREN 202, GERM 202, or SPAN 202; and 16 additional semester hours of Biology electives at the 300-400 level.

The State-Approved Teacher Education Program in Biology

Students may complete a state-approved teacher education program in Biology under either the Bachelor of Arts or Bachelor of Science degrees in Biology. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*, the total program of study must satisfy all requirements for either the Bachelor of Arts or Bachelor of Science degrees in Biology and must include: MATH 130 and 140; CHEM 121-122, 125-126, 321-322, 315-326; PHYS 103-104 or PHYS 201-202.

The Curriculum in Biology

BIOL 101-102. Principles of Biology (3-3-0) (3-3-0)

Prerequisite: None; corequisite: BIOL 101L-102L, fall, spring, and summer.

Basic principles of biology as revealed by research and experimentation; the relation of these principles to the success of living organisms.

BIOL 101L-102L. Principles of Biology Laboratory (1-0-3) (1-0-3)

Prerequisite: or Corequisite: BIOL 101-102, fall, spring, and summer. **(Laboratory Fee Required)**

BIOL 200. Basic Horticulture for Non-Biology Majors (3-3-0)

Prerequisite: None; corequisite: None, summer. A survey of horticultural practices. Topics covered include foliage plant culture, lawn establishment and maintenance, flower garden care, vegetable gardens, woody plants for the home landscape, and principles of good landscape design.

BIOL 207. Pioneer Biology – Living Off the Land (3-3-0)

Prerequisite: None; corequisite: None. summer. A study of the interdependence of man and his environment through investigating and experiencing pioneer living practices; edible wild foods, weaving, folk and natural medicine, and modern aspects of homesteading are discussed. (This course cannot count as credit toward the major.)

BIOL 212. Microbiology and Man (4-3-4)

Prerequisites: CHEM 103-104 and 105-106 or CHEM 121-122 and CHEM 125-126; corequisite: None. spring. (Laboratory Fee Required)

Principles of microbiology; emphasis on bacteria and the bacterial viruses both as entities in themselves and in their role in contemporary biology.

BIOL 213. Human Anatomy and Physiology (4-3-3)

Prerequisite or corequisite: CHEM 103 or equivalent. fall and spring. (Laboratory Fee Required)

Emphasis on basic concepts such as membrane transport systems, membrane potential, fluid and electrolyte balance. Topics include cell biology, musculo-skeletal, cardiovascular, and renal systems. All other systems are covered in BIOL 315.

BIOL 215. Biological Evolution (3-3-0)

Prerequisites: None; corequisite: None. spring. Principles of biological evolution; detailed discussion of natural selection, adaptation, population genetics, isolating mechanisms, and speciation.

BIOL 216. Nutrition (3-3-0)

Prerequisite: One year of college science; corequisite: None. fall.

A survey of specific dietary requirements, roles of nutrients; effects of nutrient deficiencies; food absorption and utilization; food production, processing, and distribution; and applied nutrition for specific groups.

BIOL 234. Aging and Health – Biological and Physiological Perspectives (3-3-0)

Prerequisites: BIOL 101-102 or BIOL 213-315 or consent of instructor; corequisite: None. Examination of the aging process and consequent changes in human physiology and body

systems. Relationships of physiological changes to health and nutritional problems. Survey of major health problems and interventive possibilities.

BIOL 295. Elementary Topics in Biology

Prerequisite: Consent of instructor; corequisite: None. fall and spring.

A variety of biological or biologically related topics not included in the regular curriculum will be offered. These topics will fill a particular need not covered by regular courses. Biology majors may apply no more than nine credits in elementary, intermediate, or advanced topics toward graduation.

BIOL 300. Plant Taxonomy (4-3-4)

Prerequisites: BIOL 101-102; corequisite: None. fall. (Laboratory Fee Required)

Principles of identifying, naming and classifying vascular plants. A plant collection is required.

BIOL 301. Microbiology (4-3-4)

Prerequisites: BIOL 101-102 and either CHEM 103-104, 105-106, or CHEM 121-122, 125-126; corequisite: None. fall. (Laboratory Fee Required)

Introduction to the morphology, physiology, and genetics of bacteria and the bacterial viruses.

BIOL 302. Oceanography – An Introduction to Marine Science (3-3-0)

Prerequisites: Two semesters of college chemistry desirable or consent of instructor; and BIOL 101-102; corequisite: None. spring, 1987.

Physical and chemical properties of the hydrosphere, application of basic ecological principles to the marine environment, history of oceanography.

BIOL 302L. Oceanography – An Introduction to Marine Science Laboratory (1-0-4)

Prerequisite or corequisite: BIOL 302. spring, 1985. (Laboratory Fee Required)

BIOL 303. Landscape Horticulture (4-3-4)

Prerequisites: BIOL 317 and POLS 335 or consent of instructor; corequisite: None. spring, 1985. (Laboratory Fee Required)

Principles of good landscape design; use, choice, and cultural practices employed with ornamental plants.

BIOL 304. Soils (4-3-4)

Prerequisites: BIOL 101-102 and either CHEM 103-104, 105-106, or CHEM 121-122, 125-126; corequisite: None. spring, 1986. (Laboratory Fee Required)

Characterization of soil as a natural system, with emphasis on its physical, chemical, and biological properties.

BIOL 305. Plant Anatomy (4-3-4)

Prerequisite: BIOL 101-102; corequisite: None. fall, 1986. (Laboratory Fee Required)

Structure and arrangement of cells and tissues in higher plants; cytology, physiology, taxonomy, ecology, evolution, and development where related to anatomy.

BIOL 306. Environmental Conservation (3-3-0)

Prerequisite: Completion of science distribution requirement or consent of instructor; corequisite: None. fall.

Study of soil, forest, land, water, air, wildlife, and recreational resources; their interrelationships and modifications by man, steps necessary to use them wisely for present and future generations.

BIOL 306L. Environmental Conservation Laboratory (1-0-4)

Prerequisite: or Corequisite: BIOL 306. (Laboratory Fee Required)

On-site visitations to resource utilization areas.

BIOL 307. Cell Biology (4-3-4)

Prerequisites: BIOL 101-102 and CHEM 104, 106, or 321, 315; corequisite: None. fall. (Laboratory Fee Required)

Physiology at cellular levels of organization; cell structure and function, enzyme action, cell energy transformations, cell regulatory processes, and cell differentiation are included.

BIOL 308. Plant Physiology (3-3-0)

Prerequisites: BIOL 101-102 and one year of college chemistry; corequisite: None. spring, 1987.

A survey of the processes involved in plant growth, mineral nutrition, water relations, translocation, metabolism, and photosynthesis. Control of plant growth and development by hormones, growth regulators, light, and temperature.

BIOL 308L. Plant Physiology Laboratory (1-0-4)

Prerequisite: or Corequisite: BIOL 308. spring, 1987. (Laboratory Fee Required)

BIOL 309. Embryology of Vertebrates (3-3-0)

Prerequisite: BIOL 101-102; corequisite: None. fall.

Comparative description and analysis of the principles and processes leading to the establishment of the adult vertebrate body plan; gametogenesis.

BIOL 309L. Embryology of Vertebrates Laboratory (1-0-4)

Prerequisite or corequisite: BIOL 309. fall. (Laboratory Fee Required)

A laboratory study of the embryology of vertebrates.

BIOL 310. Morphology and Phylogeny of Plants (4-3-4)

Prerequisite: BIOL 101-102; corequisite: None. fall, 1985. (Laboratory Fee Required)

Morphology of representative plants studied in the laboratory and field; emphasis on reproductive processes and phylogenetic relationships.

BIOL 311. Ornamental Plant Propagation (4-3-4)

Prerequisites: BIOL 101-102 and BIOL 217 or consent of instructor; corequisite: None. spring, 1987. (Laboratory Fee Required)

Principles and practices of horticultural plant propagation and greenhouse production are considered.

BIOL 312. Invertebrate Zoology (4-3-4)

Prerequisite: BIOL 101-102; corequisite: None. spring.

A survey of invertebrate biology emphasizing morphology and evolutionary relationships, and including taxonomy, physiology, and behavior.

BIOL 313. Genetics (4-3-4)

Prerequisites: BIOL 101-102, and either CHEM 103-104, 105-106, or CHEM 121-122, 125-126 and two semesters of college mathematics; corequisite: None. spring. (Laboratory Fee Required)

Mechanisms of inheritance, mutation, recombination, genetic expression and regulation at all levels of biological organization.

BIOL 314. Pathophysiology (4-4-0)

Prerequisite: BIOL 315 or consent of instructor; corequisite: None. spring.

Systemic survey of physiological abnormalities. Emphasis is placed on the more frequently encountered conditions.

BIOL 315. Human Anatomy and Physiology (4-3-3)

Prerequisite or corequisite: CHEM 104. spring and fall. (Laboratory Fee Required)

Normal structure and function of human nervous, respiratory, digestive, endocrine, and reproductive systems.

BIOL 317. Plant Materials for Landscape Use (4-3-4)

Prerequisite: None; corequisite: None. spring, 1986. (Laboratory Fee Required)

Identification and design characteristics of ornamental plants.

BIOL 318. Advanced Human Physiology (3-3-0)

Prerequisite or corequisite: Two semesters of college chemistry. spring.

Survey of normal physiology of all systems. Designed primarily for nursing students who have had anatomy and physiology only in the lower division, or for those who had their training several years ago.

BIOL 318L. Advanced Human Physiology Laboratory (1-0-4)

Prerequisite or Corequisite: BIOL 318. spring. (Laboratory Fee Required)

BIOL 395. Intermediate Topics in Biology
Prerequisite: Consent of instructor; corequisite: None. spring and fall.

A variety of biological or biologically related topics not included in the regular curriculum will be offered. These topics will fill a particular need not met by regular courses. Biology majors may apply no more than nine credits in elementary, intermediate, or advanced topics toward graduation.

BIOL 403. Marine Biology (3-3-0)

Prerequisite: BIOL 302, 312, or consent of instructor; corequisite: None. spring, 1986.

Taxonomic and ecological investigations of the major marine groups; pollution ecology; applied marine science.

BIOL 403L. Marine Biology Laboratory (1-0-4)

Prerequisite or Corequisite: BIOL 403. spring, 1986. (Laboratory Fee Required)

BIOL 407. General Ecology (4-3-4)

Prerequisites: BIOL 101-102 and junior or senior standing or consent of instructor; corequisite: None. spring. (Laboratory Fee Required)

Properties and processes of ecosystems, communities, and populations, with consideration given to man's influence on each level.

BIOL 409. Comparative Anatomy of Vertebrates (4-3-4)

Prerequisite: BIOL 101-102; BIOL 309 recommended; corequisite: None. spring. (Laboratory Fee Required)

General chordate anatomy, emphasizing the vertebrates, considered on a comparative and phylogenetic basis. Laboratory work includes dissection and study of lamprey, sand shark, necturus, cat, and other supplemental chordates.

BIOL 414. Introductory Biochemistry (3-3-0)

Prerequisites: BIOL 101-102 and CHEM 315, 322; corequisite: None. spring, 1986.

A survey of the principal molecular constituents of living organisms. The structure, roles and metabolic interconversions of carbohydrates, lipids, proteins, and nucleic acids are considered.

BIOL 414L. Introductory Biochemistry Laboratory (1-0-4)

Prerequisite or Corequisite: BIOL 414. spring, 1986. (Laboratory Fee Required)

BIOL 415. Pathology of Ornamental Plants (4-3-4)

Prerequisite: BIOL 317 or consent of instructor; corequisite: None. fall, 1985. (Laboratory Fee Required)

A course stressing the principles of plant pathology with regard to prevention, diagnosis, and control of diseases of ornamental plants. Some emphasis will be given both to beneficial insects and to insect pests of ornamentals, as well as to control techniques.

BIOL 416. Nursery and Garden Center Management (4-3-4)

Prerequisite: None; corequisite: None. spring, 1985. (Laboratory Fee Required)

Principles and practices involved with wholesale production and retailing of ornamental plants.

BIOL 418. Animal Behavior (3-3-0)

Prerequisites: BIOL 101-102 and junior or senior standing or consent of instructor; corequisite: None. fall, 1986.

The comparative study of animal behavior, including both vertebrates and invertebrates. Ethological concepts, physiological mechanisms, and adaptive significance will be emphasized.

BIOL 418L. Animal Behavior Laboratory (1-0-4)

Prerequisite or corequisite: BIOL 418. fall, 1986. (Laboratory Fee Required)

Laboratory work includes experimentation, field trips, discussion, reports, and a term project.

BIOL 490-491. Biology Seminar (1-1-0 each)

Prerequisite: Biology majors with junior or senior standing; corequisite: None: fall and spring.

Instruction in conventional oral and written scientific discourse. Attendance is required at all scheduled meetings. A scientific written paper is required for BIOL 490. An oral presentation of the same scientific paper is required for BIOL 491.

BIOL 495. Advanced Topics in Biology

Prerequisite: Upper-division standing or consent of instructor; corequisite: None. fall and spring. A variety of biological or biologically-related topics not included in the regular curriculum will be offered. These topics will fill a particular need or be an advanced treatment of a regular course. Biology majors may apply no more than nine credits of elementary, intermediate, or advanced topics toward graduation.

BIOL 499. Problems in Biology

Prerequisite: Junior and senior standing; corequisite: None. fall and spring.

An opportunity for independent research or literature review with guidance of a faculty advisor. No more than three credits may be submitted for the degree.

The Bachelor of Science degree in Chemistry

Chemistry is an experimental science. Reflecting this, laboratory work is primarily investigatory. Beginning with the first laboratory course, students learn techniques and methods usable at all levels of study, research, or industrial application. Modern instrumentation is introduced early and used extensively. Laboratory

experience is complemented by lectures given by a staff with both academic and industrial research experience. For students taking a one-year sequence, three major areas of chemical investigation – inorganic, organic and biochemistry – are considered in lecture (CHEM 103-104) and laboratory (CHEM 105-106). For science majors, these areas and others are considered in greater depth over a longer period. Majors either enter the 121-126 sequence for science majors directly or take a part of the 103-106 sequence in preparation. The CNC Chemistry Placement Test (not an entrance examination), offered by the Office of Counseling and Career Services, is strongly recommended for those students who, for whatever reason, plan to take chemistry courses. This placement test helps students select the appropriate starting course in chemistry.

Several options are available to students pursuing the Bachelor of Science degree in Chemistry or to those pursuing a minor in chemistry. Programs are individually arranged according to student's career objectives. Options include preparation for a career as a chemist, work in environmental control, and preparation for further study in such fields as medicine, dentistry, or other health-related professions. Students wishing to major jointly in chemistry and another discipline should consult with the advisors in both departments.

Students pursuing the Bachelor of Science degree in Chemistry are expected to earn no grade less than C in courses prerequisite to advanced courses in the major or related fields. Students who have had difficulty with the first- or second-year courses in chemistry, whether at CNC or elsewhere, are advised to re-take a comparable course before proceeding to the upper-level courses. Transfer students who plan to pursue the Bachelor of Science degree in Chemistry are encouraged to review their previous college transcripts with an advisor from the department prior to planning further coursework. Where content of courses is not comparable with the CNC equivalent listed on the transfer evaluation form, transfer students may be advised to take one or more portions of the CNC course sequence (such as certain laboratory work); such students receive full transfer credit, either as the stated course or as elective credit, if credit is received at CNC for comparable work.

The Bachelor of Science degree in Chemistry requires the following courses, which, because of their sequential nature, are recommended to be completed in the year indicated. **First Year:** CHEM 121-122, CHEM 125-126; MATH 130; **Second Year:** CHEM 315; CHEM 321-322, 326; MATH 140; PHYS 201-202; **Third Year:** GERM 101-102; **Fourth Year:** CHEM 386; CHEM 441; CHEM 445; CHEM 341-342, 346; CHEM 490; and either CHEM 401, BIOL 414. *Chemistry courses listed to be completed in the fourth year are offered in alternate years and are taken in any order unless prerequisite to another course.* CHEM 490 is offered each semester: a student enrolls during the semester in which s/he presents the seminar. One year of German is required; substitution of other courses requires departmental approval.

The Curriculum in Chemistry

Note: The following course listing includes alternate year offerings of junior- and senior-level courses. Also, the symbol (N) designates an evening course offering.

CHEM 103-104. Introductory Chemistry (3-3-0) (3-3-0)

Prerequisite: None; corequisite: CHEM 105-106 or consent of department. CHEM 103 is taught in fall, spring (N), and summer; CHEM 104 is taught in fall (N), spring and summer. First semester: A survey of the fundamentals of general and inorganic chemistry.

Second semester: A survey of organic and biochemistry. (Not intended for science majors; however, CHEM 103, with or without CHEM 105, may be taken for elective credit as an introductory course to CHEM 121 and CHEM 125.)

CHEM 105-106. Introductory Chemistry Laboratory (1-0-3) (1-0-3)

Prerequisite: None; corequisite: CHEM 103-104. CHEM 105 is taught in fall, spring (N), and summer. CHEM 106 is taught in fall (N), spring, and summer. (Laboratory Fee Required)

An introduction to the experimental techniques and methods of chemistry.

CHEM 121-122. General Chemistry (3-3-0) (3-3-0)

Prerequisite: MATH 110 or satisfactory scores on chemistry placement examination; corequisite: CHEM 125-126 or consent of department. CHEM 121 is taught in fall and spring (N), CHEM 122 is taught in fall (N), and spring.

Fundamental principles of all branches of chemistry.

CHEM 125-126. General Chemistry Laboratory (2-0-5) (2-0-5)

Prerequisite: None; corequisite: CHEM 121-122 or consent of department. CHEM 125 is taught in fall, spring (N), and summer; CHEM 126 is taught in fall (N), spring, and summer. (Laboratory Fee Required)

Application of experimental methods to the solution of chemical problems.

CHEM 315. Experimental Chemistry Laboratory (2-1-4)

Prerequisite: CHEM 122; corequisite: CHEM 126. (usually taken concurrently with CHEM 321. Taught fall semester. (Laboratory Fee Required)

Chemical kinetics and equilibrium are studied using analytical procedures with emphasis on instrumental methods.

CHEM 321-322. Organic Chemistry (3-3-0) (3-3-0)

Prerequisites: CHEM 122 and 126; corequisite: CHEM 315 and 326 or consent of department. CHEM 321 is taught in fall; CHEM 322 is taught in spring.

Chemistry of the organic compounds of carbon. Structure, reactivity, and reaction mechanisms.

CHEM 326. Organic Chemistry Laboratory (2-0-5)

Prerequisite: CHEM 315; corequisite: CHEM 322. Taught spring semester. (Laboratory Fee Required)

Introduction to common techniques in synthesis and qualitative organic analysis.

CHEM 341-342. Physical Chemistry (3-3-0) (3-3-0)

Prerequisites: CHEM 322, 326; MATH 240; and PHYS 202; corequisite to CHEM 341:

None; corequisite to CHEM 342: CHEM 346 or consent of department. CHEM 341 is taught in fall – even numbered years; CHEM 342 is taught in spring – odd numbered years.

A study of the interactions of matter and energy. Thermodynamics; atomic and molecular structure; solutions; kinetics; electrochemistry; quantum chemistry.

CHEM 346. Physical Chemistry Laboratory (2-0-5)

Prerequisites: CHEM 322, 326, 341; corequisite: CHEM 342. Taught spring semester – odd numbered years. (Laboratory Fee Required)

Techniques used in the study of thermochemistry, electrochemistry, states of matter, molecular structure.

CHEM 386. Techniques in Synthesis (3-1-5)

Prerequisites: CHEM 322, 326; corequisite: None. Taught spring semester – even numbered years. (Laboratory Fee Required)
Synthesis of organic and inorganic compounds. Primarily a laboratory course.

CHEM 395. Special Topics in Chemistry (Credits vary)

Selected topics. Offered as interest demands.

CHEM 401. Inorganic Chemistry (3-3-0)

Prerequisite: CHEM 341 or consent of the instructor; corequisite: None. Taught in the spring semester – odd numbered years.

Survey of properties and reactions, with emphasis on unifying principles. Topics include bonding and structures, coordination chemistry; thermodynamic and kinetic reactivity; solvent systems; redox; polymeric inorganic systems; organometallic and bioinorganic chemistry.

CHEM 441. Spectrometric Methods for Determination of Structure (3-3-0)

Prerequisite: CHEM 326 or consent of instructor; corequisite: None. Taught fall semester – even numbered years.

The application of instrumental methods for determination of structure is studied. Instrumental methods, including nuclear magnetic resonance spectrophotometry, infrared spectrophotometry, mass spectrometry, and ultraviolet-visible spectrophotometry applied to the problem of structure determination.

CHEM 445. Instrumental Methods in Chemistry (3-1-5)

Prerequisite: CHEM 341 or consent of instructor; corequisite: None. Taught in fall semester – odd numbered years. (Laboratory Fee Required)

Theory and practice of instrumental methods in the solution of analytical problems.

CHEM 490. Seminar (1-1-0)

Prerequisite: Departmental consent; corequisite: None. Taught spring and fall.
Review of current periodicals. Reports of student or faculty research. Required for senior students, who must present at least one seminar.

CHEM 495. Advanced Topics in Chemistry (Credits vary)

Prerequisite: Consent of instructor; corequisite: None.

Topics from all phases of chemistry will be presented. Credit, lecture, and laboratory to be arranged.

CHEM 499. Independent Study and Research (1 to 3 credits)

Prerequisite: Consent of department chairman; corequisite: None. Taught spring and fall. (See section on Independent Study Procedures).

The Curriculum in Geology

In addition to its biology and chemistry course listings, the Department of Biology, Chemistry, and Environmental Science offers the following courses in geology:

GEOL 201. Physical Geology (3-3-0)

Prerequisite: None; corequisite: None.

The investigation of lithosphere, and the structure, characteristics and history of planet earth. Stress is placed on processes and interactions.

GEOL 202. Geology of Ocean Basins and Margins (3-3-0)

Prerequisite: None; corequisite: None.

An investigation of oceans, seas, basins and borderlands. The student studies sea-land interactions, shelves, sediments, sea-level changes and the origin and evolution of oceans and ocean basins.

GEOL 203. Physical Geology Laboratory (1-0-3)

Prerequisite or Corequisite: GEOL 201. (Laboratory Fee Required)

Practical and experimental techniques of basic structural geology and identification of rocks and minerals.

GEOL 204. Geology of Ocean Basins Laboratory (1-0-3)

Prerequisite or Corequisite: GEOL 202. (Laboratory Fee Required)

Practical and experimental techniques of geological oceanography.

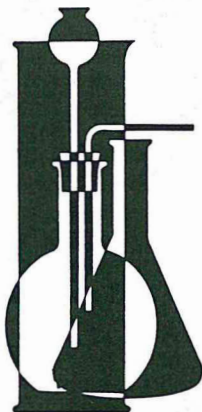
GEOL 212. Oceans, Seas and Shores (3-3-0)

Prerequisites: GEOL 201, 202; corequisite: None.

A marine science course taught from the vantage point of coastal location. Continental borderlands, ice regions, ocean basins and coastal processes are studied with consideration of the effects of the sea upon climate, land and man.

GEOL 395. Topics in Earth Sciences (3-3-0)

Selected topics in earth sciences subjects.





Computer Science

Department Chairman : Assistant Professor David E. Game

Associate Professor: Engel

Assistant Professors: Asai, Fiducia, Game, McCubbin

Instructor: Lee

The Department of Computer Science offers curricula that provide broad coverage of computer theory and many of the applications of computers. Because of the importance of computer science to many fields, the department recognizes a major responsibility to provide instruction for students earning degrees in other fields.

The department offers two majors and a minor for students wishing intensive study in the area. In addition to the Bachelor of Science Degree in Computer Science, the department administers the interdisciplinary degree in Information Science. A minor program may be arranged to support most majors; but it is particularly appropriate for science, mathematics, or business majors as preparation for advanced study or employment.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Science degree in Computer Science

The Bachelor of Science degree in Computer Science is designed to prepare a student for graduate work in computer science or a computer-oriented career, such as in scientific, application or systems programming. Distribution Requirements are those of the Bachelor of Science degree, which appear in the "Academic Policies and Regulations" section of the *Catalog*, under "Distribution and Other Degree Requirements." PHYS 201-202 is required as one of the two laboratory science sequences.

The Bachelor of Science degree in Computer Science requires a minimum of 36 credits in computer science, including: CPSC 230, 231, 310, 320, 330, 340, 370, 410, and 420. Nine credits must be selected from CPSC 450, 460, 470, 480, 495, and 499, with courses numbered 495 and above used no more than twice. Either MATH 380 or MATH 480 may be substituted for the optional courses. In addition, students pursuing this degree must successfully complete 13 credits in mathematics,

including: MATH 125, 140, 240, and either MATH 235 or 260. A grade of C or better is required for satisfactory completion of any of the above courses.

Students pursuing the Bachelor of Science degree in Computer Science are strongly encouraged to pursue studies in other academic fields in which there are significant applications of computer science. A minor in Business, Economics, Mathematics, a natural science, Pre-Engineering, or Psychology would be a viable choice. Students interested in the scientific or engineering applications of computers are strongly urged to take CPSC 220 and MATH 380-480.

The Minor in Computer Science

The minor in Computer Science requires a minimum of 21 credits in computer science, including: CPSC 230, 231, 320, and at least nine additional credits in Computer Science at the upper (300-400) level. The minor in Computer Science may not include CPSC 210. A grade of C or higher is required of all Computer Science courses presented in fulfillment of the minor in Computer Science. Additionally, the following courses are suggested for a minor concentration in specific application areas: (1) Business Application: CPSC 240, 350, 430, and 440; (2) Natural Science Application: CPSC 330, 340, and either CPSC 360 or 420; (3) Social Science Application: CPSC 220, 350, and 370; (4) Mathematics Application: CPSC 360, 420, and 470.

The Bachelor of Science in Information Science degree

The Bachelor of Science in Information Science degree consists of courses chosen from the fields of business, computer science, economics, mathematics, and psychology, with primary emphasis in the field of computer science. The program is designed to provide the student with a broad background appropriate for a computer-oriented career. Special emphasis is placed on systems analysis and design.

With careful selection of electives, a student in this program can be prepared for graduate work in computer science or related disciplines. Distribution requirements for the degree which appear in the "Academic Policies and Regulations" section of the *Catalog* should be completed within the first two years or first 60 credits of work.

Core Requirements for the Bachelor of Science in Information Science degree consist of 57 credits from the fields of business, computer science, economics, mathematics, and psychology. The following courses are required: ACCT 201-202; BUSN 324; FINC 323; PSYC 313; either MATH 235 or MATH 260; either PSYC 303 or BUSN 400; CPSC 230; CPSC 231; CPSC 240; CPSC 320; CPSC 330; CPSC 335; CPSC 350; CPSC 430; CPSC 440; CPSC 445; and two of the following: CPSC 310, CPSC 360, CPSC 410, CPSC 480. A grade of C or better is required for any of the above courses offered toward the Bachelor of Science in Information Science degree.

The Curriculum in Computer Science

CPSC 210. Introduction to Computing with BASIC (3-3-0)

Prerequisite: One semester of college-level mathematics or high-school algebra; corequisite: None. Fall and Spring. (Laboratory Fee Required)

This course is designed for non-majors. Introduction to computers, their capabilities, limitations and applications. Computer terminology, hardware and software organization. Problem solving using the programming language BASIC.

CPSC 220. Computers & Programming with FORTRAN (3-3-0)

Prerequisite: Math 110 or equivalent; corequisite: Math 130. Fall and Spring. (Laboratory Fee Required)

Introduction to computer concepts and structures. Problem solving and algorithm implementation using the FORTRAN 77 programming language. Standard numeric and non-numeric data types, arrays, subprograms and formatted I/O. Structured program development.

CPSC 221. Computer Structures and Programming (3-3-0)

Prerequisite: CPSC 220; corequisite: None.

Fall. This course will be discontinued following the 1985-86 academic year. (Laboratory Fee Required)

A continuation of CPSC 220 to continue the development of discipline in program design, style and expression, debugging and testing. Experience in an additional programming language will be gained. Basic algorithms and their analysis will be studied with particular reference to such techniques as string processing, recursion, internal search/sort methods, and simple data structures.

CPSC 230. Computers & Programming I with Pascal (3-3-0)

Prerequisite: Math 130; corequisite: None. Fall and Spring. (Laboratory Fee Required)

Introduction to computer concepts and structures (hardware and software). Problem solving and algorithm implementation using the Pascal programming language. Introduction to data types, arrays, records and textfiles. Structured methods of program development are emphasized.

CPSC 231. Computers & Programming II with Pascal (3-3-0)

Prerequisite: CPSC 230; corequisite: None. Fall and Spring. (Laboratory Fee Required)

Continuation of CPSC 230. Further study of structured program design and verification, programming style, documentation and debugging. Algorithm development and analysis with emphasis on simple data structures such as strings, lists and stacks. Recursion, internal search/sort algorithms.

CPSC 240. Business Data Processing with COBOL (3-3-0)

Prerequisite: None; corequisite: None. Fall and Spring. (Laboratory Fee Required)

Use of computers in a business environment. Report production, file structures, file maintenance and structured methods using the COBOL programming language.

CPSC 295. Elementary Topics (Credits vary)

Prerequisites: Consent of instructor or as listed in pre-registration schedule; corequisite: None. Taught when appropriate.

This course will cover in greater depth material first presented in CPSC 220 or 240, will present programming languages not otherwise covered

in the 200 level courses, or will address other elementary topics in computer science.

CPSC 310. Programming Language Concepts (3-3-0)

Prerequisite: CPSC 221 and CPSC 231; corequisite: None. Fall. **(Laboratory Fee Required)** Basic concepts dealing with information binding, arithmetic, string handling, data structures, storage and mapping, input/output, and execution environment. Specialized concepts concerning recursion, multiprocessing, list processing and language extensibility. Several programming languages will be examined.

CPSC 320. Data and File Structures (3-3-0)

Prerequisite: CPSC 221 or 231; corequisite: None. Fall and Spring. **(Laboratory Fee Required)** Study of trees, graphs, heaps. Performance analysis of related algorithms. Structure and use of external files. Search, sort/merge and retrieval for external files. Programming assignments will involve applications of the topics covered.

CPSC 330. Computer Organization (3-3-0)

Prerequisite: CPSC 221 or 231 or consent of instructor; corequisite: None. Fall.

An in-depth study of digital computer design and architecture, both hardware and software. The functional organization of the computer will be examined from a logic design point of view through the application of Boolean Algebra. Special emphasis will be placed on the logic elements used in implementing computer functions.

CPSC 335. Data Communication Systems (3-3-0)

Prerequisite: CPSC 330 and MATH 140; corequisite: None. Spring. **(Laboratory Fee Required)** Concepts and terminology of data communication systems, to include transmission protocols, media, communication devices, software, networks and control strategies.

CPSC 340. Assembler Language Programming (3-3-0)

Prerequisite: CPSC 220 or 230; corequisite: None. Spring. **(Laboratory Fee Required)** Study of assembler language and programming techniques with regard to a specific computer system. Includes a detailed coverage of the machine's architecture and instruction repertoire. Programming examples will deal with common information processing problems and

with applications in the area of systems programming.

CPSC 350. Systems Analysis and Design (3-3-0)

Prerequisite: CPSC 230 or 240; corequisite: None. Fall. **(Laboratory Fee Required)**

A study of the methodology involved in building complete computer-based business information systems. Case studies will include file-handling and data communication requirements.

CPSC 360. Modeling and Simulation (3-3-0)

Prerequisites: CPSC 220 or 230 or 240; MATH 125 and 140; corequisite: None. Spring. **(Laboratory Fee Required)**

Introduction to model building and simulation using a digital computer. The specialized language GPSS will be applied to the study of discrete stochastic systems. Consideration is given to experimental design, validation through statistical analysis, and optimization techniques.

CPSC 370. Societal Impact of Computing (3-3-0)

Prerequisites: CPSC 220 or 230 and junior/senior standing; corequisite: None. Taught fall semester.

This course introduces models which describe the impact of computers on society and the tools and techniques applicable to the problems which are posed. A framework for professional activity is developed, which involves considerations and decisions of social impact.

CPSC 395. Intermediate Topics (3-3-0)

Prerequisites: CPSC 231 or consent of instructor; corequisite: None. Taught when appropriate.

Special topics in computer science selected from such areas as microcomputers, minicomputers, telecommunications networks and distributed systems, and graphics.

CPSC 410. Operating Systems and Architecture I (3-3-0)

Prerequisites: CPSC 320, 330 and 340; corequisite: None. Fall. **(Laboratory Fee Required)**

Introduction to operating systems, I/O processing, interrupt structure and multiprocessing-multiprogramming, job management, resource management, batch and interactive processing, deadlock problem, computer networking through teleprocessing and system performance evaluation.

CPSC 420. Algorithms (3-3-0)

Prerequisite: CPSC 320 and MATH 240; corequisite: None. Taught spring semester. **(Laboratory Fee Required)**

The application of analysis and design techniques to non-numeric algorithms which act on data structures, and the utilization of algorithm analysis and design criteria in the selection of methods for data manipulation in the environment of a data base management system. Examples will be taken from areas such as combinatorics, numerical analysis, systems programming, and artificial intelligence. Certain domain independent techniques will also be introduced.

CPSC 430 Operations Research (3-3-0)

Prerequisites: CPSC 220 or 230; MATH 235 or 260; corequisite: None. Taught fall semester. **(Laboratory Fee Required)**

Introduction to operations research. The history and development of OR. Topics include linear programming, duality theory, and network flow theory, including an introduction to PERT, dynamic programming game theory, and simulation.

CPSC 440. Database Management Systems (3-3-0)

Prerequisites: CPSC 320 and either MATH 235 or 260; corequisite: None. Fall. **(Laboratory Fee Required)**

Database (DB) concepts. Relational, hierarchical and network models. Query languages, data sublanguages and schema representations. The DB environment: DB administration, security, dictionaries, integrity, backup and recovery. Study of commercial packages such as IMS, TOTAL and System R.

CPSC 445. Information Systems Development and Implementation (3-3-0)

Prerequisite: CPSC 350 and CPSC 440; corequisite: None. Spring. **(Laboratory Fee Required)**

A study of the factors necessary for successful implementation and operation of information systems; the traditional life cycle approach to managing and controlling application development and alternative development approaches.

CPSC 450. Operating Systems and Architecture II (3-3-0) Spring.

Prerequisite: CPSC 410; corequisite: None. **(Laboratory Fee Required)**

A continuation of CPSC 410 with emphasis on the area of intra-system communications.

CPSC 460. Introduction to Compilers (3-3-0)

Prerequisite: CPSC 310 and 320; corequisite: None. Spring. **(Laboratory Fee Required)**

A study of the problems of translating procedure oriented languages. Lexicographic analysis, syntax checking, code generation and optimization. Error detection and diagnostics.

CPSC 470. Theoretical Computer Science (3-3-0)

Prerequisites: CPSC 320 and 340; MATH 240 and 260; corequisite: None. Fall. **(Laboratory Fee Required)**

Presentation of basic results relating to formal models of computation. Emphasis is placed on developing skills in understanding rigorous definitions in computing and in determining their logical consequences.

CPSC 480. Software Design and Development (3-3-0)

Prerequisites: CPSC 310 and 320; corequisite: None. Taught fall semester. **(Laboratory Fee Required)**

Presentation of a formal approach to state-of-the-art techniques in software design and development. Application of such techniques in a team environment.

CPSC 495. Advanced Topics (3-3-0)

Prerequisites: Consent of instructor or as listed in preregistration schedule; corequisite: None. Taught when appropriate.

Advanced computer science topics such as advanced systems programming, systems simulation, automata theory, computability theory, and formal language theory.

CPSC 499. Directed Study in Computer Science (Credits vary)

Prerequisites: Junior or senior standing and approval of the chairman; corequisite: None. Taught when appropriate.

Directed research or projects under the direction of a faculty advisor. This course is regulated under the College policy on Independent Study.

English

Department Chairman: Professor Albert E. Millar

Professor Emerita: Sancetta

Associate Professor Emerita: Randall

Professors: Millar, Sanderlin

Associate Professors: Chambers, Gordon, MacLeod, Paul, Wood

Assistant Professors: Casey, Stark

The study of literature holds many values for the student. Since man is concerned with such realities as life, love, the problem of evil, happiness, and death, literature enriches and clarifies life by contributing to an understanding of man's relationship to society, to his physical environment, to his inner self, and to God. Other studies seek similar ends, but in other ways. The method of philosophy and science is to abstract truth from experience; that of literature is to seize truth in experience. By concentrating the multifarious aspects into a unity, literature offers an understanding of the human being in a deeper and fuller way than a lifetime of experience rarely, if ever, affords.

Recent studies show that, as a pre-professional major, English provides invaluable training in the preparation for four outstanding professions: Education, law, medicine, and business. The Department of English is determined that majors: (1) reach that degree of mastery of advanced composition and rhetoric which is necessary to a specialist in the language; (2) develop the analytical habit of mind characteristic of the liberal arts graduate who can succeed in many different professions; (3) master techniques of research and creative thinking which the study of literature provides; and (4) read judiciously and discriminately, realizing that the degree to which they invest time wisely and fruitfully will determine whether or not they will continue through the years to grow as persons, gaining an understanding of people and of themselves, and in a capacity for significant pleasure.

ENGL 101-102, ENGL 103-104, or (if approved by the Department of English) ENGL 101-104 or ENGL 103-102 is required of all students. Recommended placement of each student in ENGL 101 or ENGL 103 is done on the basis of pre-college verbal scores and educational backgrounds as well as career interests and potential majors.

Students who have had an unusually excellent background in literature and writing either in

school or in life experiences may be able to arrange for advanced placement in English so as to be excused from ENGL 101-102 or at least from ENGL 101. See *Advanced Placement/Credit By Examination* section.

The Bachelor of Arts degree in English

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Arts degree in English requires satisfactory completion of ENGL 101-102 (or the equivalent as described in the preceding paragraphs) and continued competence thereafter in written or oral expression. Transfer students and others desiring to pursue this degree who are weak in composition skills will be required to successfully complete ENGL 309. In addition, the following courses in each of the respective course areas are required for the Bachelor of Arts degree in English: **Area I:** ENGL 205 and 206; **Area II:** Six credits from ENGL 341, 342, and 343; **Area III:** ENGL 421; **Area IV:** Three credits from either ENGL 401 or 403; **Area V:** Three credits from ENGL 401 or 403 (if not used to satisfy the Area IV requirement) or either ENGL 402 or 404; **Area VI:** Six credits from ENGL 405, 406, 408, or either ENGL 326 or 407; **Area VII:** Nine credits from ENGL electives. Students may count as an elective any English course not used to fulfill an area requirement; however, students must successfully complete a minimum of 30 and a maximum of 42 credits in English courses *above* the 200-level and may offer up to three credits of English electives *at* the 200-level. Students wishing to be certified to teach in Virginia public schools must successfully complete ENGL 430; potential teachers are strongly urged to select ENGL 309 and 343; and all students are urged to select ENGL 309.

ENGL 421 will be offered every year; all other upper-(300-400) level courses will be

offered at least every other year except when emergency situations prevent such repetition. Two semesters of ENGL 341, 342, and 343 will be offered every year, since some American literature is required of those planning to teach in the Virginia secondary schools, and ENGL 430 will be offered every fall semester and in the summer because it is required of those planning to teach in the Virginia elementary schools.

A balanced program that takes into account the student's abilities and career objectives will be worked out with the departmental advisors assigned when students declare English as their major, usually towards the end of the sophomore year. Supporting courses, including history, fine arts, modern and classical languages and literatures, philosophy and religious studies, and speech will be recommended by departmental advisors.

The State-Approved Teacher Education Program in English

Students may complete a state-approved teacher education program in English under the Bachelor of Arts degree in English. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*, the total program of study must satisfy all requirements for the Bachelor of Arts degree in English and must include: ENGL 309; 430; and one course in adolescent literature.

An English Major with an Emphasis in Journalism

Students may complete the Bachelor of Arts degree in English with an emphasis in journalism. The program is designed for students interested in careers such as journalism, public relations, technical writing, and editing. There are three area requirements. First, literature courses acquaint the student with various writing styles. Second, writing courses provide practical training. Third, courses in an area of interest, called a cognate, supply knowledge that students must draw upon in a professional career. The cognate, to be agreed upon in writing by students and their advisors, comprises a block of closely related courses from one or more academic disciplines. For example, a person interested in

public relations might choose a cognate in speech communication; a person interested in political writing might choose political science; a person interested in writing about business might select finance or economics; and a person interested in reviewing might select arts and communication.

The Bachelor of Arts degree in English with an emphasis in journalism requires: (1) **Literature:** Three credits from ENGL 205, 206, or 326; three credits from ENGL 341 or 342; ENGL 343; three credits from ENGL 401, 402, 403, 404, or 421; and three credits from ENGL 405, 406, 407, or 408; (2) **Writing:** ENGL 260, 309, 353, and 360; (3) **Cognate:** 12 credits; (4) CPSC 220; (5) At least two semesters' work with *The Captain's Log*. Additional experience (practicums, internships or summer employment) is highly recommended. Practicums in the form of Independent Study are available in offices both on and off campus.

The Minor in English

The minor in English requires successful completion of either ENGL 201-202 or 205-206 or their equivalents, either of which satisfies the College Humanities Distribution Requirement; **Area II:** Three credits from ENGL 341, 342, or 343; **Area III:** ENGL 421; **Area V:** Three credits from ENGL 401, 402, 403, or 404; **Area VI:** Three credits from ENGL 326, 405, 406, 407, or 408; and **Area VII:** Six credits of English electives above the 200-level.

The Curriculum in English

Credit in any English course below the 100-level does not apply toward a degree. Students may not repeat such a course more than once.

ENGL 010. Strategies for Reading and Study (3-3-0)

Taught both semesters.

The course includes instruction, demonstration, and guided practice in selecting and organizing the major ideas and supporting evidence from textbooks, professional journals, and other academic readings; taking and reviewing academic lecture notes. Concurrent enrollment in ENGL 011 is required.

ENGL 011. Laboratory in Reading and Study Strategies (1-0-3)

Taught both semesters.

Students register concurrently with ENGL 010.

The course includes assessment of knowledge and performance in strategies considered essential for learning academic disciplines. Assignments are geared to individual capacities and interests. Regular instructor conferences are used to evaluate progress.

ENGL 020. Writing (3-3-0)

Taught both semesters.

The course provides opportunity for guided practice in the conventions of standard English prose, focusing primarily on planning, drafting, revising, rewriting, and editing of written compositions. Special attention will be devoted to the writing problems of individual students, with attention to grammar and mechanics when necessary.

ENGL 101-102. Introductory Rhetoric and Composition (3-3-0) (3-3-0)

Prerequisite: None; corequisite: None. Taught both semesters.

A study of the fundamental principles of composition and rhetoric, with paragraphs and themes arising from this study. A documented paper of approximately 1,500-2,000 words, related to the student's major or to a special subject of interest, is required of all 102 students. No student may take ENGL 102 unless he or she has passed or earned credit for ENGL 101 or its equivalent or has received the department's approval. In some cases, the department will allow a student who has successfully completed 101 to take ENGL 104 in place of 102.

ENGL 103-104. Composition, Rhetoric, and Literature (3-3-0) (3-3-0)

Prerequisite: None; corequisite: None. Taught both semesters.

A study of the principles of composition and rhetoric and an introduction to the major literary forms, with themes arising from this study. A documented paper of approximately 1,500-2,000 words related to a major literary genre is required of all students in ENGL 104. No student may take ENGL 104 or its equivalent unless he or she has passed or earned credit for ENGL 103 or its equivalent or has received the department's approval. ENGL 103-104 may substitute anywhere that ENGL 101-102 is given as a prerequisite or requirement. No student may take more than one six-hour sequence of 100-level English courses.

ENGL 180. Analytical and Speeded Reading (3-3-0)

Prerequisite: None; corequisite: None.

A course for the proficient reader, emphasizing principles and techniques for improving reading speed and comprehension, and developing inferential and critical interpretation. Coursework includes critical analysis of writings that present a range of points of view and rhetorical devices. Individual guided practice in speed, study techniques, visualizing, vocabulary, and other reading skills will be assigned as appropriate for each student.

ENGL 201, 202. English Literature (3-3-0) (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught both semesters.

A survey of English literature, emphasizing the major writers and dominant literary trends: first semester from *Beowulf* through Johnson; second semester from Blake to the present.

ENGL 205, 206. Survey of World Literature (3-3-0) (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught both semesters.

A study of literary masterpieces of the Western and Eastern worlds from classical to modern times, with emphasis on literary perspectives: epic, romantic, satiric, tragic, comic, and ironic. All study will be based on English translations.

ENGL 207, 208. Literature and Ideas (3-3-0) (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught both semesters.

A study of literature as it interprets man's understanding of himself and society. Focuses on ideas of recurring interest, such as innocence and experience, conformity and rebellion, love and hate, discovery and creation, and death. Especially recommended to non-English majors as their humanities distribution requirement.

ENGL 260. News Writing and Reporting (3-3-0)

Prerequisites: Six hour freshman English sequence; corequisite: None.

An introductory journalism course with emphasis on theory and practice of news gathering and writing, especially as they pertain to print media.

Assignments stress writing in simple language and in logical sequence.

ENGL 300. The Bible as Literature (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None. Taught fall semester.

A literary study of the Old and New Testaments with emphasis upon artistic and humanistic merits of these collections. Segments of the Apocrypha will be discussed as well.

ENGL 309. Prose Writing (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught spring semester.

Practice in writing essays and articles, some autobiographical, some persuasive. Half of the semester is devoted to developing various approaches, half to the refinement of writing. This course is intended for people in all majors. Especially recommended to liberal arts majors who have completed their 101-102 requirements before coming to the College and to all students who need further training and practice in correct and effective writing.

ENGL 326. Major World Fiction of the Twentieth Century (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical study of the great fiction produced in countries of the Western World (including England and America) since the beginning of the century, with emphasis on the novel.

ENGL 341. American Literature I (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical and historical analysis of American writers from the beginning through Herman Melville.

ENGL 342. American Literature II (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical and historical analysis of American writers from Walt Whitman through Theodore Dreiser.

ENGL 343. Modern American Literature (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None. Taught fall semester.

A critical and historical analysis of American writers from Edwin Arlington Robinson to the recent past.

ENGL 351. Fiction Writing (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught fall semester.

Intensive exercises in the writing of fiction, with emphasis on the short story. Attention to selected examples by contemporary authors. Manuscripts read and discussed in class. Individual conferences.

ENGL 352. Poetry Writing (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None.

Intensive exercises in the writing of poetry. Analysis of contemporary techniques. Manuscripts read and discussed in class.

ENGL 353. Business and Technical Writing (3-3-0)

Prerequisite: Six hour freshman English sequence; corequisite: None. Taught fall semester.

The principles and practice of writing for readers with business and technical backgrounds of varying degrees. Includes the preparation of reports, memoranda, letters, proposals, abstracts, resumes, supporting documentation, tables, graphs, and figures and the adaptation of written material for oral presentation. Valuable to majors in business, governmental administration, the sciences and pre-engineering but also to humanities-area majors who may work as writers and editors in business, industry, or government.

ENGL 360. Advanced News Writing and Reporting (3-3-0)

Prerequisite: ENGL 260; corequisite: None.

Detailed study of the techniques of securing news as well as the sources of news in the fields of public interest. Development of judgment in the style of news writing with emphasis on clarity and maturity of expression. Work in editorials, columns, reviews, and techniques of criticism. Practical exercises and assignments to cover actual news situations.

ENGL 395. Special Topics in British and American Literature (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None. Taught either semester. A seminar in major authors, literary concepts, or topics related to historical periods, with subject matter and instructor changing each time

the course is offered. The seminar topic will represent both general student interest and the specialty (or research in progress) of an individual member of the department. Subjects will be chosen to appeal to students at large as well as to English majors. English majors may enroll only once for credit.

ENGL 401. Medieval Poetry and Drama (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

Study of *Beowulf*, the Pearl Poet, medieval drama, and other non-Chaucerian medieval literature in translation. At least half of the course will concentrate on Chaucer's major works.

ENGL 402. The Renaissance in Literature (3-3-0)

Prerequisite: At least one course in the 201-208 sequence.

Non-dramatic poetry, 1580-1600, with emphasis on Spenser. Non-Shakespearean drama, 1580-1642, emphasizing such writers as Marlowe, Jonson, and Webster.

ENGL 403. Seventeenth-Century British Writers (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

Lyrics and religious poems of Donne and his followers; Jonson and the Sons of Ben; controversial and religious prose. At least half the course will concentrate on Milton's works.

ENGL 404. British Literature, 1660-1798 (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

Restoration and eighteenth-century British writers, with emphasis on Dryden, Swift, Pope, Johnson, Boswell, Fielding, and Richardson.

ENGL 405. English Literature of the Romantic Movement (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical and historical study of the major works produced in England from 1798-1830.

ENGL 406. The Victorians: British Literature, 1830-1900 (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical and historical study of the major

works produced in England from 1830-1900.

ENGL 407. Twentieth-Century British Literature (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical and historical study of the major poetry, drama, and fiction produced in Great Britain and Ireland from 1900 to the present.

ENGL 408. The Nineteenth-Century British Novel (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

A critical, analytical, and historical survey of selected British novels of the nineteenth century.

ENGL 421. Shakespeare (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None.

Representative histories, comedies, tragedies, problem plays, and romances, with attention to major themes and Shakespeare's development as a dramatist.

ENGL 430. Aspects of the English Language (3-3-0)

Prerequisite: At least one course in the 201-208 sequence; corequisite: None. Taught fall semester.

An introduction to all the major aspects of the English language (phonology, morphology, syntax, and semantics) considered in terms of the traditional, structural, and transformational-generative schools of modern-grammar study. Readings in and discussions of the historical development of language, vocabulary building and processes of word formation, and metalinguistics. An emphasis on the relation of all types of grammar study to writing and to the teaching of correct standard speech and writing.

ENGL 491. Practicum and Public Writing (3-3-0)

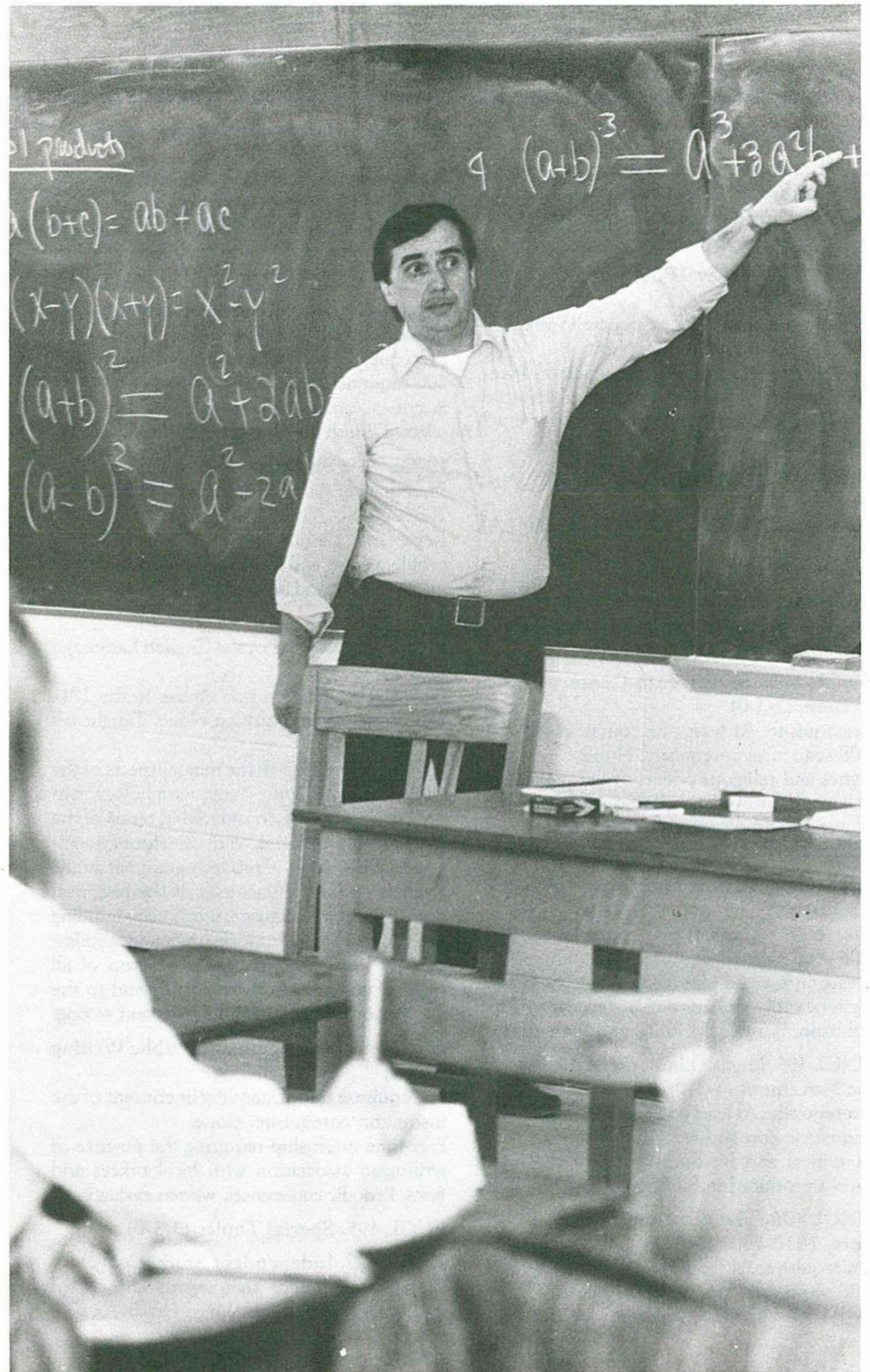
Prerequisite: Junior standing or consent of the instructor; corequisite: None.

Part-time internship requiring the practice of writing in association with local offices and firms. Periodic conferences, written evaluations.

ENGL 495. Special Topics (3-3-0)

ENGL 499. Independent Study (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None.



Mathematics

Department Chairman: Associate Professor John J. Avioli

Professors: Bartelt, Summerville

Associate Professor Emerita: Bright

Associate Professors: Avioli, Kostaki-Gailey, Weber

Assistant Professor: Persky

Instructors: Rankins, Stassi, Turner

The Department of Mathematics offers a variety of courses for those who wish to develop general or specific skills in mathematics, to satisfy the Mathematics Distribution Requirement, to study mathematics for esthetic reasons, or to pursue the Bachelor of Arts or Bachelor of Science in Mathematics or the minor in mathematics. The department has established different levels of courses for entering students. Consequently, entering students are strongly encouraged to take the CNC Mathematics Placement Test (not an entrance examination) in the Office of Counseling and Career Services before deciding which mathematics course to take. The department encourages those students who have had more advanced mathematics either in high school or at another college to consult with an advisor in the Department of Mathematics so that a suitable program of study may be planned.

All students planning to pursue either the Bachelor of Arts or Bachelor of Science degree in Mathematics must satisfy the appropriate Distribution Requirements as stated in the "Academic Policies and Regulations" section of the *Catalog*, under "Distribution and Other Degree Requirements," as well as general requirements for graduation. Students pursuing the Bachelor of Arts degree in Mathematics are strongly urged to satisfy the Natural Science Distribution Requirement by successfully completing PHYS 201-202; students pursuing the Bachelor of Science degree in Mathematics must successfully complete PHYS 201-202 plus one additional natural science sequence to satisfy the Natural Science Distribution Requirement. It may be advisable for students to take PHYS 201-202 after first completing MATH 140. The department also strongly recommends that students pursuing either the BA or BS degree in Mathematics take CPSC 230-231. The ability to write sophisticated com-

puter programs is a prerequisite for MATH 335, 380, and 390.

Because of the complexity of planning a long-term program for students intending to major or minor in mathematics, and in particular, for those intending to teach mathematics in Virginia secondary schools, such students are strongly urged to consult with the Department of Mathematics before registering for any courses. This applies to both classified and unclassified students.

The Bachelor of Arts and Bachelor of Science degrees in Mathematics.

The Department of Mathematics offers four options for students pursuing either the BA or BS degree in Mathematics: the mathematics major; the mathematics major with a concentration in computer science; the mathematics major with a concentration in physics; and the teacher education program. The completion of a concentration will be indicated on the final transcript.

The Major in Mathematics

Students pursuing the BA or BS degree with a major in mathematics must satisfactorily complete MATH 250, 260, 360, and 370; one 400-level mathematics course (not including MATH 499); and a minimum of nine additional credits in mathematics at the 300-400 level. In addition, students in this concentration must choose one of two plans: (1) Successful completion of nine additional credits in 300-400 level mathematics courses in addition to the basic 24 credits stated above; or (2) Successful completion of nine additional credits in 300-400 level courses from the Departments of Biology, Chemistry, and Environmental Science; Computer Science; and Physics, in consultation with an advisor from the Department of Mathematics. Courses from all other departments must be approved in advance by the Department of Mathematics.

The Major in Mathematics with a Concentration in Computer Science

This concentration is designed for students who have a strong interest in both mathematics and computer science. Students pursuing the BA or BS degree in Mathematics with a concentration in computer science must satisfactorily complete MATH 250, 260, 360, 370, 380 and 390; either MATH 400 or MATH 480, and six credits in 300-400 level mathematics courses; CPSC 310 and 360; at least one of CPSC 320, 330, 340; plus, in consultation with an advisor from the Department of Mathematics, an additional 15 credits in computer science courses, at least nine of which must be at the 300 or 400 level.

The Major in Mathematics with a Concentration in Physics

This concentration emphasizes practical scientific, mathematical, and engineering research. Students pursuing the BA or BS degree in Mathematics with a concentration in physics must successfully complete MATH 250, 260, 320, 360, and 420. In addition, students must successfully complete a minimum of nine credits of 300-400 level mathematics courses; MATH 335, 380, 440, and 480 are recommended. Other requirements include successful completion of PHYS 201-202 and PHYS 301; plus 12 additional credits in physics-engineering at the 300-400 level, chosen in consultation with an advisor from the Department of Mathematics.

The State-Approved Teacher Education Program in Mathematics

Students may complete a state-approved teacher education program in mathematics under either the Bachelor of Arts or Bachelor of Science degree in Mathematics. All students pursuing this option must successfully complete CPSC 220 or 230; MATH 125, 250, 260, 320, 360, 370; one 400-level mathematics course; and a minimum of six additional credits in mathematics at the 300-400 level. In addition, the student must complete those courses identified as required under the heading, "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*.

The Minor in Mathematics

The minor in mathematics requires successful completion of MATH 250, 260, and 320, plus six additional credits in mathematics at the 300 and 400 level.

The Curriculum in Mathematics

MATH 030-031. Basic Mathematics (4-4-0) (3-3-0) Credit does not apply toward a degree. Taught both semesters.

Topics include operations with fractions, percent, operations and properties of signed numbers, exponents, roots and radicals, evaluating expressions and formulas, operations with algebraic expressions, first-degree equations and inequalities, word problems, graphing, geometry, and algebraic fractions.

MATH 105. Contemporary Mathematics (3-3-0)

Prerequisites: One year of high school algebra and acceptable score on mathematics placement test; corequisite: None. fall and spring. Designed to introduce the student to the spirit of modern mathematical ideas, techniques, and applications. Topics will be drawn from consumer money management, probability, systems of linear equations, modeling, and other topics in finite mathematics. This course is recommended as a partial fulfillment of the distribution requirement for non-science majors.

MATH 110. Algebra (3-3-0)

Prerequisites: One year of high school algebra and acceptable score on mathematics placement test; corequisite: None. fall and spring.

This course is intended to serve as a prerequisite for MATH 130 or 135. Topics include properties of real numbers, polynomials, rational expressions, exponents, equations and inequalities, functions, logarithms, and systems of equations.

MATH 125. Elementary Statistics (3-3-0)

Prerequisites: One year of high school algebra and acceptable score on mathematics placement test, or two years of high school algebra; corequisite: None. fall and spring.

A general survey of descriptive and inferential statistics. Descriptive analysis of uni- and bivariate data, probability, standard distributions, sampling, hypothesis testing, estimation, linear regression, and non-parametric testing.

MATH 130. Elementary Functions and Analytic Geometry (3-3-0)

Prerequisite: Two-and-a-half years of high school mathematics, acceptable score on mathematics placement test, or MATH 110; corequisite: None. fall and spring.

Designed for the student planning to take calculus but who has little or no knowledge of analytic geometry, trigonometry, and functions. Real numbers, inequalities, analytic geometry, linear and quadratic functions, polynomials and rational functions, trigonometric identities, and exponential and logarithmic functions.

MATH 135. Calculus for Business and Social Sciences (3-3-0)

Prerequisite: Two-and-one-half years of high school math or acceptable score on mathematics placement test or MATH 110; corequisite: None.

An introduction to the calculus of functions arising in business and the social sciences. Exponential and logarithmic functions, differentiation, and integration. Modeling and applications will be stressed.

MATH 140. Calculus and Analytic Geometry (4-4-0)

Prerequisite: Three-and-a-half years of high school mathematics, acceptable score on mathematics placement test, or MATH 130; corequisite: None. fall and spring.

An introduction to the calculus of elementary functions. Analytic geometry, functions, continuity, derivatives, methods of differentiation, the Mean Value Theorem, curve sketching, applications of the derivative, the definite integral, the Fundamental Theorems of Calculus, indefinite integrals, and logarithmic and exponential functions.

MATH 235. Applied Matrix Techniques (3-3-0)

Prerequisites: MATH 140 or MATH 135, CPSC 220 or 230;; corequisite: None. fall and spring. Topics in applied linear algebra such as systems of linear equations, Gaussian elimination, matrix algebra, determinants, Cramer's rule, eigenvalues and vectors. Also applications in some of these areas: linear programming game theory, Markov chains, input/output models, graph theory, and genetics.

MATH 240. Intermediate Calculus (3-3-0)

Prerequisite: MATH 140 or consent of the instructor or chairman; corequisite: None. fall and spring.

Techniques of integration, L'Hospital's Rule, approximations, Taylor's Theorem, sequences and limits, series of numbers and functions, power series, and Taylor series.

MATH 250. Multivariable Calculus (3-3-0)

Prerequisite: MATH 240 or consent of the instructor or chairman; corequisite: None.

An introduction to the calculus of real-valued functions of more than one variable. The geometry of three-space, partial and directional derivatives, multiple and iterated integrals, and applications.

MATH 260. Linear Algebra (3-3-0)

Prerequisite: MATH 240; corequisite: None. fall and spring.

Systems of linear equations, matrix operations, vectors and vector spaces, independence, bases and dimension, coordinates, linear transformations and matrices, determinants, eigenvalues and vectors, and inner products.

MATH 295. Elementary Topics (1-3, 0-3, 0-3)

Prerequisite: Announced at the appropriate time; corequisite: None. Taught when appropriate.

This course is a mechanism for constructing non-permanent courses for specific purposes during or between semesters. Courses can range from one-credit laboratories to three-credit courses on topics of immediate importance.

MATH 320. Ordinary Differential Equations (3-3-0)

Prerequisites: MATH 240 and 250; corequisite: None. fall and spring.

An exposition of the theory and methods of solution of elementary differential equations along with applications. Topics include first order equations, n-th order linear equations with constant coefficients, series solutions of second order linear equations, Laplace transforms, systems of first order equations, and an introduction to two point boundary value problems.

MATH 335. Applied Probability (3-3-0)

Prerequisites: MATH 240, 250, and CPSC 231, or consent of instructor; corequisite: None. fall 1985. **(Laboratory Fee Required)**

Elementary probability theory including combinatorics, distributions of random variables, conditional probability and moment generating functions. Examples of stochastic processes such as Markov chains, random walks, reliability theory, Brownian motion, renewal process, branching process, and queueing theory.

MATH 350. Vector Calculus (3-3-0)

Prerequisite: MATH 250; corequisite: None. spring.

An introductory course in differential and integral vector calculus. Topics include vector operations, gradients, divergence, curl, line integrals, Green's Theorem, Stokes' Theorem, Divergence Theorem, and applications.

MATH 360. Advanced Calculus (3-3-0)

Prerequisites: MATH 250 and 260; corequisite: None. fall.

A one-semester course covering various topics in advanced calculus and elementary analysis. Topics include sequences of functions, series of functions, Taylor and Fourier series, or uniform convergence.

MATH 370. Abstract Algebra (3-3-0)

Prerequisites: MATH 250 and 260; corequisite: None. spring.

An introduction to algebraic structures, elementary number theory, groups, rings, homomorphism theorems, quotient structures, polynomial rings, and fields.

MATH 380. Numerical Analysis (3-3-0)

Prerequisites: MATH 240 and 260; CPSC 231 or equivalent; corequisite: None. fall 1985. **(Laboratory Fee Required)**

A survey of numerical methods of scientific and engineering problems. The course will include such topics as: roots of linear and nonlinear systems of equations, integration, differentiation, interpolation and approximation, ordinary differential equations, and eigenvalue problems. Consideration will be given to theoretical concepts and to efficient computational procedures.

MATH 390. Mathematical Methods of Operations Research I (3-3-0)

Prerequisites: MATH 250, 260, and CPSC 231, or consent of the instructor; corequisite: None. fall 1986. **(Laboratory Fee Required)**

Properties of convex sets in Euclidean spaces. Extreme values of linear functionals on convex polyhedra. The general linear programming problem. The simplex algorithm: theoretical and computational aspects. Duality and its relationship to game theory. Case studies.

MATH 395. Elementary Topics (3-3-0)

Prerequisite: Consent of the instructor or the chairman of the department unless otherwise listed; corequisite: None. Taught when appropriate.

The exact course(s) to be offered in any one semester and a description of the course(s) will be found in the pre-registration schedule for that semester.

MATH 400. Mathematical Methods of Operations Research II (3-3-0)

Prerequisites: MATH 390 and 360 or permission of the instructor; corequisite: None. spring 1987. **(Laboratory Fee Required)**

Mathematical theory and techniques of network algorithms, integer programming, sequencing and scheduling, dynamic programming, inventory control, and computational complexity of algorithms.

MATH 420. Intermediate Differential Equations (3-3-0)

Prerequisites: MATH 320 and 360 or consent of the instructor; corequisite: None. fall.

Discussion of methods used in solving problems arising from continuous mathematical models. An introduction to Partial Differential Equations. Additional Topics may include: Sturm-Liouville Theory and qualitative theory of ordinary differential equations, transform methods, Green's functions, delay differential equations, special functions, numerical methods.

MATH 435. Mathematical Statistics (3-3-0)

Prerequisites: MATH 335 and 360 or permission of the instructor; corequisite: None. spring 1986.

A study of the nature, scope, and theoretical basis of methods of estimation, hypothesis test-

ing, and statistical decision making. Descriptive statistics, quality of estimators and best tests, techniques of estimation and hypothesis testing, and regression analysis. Additional topics such as: analysis of variance, non-parametric procedures, sampling techniques, and SPSS.

MATH 440. Mathematical Modeling (3-3-0)
Prerequisites: MATH 320 and 360 or consent of the instructor; corequisite: None.
Modeling and solution of some problems that arise in the sciences. Emphasis on development of appropriate models and an awareness of their domain or applicability.

MATH 470. Applied Modern Algebra (3-3-0)
Prerequisites: MATH 370 and CPSC 231 or the equivalent; corequisite: None. Taught when appropriate.

An introduction to applications of algebra and discrete mathematics to machine and systems theory. Set and graph theory, semigroups, finite state machines, boolean operations, turing machines, machine homomorphisms and decompositions, circuit optimization, machine products, and other topics in discrete mathematics.

MATH 480. Numerical Analysis II (3-3-0)
Prerequisites: MATH 360 and 380; corequisite: None. spring 1986. (Laboratory Fee Re-

quired)

A continuation of MATH 380. Topics will be chosen from partial differential equations, eigenvalue problems, approximation techniques, and other topics.

MATH 495. Advanced Topics (3-3-0)

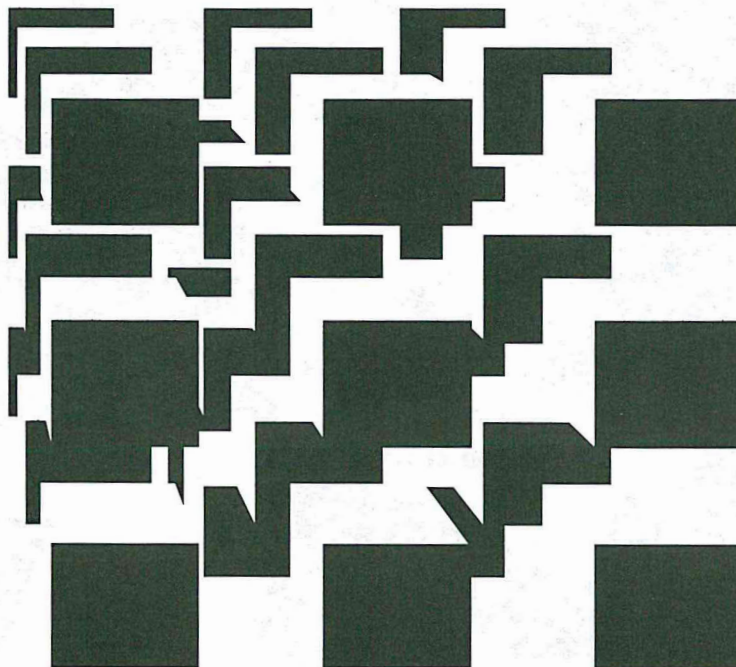
Prerequisite: Consent of the instructor or the chairman of the department, unless otherwise listed; corequisite: None. Taught when appropriate.

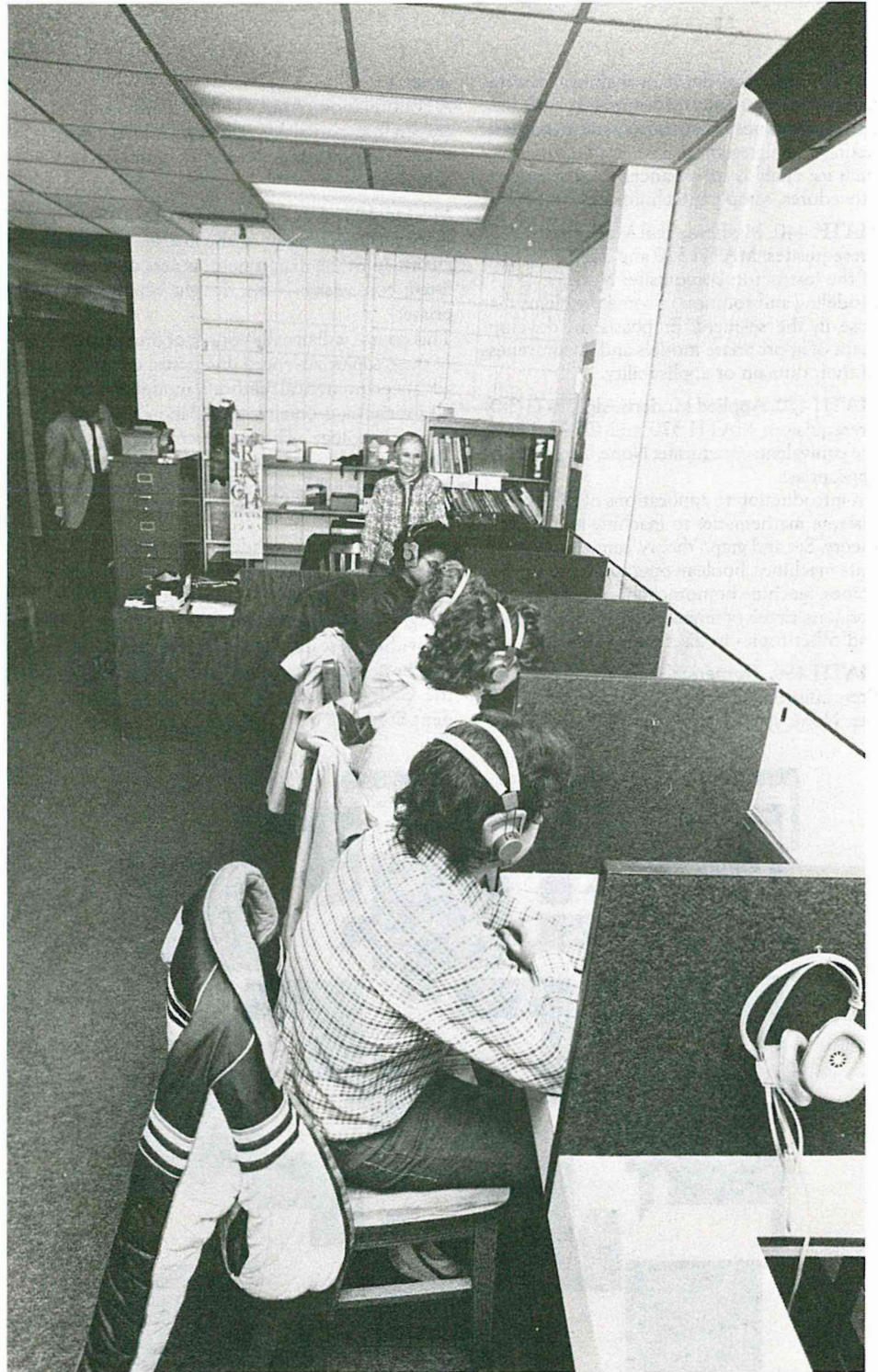
This course will usually consist of one or more of these topics: advanced differential equations, advanced numerical methods, modeling, complex variables, geometry, optimization, real analysis, or topology. The exact course(s) to be offered in any one semester and a description of the course will be found in the pre-registration schedule for that semester.

MATH 499. Independent Research

Prerequisites: Junior or senior standing and approval of the chairman; corequisite: None. Taught when appropriate.

Individual research on an approved subject may be taken for from one to three credits. See the *College Catalog* description of Independent Study.





Modern and Classical Languages and Literatures

Department Chairman: Associate Professor D. Doris Reppen

Professors: Jones, St. Onge

Associate Professors: Guthrie, Reppen

Assistant Professors: D. King, Scheiderer

The Department of Modern and Classical Languages and Literatures offers courses and programs that are designed to teach the student to understand and to speak a foreign language with facility, to develop skill in reading and writing, and to promote understanding and appreciation of foreign cultures and literatures. The department also helps students to prepare for the teaching profession, the domestic and international business world, government work, social and welfare work, careers in science and medicine, work in and relating to the fine and performing arts, and research leading to advanced degrees. Thus, modern and classical languages and literatures are both an integral part of the liberal arts program and of many different career-oriented programs at the College. The department offers the Bachelor of Arts degree in French, the Bachelor of Arts degree in German, the Bachelor of Arts degree in Spanish, and a minor program in each of the three languages. Also available are teacher education programs in French, German, and Spanish.

The study of a foreign language is one of the Distribution Requirements at the College. There are four courses in French, German, Latin, and Spanish designed to satisfy this requirement: They are listed as 101-102 and 201-202 for each language. Students who have had no previous experience in foreign languages must take the four-course sequence in one of these languages in order to satisfy the Distribution Requirement.

The results of the CNC Language Placement Test (not an entrance examination) will determine where students with previous language experience will begin their programs of study in the languages. Wherever the students begin, they must complete the appropriate sequence through the 202 course, whereupon the Foreign Language Distribution Requirement will have been satisfied. Many students will earn up to 14 credits for courses in the basic sequence that they did not have to take as a result of advanced

placement. Students scoring beyond the 202-level on the CNC Language Placement Test satisfy the Foreign Language Distribution Requirement and receive 14 credits. For further information on the CNC Language Placement Test, please contact the Chairman of the Department of Modern and Classical Languages and Literatures.

Students with French, German, or Spanish as their native language may not take the 101 or 102 course in that language for college credit. These students must, however, take the CNC Language Placement Test; the results will be evaluated for appropriate placement by the department. All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Arts degree in French

The Bachelor of Arts degree in French requires 27 credits of French courses above the 202-level and must include FREN 251 and 252; either FREN 301 or 303; and FREN 310. The remaining 15 credits of French electives are left to the discretion of the student so that each individual can create a major program emphasizing either language and literature or language and civilization according to his/her career objectives. The department recommends that cognate courses in art, English, history, and philosophy be studied to support the major. The study of a second modern or classical language is strongly recommended for students pursuing the Bachelor of Arts degree in French.

The Minor in French

The minor program in French is a valuable complement to many concentrations, particularly biology, business administration, chemistry, economics, elementary education, English, history, philosophy and religious studies, political science, psychology, sociology, and theatre arts. The minor program in French requires 18 credits in French above the 100-level.

The State-Approved Teacher Education Program in French

Students may complete a state-approved teacher education program in French under the Bachelor of Arts degree in French. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*, the total program of study must satisfy all requirements for the Bachelor of Arts degree in French and must include: Either FREN 302 or 304; and either FREN 311 or 312.

The Curriculum in French

Note: Unless otherwise specified, the prerequisite for all 300- and 400-level French courses is FREN 251-252, or consent of the instructor.

FREN 101, 102. Elementary French (4-3-1) (4-3-1)

Prerequisite: None; corequisite: None. Taught both semesters.

Establishment of a basic foundation in the French language. Emphasis on the acquisition of practical vocabulary and structure through oral usage in the classroom and laboratory. Reading and writing skills based on the same material are developed simultaneously.

FREN 201. Intermediate French (3-3-0)

Prerequisite: FREN 101-102 or by placement examination; corequisite: None. Taught fall semester.

A review of basic vocabulary and structures, emphasizing increased oral fluency and further development of reading, writing, and listening comprehension skills.

FREN 202. Intermediate French (3-3-0)

Prerequisite: FREN 201 or by placement examination; corequisite: None. Taught spring semester.

More advanced work in all skill areas of the language. Material equally divided between practical conversation and selected readings conducted chiefly in French.

FREN 251. Introduction to French Literature (3-3-0)

Prerequisite: FREN 202 or the equivalent; corequisite: None. Taught fall semester.

A survey of French literature emphasizing the major authors and principal literary movements from the Middle Ages through the eighteenth century. Materials treated from both an historical

and thematic approach. Concurrent development of language skills through lectures, discussion, and short themes in French.

FREN 252. Introduction to French Literature (3-3-0)

Prerequisite: FREN 202 or the equivalent; corequisite: None. Taught spring semester.

A survey of French literature emphasizing the major authors and principal literary movements from the nineteenth century to the present. Material treated from both an historical and a thematic approach. Concurrent development of language skills through lectures, discussions, and short themes in French.

FREN 301. Grammar and Composition (3-3-0)

Prerequisite: FREN 202 or the equivalent; corequisite: None. Offered in alternate years.

Review of the main principles of syntax, composition, and translation. Conducted chiefly in French.

FREN 302. Practical Conversation (3-3-0)

Prerequisite: FREN 202 or the equivalent; corequisite: None. Offered in alternate years.

Aim of this course is to develop fluency in speaking French. Intensive oral-aural training. Conducted chiefly in French.

FREN 303. Advanced Grammar and Composition (3-3-0)

Prerequisite: FREN 202 or the equivalent; corequisite: None.

Study of syntax and style through composition and translation. Conducted chiefly in French.

FREN 304. Conversational Approach to Society and Institutions (3-3-0)

Prerequisite: FREN 202 or consent of the instructor; corequisite: None.

Conversations emphasizing social phenomena and institutions serve as the format for improving general fluency and developing a more abstract vocabulary than in FREN 302. Stress will be placed on vocabulary related to French society and social situations.

FREN 306. Facets of a Changing France (3-3-0)

Prerequisite: FREN 202; corequisite: None.

The focus of the classroom work will be conversational. Newspapers, magazines, and films will be used to present the various facets of

change in contemporary France and will serve as the basis for discussions. The primary goal of FREN 306 will be to improve the student's ability to express himself in a loosely-structured context on topics of current import. Techniques will include reports, group discussions, and interview situations.

FREN 310. Practical French Phonetics (3-3-0)

Prerequisite: FREN 202 or equivalent; corequisite: None.

An intensive study of pronunciation, rhythm, intonation, and the international phonetic alphabet designed to increase oral proficiency. Extensive use of laboratory materials.

FREN 311. French Civilization (3-3-0)

Prerequisite: FREN 201 or equivalent; corequisite: None.

A study of French society and culture from their origins to the Third Republic, encompassing social and political trends, art, and social customs.

FREN 312. Contemporary France (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

A study of French culture and society from the Third Republic to the present, encompassing social and political trends, art, architecture, and historical events.

FREN 361. Seventeenth-Century French Literature (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

A survey of the major authors and genres of the seventeenth century, including the dramatists, the moralists, and the baroque poets. Emphasis on the theatre through selected plays of Corneille, Moliere, and Racine. Conducted chiefly in French.

FREN 371. Eighteenth-Century French Literature (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

Reading and analysis of the major works of the French Enlightenment. Developments in the novel and the theatre of the period.

FREN 381. Nineteenth-Century French Literature (3-3-0)

Prerequisites: FREN 251-252 or consent of

instructor; corequisite: None.

A survey of the major authors and works of nineteenth-century prose, poetry, and drama. Organization of the material by genre within the context of the principal literary movements of the period from Romanticism to Symbolism.

FREN 395. Elementary Topics (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

A seminar in major literary periods, linguistic phenomena, or topics related to historical and cultural developments. Emphasis on research methods. *No student may enroll more than twice for credit.*

FREN 403. Advanced Writing and Stylistics (3-3-0)

Prerequisite: FREN 301 or 303 or consent of instructor; corequisite: None.

Directed toward the student who is already familiar with the basic principles of French grammar and composition. The emphasis at this level is on increasing the student's facility in writing French and on helping him develop appropriate levels of style. These goals will be implemented through a variety of written work, including free and guided compositions, translation, and business correspondence.

FREN 490. Seminar in French Literature (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None.

Topics in major authors or specific literary themes. The seminar topic will represent both student interest and the specialty or research in progress of individual members of the department. *No student may enroll more than twice for credit.*

FREN 491. Twentieth-Century French Novel (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

A critical and historical study of prose fiction in the twentieth century, emphasizing the development of the genre as seen in the novels of Proust, Gide, Malraux, Mauriac, Sartre, Camus, and other major authors.

FREN 492. Twentieth-Century French Poetry and Drama (3-3-0)

Prerequisites: FREN 251-252 or consent of instructor; corequisite: None.

A critical and historical study of the major poetic trends of the twentieth century as seen in the works of Apollinaire, Peguy, Claudel, Valery, the surrealists, and Prevert. Accompanying study of the drama of the period through the works of Apollinaire, Claudel, Giraudoux, Anouilh, Cocteau, Sartre, Ionesco, and Becket.

FREN 495. Advanced Topics in French (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None.

A seminar in major authors or topics related to historical and cultural periods or linguistic phenomena, with subject matter and instructor changing each semester. The seminar topic will represent both student interest and the specialty (or research in progress) of an individual member of the department. *No student may enroll more than twice for credit.*

FREN 499. Independent Study (3-3-0)

Prerequisite: Upperclass standing; corequisite: None.

A course for upperclassmen in French studies. The area of study and number of credits may vary each time the course is taken.

The Bachelor of Arts degree in German

The Bachelor of Arts degree in German requires 27 Credits of German courses above the 202-level and must include GERM 251 and 252; and either GERM 301 or 303. The remaining credits of German electives are left to the discretion of the student. Some upper-level (300-400-level) German courses may have to be taken at another institution.

The Minor in German

The minor program in German requires 18 credits in German above the 100-level. No specific courses are required.

The State-Approved Teacher Education Program in German

Students may complete a state-approved teacher education program in German under the Bachelor of Arts degree in German. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*, the total program

of study must satisfy all requirements for the Bachelor of Arts degree in German and must include: GERM 302 and either GERM 311 or 312.

The Curriculum in German

Note: *Unless otherwise specified, the prerequisite for all 300- and 400-level German courses is GERM 251-252, or consent of instructor.*

GERM 101, 102. Elementary German (4-3-1) (4-3-1)

Prerequisite: None; corequisite: None.

An introduction to understanding, speaking, reading, and writing German. The student uses the language in practical situations while acquiring a basis for reading and writing at the same time.

GERM 201. Intermediate German (3-2-1)

Prerequisite: GERM 102 or placement examination; corequisite: None. Taught fall semester. A course reviewing the major grammatical structures of the language and further developing the student's ability to understand, speak, read, and write German. Emphasis is placed on use of the language.

GERM 202. Intermediate German (3-3-0)

Prerequisite: GERM 201, placement examination, or consent of instructor; corequisite: None. Taught spring semester.

A continuation of the review of major grammatical structures of the language. Readings and discussions in German literature, culture and civilization. Emphasis is placed upon the expansion of the student's active and passive vocabularies toward the goal of perfecting his knowledge of German.

GERM 251, 252. Introduction to German Literature (3-3-0) (3-3-0)

Prerequisite: GERM 202 or the equivalent; corequisite: None. 251 taught fall semester, 252 taught spring semester.

A survey of German literature emphasizing major writers and literary trends; first semester from the beginning through the age of Goethe; second semester from 1800 to the present.

GERM 301. Grammar and Composition (3-3-0)

Prerequisite: GERM 201 or the equivalent; corequisite: None.

A course dealing with the chief difficulties of grammar and the main principles of syntax,

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focusing on the development of skill in writing and translating.

GERM 302. Conversation and Comprehension (3-3-0)

Prerequisite: GERM 201 or the equivalent; corequisite: None.

A course to develop greater fluency in speaking idiomatic German and greater ability to comprehend the language in a variety of practical situations. Phonology, intensive training in speaking and listening, extensive use of recorded and filmed materials and discussions.

GERM 303. Usage and Stylistics (3-3-0)

Prerequisite: GERM 202 or the equivalent; corequisite: None.

A course in usage and prose style through composition and translation. The student is introduced to the major reference works in usage and diction and for translation.

GERM 311. German Civilization (3-3-0)

Prerequisite: GERM 202; corequisite: None.

A study of the German-speaking area of Europe, encompassing art, music, philosophy, history, geography, and social customs to 1900.

GERM 312. German Civilization (3-3-0)

Prerequisite: GERM 202; corequisite: None.

A study of the German-speaking area of Europe, encompassing art, music, philosophy, history, geography, and social customs from 1900 to the present.

GERM 371. German Literature from Classicism through Realism (3-3-0)

Prerequisite: GERM 251, 252 or consent of instructor; corequisite: None.

A study of a selection of the major works in German literature from the Classical period (ca. 1750) to the end of Realism (ca. 1890) inclusive of such writers as Goethe, Heine, Storm, Keller, Raabe, and other major authors.

GERM 395. Topics (3-3-0)

Prerequisite: Junior standing or consent of instructor; corequisite: None.

Courses in major literary periods and genres, in practical aspects of the language, in German civilization, and in German literature. *No student may enroll more than twice for credit.*

GERM 490. Seminar in German Literature (3-3-0)

Prerequisite: Senior standing or consent of

instructor; corequisite: None.

Topics in major authors or specific literary themes. The seminar topic will represent both student interest and the specialty or research in progress of individual members of the department. *No student may enroll more than twice for credit.*

GERM 493. Twentieth-Century German Novel (3-3-0)

Prerequisite: GERM 251, 252 or consent of instructor; corequisite: None.

A critical and historical study of prose fiction in the twentieth century, emphasizing the development of the genre as seen in such writers as Fontane, Mann, Hesse, Doblin, Musil, Kafka, Boll, and other major authors.

GERM 494. Twentieth-Century German Poetry and Drama (3-3-0)

Prerequisite: GERM 251, 252 or consent of instructor; corequisite: None.

A critical and historical study of the major poetic trends as well as major developments in the drama in the twentieth century, inclusive of such poets as George, Schroder, Carossa, Bergengruen, Huch, Benn; dramatists Hauptmann, von Hofmannsthal, Wedekind, Brecht, Borchert, Durrenmatt, Frisch; and other major authors.

GERM 499. Independent Study

Prerequisite: Senior standing or consent of instructor; corequisite: None. Taught upon request and at the discretion of the department. Projects for upperclassmen in German language, literature and civilization.

The Curriculum in Latin

LATN 101, 102. Elementary Latin (4-3-1) (4-3-1)

Prerequisite: None; corequisite: None. Taught on demand.

An introduction to the Latin language. Emphasis upon the acquisition of basic vocabulary and forms and the development of reading skills.

LATN 201-202. Intermediate Latin (3-3-1) (3-3-1)

Prerequisite: LATN 101, 102 or consent of instructor; corequisite: None. Taught on demand.

The Bachelor of Arts degree in Spanish

The Bachelor of Arts degree in Spanish requires a minimum of 27 credits of Spanish

courses above the 200-level and must include nine credits from: SPAN 251, 252, 301, 303, 351, and 352. The remaining 18 credits of Spanish electives are left to the discretion of the student in consultation with his/her advisor, so that each individual may create a major program emphasizing his/her particular career objectives. The department recommends that cognate courses in art, English, history, music, philosophy, and religious studies be studied to support the major.

The Minor in Spanish

The minor program in Spanish is a valuable complement to most concentrations, particularly biology, business administration, chemistry, economics, elementary education, English, history, philosophy and religious studies, political science, psychology, sociology, and theatre arts. The minor program in Spanish requires 18 credits in Spanish above the 100-level. Either SPAN 251, 252 or SPAN 351, 352 is recommended.

The State-Approved Teacher Education Program in Spanish

Students may complete a state-approved teacher education program in Spanish under the Bachelor of Arts degree in Spanish. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the *Catalog*, the total program of study must satisfy all requirements for the Bachelor of Arts degree in Spanish and must include: Either SPAN 301 or 303; SPAN 302 or 304; or SPAN 311 or 312.

The Curriculum in Spanish

Note: Unless otherwise specified, the prerequisite for all 300- and 400-level Spanish courses is SPAN 251-252, or consent of the instructor.

SPAN 101, 102. Elementary Spanish (4-3-1) (4-3-1)

Prerequisite: None; corequisite: None. Taught both semesters.

An introduction to the Spanish language, with emphasis on reading, writing, speaking, and listening comprehension. Accompanying laboratory practice.

SPAN 201. Intermediate Spanish (3-3-0)

Prerequisites: SPAN 101-102 or placement examination; corequisite: None. Taught fall semester. A review of grammatical structure, with further development of reading, writing, speaking, and listening comprehension skills.

SPAN 202. Intermediate Spanish (3-3-0)

Prerequisite: SPAN 201 or placement examination; corequisite: None. Taught spring semester. Further development of reading, writing, speaking, and listening comprehension skills. Conducted chiefly in Spanish.

SPAN 251, 252. Introduction to Spanish Literature (3-3-0) (3-3-0)

Prerequisite: SPAN 202 or consent of instructor; corequisite: None.

A survey of Spanish literature, emphasizing the major writers and the dominant literary trends. First semester from El Cid through the Golden Age; second semester from 1700 to the present. Conducted chiefly in Spanish.

SPAN 301. Grammar and Composition (3-3-0)

Prerequisite: SPAN 202 or the equivalent; corequisite: None.

Review of main principles of syntax. Composition and translation. Conducted chiefly in Spanish.

SPAN 302. Conversation (3-3-0)

Prerequisite: SPAN 202 or the equivalent; corequisite: None.

The aim of this course is to develop the ability to speak Spanish with greater fluency. Intensive oral-aural training. Conducted chiefly in Spanish.

SPAN 303. Advanced Grammar and Composition (3-3-0)

Prerequisite: SPAN 202 or the equivalent; corequisite: None.

Study of syntax and style through composition and translation. Conducted chiefly in Spanish.

SPAN 304. Practical Conversation and Diction (3-3-0)

Prerequisite: SPAN 202 or consent of instructor; corequisite: None.

A course designed to increase the speaking ability of the students through the use of both live and radio interviews of native speakers on topics of current interest. Emphasis will be placed on proper and accurate pronunciation as well as fluency.

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SPAN 311. Spanish Civilization (3-3-0)

Prerequisite: SPAN 202 or consent of instructor; corequisite: None.

A study of contemporary society and culture of Spain encompassing geography, history, art, music, and social customs.

SPAN 312. Spanish-American Civilization (3-3-0)

Prerequisite: SPAN 202 or consent of instructor; corequisite: None.

A study of contemporary society and culture of the Spanish-American countries encompassing geography, history, art, music, and social customs.

SPAN 321. Techniques of Translation: Spanish to English (3-3-0)

Prerequisite: SPAN 301, 303 or consent of instructor; corequisite: None.

A course designed to acquaint the student with the skills of translation. The course will be based upon practical translations such as business letters, newspaper articles, essays on different subjects. A variety of techniques emphasizing accurate and exact translations from Spanish to English will be used.

SPAN 351, 352. Introduction to Spanish-American Literature (3-3-0) (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

A survey of Spanish-American literature, emphasizing the major writers and the dominant literary trends. First semester from the colonial period to Modernism. Second semester from Modernism to the present.

SPAN 363. Drama of the Golden Age (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

Detailed study of the drama of the Golden Age: Lope de Vega, Cervantes, Tirso de Molina, Ruiz de Alarcon, and Calderon de la Barca.

SPAN 364. The Novel and the Poetry of the Golden Age (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

Major emphasis on the picaresque novel and the development of poetic expression from Garcilaso to Gongora.

SPAN 391. The Generation of '98 (3-3-0)

Prerequisite: SPAN 251, 252 or consent of

instructor; corequisite: None.

Representative figures include Unamuno, Azorin, and Baroja.

SPAN 392. Twentieth-Century Spanish Literature (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

Critical and historical study of representative works of the twentieth century.

SPAN 394. Twentieth-Century Spanish-American Literature (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

Critical and historical study of representative works of the twentieth century.

SPAN 395. Elementary Topics (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

A seminar in major literary periods, linguistic phenomena, or topics related to historical and cultural developments. Emphasis on research methods. *No student may enroll more than twice for credit.*

SPAN 463. Cervantes (3-3-0)

Prerequisite: SPAN 251, 252 or consent of instructor; corequisite: None.

A seminar on Cervantes, his life and works. Major emphasis on *Don Quixote*.

SPAN 490. Seminar in Spanish Literature (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None.

Topics in major authors or specific literary themes. The seminar topic will represent both student interest and the specialty or research in progress of individual members of the department. *No student may enroll more than twice for credit.*

SPAN 495. Advanced Topics in Spanish (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None.

A seminar in major authors or topics related to historical and cultural periods, or linguistic phenomena, with subject matter and instructor changing each semester. The seminar topic will represent both student interest and the specialty (or research in progress) of an individual member of the department. *No student may enroll more than twice for credit.*

SPAN 499. Independent Study (Credits vary)

Prerequisite: Upperclass standing; corequisite: None. Taught both semesters upon request and at the discretion of the department.

A course for upperclassmen in Hispanic Studies. The area of study and number of credit hours may vary each time the course is offered.

The Curriculum in Modern Languages

The department of Modern and Classical Languages and Literatures offers the following courses conducted entirely in English.

MLAN 205. The Novel in English Translation (3-3-0)

Prerequisite: None; corequisite: None. Taught fall semester.

A course team-taught by members of the Department of Modern and Classical Languages and Literatures designed to acquaint the student with masterpieces of foreign literature through English translation. Material drawn from selected works of prose narrative from the French, German, Spanish, and Italian worlds. Texts chosen to provide a critical-historical perspective of a major literary theme.

MLAN 206. The Drama in English Translation (3-3-0)

Prerequisite: None; corequisite: None. Taught spring semester.

A course team-taught by members of the Department of Modern and Classical Languages and Literatures and designed to acquaint the student with masterpieces of foreign literature through English translation. Material drawn from selected works of drama from the French, German, Spanish and Italian worlds. Texts chosen to provide a critical-historical perspective of a major literary theme.

MLAN 308. Contemporary Culture of the French, German, and Spanish-Speaking Worlds (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

A cross-cultural course team-taught in English members of the Department of Modern and Classical Languages and Literatures. The goal of the course is to familiarize the student with current cultural phenomena, institutions, and patterns outside of his own frame of reference.

General anthropological orientation will be presented as a departure for the discussion of the particular social, political, and national characteristics of the language areas involved.

MLAN 395. Elementary Topics in English Translation (3-3-0)

Prerequisite: Completion of humanities distribution requirement or consent of instructor; corequisite: None.

Courses for majors and non-majors in cross cultural topics, comparative literature, and French, German, Italian, Spanish, and Latin-American literature in translation. No student may enroll more than twice for credit.

The Program in Classical Studies

The principal objectives of the Classical Studies program are as follows: (1) To contribute broadly to the humanistic education of the undergraduate student both through courses conducted in English in the area of classical civilization and through courses involving the reading of Latin literature in the original; (2) to offer to students in related fields specialized training in areas of classical civilization and in the Latin language for vocational or professional purposes; and (3) to provide the general student and the surrounding community with opportunities for personal enrichment and development through significant engagement with some major texts and ideas of our cultural heritage.

The Curriculum in Classical Studies

The following courses do not require knowledge of Latin or Greek and are conducted entirely in English.

CLST 100. English Vocabulary Through Word Origins (3-3-0)

Prerequisite: None; corequisite: None.

A systematic program designed to aid in the comprehension of words encountered in college-level reading. Analysis of Latin and Greek components in English words, derivatives, Latin phrases and abbreviations, and word histories. Useful for the general student and for students in natural and social science, business, humanities, education, and communications.





Philosophy and Religious Studies

Department Chairman: Professor John A. Hoaglund

Professor: Hoaglund

Associate Professors: Powell, Teschner

The philosophy program at the College is liberal in its orientation in that it aims to free the mind of prejudice and dogma to prepare the way for a critical stance that produces affirmative beliefs. It focuses on two areas of general human interests: Methods of correct thinking and the values people live by. The department affirms that humans have the responsibility of developing their native abilities toward leading a full and satisfying life. Clear thinking and a sharpened sense of values contribute significantly to this end. A democratic form of government such as ours can flourish only when its citizens are aware of the value implications of proposed policies and can logically weigh and rationally debate their merits.

Courses in logic, the theory of knowledge, the philosophy of language, and the philosophy of science are designed to improve the student's ability to think critically and reason incisively. Courses in ethics, aesthetics, social and political philosophy, and the philosophy of religion are designed to sharpen the student's awareness of values in several main areas of human endeavor; these courses encourage the student to weigh competing values against each other as the foundation of intelligent decision-making. Other courses combine these two aims. All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Arts degree in Philosophy

The Bachelor of Arts degree in Philosophy requires a minimum of 30 credits in philosophy and religious studies, including: PHIL 101-102; nine additional credits in historical studies chosen from PHIL 201, 202, 307, 421, 440, 451, and 452; six credits in value analysis chosen from PHIL 304, 306, 308, 310, 317, 374, and 384; plus three credits in advanced critical thinking chosen from PHIL 301, 302, 320, and 430.

The main goal of philosophy is to prepare people for an enriched life. Philosophy is also an excellent preparation for specific professions since many philosophy majors enter careers in publishing, journalism, broadcasting, business, marketing, or governmental administration at the local, state, or national levels. A number of philosophy majors enter graduate school for advanced degrees in the humanities and then go into college-level teaching. Others enter graduate programs in business administration or law school for which their training in logical techniques and value-awareness provides them an excellent background.

Combined with the proper courses in the natural sciences, the Bachelor of Arts degree in Philosophy can provide an excellent undergraduate foundation for those who want to enter a college of medicine or veterinary medicine. Philosophy majors are encouraged to broaden their acquaintance with ancient and

recent thinkers and with current issues by independent reading. They are also encouraged to take one or two years of a foreign language.

The Concentration in Religious Studies

Students may complete a concentration in religious studies under the Bachelor of Arts degree in Philosophy. The total program of study must satisfy all requirements for the Bachelor of Arts degree in Philosophy and must include RSTD 131 or 231 and 12 additional credits selected from: RSTD 131, 231, 232, 361, 362, 365, 395, and 495. Those who complete the religious studies concentration are encouraged to take elective courses that support the concentration. The following courses are strongly recommended: CLST 201 and 202; ENGL 300; HIST 314; and SOCL 313.

Courses in the religious studies program involve the empathetic and critical analysis of religious traditions in order to understand their development and their present character. As an academic discipline, religious studies does not seek to promote or to condemn any particular creed, institution, or way of life. Rather, the goal is the exploration and clarification of diverse religious traditions and consideration of their similarities and differences.

As a part of a liberal education, this study fosters an awareness of one's own religious and cultural heritage through knowledge of the religious traditions influencing one's own personal life and culture and through knowledge of other traditions having comparable influence in the lives of other persons and in other cultures. Such awareness should aid in understanding and articulating personal convictions in relation to matters of religious concern.

In addition to the personal enrichment that such ability can provide, this reflective capacity can benefit those responsible for instructing others in religious matters (whether as paid professionals or as volunteers). Generally, in fact, any person responsible for dealing with other persons in counseling and healing roles should have some knowledge of the function of religion in the lives of individuals and cultures. Sensitive understanding of these matters can only enhance one's effectiveness.

Courses in religious studies count as humanities electives and as credits within a philosophy minor or major.

The Minor in Philosophy

The minor in philosophy requires a minimum of 15 credits in philosophy and religious studies above the 100-level.

Philosophy supports other programs at the College wherever critical thinking and a sharpened sense of values are important. The general area of ethics, philosophy and the fine arts, and social, political, and religious values will be of special interest to students concentrating in the humanities and the social sciences. The area of logic, theory of knowledge, philosophy of science, and philosophy of language, with its stress on reasoning and analysis, will be of interest to students concentrating in the natural sciences, mathematics, and computer science.

The Curriculum in Philosophy and Religious Studies

PHIL 101. Elementary Logic (3-3-0)

Prerequisite: None; corequisite: None. spring and fall.

Designed to impart the basic skills of logical reasoning: techniques of drawing a conclusion from premises, establishing whether or not members of one group are members of another group, judging whether or not several statements are consistent, recognizing fallacies and avoiding them in one's own reasoning, defining words with precision, establishing relations between evidence and a hypothesis or between facts and possible explanations. The areas treated are the logic of categorical statements, the syllogism, elementary propositional logic, and some inductive reasoning.

PHIL 102. Introduction to the Logic of Philosophic Inquiry (3-3-0)

Prerequisite: None; corequisite: None. spring. The application of logical techniques of reasoning to some of the basic problems of philosophy that arise in everyone's experience: freedom, alienation, and personal identity; the enigma of being; moral values and the aim of life; ethical relativity and egoism; the justification of religious belief; and the problem of evil.

PHIL 201. History of Ancient Philosophy (3-3-0)

Prerequisite: None; corequisite: None. annually. An historical introduction to philosophy with special readings in the presocratics, Plato, Aristotle, the Stoics and Epicureans, St. Thomas Aquinas, and others. The nature of philosophy and basic philosophic problems will be discussed through a consideration of these writers.

PHIL 202. History of Modern Philosophy (3-3-0)

Prerequisite: PHIL 201 or consent of instructor; corequisite: None. annually.

An historical introduction to modern philosophy with readings from Descartes, Spinoza, Locke, Berkeley, Hume, Kant, and others. These philosophical writings will be studied not only for their own worth but also as a means of acquainting the student with the nature of philosophy and the basic philosophical quest. Some time will be given to the political and cultural milieu out of which these philosophies came.

PHIL 295. Elementary Topics in Philosophy (3-3-0)

Prerequisite: None; corequisite: None.

Elementary topics in philosophy will be treated on the basis of student interest.

PHIL 301. Symbolic Logic (3-3-0)

Prerequisite: PHIL 101 or its equivalent; corequisite: None.

The purpose of this course is to increase, strengthen, and refine the student's skills in translating arguments into symbolic notation and testing them for validity. Both truth-table and deductive tests of validity are used in dealing with truth-functional arguments. The type of argument treated ascends in complexity from those involving simple quantification to those with more complex multiple quantification and then to relational arguments. Natural deduction techniques will be used, and the student will work with rules of inference, conditional proofs, and indirect proofs.

PHIL 302. Advanced Logic (3-3-0)

Prerequisite: PHIL 301 or its equivalent; corequisite: None.

Beginning with an examination of some properties of formal deductive systems, this course proceeds to develop axiom systems for both propositional and predicate logic and to prove the consistency and completeness of each.

PHIL 304. Ethics and Current Value Questions (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None. Taught biannually.

A systematic study of central problems of right action, stressing value and decision in the individual; the distinction of facts from values;

rules versus ends; generalization and moral rules; the ground and nature of moral obligation; freedom; moral responsibility; the justification of punishment; the viability of egoism; the relativity of moral values. At every stage the student is provided opportunities to bring his new theoretical and conceptual material to bear on the analysis of moral problems in real-life situations.

PHIL 306. Man's Search for Beauty (3-3-0)

Prerequisite: None; corequisite: None.

Confronts the student with the artwork and its elementary descriptive terminology and then considers the general significance of the fine arts and beauty or aesthetic value in the life of man by a systematic treatment of these problems: expression; creativity; the objectivity of the aesthetic judgment; the nature of the aesthetic experience; aesthetic qualities and the aesthetic object; the analysis of aesthetic value; art and morality.

PHIL 307. Current Trends in Modern Thought (3-3-0)

Prerequisite: None; corequisite: None.

An examination of the most important topics and theories of the leading philosophers of the twentieth century. Major British and continental philosophers will be treated as well as American.

PHIL 308. Philosophy of Religion (3-3-0)

Prerequisite: None; corequisite: None.

An analysis of the nature and attributes of God (such as omnipotence and benevolence) with special reference to the problem of evil; statement and criticism of the arguments for the existence of God; the problems of religious language, such as whether religious statements are symbolic, analogical, or meaningless; the relation of reason to revelation, faith, and miracles.

PHIL 310. Man's Quest for Justice (3-3-0)

Prerequisite: None; corequisite: None.

An examination of attempts to provide a philosophical foundation for political authority, focusing on such problem areas as traditionalist, contractarian, and utilitarian theories of authority; natural rights; legal positivism; negative and positive political freedom; civil disobedience; distributive justice or equality; retributive justice or punishment; the public interest.

PHIL 317. Irrational Man (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

A study of existentialism from its 19th-century beginnings with Kierkegaard and Nietzsche to the work of Jaspers, Heidegger, and Sartre. Topics that will be treated include the existentialist view of man's predicament, the concepts of anxiety, dread, and the absurd, the will to power, and man as a being toward death. Both the methodological foundations of existentialism in the phenomenology of Husserl and its literary roots in such writers as Dostoevsky, Tolstoy, and Camus will be treated.

PHIL 320. Scientific Reasoning (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

An analysis of scientific thought in the natural as well as social sciences through a study of its historical development and method. Topics to be discussed will be the nature of observation and its relation to theoretical frameworks, abstraction, generalization, experiment, induction and probability, deductive models of explanation and reduction.

PHIL 374. Business Ethics (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

Examines the role of ethics in the business context. The utilitarian and Kantian theories are dealt with to suggest solutions to ethical problems in these and similar areas: fairness in hiring and promotion policies; the employee's right to privacy and legitimate employer interest; the polygraph; management philosophies; conflicts of interest and bribery; responsibility to the consumer for information and safety; fair treatment of women and minorities; youth, age, and seniority; care for nature and the environment.

PHIL 384. Medical Ethics (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

The focus is on value issues in medicine. The aspects of moral theory relevant to problems in medicine are treated, and recent biomedical technology is examined briefly to discover where value issues arise. The moral problems attending birth and death are treated: abortion and the beginning of human life, severe congenital

defects, rights of the dying, the definition and the determination of death. Moral issues in the physician-patient relation are treated: confidentiality; informed consent; how much the patient should be told; screening for genetic disease, etc.; experimenting with human subjects. Also covered are the moral problems of behavior modification and control: genetic engineering, psycho-surgery, the insanity plea, involuntary commitment. Finally, attention is also devoted to problems of social justice and health care delivery: medicine in the market place, the health maintenance organization, the putative right to health care, the allocation of scarce resources.

PHIL 395. Special Topics in Philosophy (3-3-0)

Prerequisite: Three hours of philosophy or consent of instructor; corequisite: None.

The following topics or similar ones will be offered on the basis of student interest: eras such as British empiricism; elementary logical theory; methods of inductive reasoning; philosophy of science; philosophy of law.

PHIL 421. Eastern Philosophy (3-3-0)

Prerequisite: None; corequisite: None.

A study of oriental philosophies using source materials from China, India, Japan, Tibet, Korea, and Persia. Both ancient and modern Asian texts will be studied, including the *I-Ching*, *Bhagaved-Gita*, *The Tibetan Book of the Dead*, *Chuang Tzu*, and the classics of Zen Buddhism.

PHIL 430. Man's Quest for Truth (3-3-0)

Prerequisite: PHIL 101 or consent of instructor; corequisite: none.

Explores some of the main questions of human knowledge. What is truth? How do we find it? Can we depend on sense preception? How reliable is the testimony of others? How do words mean? In what way do words refer to objects? What distinguishes deductive from inductive reasoning? How reliable is memory? Can we trust our knowledge of the past? How does knowledge differ from belief?

PHIL 440. American Philosophy (3-3-0)

Prerequisite: PHIL 201-202 or consent of instructor; corequisite: None.

A history of American philosophical thought from colonial times to the present day, from

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Ames to Hoffer, concentrating on those traits distinctive in American philosophers. Included will be figures from the Golden Age of American philosophers such as William James and George Santayana.

PHIL 451. Great Philosophers (Ancient) (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

A comprehensive examination of the writings of one of the major thinkers of the ancient or medieval period. Philosophers such as Parmenides, Plato, or Aristotle will be treated.

PHIL 452. Great Philosophers (Modern) (3-3-0)

Prerequisite: Junior or senior standing or consent of instructor; corequisite: None.

A comprehensive examination of the writings of one of the major thinkers of the period from the Renaissance to the present. Philosophers such as Descartes, Spinoza, Locke, Hume, or Kant will be treated.

PHIL 490. Senior Seminar (3-3-0)

Prerequisites: Open only to philosophy majors with senior standing; corequisite: None.

A seminar course concentrating on one philosopher or concept. A major research paper is required from each student. **Recommended for all philosophy majors.**

PHIL 495. Advanced Topics in Philosophy (3-3-0)

Prerequisite: Six hours of philosophy or consent of instructor; corequisite: None.

The following topics or similar ones will be offered on the basis of student interest: areas such as presocratic philosophy; modal logic; philosophy of language; philosophy of mind; action theory; decision theory; theories of justice.

PHIL 499. Independent Research (3-3-0)

Prerequisites: Philosophy major, senior status; corequisite: None.

A research project involving substantial reading on a specific problem, theme, or the work of an individual philosopher. The research is supervised by a staff member who must approve the project before registration. A research paper is required.

RSTD 131. Introduction to Religious Studies (3-3-0)

Prerequisite: None; corequisite: None.

Designed to introduce students to basic questions and issues in the study of religion. What does it mean to be religious? What are religious

symbols? What are some basic religious symbols? How are they the same or different?

RSTD 231. Introduction to World Religions (3-3-0)

Prerequisite: None; corequisite: None. Taught annually.

Involves a consideration of the external history and inner dynamics of diverse religious traditions. Prehistoric and primal religions will be considered alongside such traditions as Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism, and Shinto. Questions regarding the general nature of religious belief and practice will also be discussed. What is religion? What is a myth? What is the relation of religion and society?

RSTD 232. Christianity (3-3-0)

Prerequisite: None; corequisite: None.

An introduction to major events, persons, issues, and ideas within the development of the Christian tradition. Special attention is given to the early years of formation within the worlds of Palestinian Judaism and of the Roman Empire and to modern tensions with science and secularism.

RSTD 361. Old Testament (3-3-0)

Prerequisite: None; corequisite: None. Taught annually.

Concerns the writings of the Old Testament and their role in the development of Hebrew religion. Archaeological, literary, and cultural backgrounds are used to illumine the historical, legal, prophetic, and poetic sections of the writings. An explanation of the meaning of covenant provides a continuing focus within the diversity of materials considered.

RSTD 362. New Testament (3-3-0)

Prerequisite: None; corequisite: None. Taught annually.

Explores the life and teachings of Jesus found in the four gospels and the contributions of Paul to the development of early Christian thought and practice as reflected in his letters and in the Acts of the Apostles. The additional books of the New Testament, including non-Pauline epistles and the Revelation to St. John, will also be considered.

RSTD 365. The Prophets of Israel and the Prophetic Tradition (3-3-0)

Prerequisite: PHIL 361 or consent of instructor; corequisite: None.

Designed to consider the role of prophecy in specific religious traditions originating in the

Near East and subsequently influencing Western culture. Topics to be considered include: the rise and development of prophecy within Judaism; the impact of the prophetic tradition on Christianity and Islam; the continuing influence of prophetic movements in Western history.

RSTD 395. Topics in Religious Studies (3-3-0)

Prerequisite: None; corequisite: None.

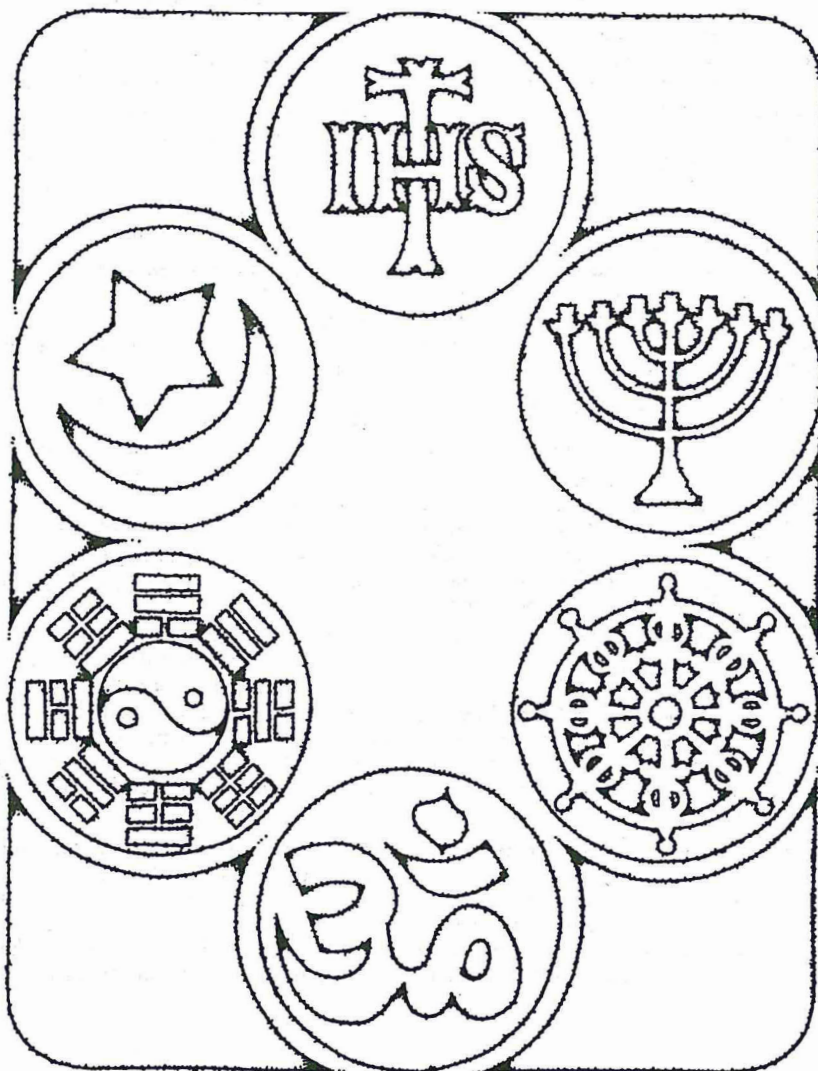
The following topics or similar ones will be offered on the basis of student interest: individual religious thinkers such as Maimonides,

Augustine, Pascal, and others; periods and schools of thought such as Medieval Scholasticism; modern critics of religion; mysticism; religion in America.

RSTD 495. Advanced Topics in Religious Studies (3-3-0)

Prerequisite: Six hours of religious studies or consent of instructor; corequisite: None.

The following topics or similar ones will be offered on the basis of student interest: the nature of religious experience; religious language; contemporary religious issues and writers; problems in the study of religion.



Physics

Department Chairman: Professor George R. Webb

Professors: Buoncristiani, G. Webb

Associate Professor: J. Webb

Assistant Professors: Al-Salam, Doughty

A number of options are available in physics to the CNC student. The core of traditional courses in physics offered by the department makes it possible for students to develop any one of the following: (1) a two-year basic pre-engineering program; (2) a degree in mathematics with a concentration in physics that emphasizes practical research; (3) a minor in physics for science and mathematics majors; (4) a pre-professional physics program; (5) a program of recertification for science teachers; and (6) a BS degree in applied physics.

Because the Department of Physics combines an emphasis on research with the active service of the community, there are usually several on-going projects involving faculty members in both of these areas. Students who would like to work in the community in the realm of science and society or to assist with the research projects will find departmental members able to provide challenging opportunities for independent study.

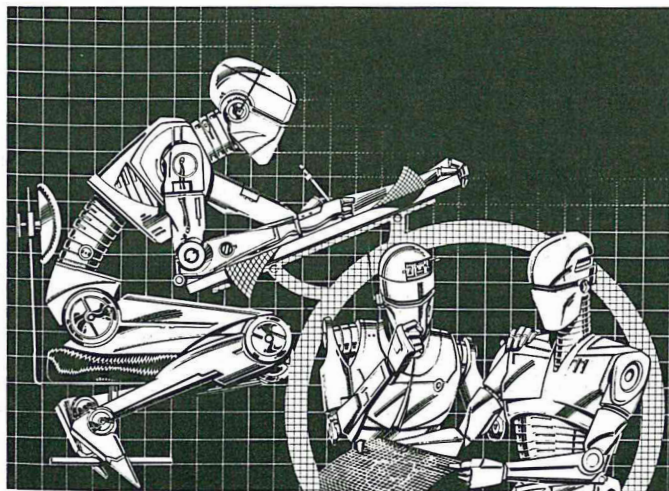
In addition to its commitment to serve the science student, the department has two special goals: to increase the understanding of the uses of science and technology for solving contemporary problems and to increase public awareness of relations between science and technology and the realm of human values. Because of these special goals, the department offers several courses designed to interest students

in the liberal arts and in business. The current class schedule or the department chairman should be consulted for special topics courses offered from time to time that may be of interest to students in the humanities and in business as well as in science and mathematics. The overall orientation of the department is the use of physics in the study of the modern world.

The Bachelor of Science degree in Applied Physics (Microelectronics)

The Bachelor of Science degree in Applied Physics (Microelectronics) prepares its graduates to design instrumentation and control systems. The core courses in theoretical and applied physics provide a strong background in mechanics, electromagnetism, thermodynamics, and the microstructure of materials. The specialty courses emphasize the application of these fundamentals to problems of microelectronics and instrumentation, as well as the combination of these special emphases for the control of processes and systems. The coupling of microprocessors of sensors and actuators and the use of digital analysis is central to these applications.

Digital computers will also be used heavily in the curriculum and the unification of these two fields, microprocessors and digital computers, will enable graduates to make strong contributions in computer-assisted design and computer-assisted manufacturing (CAD/CAM).



The courses in the curriculum are presented, and their prerequisite structure arranged, in such a way that they are highly accessible to the non-traditional student who often needs evening courses and flexible scheduling. An interdisciplinary curriculum emphasizes physics, mathematics, chemistry, and computer science. Students may also select one of six tracks, supplementing their core requirements with 30-36 credits in business, social science, and humanistic disciplines. These tracks are designed to enable the student to apply knowledge of microelectronics in the following areas: (1) Small Business Development; (2) International Business; (3) Business Systems; (4) Management of Information; (5) Applied Mathematics; or (6) Industrial Practice.

Graduates will be prepared for employment as designers for business firms that use microelectronic controls and for companies that produce these control systems or their components. Potential job titles for graduates include: Physicist, design engineer, aerospace technician, and aerospace technologist. Additionally, graduates of the program will be able to pursue graduate studies in physics or electrical engineering.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Science degree in Applied Physics (Microelectronics) also requires the following courses, which, because of their sequential nature, should be completed in the year indicated: **First Year:** ENGR 121-122; PHYS 201-202; MATH 140-240; and CPSC 220 or CPSC 230; **Second Year:** PHYS 312-314; MATH 250-260-320; CHEM 121-122 and 125-126; and ENGR 301-311; **Third Year:** PHYS 351-352; PHYS 315; and ENGR 306; **Fourth year:** PHYS 304; PHYS 421-422; and PHYS 499. In addition, students must successfully complete a second laboratory science sequence, and five professional electives approved by the department.

The Minor in Physics

A minor in physics requires satisfactory completion of PHYS 201-202 and at least 15 additional credits in physics courses above the 200-level. These additional credits must include one course in classical physics or engineering science and one course in modern physics. Per-

sons who are majoring in chemistry, biology, computer science, and mathematics are especially suited for such a minor program.

Students may earn a minor in physics with a concentration in microelectronics by completing ENGR 311, PHYS 312 and any three other courses in the upper level that are approved by the department chairman.

The Curriculum in Physics

PHYS 103, 104. Elementary Physics (4-3-3)

Prerequisite: None; corequisite: None. Taught both semesters. (Laboratory Fee Required) A survey of classical and modern physics with discussions of their implications to society. Analysis of problems in mechanics, heat, sound, electromagnetism, and modern physics. Influence of physics on art, literature, and values. Satisfies distribution requirements in the field of science.

PHYS 201-202. General Physics (5-4-3)

Prerequisite: High school physics or consent of instructor; corequisite: MATH 140. Taught both semesters. (Laboratory Fee Required) A presentation of the major concepts of physics from a contemporary point of view, using algebra and calculus. For students in the physical and life sciences, mathematics, or engineering. Topics covered include mechanics, heat, sound, electromagnetism, optics, and modern physics.

PHYS 299. Independent Study in Physics, I (Maximum Credit: 3 hours)

Prerequisites: Enrollment in a college science course and the approval of the department; corequisite: None.

An opportunity for reading and research on topics in physics under the direction of a faculty advisor.

PHYS 301. Classical Mechanics (4-3-3)

Prerequisites: MATH 240. PHYS 201-202 are desirable, but not mandatory; corequisite: None. fall. (Laboratory Fee Required) A vector space approach to the study of classical mechanics in the Newtonian, Lagrangian, and Hamiltonian formulations. Extensive applications to problems in biophysics, space science, and engineering. Laboratory emphasis on the computer solution of these problems.

PHYS 303. Fluid Mechanics (3-3-0)

Prerequisites: MATH 250 and PHYS 201 or consent of instructor; corequisite: None. Fluid statics, integral and field equations for the

balance of mass, momentum, and energy; and constitutive equations for ideal and viscous fluids. Applications to incompressible flows; fluid boundary layers and free surface flows; one dimensional compressible flows. Similitude studies.

PHYS 304. Electromagnetism (4-3-3)

Prerequisite: MATH 240. MATH 250 and PHYS 201-202 are desirable but can be waived with consent of instructor; corequisite: None. (Laboratory Fee Required)

The electrostatics and electrodynamics of discrete and continuous systems. Electrostatics, magnetostatics, solutions of Maxwell's equations, AC circuits, relativistic electrodynamics, reflection and refraction. Laboratory stresses computer solutions and experimental analyses of electromagnetic phenomena.

PHYS 312. Electronics (4-3-3-)

Prerequisite: ENGR 311; corequisite: None. (Laboratory Fee Required)

Electronic measurements techniques. Analysis of AC circuits with an emphasis on characteristics of solid state electronic devices. Operational amplifiers and integrated circuits. Students will be taught to design, construct and test circuits which perform a variety of specific tasks. Introduction to sensor-actuator instrumentation systems.

PHYS 314. Digital Electronics and Microprocessors I (3-3-0)

Prerequisite: PHYS 202 or consent of instructor; corequisite: None. (Laboratory Fee Required)

Digital electronics principles. Microprocessor architectures and instruction sets. Assemblers and other development aids. Microcomputer system organization, memories, input-output techniques, interrupt handling, external interfacing. Data acquisition and control with A/D and D/A devices. Hands on experience with a specific microcomputer. Emphasis is on microprocessors as tools for data acquisition and control.

PHYS 315. Digital Electronics and Microprocessors II (4-3-3)

Prerequisite: PHYS 314; corequisite: None. (Laboratory Fee Required)

Digital electronic principles. The design of circuits for processing signals from integrated ele-

ments. Microprocessors as large scale integrated circuits. Interfacing; memories; input-output equipment; programming and flow charting. Laboratory experience with digital electronic measurement techniques, logic circuits, specific microprocessors, and with the interfacing of equipment and sensor/actuator devices.

PHYS 322. Exploration of the Universe; Astronomy (2-2-0) or (3-3-0 by contract)

Prerequisite: Junior standing or consent of instructor; corequisite: None. spring.

A survey of the history and methods of astronomy, including the solar system, planetary motion, stellar evolution, theories of cosmology, and such recent developments as quasars, pulsars, and black holes. A good optical telescope, a radio telescope, and a planetarium are available at the Peninsula Nature and Science Center.

PHYS 351. Modern Physics I: Atomic Physics (3-3-0)

Prerequisite: PHYS 201-202 or consent of instructor; corequisite: None. fall.

A survey of the developments in atomic physics. An introduction to quantum mechanics and its application to current technology such as health sciences and atomic and molecular chemistry.

PHYS 352. Device Physics (3-3-0)

Prerequisite: PHYS 202; corequisite: None.

The physical principles which underlie the operation of technologically important electronic and optical devices. The course deals with semi-conductor devices: junction, field effect and charge coupled devices as well as devices based upon electro-optical effects.

PHYS 362. Material Science (3-3-0)

Prerequisite: PHYS 351; corequisite: None.

Study of the microscopic and macroscopic characteristics of materials with an emphasis on the basic principles that describe material behavior in these two realms. Application of the basic principles in the understanding of the large-scale behavior of materials; the determination of the thermal, mechanical, and electrical properties of solids. Discussion of examples that illustrate the theory.

PHYS 395. Topics in Physics (Credits vary)

Prerequisite: Junior standing or consent of instructor; corequisite: None. Taught both semesters. Topics of special interest to both science and non-science majors in the areas of solar energy, technology assessment, science and questions of values, and microelectronics.

The School of Letters and Natural Science

PHYS 402. Quantum Mechanics (3-3-0)

Prerequisites: PHYS 201, 202; MATH 240; corequisite: None.

Review of the crucial ideas and experiments leading to the development of quantum theory. Axiomatic formulation of the theory with applications to simple systems.

PHYS 421. Design III (3-3-0)

Prerequisite: PHYS 315; corequisite: None.

The use of computers as design aids: computer analysis – packages; computer graphics; coupling tasks to mini-computers. Applications by means of the case study method.

PHYS 422. Design IV (3-3-0)

Prerequisite: PHYS 315; corequisite: None.

The design of microelectronic systems for the control of single and integrated manufacturing and experimental systems and processes. Supervising, response to alarm and priority commands, self-diagnosis, optimization, and collecting performance data. Case studies of systems of local and of national interest.

PHYS 495. Advanced Topics in Physics (Credits Vary)

Prerequisite: Senior standing or consent of instructor.

Topics of special interest to the physics major.

PHYS 499. Independent Study in Physics, II (Credits vary)

Prerequisites: Junior standing and approval of the department; corequisite: None.

The Pre-Engineering Program

The Department of Physics with the cooperation of Old Dominion University has designed a pre-engineering program in which Peninsula students can complete their first two years of engineering study. Persons who finish the program at CNC will begin their studies at ODU as juniors, contingent upon admission to this school. The program is also suitable for transfer to other engineering schools in the country.

The program at Christopher Newport College is ideal for those students who want to try their skills in a personal program that can be individually tailored to their needs and who want to prepare for the large state universities with a high quality beginning at a moderate-sized college that is near their homes.

An important feature of the program is its flexibility. Students who would like more freedom in the course that they take or who would like a more leisurely pace in order to develop their maturity in the engineering sciences can take three years to complete the program. With a careful choice of electives, the student is prepared for further study as a mechanical, electrical, or civil engineer, or for study and research in engineering science.

The pre-engineering program requires the following courses, which, because of their sequential nature, should be completed in the year indicated: **First Year:** PHYS 201-202; MATH 140-240; ENGL 101-102; ENGR 121-122; CPSC 220; and CHEM 121-125; **Second Year:** MATH 250, 260 and 320; ENGR 306 and 311; ENGR 301 and 302; PHYS 351; CHEM 122-126; and one humanities or one social science course.

The Curriculum in Engineering

ENGR 121, 122. Introduction to Engineering and Technology (2-2-0) each.

Prerequisite: None; corequisite: MATH 130 or equivalent.

An introduction to the methods of modeling, analysis, and design in the solution of simple problems from the major disciplines of engineering. A consideration of the impact of engineering artifacts on society. The application of the computer language BASIC and the use of library programs in other computer languages in the solution of engineering models.

ENGR 299. Independent Study in Engineering, I (Maximum Credit: 3 hours)

Prerequisites: Enrollment in a college science or engineering course and the approval of the department; corequisite: None.

An opportunity for reading and research on topics in engineering under the direction of a faculty advisor.

ENGR 301. Statics and Dynamics (4-3-3)

Prerequisite: MATH 240; PHYS 201-202 is desirable, but not mandatory; corequisite: None. fall. (Laboratory Fee Required)

A vector space approach to the study of classical mechanics in the Newtonian, Lagrangian, and Hamiltonian formulations. Extensive applications to problems in biophysics, space science and engineering. Laboratory emphasis on computer-aided analysis and design.

ENGR 302. Mechanics of Solids (4-3-3)

Prerequisite: MATH 240; MATH 250 and PHYS 201 are desirable, but can be waived with consent of instructor; corequisite: None. spring. **(Laboratory Fee Required)**

The continuum mechanics of linear elastic solids presented in terms of vectors and tensors. Extension, torsion, pure bending; engineering beam theory; indeterminate systems; stability; limit analysis. Applications in biophysics and engineering. Laboratory emphasizes experimental stress analysis (strain gages, photoelasticity, Moire fringes), and computer-aided analysis and design.

ENGR 303. Fluid Mechanics (3-3-0)

Prerequisites: MATH 250 and PHYS 201 or consent of instructor; corequisite: None.

Fluid statics; integral and field equations for the balance of mass, momentum, and energy; and constitutive equations for ideal and viscous fluids. Applications to incompressible flows; fluid boundary layers and free surface flows; one dimensional compressible flows. Similitude studies.

ENGR 306. Thermodynamics (3-3-0)

Prerequisites: MATH 250 and PHYS 201 or consent of the instructor; corequisite: None.

The formulation of the basic concepts of thermodynamics: first and second laws, energy, temperature, entropy, enthalpy, reversibility and irreversibility, ideal gases, models of real gases. Thermodynamic cycles and their application to engineering systems and mixtures and solutions.

ENGR 311. Introduction to Electric Circuits and Electronics (3-3-0)

Prerequisites: PHYS 202 and MATH 240; corequisite: None.

A study of the basic experimental laws of electrical circuits; Ohm's Law and Kirchoff's Laws of voltage and current. Analysis techniques for DC circuits. Properties of the basic circuit elements; resistors, inductors, capacitors. AC circuits, sinusoidal AC circuits, and their solution by phasor methods. Introduction to the operational amplifier.

ENGR 321. Transportation Technology (3-3-0)

Prerequisites: MATH 125, CPSC 220; corequisite: None.

This course will provide an introduction to the technological aspects of transportation and logistics. It begins with a survey of various modes of transporting material, emphasizing new and developing methods. It will discuss in detail the physical characteristics, load, energy and power requirements, aerodynamic effects, propulsion efficiency, packaging of various modes. Models of traffic movement will be described and problems of control and distribution of traffic examined. Finally, generalized models developing integrated transportation systems will be introduced.

ENGR 362. Material Science (3-3-0)

Prerequisite: PHYS 351; corequisite: None.

The study of the microscopic and macroscopic characteristics of materials with an emphasis on the basic principles that describe material behavior in these two realms. The application of the basic principles in the understanding of the large-scale behavior of materials; the determination of the thermal, mechanical, and electrical properties of solids. Discussion of examples that illustrate the theory.

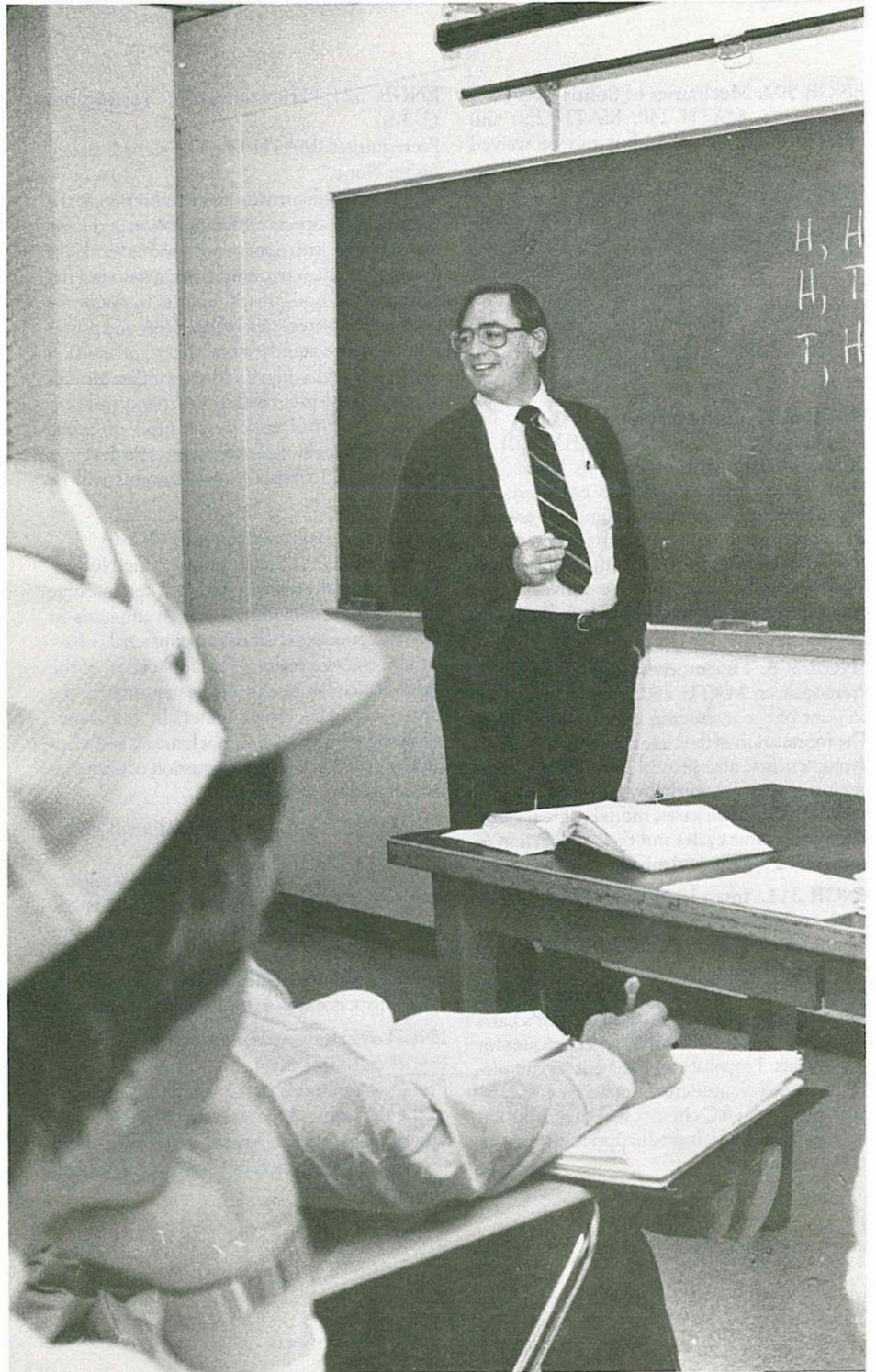
ENGR 395. Topics in Engineering (Credits vary)

Prerequisite: Junior standing or consent of instructor; corequisite: None. Taught both semesters. Topics of special interest to engineering and science and mathematics majors. Among the courses presented will be digital electronics, microprocessors, and intermediate dynamics.

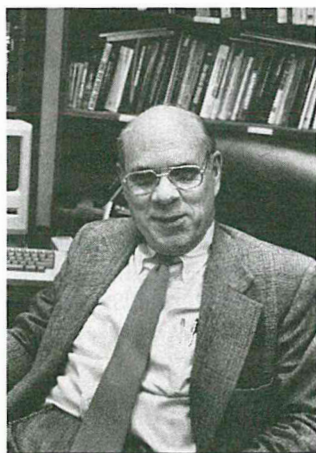
ENGR 499. Independent Study in Engineering, II (Credits vary)

Prerequisite: Junior standing and the approval of the department; corequisite: None.

Independent study of topics in engineering under the direction of an advisor who is a professional.



The School of Business and Economics



Dear Student:

The School of Business and Economics offers professional programs leading to the following degrees: The Bachelor of Science in Accounting; the Bachelor of Science in Business Administration (with concentrations in Accounting, Economics, Finance, Management, Marketing, or Real Estate); and the Bachelor of Arts degree in Economics. Also available is an interdisciplinary degree program leading to a Bachelor of Arts degree in International Culture and Commerce. All of these programs are designed to prepare students for managerial careers in business and public administration, and to provide a strong background for additional education at the graduate level. As a student of the School of Business and Economics, you must also complete the distribution requirements of Christopher Newport College.

The School of Business and Economics curriculum is designed to give all students a strong background in areas necessary for completion of the degree requirements of their choice, and to provide a basic understanding of the general activities that must be accomplished to succeed in today's complex and demanding world of business. The core requirements include Accounting, Economics, Marketing, Financial Management, Statistics, Management Theory, Business Law, Quantitative Analysis, and Business Policy. The advanced courses which must be completed for a degree in the specific concentrations are provided in the following pages of this catalog.

The faculty of the School of Business and Economics is dedicated to providing opportunities for personal development as an essential part of the college experience. The academic requirements of each discipline encourage independent thought, development of analytical abilities, and the capacity to present one's work and opinions in both oral and written communications. All students are provided the opportunity to work as part of a group in one or more courses. Also, group participation under professional guidance provides an excellent opportunity for students to develop initiative, self-expression, personality, maturity, and poise while learning to work effectively with others.

In summary, Christopher Newport College, with its highly qualified and dedicated faculty, provides an outstanding opportunity for you to participate in educational programs designed to provide you with a liberal education in the arts and sciences, while completing your professional degree program in the School of Business and Economics.

Sincerely,

Algin B. King

Algin B. King, Dean
School of Business and Economics

The Bachelor of Science in Business Administration degree

A summary of the Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." In addition to successfully completing these requirements, all candidates for the BSBA degree must successfully complete the following 30 to 33 credits of **Core Requirements** for this degree: ACCT 201-202; BUSN 311; 324; 331; *361; 408; 418; FINC 323; and one of: ECON 301, 304, 420, or 490.

(*Students concentrating in accounting must take ACCT 341-342 in lieu of BUSN 361.)

Students pursuing the BSBA degree must choose a concentration from among Accounting, Economics, Finance, Management, Marketing, and Real Estate. Additional requirements for each of these concentrations are described in the individual departmental entries (following).

The Bachelor of Science in Accounting degree

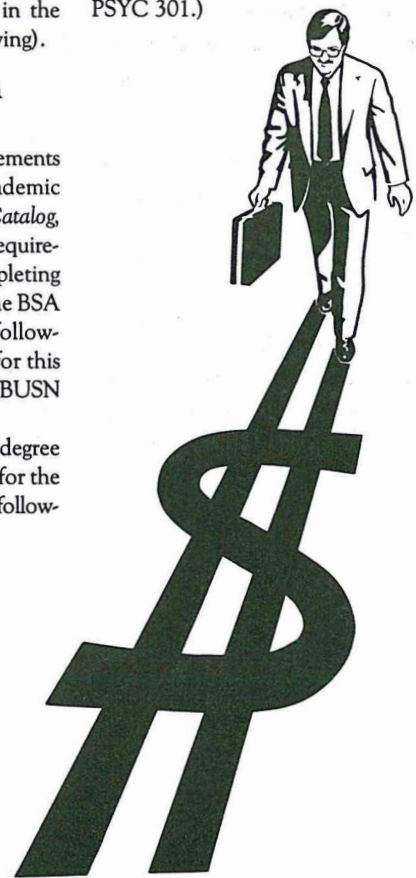
A summary of the Distribution Requirements for the BSA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." In addition to successfully completing these requirements, all candidates for the BSA degree must successfully complete the following 27 credits of **Core Requirements** for this degree: ACCT 201-202; and 341-342; BUSN 311; 324; 331; 408; and FINC 323.

Additional requirements for the BSA degree are discussed in the departmental entry for the Department of Accounting and Finance (following).

The Minor in Business Administration

This interdisciplinary program in business administration is designed for students majoring in other academic disciplines who desire to acquire skills in the basic concepts and practices inherent in and allied to the field of business administration. The minor program in business administration requires successful completion of: ACCT 201-202; BUSN 311; 324; and *331; CPSC 210; ECON 201, 202; and FINC 323.

(*Students who have not completed a statistical methods course in their major academic discipline will be required to successfully complete MATH 125 (Elementary Statistics). However, the statistical methods requirement may be satisfied in other ways, such as through successful completion of SOSW 391-392 or PSYC 301.)



Accounting and Finance

Department Chairman: Associate Professor James N. Shaver

Associate Professors: Riley, Rowell

Assistant Professors: Dawson, C. Edwards, Fellowes, Grobel, Schell, Serio, Shaver

Instructor: Vawter

The Department of Accounting and Finance offers the Bachelor of Science in Accounting degree and the Bachelor of Science in Business Administration degree with concentrations in accounting and finance, as well as minor programs of study in accounting and finance.

The BSA degree is substantially the same as the BSBA degree with a concentration in accounting, with the exception that ACCT 401 and three other accounting elective courses, chosen in consultation with an advisor, are required for the BSA degree.

No more than 60 percent of the minimum credits (usually 124) required toward either degree may come from courses in the School of Business and Economics.

The Bachelor of Science in Accounting degree

The BSA is highly recommended for students who plan to take the Virginia CPA Examination and pursue a full-time career in professional accounting (in particular, public accounting). It is also recommended for students planning to pursue advanced degrees in accounting. The extra accounting courses associated with this degree provide students with stronger backgrounds for their chosen professions.

A summary of Distribution Requirements for the BSA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSA degree are found on the introductory page for the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Accounting degree also requires successful completion of: ACCT 301-302; 303-304; 400; 401; and 405; as well as nine credits of upper-level (300-400-level) accounting courses from: ACCT 351; 402; 403; 415; and 495. Students planning to take the Virginia CPA Examination are advised to take ENGL 353.

The Bachelor of Science in Business Administration degree with a Concentration in Accounting

The BSBA degree with a concentration in accounting meets the educational requirements to take various professional examinations, such as the CPA, CMA, and CIA exams, and gives students a more general business background than the BSA degree.

A summary of the Distribution Requirements for the BSBA degree appears in the Academic Policies section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page for the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Business Administration degree with a concentration in accounting requires successful completion of: ACCT 301-302; 303-304; 400; 405; and three additional credits in upper-level (300-400-level) accounting courses chosen from: ACCT 351; 401; 402; 403; 415; and 495.

Note: Courses taken to satisfy the accounting concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

Note: Students pursuing the BSA degree or the BSBA degree with a concentration in accounting are expected to earn no grade less than C in ACCT 201-202, both of which are prerequisite to advanced study in the major field. Students who have had difficulty with ACCT 201-202, whether at CNC or elsewhere, are advised to re-take the course(s) before proceeding to the upper-level courses in accounting.

The Minor in Accounting

The minor program in accounting requires successful completion of: ACCT 201-202; 301-302; and 303-304.

The Bachelor of Science in Business Administration degree with a Concentration in Finance

A summary of Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page for the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Business Administration degree with a concentration in finance requires successful completion of: FINC 421; 422; 423; 424; and six additional credits in upper-level (300-400-level) courses chosen from: ACCT 410; and 415; BUSN 473; and 474; ECON 304; 420; 470; and 490; FINC 412; and 413. **Note:** Courses taken to satisfy the finance concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

The Minor in Finance

The minor program in finance requires successful completion of: FINC 421; 422; and 423; and three additional credits in upper-level (300-400-level) finance electives. This three-credit elective course may be any course listed as *required* or as an *elective* under the BSBA degree with a concentration in finance. **Note:** Courses taken to satisfy the requirements for the minor program in finance must be in addition to those courses taken to meet the BSBA Core Requirements.

The Curriculum in Accounting

ACCT 201-202. Principles of Accounting (3-3-0) (3-3-0)

Prerequisite: MATH 105 or 110; corequisite: None. fall and spring.

A study of the elementary principles and procedures of individual proprietorship, partnership, and corporation accounting; introduction to managerial accounting.

ACCT 301-302. Intermediate Accounting (3-3-0) (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. fall and spring.

The study and application of generally accepted accounting principles for accumulating and

reporting financial information about businesses. Proper treatment of leases, bonds, short and long term investments, receivables, liabilities, and merchandise inventory are emphasized.

ACCT 303-304. Cost Accounting (3-3-0) (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. 303 fall, 304 spring.

The fundamentals of job order, process, and standard cost accounting systems; cost and profit analysis for decision-making purposes; budgeting, and stabilized accounting.

ACCT 341-342. Business Law (3-3-0) (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A study of the primary legal principles and their applicability to ordinary commercial transactions, with emphasis on contracts, legal forms of business enterprises, agencies, negotiable instruments, and labor and antitrust legislation.

ACCT 351. Governmental and Institutional Accounting (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. fall and spring.

Budgetary accounting and finance control and their application to various governmental units, more particularly to cities, counties, and other political subdivisions and public institutions.

ACCT 385. Survey of Taxation (3-3-0)

Prerequisites: ACCT 201-202 or permission of instructor; corequisite: None. fall and spring.

An introduction to the concepts and principles of income taxation as they apply to individuals and businesses. No credit will be given to accounting majors. This course is designed for non-accounting majors.

ACCT 400. Advanced Accounting (3-3-0)

Prerequisites: ACCT 301-302; corequisite: None. fall and spring.

A study of accounting for partnerships, consolidated statements, and fiduciaries.

ACCT 401. Taxation (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. fall and spring.

A review of federal income tax legislation and the concept of taxable income applicable to individuals.

ACCT 402. Advanced Taxation (3-3-0)

Prerequisite: ACCT 401; corequisite: None. spring and fall.

A review of federal income tax legislation applicable to partnerships, corporations, estates and trusts.

ACCT 403. Accounting Theory (3-3-0)

Prerequisites: ACCT 301-302; corequisite: None. fall and spring.

A study of fundamental and applied theory underlying financial accounting. Current issues in accounting will be reviewed, involving published articles from various accounting periodicals and case studies.

ACCT 405. Auditing (3-3-0)

Prerequisites: ACCT 301-302 and MATH 125; corequisite: None. fall and spring.

Conceptual approach to auditing principles and procedures in the preparation of auditing reports. Professional standards and ethics are emphasized.

ACCT 410. Managerial Accounting (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. For non-accounting majors only. fall and spring.

The study of the use of accounting data by management in planning budgeting, and forecasting business and economic variables.

ACCT 415. Accounting Information Systems (3-3-0)

Prerequisites: ACCT 201-202, CPSC 210; corequisite: None. fall and spring.

The theoretical and practical approach to the analysis, design, and implementation of computerized accounting systems using COBOL or BASIC language.

ACCT 495. Accounting Topics (Credits vary)

Prerequisites: ACCT 301-302 and permission of department chairman; corequisite: None. As required.

Topical seminars in accounting.

The Curriculum in Finance

FINC 310. Personal Finance (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

Recommended elective for non-business as well as business majors. A course designed to teach the student to exercise intelligent control

over his/her income, expenditures, borrowing, saving, and investments.

FINC 323. Financial Management (3-3-0)

Prerequisites: ACCT 201-202; corequisite: None. fall and spring.

Topics include the environment of managerial finance, financial analysis, planning and control; working capital management; investment decisions; valuation and cost of capital; and long-term financing.

FINC 412. Venture Capital and Investment Banking (3-3-0)

Prerequisite: FINC 323 or permission of instructor; corequisite: None. spring.

New venture start-up management with emphasis on financial decision-making for the entrepreneurial-oriented student. Examines investment banking institutions and functions as related to venture capital acquisition and management. Topics include feasibility analysis, evaluation of forms for new business and enterprises, legal aspects, valuation and fail-safe strategies, financing and controlling new business ventures. Students will participate in bringing a new venture on-line, using the case study method. Text, lecture, and cases will be supplemented by outside speakers.

FINC 413. Commercial Bank Management (3-3-0)

Prerequisite: FINC 323, or permission of instructor. ECON 301 strongly recommended; corequisite: None. fall.

Organization, administration, and regulation of commercial banks, financial markets, sources and uses of bank funds, and portfolio policy.

FINC 421. Principles of Investment (3-3-0)

Prerequisite: FINC 323 or permission of the instructor; corequisite: None. fall and spring.

A survey of the investment characteristics of securities, the fundamentals of portfolio planning, and operation and regulation of security markets. Analysis and solution of financial problems related to investment. Analysis of trends, timing of investments, and effects of taxation on investment strategy and policy.

FINC 422. Problems of Financial Management (3-3-0)

Prerequisite: FINC 323; corequisite: None. fall semester only.

Develops the theoretical framework for decision making in the major areas of financial manage-

ment. Application of principles of financial management to the solution of special problems and cases. Topics include financing of the firms, dividend policy, capital structure, cost of capital, capital budgeting, financial analysis and mergers and acquisitions.

FINC 423. Management of Financial Institutions (3-3-0)

Prerequisite: FINC 323; corequisite: None. spring.

Emphasis on the operating environment of the particular financial institution in terms of performance criteria, loan and investment policy, regulation, and social and economic roles. The course also deals with the current changes and proposed changes in the functioning and role of each of the financial institutions.

FINC 424. Financial Policy and Strategy (3-3-0)

Prerequisite: FINC 323; corequisite: None. spring semester only.

Special emphasis will be placed on the major aspects of financial management decision making by application of financial theory and techniques to the analysis and solution of actual financial problems. Financial forecasting, application of ratio and fund flow analysis capital, budgeting, capital structure, and the cost of capital will be stressed.

FINC 495. Finance Topics (Credits vary)

Prerequisite: Permission of the department chairman; corequisite: None. Offered as required.

Topical seminars in finance.



Economics

Department Chairman: Professor H. Marshall Booker

Professors: Booker, Maniyar

Associate Professors: Colonna, Park

The Department of Economics offers the Bachelor of Arts degree in Economics, the Bachelor of Arts degree in International Culture and Commerce, the Bachelor of Science in Business Administration degree with a Concentration in Economics, and a minor program in economics. The BA in Economics and the BSBA degree with a Concentration in Economics offer an introduction to the fundamentals of business and economics, with a concentration in the third and fourth years on methods of economic analysis. The curriculum prepares students for positions in business, government, and for graduate study providing theoretical and analytical tools of economics.

The Bachelor of Arts degree in Economics

A summary of Distribution Requirements for the BA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." In addition to successfully completing these requirements, all candidates for the BA degree in Economics must successfully complete the following: ECON 201, 202; 301; 303, 304; and 18 additional credits in upper-level (300-400-level) economics courses. In addition to these requirements, the Department of Economics recommends the following elective courses from other academic departments: ACCT 201-202; BUSN 311; FINC 323; and SOCL 361.

The Bachelor of Science in Business Administration degree with a Concentration in Economics

A summary of the Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page for the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Business Administration degree with a Con-

centration in Economics also requires successful completion of: ECON 301; and 303, 304; plus nine additional credits in upper-level (300-400-level) economics courses. In addition to these requirements, the Department of Economics recommends the following elective courses from other departments: BUSN 441; and SOCL 361. **Note:** Courses taken to satisfy the Economics Concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

The Minor in Economics

The minor program in economics requires successful completion of: ECON 201, 202; 301; and 303, 304; plus six additional credits in upper-level (300-400-level) economics courses.

The Bachelor of Arts degree in International Culture and Commerce

The BA degree in International Culture and Commerce is an interdisciplinary degree utilizing the courses and personnel from the Departments of Accounting and Finance, Computer Science, Economics, English, History, Management and Marketing, Modern and Classical Languages and Literatures, Political Science and Governmental Administration, and Psychology. Through a carefully planned program of study utilizing these academic disciplines, students will develop a multi-faceted program of studies leading to a basic knowledge of international commerce, as well as an appropriate regional specialization in which they can function with ease, understanding, and efficiency. The program is administered by the Coordinator of the International Culture and Commerce Program, appointed by the Vice President for Academic Affairs. The coordinator advises all students enrolled in the program to ensure that their courses of study are suited to their talents, needs, and career goals.

In addition to the Distribution Requirements for the BA degree, which appear in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements," the following five "Area" Requirements

must be successfully completed: **(Area I) International Culture:** A total of 21 credits from the following: Six credits from HIST 319, 325, 331, 342, 343, 395, 411, 415, 431, and 461; six credits from ECON 385 and 470, GEOG 352, POLS 311 and 321; six credits from ENGL 206, PSYC 303, RSTD 231, SOCL 200, 220, 332 and 361; plus three additional credits from one of the preceding areas; **(Area II) Business Core:** A total of 24 credits from the following: ACCT 201 and 202, BUSN 311, 324 and 441, CPSC 210, ECON 201 and 202; **(Area III) Business Specialization:** A total of 12 credits from any one of the following sub-areas: *Accounting:* ACCT 301, 302, 303, 304, 401, 403, or 405; *Finance:* BUSN 473, FINC 323, 421, 422, 423, or 424; *Marketing:* BUSN 450, 452, 453, 454, 457, or 458; *Management:* ACCT 410, BUSN 400, 412, and 418, and ECON 490; *Economics:* ECON 301, 303, 304, 385, 420, or 470; **(Area IV) Modern Foreign Language:** From three to 17 credits are required; each student is required to complete through the intermediate (202 course) sequence courses, by coursework or by testing, in French, German, or Spanish. An upper-level (300-400-level) conversation or civilization course in the language is also required. In addition, it is strongly recommended that each student complete additional language courses; **(Area V) Practicum:** Six credits are required. Each student will receive on-the-job experiences through working with a company or organization which is engaged in international trade. Standards of training experience will be maintained by the College. At the discretion of the Coordinator of the International Culture and Commerce Program, a senior-level research paper may be substituted for this area requirement.

The Curriculum in Economics **ECON 201, 202. Principles of Economics** **(3-3-0) (3-3-0)**

Prerequisite: None; corequisite: None. fall and spring.

An introduction to the analytical tools commonly employed by economists in determining the aggregate level of economic activity and the composition of output, prices, and the distribution of income. Problems related to these subjects are considered, and alternative courses of public policy are evaluated. First semester macroeconomics; second semester microeconomics.

ECON 225. Economics for Teachers (3-3-0)
Prerequisite: ECON 201 or consent of instructor; corequisite: None. spring.

A survey course in economic fundamentals designed to provide educators with the methodological skills to convey effectively economic principles and analysis to elementary and secondary students. Development of teaching strategies and techniques for maximizing the learning outcomes in the field of economics will be stressed.

ECON 301. Money and Banking (3-3-0)
Prerequisite: ECON 201; corequisite: None. fall and spring.

An analysis of the monetary system with emphasis upon determinants of the money supply and the relationship between money and economic activity.

ECON 302. Public Finance (3-3-0)
Same as POLS 302
Prerequisites: ECON 201, 202. corequisite: None. spring.

The nature and application of the fundamental principles of obtaining, managing, and disbursing funds for governmental functions at the local, state, and federal levels. The American tax system is given detailed consideration.

ECON 303. Intermediate Micro-Economic Analysis (3-3-0)
Prerequisites: ECON 201, 202; corequisite: None. fall.

A study of micro-economic theory as related to consumer behavior and demand, production and cost, market structures, distribution theory, and welfare economics.

ECON 304. Intermediate Macro-Economic Analysis (3-3-0)
Prerequisites: ECON 201, 202; corequisite: None. fall and spring.

A study of classical, neo-classical, and Keynesian Macro-economics. Economic analysis of national income, output, employment, price level, consumption, investment, rate of interest, demand for money and supply of money, and a study of monetary, fiscal, and other economic policies.

ECON 341. Economic History of the United States (3-3-0)
Same as HIST 341.

Prerequisites: ECON 201, 202; corequisite: None. fall.

The study of America's economic growth and

development from colonial times to the present. Includes the development of agriculture, manufacturing, trade and commerce, improved methods of transportation and communication, employer and employee organizations, governmental impact on the economy, and economic interdependence. Second semester begins with the late 19th Century.

ECON 351. Urban Development Economics (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. spring.

The theories, problems, and policies of urban and regional development, with emphasis on metropolitan finance, local government organization, economic base, location theory, and manpower utilization. The application of economic theory toward a solution of the urban problems of unemployment, education and training, welfare, housing, health, and transportation.

ECON 385. Comparative Economic Systems (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

A comparative analysis of economic systems and the performance of such economies as measured by growth, equity, and efficiency criteria. Theoretical and actual systems such as the U.S., West and East Europe, the Soviet Union, China, Cuba, Norway, Sweden, and Japan are examined.

ECON 391. Contemporary Economic Issues (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate falls.

A course concentrating on economic analysis of socio-political problems rather than economic theories. It is intended to convey the breadth, scope, and relevance of economic analysis to both public and private decision-making of various economic issues. Students will learn to apply specific analytical techniques to various socio-economic problems.

ECON 395. Economic Topics (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. fall.

Topical seminars in economics to cover a variety of areas.

ECON 420. Business Conditions and Forecasting (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. fall.

A study of the cyclical fluctuations in the U.S. economy, with stress upon their causes and measurement, and a survey of methods of business conditions analysis. Emphasis on short-term and long-term methods of forecasting.

ECON 435. History of Economic Thought (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

The development of economic analysis with emphasis upon Classical, Marxian, Keynesian, and modern economic theory and analysis.

ECON 451. The Economics of Labor and Collective Bargaining (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

A study of labor force and the demand for and supply of labor, wage determination, the procedures, agencies, legal framework, and major issues involved in labor-management relations. Attention is also given to the problems of negotiating and implementing a collective bargaining agreement.

ECON 460. Economics of Transportation (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

Economic analysis and understanding of transportation systems. Rail, motor, water, air, and pipeline carriers are examined for importance, cost, utility, and inherent comparative advantages. The economic basis for government regulation and for transportation pricing with emphasis on competition and coordination. Transportation policy as reflected in current studies and legislation.

ECON 465. The Economics of Industrial Organization (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

Designed to enable the student to study the microeconomic theoretical aspects of industrial organization. The topics covered: market structures, vertical structure of markets, welfare

The School of Business and Economics

losses due to market power, impact market power has on distribution pricing policies and the role of government in promoting and preventing competition. Provides the student a theoretical, empirical, and descriptive framework of industrial organization and social/business policy.

ECON 470. International Trade and Finance (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate falls.

An analysis of the development of international trade theory. A study of balance of payments equilibrium, foreign exchange, international finance, and especially international economic developments since World War II.

ECON 490. Managerial Economics (3-3-0)

Prerequisites: ECON 201, 202; corequisite: None. Alternate springs.

Economic analysis of problems of particular importance for business firms. Emphasis on discovering policy criteria, identifying alternatives, and selecting and using economic, financial, and management information in decision theory.

ECON 492. Economics of Health Resources and Aging (3-3-0)

Prerequisites: ECON 201, 202 or consent of

instructor; corequisite: None. Alternate springs. Designed to inform the student of economic aspects of health resources and aging. Provides the theoretical, empirical, and descriptive framework for analyzing health resources and aging, applying these tools to urgent problem areas. Enables the student to reason more accurately and objectively about health professions and problems. The course also deals with the national policy dilemmas on national health programs, health maintenance organizations, and fee-for-service markets.

ECON 495. Economic Topics (3-3-0)

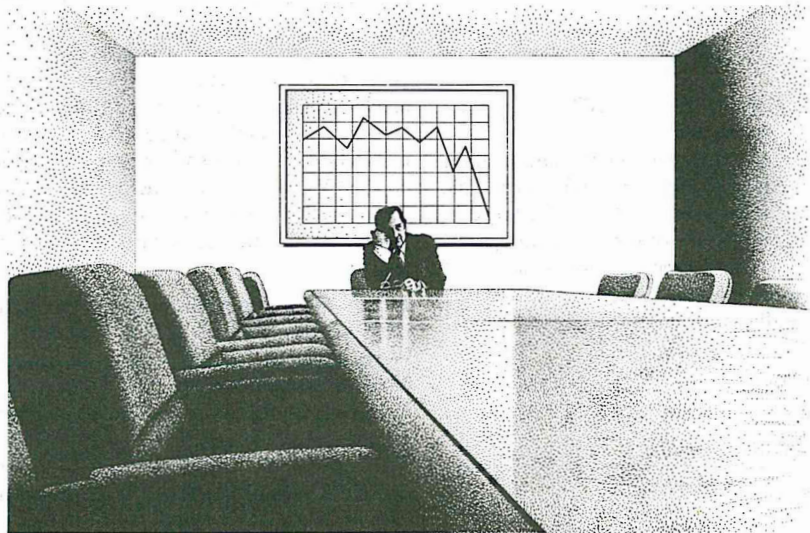
Prerequisites: ECON 201, 202; corequisite: None. fall and spring.

Topical seminars or experimental courses in economics in a variety of areas.

ECON 499. Independent Study or Research (Credits vary)

Prerequisites: ECON 201, 202; corequisites: Consent of the instructor and senior status. fall and spring.

An opportunity for independent study or research with guidance of an economics faculty member. From one to three credits.



Management and Marketing

Department Chairman: Associate Professor Albert E. Avery

Professors: Coker, A. King, Papageorge

Associate Professors: Avery, Boyd

Assistant Professors: Casey, Cohen, Hunter

Instructors: Loizides, Mills

The Department of Management and Marketing offers the Bachelor of Science in Business Administration degree with concentrations in management, marketing, and real estate.

No more than 60 percent of the minimum credits (usually 124) required toward the BSBA degree may come from courses in the School of Business and Economics.

The Bachelor of Science in Business Administration degree with a Concentration in Management

The BSBA degree with a concentration in management provides an overview of management theory and practice as it relates to all of the specific business functions, e.g., production, finance, accounting, marketing, and purchasing. The curriculum assumes a degree of universality and transferability with respect to management skills. The management concentration offers an exceptional variety of courses to prepare students for all types of managerial positions and perspectives. For instance, students interested in a general approach to this field might select as their management electives such courses as Personnel Management, Human Relations in Organizations, Industrial Psychology, Economics of Labor and Collective Bargaining, and a topics course such as Case Studies and Decision-Making Simulation in Organizations. On the other hand, students desiring mathematical or quantitative managerial training might elect as management electives a group of such courses as Managerial Economics, Business Conditions and Forecasting, Managerial Accounting, and Production Management.

A summary of Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page of the School of Business and Economics. In addition

to these requirements, the Bachelor of Science in Business Administration with a concentration in management also requires successful completion of: BUSN 412; ACCT 385; BUSN 400; and three courses chosen from: ACCT 410; BUSN 325; 431; 441; 450 and 495; ECON 420; 451 and 490; and either PSYC 303 or 313.

Note: Courses taken to satisfy the management concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

The Bachelor of Science in Business Administration degree with a Concentration in Marketing

The BSBA degree with a Concentration in Marketing involves the planning of business activity from the completion of production to the final consumer. This includes such inter-related activities as product planning, advertising strategy, distribution and logistics management, pricing policy, and marketing promotion. Salesmanship and merchandising techniques, store operations, and buying procedures are also included.

A summary of Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page of the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Business Administration degree with a concentration in marketing also requires successful completion of: BUSN 300; 450; 452 and 454; plus two courses chosen from: BUSN 315; 336; 338; 350; 395; 415; 416; 441; 453; 457; 458 and 495. **Note:** Courses taken to satisfy the marketing concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

The Bachelor of Science in Business Administration degree with a Concentration in Real Estate

The BSBA degree with a concentration in real estate, directed by the Department of Management and Marketing, prepares students for careers in real estate. Students who elect this concentration will take all of the courses required by the Commonwealth of Virginia to become eligible to take the Virginia Real Estate Brokers' Examination.

A summary of Distribution Requirements for the BSBA degree appears in the Academic Policies and Regulations section of the *Catalog*, under "Distribution and Other Degree Requirements." Core Requirements for the BSBA degree are found on the introductory page for the School of Business and Economics. In addition to these requirements, the Bachelor of Science in Business Administration degree with a concentration in real estate also requires successful completion of: BUSN 322; and four courses chosen from: BUSN 470; 471; 472; 473 and 474. **Note:** Courses taken to satisfy the real estate concentration must be in addition to those courses taken to meet the BSBA Core Requirements.

The Curriculum in Management, Marketing, and Real Estate

BUSN 300. Salesmanship (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A study of effective selling techniques emphasizing planning a sale, qualifying the customer, the importance of product knowledge, handling objections, multiple closings, effective use of buying signals, suggestive selling and prospecting. The student is required to give a number of sales demonstrations in class in order to show ability to conduct a sales interview.

BUSN 311. Marketing Theory and Analysis (3-3-0)

Prerequisite: ECON 201, 202, or consent of instructor; corequisite: None. fall and spring. Study of the activities which direct the flow of goods and services from producer to consumers in modern economic systems. Emphasis is placed on developing the student's ability to analyze and evaluate marketing problems and policies.

BUSN 315. Principles of Transportation (3-3-0)

Prerequisite: BUSN 311; corequisite: None. fall.

Designed to give the student an overview of the transportation field to include: transportation development, freight rate differential, transportation and the industrial pattern, valuation and rate making.

BUSN 322. Principles of Real Estate (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A survey of the role and importance of real estate in the economy; legalities, financing, investment, and appraisal. Involves problems of obtaining, owning and transferring real estate.

BUSN 324. Administrative Theory and Practice (3-3-0)

Prerequisite: ACCT 201, 202, or consent of instructor; corequisite: None. fall and spring.

The fundamental principles of administration underlying the operation of any type of organization. Emphasis will be placed on such basic functions of management as planning, organizing, staffing, leading, and control. These functions will be viewed from the human relations and quantitative aspects.

BUSN 325. Small Business Management (3-3-0)

Prerequisite: Junior or Senior standing or consent of instructor; corequisite: None. fall and spring.

Designed to give the student or student businessperson specific information concerning all aspects of small business. Major areas of study will be marketing, financing, and recordkeeping for small businesses.

BUSN 331. Statistical Methods in Business and Economics (3-3-0)

Prerequisites: MATH 125, MATH 110 or a higher level MATH course, and CPSC 210; corequisite: None. fall and spring.

Emphasis is placed on applications of statistical techniques to practical business and economic problems. Topics include classical hypothesis testing, non-parametric tests, one-way analysis of variance, time series analysis, and linear regression and correlation analysis.

BUSN 336. Retail Management (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. fall.

The importance, problems, and requirements of retail stores are explored; the financing, organizing, location selection, building, layout, pricing, promotion, credit, control, and record-keeping. Students work in all stages in the planning and operation of a retail store.

BUSN 338. Buying Procedures and Problems (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. spring.

A study of problems involving initial markup, maintained markups, retail methods of inventory, turnover, profit, stock to sales ratios and their application to the buyer's job. Dollar and unit planning, unit control, model stocks, merchandise selection, pricing, and market procedures are emphasized and practiced with projects.

BUSN 350. Sales Management (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. fall.

Examines the management of a company's personal selling component(s). The sales manager will be studied as a profit manager of a market area and as an administrator involved in sales planning, forecasting, budgeting, staffing (selecting, training, compensation, supervising, and stimulating), quota setting, sales force operations, sales analysis, and performance evaluation. Sales executive's ethical and social responsibilities will be reviewed.

BUSN 361. Legal Environment of Business (3-3-0)

Prerequisites: ACCT 201, 202; ECON 201, 202, junior or senior standing; corequisite: None. fall and spring.

A study of legal, economic and political aspects of government regulations of business. Emphasis is placed on the powers of the federal and state governments under their constitutions; the anti-trust laws; regulatory agencies and their regulations; and administrative rule-making by governmental agencies and how they affect decision-making and the operations of business.

BUSN 395. Topics in Retailing (3-3-0)

Prerequisite: None corequisite: None. spring. Presentation and discussion of recent trends in current problems of the retail industry. The seminar topics will reflect student interest.

BUSN 400. Organization Theory (3-3-0)

Prerequisite: BUSN 324; corequisite: None. fall and spring.

A detailed investigation into contemporary organization theory and problems. The determinants of organization design, the structural and process components of an organization, determinants of organization performance, and interrelationships between organization context, structure, process, and ends. Alternative theories and models of organizations will be compared and contrasted.

BUSN 408. Quantitative Analysis for Business and Economics (3-3-0)

Prerequisites: BUSN 331; MATH 125; MATH 110 or a higher level MATH course; and CPSC 210; corequisite: None. fall and spring.

An analysis of the quantitative operations research and management science approach to decision theory. Mathematical models which may be used in certain business decision situations are emphasized. Computer solutions to certain models are considered.

BUSN 412. Personnel Management (3-3-0)

Prerequisite: BUSN 324; corequisite: None. fall and spring.

A study of the principles and problems involved in personnel administration. Topics include job analysis, recruiting, and selection and training of personnel. The course will also include a discussion of collective bargaining and an introduction to wage and salary administration.

BUSN 415. Traffic Management (Transportation) Practices and Procedures (3-3-0)

Prerequisites: BUSN 311; 315 and 324; MATH 110 or a higher level MATH course; and CPSC 210; corequisite: None. fall.

A study of the management function of a traffic department in the movement and routing of raw material or finished goods in the intrastate or interstate commerce; application of freight rates, rules, and regulations of tariffs to specific commodity groups; preparation of transportation documents; auditing of freight charges.

BUSN 416. Transportation Regulation and Law (3-3-0)

Prerequisite: BUSN 415; corequisite: None. spring.

A study of transportation regulations and law including the Interstate Commerce Act; nature of interstate commerce; franchises, combinations of carriers; finance rates and service; procedures, loss and damage and related statutes.

BUSN 418. Business Policy and Strategy (3-3-0)

Prerequisites: ACCT 201-202; FINC 323; BUSN 311, 324, 331 and 361; and senior standing; corequisite: None. fall and spring.

Case analysis of the principles and techniques of formulating management policies. Utilizes analytical techniques in solving problems in management, finance, marketing, production, personnel, and accounting.

BUSN 431. Production and Operations Management (3-3-0)

Prerequisites: MATH 110 or a higher level MATH course; ACCT 201-202; BUSN 324, 331, and 408; corequisite: None. fall and spring.

An analysis of production with concentration on the method, design, and operation of production systems.

BUSN 441. International Business Management (3-3-0)

Prerequisites: BUSN 311, 324; FINC 323; corequisite: None. fall and spring.

Addresses the problems created by operating a business in more than one country, i.e., a multinational firm. The problems caused by differing laws, economic environments, social and cultural difference, differing technology, and educational differences are studied. Organizational and control problems are discussed. Students learn how to analyze the impact of these factors on operations and decision-making.

BUSN 450. Marketing Management (3-3-0)

Prerequisite: BUSN 311; corequisite: None. fall and spring.

An intensive analysis of major marketing decisions facing the firm, such as level mix, allocation, and strategy of marketing efforts. Specific decision areas investigated include market determination, buyer behavior, product policy, channel management, physical distribution, promoting and pricing. Competitive, political,

legal, and social factors that may affect such areas are discussed. Cases, models, and problems are used heavily.

BUSN 452. Marketing Research (3-3-0)

Prerequisite: BUSN 311; BUSN 331; and CPSC 210; corequisite: None. spring.

The application of analytical tools in the investigation of marketing problems. Emphasis on the development of sound policies in the systematic selection, gathering, and interpretation of marketing information.

BUSN 453. Advertising Management (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. fall.

Examines rationale and strategies behind the managing, planning, creating, using, researching, and evaluating of radio, television, print, outdoor, direct mail, specialty, and P.O.P. advertising. Determining objectives, making budget decisions, preparing advertisements, selecting media, and monitoring environmental constraints on advertising are stressed.

BUSN 454. Consumer Behavior (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. spring.

A study of the motivation and behavior of the consumer in the marketplace. The course draws on such disciplines in the behavioral sciences as psychology, sociology, and anthropology, and provides students with insight into the dynamics of the consumer's way of thinking.

BUSN 457. Channels of Distribution (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. fall.

Deals with the different types of channel organizations and structures. Economic and behavioral dimensions of channels are also discussed. Effectiveness of different channel combinations is analyzed as it applies to product areas, geographical environments, and economic environments.

BUSN 458. International Marketing (3-3-0)

Prerequisite: BUSN 311 or consent of instructor; corequisite: None. fall.

Marketing problems and practices faced by national and multinational corporations are analyzed. Specific types of marketing policies and strategies are examined as they relate to different product areas and different international geographical areas.

BUSN 470. Real Estate Law (3-3-0)

Prerequisite: BUSN 322 or consent of instructor; corequisite: None. spring.

A detailed and comprehensive survey of state and local laws which pertain to real estate: the laws of contracts, deeds, mortgages, leases, liens, and property taxes.

BUSN 471. Real Estate Appraisal (3-3-0)

Prerequisite: BUSN 322 or consent of instructor; corequisite: None. fall.

A detailed and comprehensive survey of specific principles and techniques of appraising the value of residential and commercial property. Intrinsic structural and engineering values are viewed as well as market considerations.

BUSN 472. Real Estate Brokerage (3-3-0)

Prerequisite: BUSN 322 or consent of instructor; corequisite: None. spring.

A survey of the principles and techniques involved in the ownership or managership of a real estate agency. Involves the issues of agent and agency, employment contracts, title of contracts, and commissions.

BUSN 473. Real Estate Finance (3-3-0)

Prerequisite: BUSN 322 or consent of instructor; corequisite: None. fall.

A survey of the principles and techniques of financing residential and commercial property. Involves bank and savings and loan regulations, Veterans Administration regulations, interest rates, and computation of installment payments.

BUSN 474. Real Estate Investment (3-3-0)

Prerequisite: BUSN 322 or consent of instructor; corequisite: None. fall.

For the real estate major or person pursuing a career in real estate. Subjects stressed include: the knowledge and use of pertinent information that is necessary for the marketing of income-producing and/or speculative real estate to clients; techniques and tools used in providing professional counsel to real estate investment clients; and the broker's role as either the seller's agent, the buyer's agent, or as one only providing counseling services.

BUSN 495. Topics in Business (3-3-0)

Prerequisite: Vary with topic; corequisite: None. fall and spring.

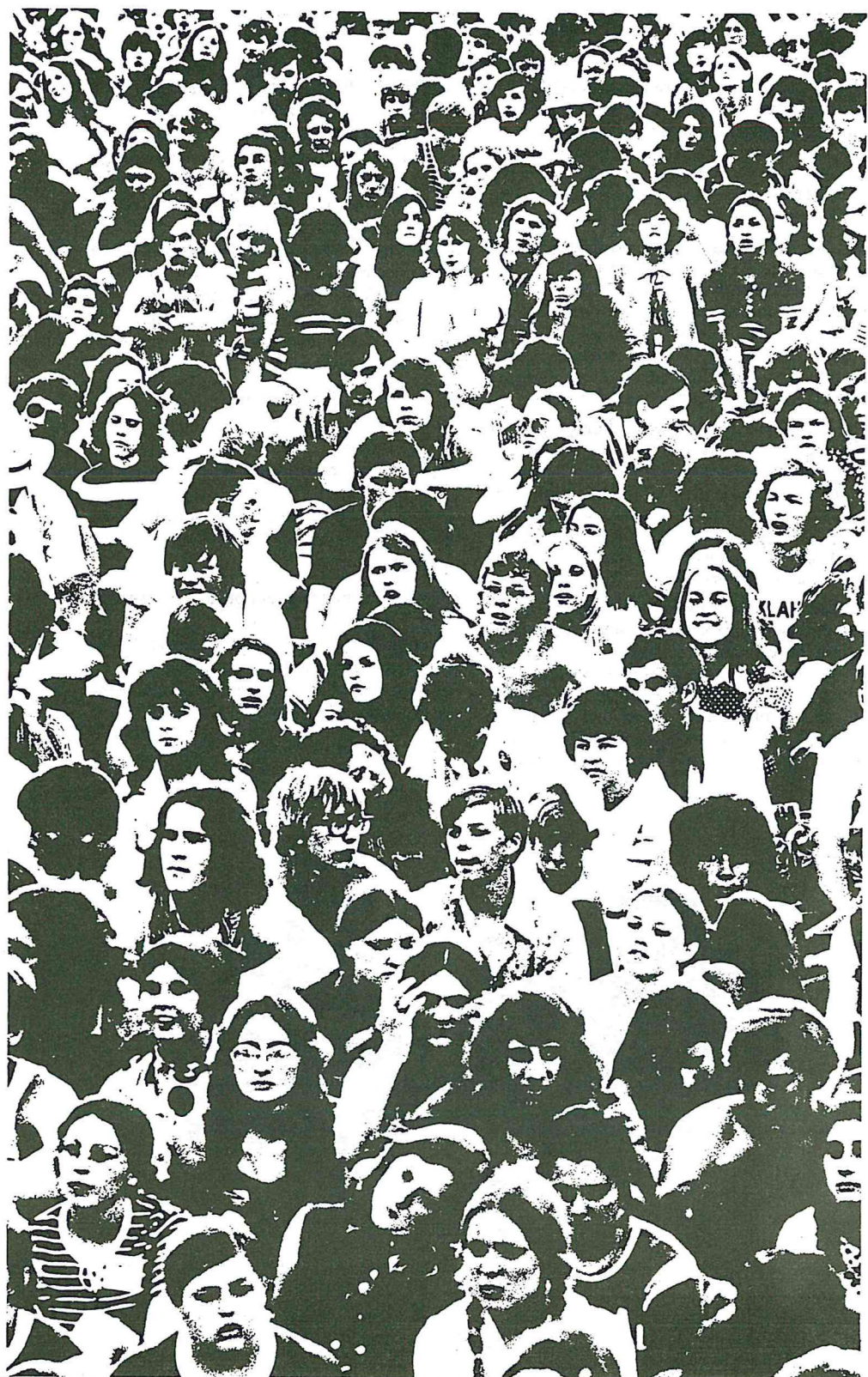
Topical seminars or experiment of courses in business in a variety of areas: comparative systems, organizational analysis, case work in human relations in organizations, and financial analysis possibilities.

BUSN 499. Independent Study or Research (1 to 3 credits)

Prerequisites: Junior or senior status and consent of instructor; corequisite: None.

An opportunity for independent study or research with guidance of faculty advisor.





The School of Social Science and Professional Studies



Dear Student:

The School of Social Science and Professional Studies provides a curriculum that combines the College's commitment to liberal arts education and professional and career-oriented programs that serve a diverse and inquiring student body. The School houses seven of the College's academic departments which offer ten degree programs and one multi-disciplinary certificate program.

The School's programs can be divided into two major groupings: The Social Sciences, comprising History, Political Science, Psychology, and Sociology; and Professional Studies, comprising Education, Arts and Communication (Art, Music, and Theatre), Gerontology, Governmental Administration, Leisure Studies and Physical Education, Military Science (Army R.O.T.C.), and Social Work. Several departments provide minors and special concentrations or career options within their majors.

The School's faculty is highly qualified. All faculty members have master's degrees and seventy-four percent have Ph.D.'s or Ed.D.'s from prestigious graduate universities throughout the nation. The faculty are scholars and effective teachers committed to the transmission of knowledge and skills. They organize their classes to bring out the best in their students; they will challenge you. They are excellent counselors and advisors; they will serve as mentors in your own pursuit. You should feel free to approach them when you have an academic need.

Members of the School's faculty demand that students have fine-tuned writing and computational skills. All of the programs in the School require communication skills and a majority require a knowledge of research and statistics. Through the School's curriculum, faculty members will assist you in the application of these skills to the solving of problems in their respective disciplines. When you graduate from Christopher Newport College in one of the fields of this School, the faculty will certify you as having met not only the curriculum requirements of a degree but its standards for academic performance. To meet these standards, you will need to produce.

Complementing the School's academic programs, each department sponsors one or more student clubs which provide opportunities for students with similar academic or career interests to get together to discuss and conduct activities on matters of mutual concern. Since Christopher Newport is a commuter college, the role of these clubs is essential to our mission. I encourage you to become active in one or more of these clubs. They are the vehicles by which you will have impact, not only on your own academic progress, but also on the academic programs themselves.

While the faculty and curriculum are the central ingredients of the School, you, the students, are the purpose. Please take advantage of what we have to offer. As Dean of the School, I am available to be of whatever assistance I can. Please feel free to come by my office. I am interested in your academic and career pursuits and in your experiences here at Christopher Newport.

In the pursuit of knowledge,

Robert J. Durel, Dean
School of Social Science and Professional Studies



Arts and Communication

Department Chairman: Associate Professor Rita C. Hubbard

Professor: Koch (Director of Theatre)

Associate Professors: Alexick (Director of Art), Hines (Director of Music), Hubbard

Assistant Professors: Brockett, Petruchyk

Instructors: Benton, Haynes

The Department of Arts and Communication houses the disciplines of art, music, theatre, speech communication, cinema, and photography. It views the arts critically and historically as they provide a living record of man's experiences and perceptions. The arts today represent a continuation of the past, and students working toward their chosen goals of artistic creation acquire both technical expertise and historical understanding.

The department offers a Bachelor of Arts degree in Fine and Performing Arts with concentrations in either art, music, or theatre, and the Bachelor of Music degree. The department also offers minor programs of study in art, music, speech communication, and theatre.

The Bachelor of Arts degree in Fine and Performing Arts

The Bachelor of Arts degree in Fine and Performing Arts requires that students fulfill College Distribution Requirements and successfully complete a minimum of 30 credits in their concentration of art, music, or theatre, plus 12 credits from the other two academic disciplines and speech communication. Choices can be made either from two of these disciplines or from all three. Specifics for all programs follow. In planning their programs of study, students should select an advisor from the Department of Arts and Communication during their freshman year. A minimum grade of C is required on all courses from the Department of Arts and Communication counted towards the degree.

The Bachelor of Music degree is performance-oriented and geared towards musically talented students. It does not supersede the Bachelor of Arts degree in Fine and Performing Arts with a concentration in music, but rather complements it. Students are accepted into the Bachelor of Music degree program based on their ability and level of performance at the end of their sophomore year.

The Bachelor of Arts degree in Fine and Performing Arts (Art concentration)

The art program is essentially pre-professional, providing the student with a thorough liberal arts background while offering the fundamentals required in drawing, painting, design, ceramics, and sculpture. Each of these academic disciplines allows advanced work so that the student will be prepared to pursue a career in a chosen art specialty at the graduate level.

The Bachelor of Arts degree in Fine and Performing Arts (Art concentration) requires successful completion of: FNAR 201, 202, 218 and 219 as lower level electives, and 321. In addition, students pursuing this degree and concentration must successfully complete two upper-level (300-400-level) art history courses plus 21 additional credits in art, chosen in consultation with a departmental advisor; and 12 credits chosen from at least two of the following areas: music, theatre, and speech communication.

The State-Approved Teacher Education Program in Art (NK-12)

Students may complete a state-approved teacher education program in art (NK-12) under the Bachelor of Arts degree in Fine and Performing Arts (Art concentration). In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the Catalog, the total program of study must satisfy all requirements for the Bachelor of Arts degree in Fine and Performing Arts (Art concentration) and must include: FNAR 231, 241, 251, 389, and one upper-level art history course.

The Minor in Art

A student may elect to minor in either studio art or art history. The student selecting studio

art as a minor must successfully complete FNAR 201 and 202 and 12 credits in studio art courses, six of which must be at an advanced (300-400) level. The student selecting art history as a minor must successfully complete FNAR 201 and 202, nine credits of advanced (300-400) level art history courses, and six credits of studio art courses. It is equally as necessary for the studio-oriented student to have a knowledge of the cultural heritage as it is for the art history student to have some experience in the problems of creating a particular art object.

The Curriculum in Art

FNAR 201, 202. Introduction to the Arts (3-3-0) (3-3-0)

Prerequisite: None. 201 fall, 202 spring.

The development of western art in painting, sculpture, and architecture from pre-historic times to the present. The first semester concludes with the Gothic period. The second semester begins with the Renaissance and continues to the present.

Studio Art

Note: In all studio courses, the student is responsible for the purchase of all personal and expendable art material.

FNAR 218, 219. Basic Drawing and Design (3-2-4)

Prerequisite: None. fall and spring.

These courses are prerequisites for all other studio courses, serving as foundations in the fundamentals of design and drawing. Emphasis in 218 is on individual design problems and problems of three-dimensional design; emphasis in 219 is on individual design problems and advanced drawing techniques.

FNAR 231. Fundamentals of Painting (3-0-6)

Prerequisites: FNAR 218, 219 or consent of instructor. fall and spring.

A course in the concepts and techniques related to the art of painting in oils and acrylics. Varied approaches in the use of painting media, the selection of content and subject matter.

FNAR 241. Ceramics (3-0-6)

Prerequisites: FNAR 218, 219 or consent of instructor. fall and spring.

An introductory course in ceramics with an emphasis on hand building and wheel throwing techniques as well as on an understanding of clay and glaze materials and their proper use.

FNAR 251. Sculpture (3-0-6)

Prerequisite: FNAR 218, 219 or consent of instructor.

A basic course that introduces a variety of methods, materials, and processes used in the making of sculpture. An exploration of basic sculpture concepts.

FNAR 321. Drawing (3-0-6)

Prerequisites: FNAR 218, 219 or consent of instructor. fall and spring.

A course exploring the creative and technical aspects of drawing as an independent expressive medium.

FNAR 323. Painting II (3-0-6)

Prerequisite: FNAR 231. fall and spring.

A course in the further development of painting skills and elements of style with a focus on the application of concepts. The development of critical facilities with regard to the creative process of painting.

FNAR 325. Painting III (3-0-6)

Prerequisite: FNAR 323. fall and spring.

A course in the development of the techniques and concepts of painting as a means of self-expression as well as the exploration of issues and ideas in practical application.

FNAR 341. Advanced Ceramics (3-0-6)

Prerequisite: FNAR 241 or consent of instructor. fall and spring.

Continuing development of skills in hand building, wheel throwing, and techniques in glazing and decorating.

FNAR 351. Advanced Sculpture (3-0-6)

Prerequisite: FNAR 251 or consent of instructor. Experience with a variety of sculpture materials with a focus on individual projects and further development of sculptural concepts.

FNAR 389. Crafts (3-0-6)

Prerequisites: FNAR 218, 219, or junior standing. A course that explores the fundamentals of several basic craft processes and materials. This is a course suitable for teachers or others interested in learning about basic craft techniques. Possible projects include weaving, copper enameling, woodcarving, and simple jewelry making.

FNAR 395-S. Special Topics. (Credits vary)

Prerequisite: Consent of instructor. fall and spring. Studio work in such areas as watercolor, advanced watercolor, print-making, crafts, and other topics in accordance with special student needs and interest as well as departmental resources.

FNAR 401. Individual Problems in Studio (3-0-6)

Prerequisites: Basic studio courses and consent of instructor. fall and spring.

Special individualized problems in studio areas.

Art History

FNAR 371. Modern Art (3-3-0)

Prerequisites: HIST 101, 102; FNAR 201, 202; or consent of the instructor. Alternate spring.

The development of western art from the late 18th century to 1945. The course is concerned with art objects as they reflect the changing social, political, and economic revolutions of their period as well as developments of different aesthetic theories and art criticism.

FNAR 372. Arts in the United States (3-3-0)

Prerequisites: HIST 201, 202; FNAR 201, 202; or consent of the instructor. Alternate spring.

A study of the arts in America from the colonial times to 1960 as they reflect upon the varieties of the American experience.

FNAR 373. Arts of Humanism (3-3-0)

Prerequisites: HIST 101, 102; FNAR 201, 202; or consent of the instructor. Alternate fall.

A study in the development of art from the early Renaissance through the 16th century. Special attention is given to the changing role of the artist, the effects of Roman and Greek archaeology, increasing nationalism as well as establishing our conceptual vision of the world.

FNAR 374. Arts of the Non-Western World (3-3-0)

Prerequisite: FNAR 201, 202; HIST 101, 102; or consent of the instructor. Alternate fall.

A study of the arts of India, China, and Japan as well as the cultures of Africa, Oceania, and pre-Columbian America. The emphasis is on the conceptual differences between these developed, complex areas as they differ from our own.

FNAR 395-H. Special Topics in Art History (3-3-0)

Prerequisites: FNAR 201, 202; or consent of the instructor.

A topic in art history may cover an area such as Baroque and Rococo, Classical, Ancient, and Contemporary as determined by the special interests and needs of students and the expertise of the faculty.

The Degree Programs in Music

The music programs balance a scholastic approach to music with high performance standards and prepares the student for either graduate study or professional career opportunities. The faculty is cognizant of the liberal arts emphasis on education today and of the technical knowledge expected of professional musicians. To that goal emphasis is placed on the traditional music courses, theory and history; and these are supplemented with advanced courses and independent study geared towards the student's own career objectives. The student constantly learns to relate knowledge learned in the classroom to his/her own musical performance.

Most students concentrate in musical performance. Students planning to pursue graduate study in theory, composition, or musicology can concentrate in those areas as an undergraduate. Advanced work in theory and musicology is done through independent study and culminates in the senior year with a major research project and thesis. Composition is taught as an applied music and culminates with a full concert of the student's original compositions. Specific details on these special programs are available from the Director of Music.

An important aspect of a student's music education is his/her increasing familiarity with musical literature from various eras and in various genres. A music student is required to attend student recitals, concerts on two CNC concert series, and various professional and quasi-professional concerts and productions presented throughout the Tidewater area.

Regular student recitals as well as studio recitals are held throughout each semester. All students studying major applied music are expected to perform on at least one student recital each semester, although applied music teachers may waive this requirement for individual students during their first semester at CNC.

A senior recital is required of all performance majors. Senior recitals are presented at the completion of APP MUSC 432 and APP MUSC 434. The recital must represent a cross-section of the literature for the instrument, and must represent a level of difficulty appropriate to a college graduate with a degree in performance. Recital approval must be given by the examining jury in the semester preceding the semester

in which the recital is to be presented. Approval is given on the basis of the suitability of the proposed program and the reasonable assumption that the student is technically capable of completing the program.

All music students other than keyboard majors must demonstrate piano proficiency prior to graduation in one of the following ways: (1) by satisfactory completion of the Standard Piano Proficiency Test; (2) by accompanying in student recitals; (3) by completing at least six semesters of Piano 130 with grades no lower than "B".

The Standard Piano Proficiency Test includes: (1) a prepared piece not memorized, approved by members of the Piano faculty or the Director of Music; (2) sight reading of a hymn with steady rhythm; (3) a Chorale by J. S. Bach assigned one week before the test date; (4) a major scale of two octaves with hands together in similar motion; (5) transposition at sight of a simple melodic line up or down a whole step; (6) improvised accompaniment to a simple melodic line.

Students not having completed the Piano proficiency requirement prior to beginning their sophomore year must register for PIAN 130. Transfer students entering above the freshman level will be allowed one semester to complete the piano proficiency requirement before being required to register for PIAN 130.

The Bachelor of Arts degree in Fine and Performing Arts (Music concentration)

The Bachelor of Arts degree in Fine and Performing Arts (Music concentration) requires successful completion of: MUSC 213-214, 303-304, 403, 414; APP MUSC 131-132, 231-232, 331-332, 431-432. Recommended electives for the Bachelor of Arts degree in Fine and Performing Arts (Music concentration) are: FNAR 201-202; FNAR 218; MUSC 100; SPCH 201; THEA 210, 211, and 213.

The Bachelor of Music degree

A summary of the Distribution Requirements for the Bachelor of Music degree appears in the Academic Policies and Regulations section of the Catalog, under "Distribution and Other

Degree Requirements." These are required of all candidates for the BM degree. All candidates for the BM degree must also successfully complete MUSC 213-214; 303-304; 314; 403; 414; and 417. Additional requirements, by track, include: **Performance Track:** APP MUSC 131-132; 231-232; 333-334; and 433-434; **Composition Track:** APP MUSC 333-334 and 433-434; MUSC 313; and MUSC 415; **Theory Track:** MUSC 313; MUSC 415; MUSC 399-399; and MUSC 499-499; **History Track:** MUSC 395-395; MUSC 399-399; and MUSC 499-499. Recommended electives depending on track are: APP MUSC 131-132; APP MUSC 231-232; MUSC 307; MUSC 313; MUSC 395; and MUSC 415. Students pursuing the Bachelor of Music degree must successfully complete a minimum of 12 credits of non-music electives at the 300-400-level. Credits in a second modern or classical language may be counted toward this requirement at the 100-200-level.

The Minor in Music

The minor program in music requires successful completion of a minimum of 18 credits in music above the 100-level. The minor program in music requires: MUSC 213-214, MUSC 303-304; and APP MUSC 231-232. Also, students must present a minor (one-half hour) recital at the completion of APP MUSC 232 or at the highest level of applied music coursework they successfully complete. Approval of the recital program must be attained in the semester immediately preceding the semester in which the recital is given.

The Curriculum in Music

MUSC 100. Mixed Chorus (1-0-3)

Prerequisites: None; corequisites: None. fall and spring.

Choral literature by major composers is studied through performance. Vocal emphasis is placed on diction, phrasing, breath control, dynamic expression, and tone production. Works are performed in their original language. Auditions are required, and prospective chorus members are encouraged to contact the Director of Music before registering. Students can register for Mixed Chorus each semester, but no more than eight credits can be counted toward graduation.

MUSC 113-114. Elementary Theory of Music (5-3-3) (5-3-3)

Prerequisites: None; corequisites: None. fall, spring sequence.

A beginning course in the study of tonal harmony and ear training. Triads, seventh chords, non-harmonic tones, and simple modulation are studied through partwriting and analysis. Ear training is pursued through sight singing and melodic, rhythmic, and harmonic dictation.

MUSC 201-202. Introduction to Music (3-3-0) (3-3-0)

Prerequisite: None; corequisite: None. fall, 201; spring, 202, summer 201 & 202.

A course that traces the stylistic development of music chronologically through historical periods from the Middle Ages to the present day. Students become familiar with major works of the most important composers from each period. The first semester includes periods before 1750, and the second semester continues to the present day. This course fulfills CNC's humanities distribution requirement and is recommended for all non-music majors.

MUSC 213-214. Advanced Theory of Music (4-3-2) (4-3-2)

Prerequisite: MUSC 114; corequisite: None. fall, spring sequence.

This course is a continuation of MUSC 113, 114. Students deal with advanced harmonic techniques, including altered chords, chromatic harmony, and modulation. Formal and harmonic analysis is emphasized in the second semester. Ear training includes more difficult sight singing and melodic, rhythmic, and harmonic dictation. This course is required of all music majors.

MUSC 303-304. History of Western Music (3-3-0) (3-3-0)

Prerequisites: None; corequisites: None. fall, 303; spring, 304.

A course that surveys musical philosophy, style, and literature from the ancient world through the twentieth century. Although no written papers are required, the course requires a significant amount of outside reading.

MUSC 307. Music in America (3-3-0)

Prerequisites: None; corequisites: None.

A course in which music is studied as a part of America's cultural history. Beginning with music

transported to the New World by the Pilgrims, musical activity is traced chronologically into the twentieth century. The development of an indigenously American expression is identified.

MUSC 313. Modal Counterpoint (3-3-0)

Prerequisite: MUSC 214; corequisite: None. fall and alternate years.

A study through analysis and compositional assignments of sixteenth-century counterpoint, primarily in the style of Palestrina. Emphasis is placed on motets and movements of masses, up to five voices.

MUSC 314. Tonal Counterpoint (3-3-0)

Prerequisite: MUSC 214; corequisite: None. fall and alternate years.

A study through analysis and compositional assignments of eighteenth-century counterpoint, primarily in the style of J. S. Bach. After completing exercises in the techniques of species counterpoint, students will study the larger forms of inventions, canons, fugues, and chorale-based compositions.

MUSC 403. Twentieth Century Music (3-3-0)

Prerequisites: MUSC 214, 304; corequisite: None. spring.

A course that traces the major developments of the twentieth century in musical composition and style. An analytical approach is utilized in the study of harmonic, melodic, and rhythmic usage in contemporary composition generally, as well as the newly developed techniques of serial and electronic composition. A historical approach is utilized in the examination of representative literature.

MUSC 414. Conducting (3-2-2)

Prerequisite: MUSC 214, or 304; corequisite: None. fall.

A course in the basic problems of vocal and instrumental conducting of small and large groups. Baton techniques, score reading, rehearsal techniques, and musical interpretation of compositions from various style periods are studied.

MUSC 415. Orchestration (3-3-0)

Prerequisite: MUSC 214; corequisite: None. spring and alternate years.

A course in which the basic concepts of arranging music for various groups of orchestra instruments is studied. After a general survey of the instruments of the orchestra covering ranges, clefs used, timbre, special effects, and terminol-

ogy, techniques of actual orchestration are studied through written projects and analysis of orchestra scores.

MUSC 417. Form and Analysis (3-3-0)

Prerequisite: MUSC 214; corequisite: None. spring and alternate years.

A study of the formal structure of music utilized in various genres of the Baroque, Classic, and Romantic periods. Through analysis of many compositions students gain insight into the similarities and differences of musical composition, performance, and interpretation from period to period and composer to composer.

MUSC 395. Special Topics in Music (3-3-0)

Prerequisite: As announced; corequisite: None. fall and spring.

Courses in music history and literature chosen to fulfill the needs of students pursuing the Bachelor of Music degree. Among the composer and genre studies to be offered in the next few years are: Haydn, Beethoven, Schumann, Piano Literature, Song Literature, Oratorio, and Opera.

MUSC 495. Special Topics in Music (3-3-0)

Prerequisite: As announced; corequisite: None. fall and spring.

Courses in music history and literature chosen to fulfill the needs of students pursuing the Bachelor of Music degree. Among the era courses to be offered are: Baroque, Classic, and Romantic.

MUSC 499. Independent Study (Credits vary)

Prerequisites: Junior or senior standing; corequisite: None. fall and spring.

Independent study provides special opportunities for students to explore special areas of music and research outside the limitations of regular music offerings. Students desiring to pursue independent study should first talk to the Director of Music and then submit a project proposal. Subject to the acceptability of the project, a faculty member will be assigned to work with the student.

Applied Music

Applied music at CNC is not intended to serve only those students pursuing a major or minor in music. All students with a sincere interest in music can take applied music, subject to policies established by the Department

of Arts and Communication and approved by the dean of the school.

Applied music is taught in private lessons, but an additional fee is charged. Instruction is available in piano, organ, strings, woodwinds, brass, and voice. Music composition is also taught as an applied music.

Students considering applied music should first see the Director of Music. Registration is not allowed without prior approval. Applied music is taught each semester and summer.

APP MUSC 130. Applied Music: Piano, Organ, Strings, Woodwinds, Brass and Voice
Taught both semesters and summers.

Students receive one thirty minute lesson per week and one credit per semester. Lessons can be taken by beginners or students at any level of advancement. Compositions studied are determined by the instructor according to the level and ability of the student, but only compositions in the classical tradition will be studied. Students are allowed to repeat MUSC 130 up to eight times for credit toward graduation. An applied music fee is charged each semester. See "Payments and Fees."

APP MUSC 131, 132, 231, 232, 331, 332, 431, 432. Applied Music: Piano, Organ, Strings, Woodwinds, Brass, Voice, Composition

Taught both semesters and summers.

Students receive a one-hour lesson per week and two credits per semester. Auditions are required for new students. Compositions studied are determined by the instructor according to the level and ability of the student, subject to standards as established by the Department. Minimal levels of technical proficiency for each number are available from the Director of Music. A half-hour recital may be required of students at the completion of MUSC 232. A senior recital is required of all students at the completion of MUSC 432. An applied music fee is charged each semester. See "Payments and Fees."

APP MUSC 333, 334, 433, 434. Applied Music: Piano, Organ, Strings, Woodwinds, Brass, Voice, Composition.

Taught both semesters and summer.

Students receive a one-hour lesson per week and three credits per semester. Completion of APP MUSC 232 and acceptance in the Bachelor

of Music degree program as a performance or composition major are required. Compositions studied are determined by the instructor according to the level and ability of the student, subject to standards established by the Department. A one-hour recital is required of all students at the completion of APP MUSC 434. None of the applied music numbers here can be repeated for credit counting towards graduation. **An applied music fee is charged each semester. See "Payments and Fees."**

The Speech Communication Program

The department defines speech communication in its broadest sense as including all those verbal and nonverbal processes by which people influence one another. Communication behavior is learned from families, friends, schools, and the media; and our culture provides negative as well as positive models. Speech communication courses offer students an opportunity to examine alternatives and to begin the task of eliminating negative patterns and replacing them with more satisfying and effective communication patterns.

The Minor in Speech Communication

The minor program in speech communication requires 18 credits in speech communication courses. The department offers four courses regularly, special topics and independent study courses.

The Curriculum in Speech Communication

SPCH 201. Public Speaking (3-3-0)

Prerequisite: None; corequisite: None. fall, spring and summer.

Effective speech preparation and delivery with emphasis on the extemporaneous mode of natural and direct communication. Focus on content and organization as well as on verbal and nonverbal aspects of public address. Special attention given to audience analysis.

SPCH 211. Interpersonal Communication (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A theoretical and practical study of face-to-

face, two-way communication. Among the areas for consideration: message systems, breakdowns in communication, levels of meaning, perspectives, and methods of creating effective and efficient communication in family systems, friendships, love and work relationships.

SPCH 214. Fundamentals of Voice and Diction (3-3-0) [Same as THEA 214]

Prerequisite: None; corequisite: None. Alternate fall.

Study of basic principles underlying the effective use of the voice and exploration of practical methods leading to acceptable standards of diction.

SPCH 301. Nonverbal Communication (3-3-0)

Prerequisite: SPCH 201 or 211 or consent of instructor. summer.

Study of body language, facial expressions, space, vocalization, time, objects, dress, and touch as forms of nonverbal communication which in conjunction with language convey ideas, intentions, emotional states, and attitudes. Related to current perspectives in American society.

SPCH 395. Special Topics (3-3-0)

Prerequisite: SPCH 201 or 211 or consent of instructor. spring.

Topics will vary. For example, a topics course on persuasion deals with the tactics and ethics of persuasion. Designed for the persuader and the recipient of persuasive communication. Includes selected theories of persuasion and attitude modification as applied to interpersonal relations, advertising, politics, business, science, and religion.

SPCH 499. Independent Study (Credits vary)

Prerequisites: Junior or senior standing, the completion of fifteen credits in speech communication courses, and consent of instructor. fall and spring.

Provides special opportunities for well-prepared students to independently explore special areas of speech communication outside the limitations of regular classes. Students wishing to pursue independent study must submit an acceptable proposal before enrolling.

The Curriculum in Photography PHOT 270. Introduction to Photography (3-3-0)

Prerequisite: None. fall and spring.

An introductory course in photography. Emphasis is placed upon the making of black-and-white prints and some color slides. Course will include: choice of camera and accessories, camera operation, subject choice, composition, lighting, film choice, color control, the procedures for processing and printing black-and-white film. Access to an adjustable 35 mm camera is necessary. By instructor's choice, film will either be processed by photo-finishers or by students. Students must bear all costs for film and processing.

The Theatre Arts Program

The theatre is not an invention of recent centuries. It has been with man since time immemorial. Down through the years it has provided an illuminating record of how man lived, thought, and felt. Theatre, therefore, represents a vast storehouse of human experience harnessed in the form of drama.

With the study of human behavior at its center, theatre has a vital place in the study of the liberal arts. This is of special importance to those who do not intend to pursue a professional career in the theatre. Their interests and needs may be served by being directed to apply the discipline of theatre to the study of self and the social sphere.

The Bachelor of Arts degree in Fine and Performing Arts (Theatre Arts concentration)

For students pursuing the Bachelor of Arts degree in Fine and Performing Arts (Theatre Arts concentration), the program provides a solid foundation on which to base graduate study, a teaching career on the secondary level, and further professional training. The program is committed to a disciplined approach to theatre as a form of art. This implies that a competent theatre practitioner must bring to his/her art a sense of dedication and willingness to work. Extensive involvement in all phases of production, in addition to regular theatre classes, is critical to the implementation of such a philosophy.

The CNC Theatre represents the major practical component of the program. This organization stages from two to four productions each year. Studio productions, directed by students, add an important dimension to the total program.

The Bachelor of Arts degree in Fine and Performing Arts (Theatre Arts concentration) requires: THEA 210, 211, 212, 213, 318, and 323; 12 additional credits in theatre arts courses; plus 12 credits from at least two of the following areas: Art, music, and speech communication.

The Minor in Theatre Arts

The minor program in theatre arts requires: THEA 210, 211, 212, 213, and 323; plus six additional credits in theatre arts courses.

The Curriculum in Theatre Arts THEA 210, 211. Introduction to the Theatre (3-3-0) (3-3-0)

Prerequisite: None. 210 – fall, 211 – spring

A historical, theoretical, and artistic survey of the theatre experience. THEA 210 establishes a conceptual basis by means of comparative analysis of selected plays. THEA 211 focuses on in-depth dramaturgical analysis and inquiry into the historical, social, and philosophical forces that shaped the representative plays from various epochs.

THEA 212. Introduction to Technical Theatre Production (4-2-5)

Prerequisite: None. fall.

Fundamentals in scene construction, stage lighting, and contemporary production techniques. Three laboratory hours per week, arranged by the instructor, are required, as well as participation in some aspect of departmental production.

THEA 213. Beginning Acting (3-3-0)

Prerequisite: None. fall.

The course consists of basic psycho-physical exercises, improvisations, and exploratory techniques in regard to character, situation, and interrelationships, culminating in a presentation of a scene from a written script. For majors and non-majors.

THEA 214. Fundamentals of Voice and Diction (3-3-0) [Same as SPCH 214]

Prerequisite: None. Alternate fall.

Study of basic principles underlying the effective use of the voice. Practical exercises leading to acceptable standards in diction.

THEA 313. Intermediate Acting (3-3-0)

Prerequisite: THEA 213 or consent of instructor. spring.

Scene studies from realistic plays. Systematic application of techniques developed in THEA 213. For majors and non-majors. For the latter, emphasis is on applying the study of character, situation, and interrelationships as inherent in script analysis to the social sphere.

THEA 318, 319. Scenography (3-2-3) (3-2-3)

Prerequisite: THEA 212 or consent of instructor. Alternate spring.

A theoretical and practical study of unified production concepts. THEA 318 emphasizes scenic drawing, drafting, rendering, and model-making techniques. THEA 319 emphasizes stage lighting equipment, special effects, and lighting design. Participation in some aspect of departmental productions required from both courses.

THEA 322. Music Theatre (3-4-0)

Prerequisite: Consent of instructor. spring. Study and practice of performance techniques for opera, musical comedy, and review.

THEA 323. Directing (3-3-0)

Prerequisite: THEA 213 or consent of instructor. Alternate fall.

Study of basic principles in directing through scenes from realistic plays.

THEA 326. Creative Dramatics (3-3-0)

Prerequisite: None. Alternate summer.

Examination of methods for constructing theatrical events for children. Emphasis is on developing imagination and communication abilities in both theatre and classroom.

THEA 395. Special Topic (Credits vary)

Prerequisite: Consent of instructor. fall or spring. Studies determined by instructor according to special needs and interests of students and expertise of faculty.

THEA 413. Advanced Acting (3-3-0)

Prerequisites: THEA 213 and THEA 313, or consent of instructor. spring.

Scene studies, including non-realistic plays. This involves the study of various styles. Style, in this context, is evolved as an organic extension of the principles of realistic acting.

THEA 414, 415. Theatre Practice: Styles of Acting, Directing, and Design (3-3-0) (3-3-0)

Prerequisite: Consent of instructor. Alternate spring.

Study of major styles in the Western theatre. Each student determines his/her special emphasis. Projects may be carried out in connection with a major production or studio production.

THEA 458. Playwriting (3-3-0)

Prerequisite: Consent of instructor. Offered on a tutorial basis.

Study of traditional and contemporary modes of dramaturgy and their translation into one-act or full-length plays.

THEA 495. Special Topics (Credits vary)

Prerequisite: Consent of instructor. fall or spring. Studies to be determined by instructor according to special needs and interests of students and expertise of faculty.

THEA 499. Individual Projects (Credits vary)

Prerequisite: Consent of instructor. fall or spring. Individual construction, performance, or research projects under the guidance of a faculty member.





Education

Department Chairman: Assistant Professor John E. Jenkins

Professors: Daly, Friedman

Assistant Professors: Hornback, Jenkins (Director, Student Teaching), Wakefield

The Department of Education offers state-approved teacher education programs designed for the preparation of early (NK-4), middle (4-8), and secondary teachers. Early and middle education teachers are prepared through state-approved programs leading to the Bachelor of Arts degree in Elementary Education. Secondary teachers, majoring in specific academic disciplines, are prepared through state approved programs leading to a bachelor's degree with a minor in secondary education.

Through these programs and other course offerings, the department seeks to meet unique needs of students at an urban, non-residential college and to serve the metropolitan area in the specific fields of undergraduate and in-service teacher education.

A liberal arts core is the basis of the teacher education programs. The professional education component of these programs involves study of philosophical, cultural, and social foundations of education; human behavior; curriculum and instructional strategies; and the structure and operation of American education. The teacher education programs include opportunities for practical observation and application of knowledge, theory, and concepts.

The overall objective of these programs is to prepare effective teachers who possess the knowledge, skills, and attitudes necessary to meet the diverse needs of today's students.

A summary of Distribution Requirements for the BA degree appears in the Academic Policies and Regulations section of the Catalog, under "Distribution and Other Degree Requirements." Additional requirements for the BA degree in Elementary Education follow.

The Bachelor of Arts degree in Elementary Education

College Distribution Requirements for the BA degree should be satisfied in the freshman and sophomore years. The Bachelor of Arts degree in Elementary Education requires: **Education Courses:** EDUC 300; 320; 325; 330; 332; 334; 336; 404; and 420; **Student Teaching Block:** EDUC 401 (six credits); 405 or 416; 406; and 414; **Major Support Courses:** PSYC 201; SPCH 201, 203, 211, or

214; LSPE 318 and 321; ECON 200, 201, or 225; GEOG (three credits); HIST 101-102; HIST 201 or 202; PSYC 307, 308, or 309; PSYC 312; ENGL 430; **Mathematics:** Six credits; **Laboratory Science:** Eight credits; **LSPE:** Two activities courses; **Humanities:** Three credits in literature and three credits in art, music, philosophy, or foreign language. Students in the teacher education program (grades 4-8) must develop two areas of specialization which are to include 15 credits in each. The areas of specialization are: **mathematics** (must include MATH 110, 125, 130, and three hours of computer science); **science** (at least two laboratory sciences); **language arts** (must include ENGL 309); and **social science** (must include POLS 102).

The Minor in Elementary Education

The Minor program in elementary education requires: EDUC 300; EDUC 320; nine credits of EDUC electives; and PSYC 312.

Secondary Teacher Education Programs

Secondary teacher education programs have developed in cooperation with other academic departments of the College. Students may be prepared to teach in the following subject areas: art; biology; English; English and speech; English and journalism; English and dramatics; French; general mathematics; general science; German; government; history; journalism or dramatics; mathematics; physical education; social sciences; and Spanish.

All state approved secondary teacher education programs require successful completion of: EDUC 300; 303; 401; 403; 404; and 414; PSYC 307 or 309; PSYC 312; three credits in literature; eight credits in laboratory science; six credits in mathematics; either HIST 201 or 202; nine additional credits in social science; LSPE 321; one LSPE activity course; SPCH 201, 203, 211, or 214; and three credits in art, foreign language, music, or philosophy. Additional departmental requirements appear in the respective departmental listings of the *Catalog*.

Academic advisors for students interested in teacher education programs are: **Art:** Professor

Rita Hubbard; **Biology:** Professor Jean Pugh; **English:** Professor Burnam MacLeod; **Government:** Professor William Winter; **History:** Professor Mario Mazarella; **Mathematics:** Professor John Avioli; **Modern Languages:** Professor David King; **Physical Education:** Professor James Hubbard. Secondary teacher education program advisors in the Department of Education are Professors Elizabeth Daly and John Jenkins.

The Minor in Secondary Education

The minor program in secondary education requires successful completion of: EDUC 300; EDUC 303; EDUC 404; plus the student teaching block: EDUC 401; EDUC 403; and EDUC 414.

Criteria for Admission to Teacher Education Programs

Students preparing to be teachers must be admitted by the Department of Education to a state-approved teacher education program. Students must meet the following criteria in order to be admitted to a state-approved teacher education program: (1) An overall quality point average of at least 2.40; (2) Personal and social fitness and demonstrated potential leadership, as evidenced by current references by three people who have known the applicant in different situations; (3) Physical and mental health sufficient for the tasks to be performed as indicated in a report of a physical examination. This examination must have taken place within one year prior to the date of application for admission to the teacher education program; (4) Competency in voice, speech, and oral and written English as evidenced by: a) A grade of at least C in a speech course and in ENGL 101-102 or ENGL 103-104; b) An acceptable score on the English competencies test designated by the department; (5) Competency in mathematics as evidenced by a grade of at least C in six credits of mathematics; (6) Related experiences as evidenced by data supplied by the applicant on the admission form. If the student fails to meet any of the criteria for admission, to the teacher education program, (s) he should seek advice and counsel concerning remediation from the Admissions and Retention Committee of the College Department of Education.

Procedures for Application

The student must file an Application for Admission to the Teacher Education Program with the Admission and Retention Committee of the Department of Education. This form may be obtained from the department.

The application for admittance must be filed after the successful completion of at least thirty semester hours of course work but prior to the completion of the last thirty semester hours.

A student possessing a bachelor's or graduate degree may seek admission (as an unclassified student) to a teacher education program upon admission to the College.

Conditional admittance is possible until the semester of student teaching, at which time the student must possess unconditional admittance into a teacher education program. This provides the student with an opportunity to meet admissions criteria while currently pursuing a course of study in a teacher education program.

Retention in the Teacher Education Program

The performance of the student will be monitored throughout the teacher education program by the faculty of the Department of Education. Any student whose performance falls below the level for admission to the teacher education program as established by the criteria may be placed on provisional admittance. Such a change in status is made by the College Department of Education upon the recommendation of the Admissions and Retention Committee of the Department of Education.

Admission to the Student Teaching Semester

Students must meet the following criteria in order to be admitted to the Student Teaching Semester: (1) An overall quality point average of at least 2.40 in all courses completed prior to the student teaching semester; (2) An earned grade of C or above in each of the following courses: **Major (Elementary):** EDUC 300; 320; 330; 405 or 416; 406; and 420; PSYC 307, 308, or 309; and PSYC 312; **Minors (Secondary):** EDUC 300, 303, and 403; PSYC 307 or 309; and PSYC 312; (3) Recommendation from the student's major department; (4) Completion of the Audio-Visual Competencies Checklist.

The completed Application for Student Teaching form must be filed with the Director of Student Teaching by March 1 for the Fall Semester, or by October 1 for the Spring Semester. The Recommendation for Student Teaching form will be requested from the student's major department by the Director of Student Teaching.

Certification and Placement

Graduates of teacher education programs may apply for a Virginia Teaching Certificate by filing Form DOA034 with the Director of Student Teaching. In order for a student to be recommended for the certificate, a grade of at least "C" must be earned in student teaching. Throughout the program the applicant must have demonstrated competencies necessary for successful teaching. An applicant must also present scores on the National Teacher Exam.

During the student teaching semester, the Director of Student Teaching assists students in teacher education programs in compiling a placement file.

The Curriculum in Education

EDUC 300. Foundations of Education (3-2-3)

Prerequisite: None; corequisite: None. fall and spring.

This introductory course offers a theoretical and practical examination of American education through the perspectives of the historian, sociologist, and philosopher. A thirty-hour laboratory observation/participation experience in the public schools is an integral part of the course and is arranged for each student individually.

EDUC 303. Instructional Materials and Methods – Secondary (3-3-0)

Prerequisites: SPCH 201; EDUC 300; PSYC 307 or 309, and 312; and fifteen semester credits in the subject of teaching choice; or consent of the instructor; corequisite: None. fall and spring.

An introductory course in the organization of instruction focusing on the application of basic concepts, skills, materials, media, and classroom management.

EDUC 312. Educational Psychology (3-3-0) Same as PSYC 312

EDUC 320. Developmental Reading (3-2-1) Prerequisite: EDUC 300; PSYC 307 or 308; corequisite: None. fall and spring.

A basic course in the teaching of reading. Reading materials, methods, and evaluation techniques are examined. Emphasis is placed on helping children develop reading readiness, word recognition skills, comprehension skills, study skills, and skills needed for reading. Supervised practicum experience in a public school is an integral part of this course.

EDUC 325. Children's Literature (3-3-0)

Prerequisite: ENGL 101-102; corequisite: None. fall and spring.

A study of children's literature focusing on children's interests, the content of children's literature, ways to bring children and books together, criteria for evaluation, analysis, selection, and utilization of children's books in the total school curriculum. Opportunities are provided for oral interpretation of children's literature.

EDUC 330. Mathematics Instruction (K-8) (3-3-0)

Prerequisites: Six hours of mathematics and an acceptable score on a basic mathematics inventory; corequisite: None. fall and spring.

A course designed to emphasize key concepts, instructional materials, methods, and procedures for teaching mathematics. Field experience is an integral part of the course.

EDUC 332. Science Instruction (K-8) (3-3-0)

Prerequisite: A two-semester laboratory science course; corequisite: None. fall and spring.

Science instruction focusing upon the methods, materials, and literature of the sciences. Emphasis will be placed on the development of teaching skills using inquiry techniques and the processes of science.

EDUC 334. Art Instruction (K-8) (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A study of the principles, techniques, materials, and methods used in art programs.

EDUC 336. Music Instruction (K-8) (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

A study of the principles, techniques, materials, and methods used in music programs.

EDUC 395. Elementary Topics (Credits vary)

A variety of topical courses in education offered to satisfy changing needs and special interests of students.

EDUC 401. Student Teaching

Prerequisite: Admission to student teaching semester; corequisite: EDUC 414; 403 or 405/406; **Elementary:** Taught both semesters; **Secondary:** fall semester for English, mathematics, science; spring semester for foreign languages and social sciences.

A full-time supervised teaching experience in the public schools offered as part of the student teaching semester.

EDUC 403. Methods of Teaching – Secondary (3-3-0)

Prerequisite: Admission to student teaching semester; corequisite: None. fall and spring.

A study of the objectives, content, methods, and materials of instruction relevant to the respective secondary school teaching fields. Curriculum trends in each teaching field will be studied.

EDUC 404. The Exceptional Learner (3-3-0)

Prerequisite: Six hours of 300-level psychology; corequisite: None. fall and spring.

Characteristics of exceptional learners and the definitions, procedures, and assurances established by Public Law 94-142 will be studied. The development, implementation, and evaluation of individual education programs will be emphasized. Particular attention will focus on the instructional programs and teaching techniques appropriate for educating learners who are retarded, emotionally disturbed, learning disabled, speech and/or language handicapped, gifted or talented.

EDUC 405 (NK-4). Curriculum Organization and Instructional Procedures (3-3-0)

Prerequisite: Admission to student teaching semester; corequisite: EDUC 401, 406, 414. fall and spring.

A study of curriculum organization, teaching techniques, instructional materials, and classroom management appropriate for early childhood education.

EDUC 406 (NK-8). Curriculum Organization and Instructional Procedures (3-3-0)

Prerequisite: Admission to student teaching

semester; corequisites: EDUC 401, 405, 414. fall and spring.

A study of curriculum organization, teaching techniques, and instructional materials, with emphasis on language arts and social studies. Field experiences included.

EDUC 410. Audio Visual Instruction (3-3-0)

Prerequisite: None; corequisite: None. spring. A course in the theory, production, and use of audio-visual materials for instruction. Stresses the design, development, and application of materials for various instructional strategies.

EDUC 414. Educational Measurements and Evaluation (3-3-0)

Prerequisite: Admission to the student teaching semester; corequisites: EDUC 401, 403, or 405/406, 414. fall and spring.

A study of the development of instructional objectives, construction and selection of measurement and evaluation instruments, and interpretation of test results.

EDUC 415. Classroom Management and Discipline (3-3-0)

Prerequisite: None; corequisite: None.

The challenge of management and discipline in today's classroom. Specific practical approaches and techniques for preventing and coping with discipline problems will be discussed and simulated.

EDUC 416. The Middle School (3-3-0)

Prerequisite: EDUC 301, 406, or consent of instructor; corequisite: None. fall and spring. This course examines the middle school concept including its basic components, the characteristics of the students, appropriate instructional strategies, curriculum design and innovations and management techniques. Field experiences included.

EDUC 420. Diagnostic Reading (3-2-1)

Prerequisite: EDUC 320; corequisite: None. fall and spring.

A study of techniques for evaluation of reading programs, difficulties experienced by children in learning to read, diagnostic techniques for the classroom teacher, methods of differentiation of instruction, and corrective classroom methods. Supervised practicum experience in a school is an integral part of this course.

EDUC 430. Characteristics of the Learning Disabled Student (3-3-0)

Prerequisite: EDUC 404 or the consent of the instructor; corequisite: None. fall and spring. An overview of the identifying characteristics of the learning disabled. Varied diagnostic procedures utilized to identify the student who has disabilities in perception, motor, language, and cognitive skills will be explored.

EDUC 440. Teaching the Learning Disabled Student (3-3-0)

Prerequisite: EDUC 404 or consent of instructor; corequisite: None. fall and spring. Curriculum development, materials, media, and basic methods for teaching the learning disabled student. The organization and planning of instructional activities, materials, and use of resources and supportive services will be emphasized.

EDUC 442. Computer Applications in Education (3-3-0)

Prerequisite: Senior undergraduate status or experienced teacher; corequisite: None. A study of current and future applications of computers in the instructional process. Applications will include the computer as an instructional delivery system, as an aid in developing instructional materials and as a tool for the management of data. A segment on computer literacy will review materials and methods for teaching computer literacy while developing the student's own computer literacy.

EDUC 495. Advanced Topics (Credits vary)

A variety of advanced topical courses in education will be offered to satisfy changing needs and special interests of students.

EDUC 499. Independent Study

Prerequisite: Approval of advisor and instructor; corequisite: None. fall and spring. Independent study on an approved topic under the direction of a faculty member.

Gerontology

Director: Associate Professor Ruth L. Kernodle

The Minor/Certificate Program in Gerontology

Christopher Newport College offers a multidisciplinary minor in gerontology for undergraduates and a certificate program for practitioners in the community. The program is designed to meet the following student goals:

- To provide a body of knowledge about older persons to be combined with skills obtained from the student's major discipline to prepare for careers in nursing home administration, administrative positions in community aging programs, research and planning, recreation, social work, counseling, adult education, and others.

- To offer a certificate program to practitioners in gerontology-related fields while they work in the community and wish to extend their knowledge base in gerontology (an A.A. degree or equivalent is a suggested prerequisite and any specific course prerequisite must be met or waived by consent of instructor).

- To serve as a minor for the student who has no career goals in the field but has an interest in gerontology. Any of the courses may be taken without commitment to the entire program.

The minor program in gerontology requires successful completion of 18 credits of coursework, 12 credits of which are core requirements. The additional six credits may be chosen according to the student's interests. It is anticipated that courses in the core requirements will be offered in alternate years during the evening. Elective courses are not offered on a regular basis. Core requirements for the minor program in gerontology are: BIOL 234; PSYC 340; SOCL 305; and SOCL 491. The following courses, whose course descriptions appear in their respective sections of the Catalog, are electives for the minor program in gerontology: ECON 492; LSPE 311; PHIL 384; PSYC 395; SOCL 315; SOSW 300; SOSW 368; SOSW 395; and SOSW 492. Students using these elective courses for the minor program in gerontology will be expected to focus on the elderly.

The Core Curriculum in Gerontology

BIOL 234. Aging and Health: Biological and Physiological Perspectives (3-3-0)

Prerequisite: BIOL 101-102 or BIOL 231-315 or consent of instructor; corequisite: None. fall

Examination of the aging process and consequent changes in human physiology and body systems. Relationship of physiological changes to health and nutritional problems. Survey of major health problems and interventive possibilities.

PSYC 340. Psychology of Adulthood and Aging (3-3-0)

Prerequisite: PSYC 201 or permission of instructor; corequisite: None. spring

A study of the psychological processes involved in the middle and later years of human development from young adulthood to the end of the life cycle.

SOCL 305. Sociology of Aging (3-3-0)

Prerequisite: Junior or Senior standing; corequisite: None. fall

Study of process of aging, ageism and its effects. Demographic facts and trends; social aspects of physical and psychological functioning; the social environment of older people, including living environments, finances, family and friends; problems and programs to deal with them.

SOCL 491. Practicum in Gerontology (3-3-0)

Prerequisite: Senior standing; corequisite: None. Each semester.

Part-time internship in appropriate agency/organization. Periodic conferences, written evaluations, and internship project. Students must apply for internship through the Gerontology Program Director at least thirty days prior to the semester.

Practicum placement will be coordinated by Gerontology Program Director with the department through which the student is registered. This will ordinarily be the student's major department. Otherwise, the student will register for the practicum in the most appropriate department as it relates to the practicum experience. Students should register for the practicum in the last semester of the program. Specific requirements of the practicum are available from the program director.

Certificate students working in a geriatric setting may substitute either another course in gerontology or a course relevant to their work, chosen in consultation with the Gerontology Program Director. Persons wishing more information about this program should contact the Program Director (599-7114).

History

Department Chairman: Associate Professor Timothy E. Morgan

Professors: Bostick, Morris, Saunders

Associate Professors: Mazzarella, Morgan

The Department of History offers the Bachelor of Arts degree in history, a minor program, and general and specific history courses for all students interested in historical study for personal enrichment or for furtherance of their vocational needs. The study of history is recognized as an excellent background for work in teaching, public administration, business, journalism, law, and the military services. Students are taught historical analysis; factual and textual criticism; and the complexity of cultural, economic, and political forces present in human decision-making through analysis of varied historical eras and movements. In addition to detailed study in European and American History, courses in Latin American, Asian, and contemporary history are offered. The department has also developed sample programs to prepare students for law school, graduate study in international studies, and for careers in secondary education and business administration.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Arts degree in History

The Bachelor of Arts degree in History requires successful completion of: HIST 101, 102, 201, 202, and a minimum of 24 credits in history above the 200-level, including HIST 490. A maximum of 42 credits in history courses above the 200-level may be offered toward the Bachelor of Arts degree in History. Also, a maximum of nine hours in HIST 395 courses, no more than six credits of which may be in courses taught in conjunction with Colonial Williamsburg, may be offered toward the Bachelor of Arts degree in History. Students pursuing the Bachelor of Arts degree in History are encouraged to diversify their programs of study by taking advanced courses in American, European, and non-Western history.

The Bachelor of Arts degree in History may be taken in combination with a concentration in business administration to join the strengths of liberal arts academic preparation with employment opportunities in the field of business. In addition to those courses identified as required

for the Bachelor of Arts degree in History, students should complete the Minor in Business Administration (see that entry in the School of Business and Economics section of the Catalog).

The State-Approved Teacher Education Program in History

Students may complete a state-approved teacher education program in history under the Bachelor of Arts degree in History. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the Catalog, the total program of study must satisfy all requirements for the Bachelor of Arts degree in History and must include ECON 201 and 202.

The State-Approved Teacher Education Program in Social Studies

Students may complete a state-approved teacher education program in social studies under the Bachelor of Arts degree in History. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the Catalog, the total program of study must satisfy all requirements for the Bachelor of Arts degree in History and must include: ECON 201, 202; GEOG 311 or a GEOG elective; POLS 102; POLS 221; POLS 311 or 312; POLS 357, 358, or 359; and SOCL 200.

The Pre-Law Program

The Bachelor of Arts degree in History may be taken in combination with a minor program in Political Science to constitute a program for law school. The total program of study must satisfy all requirements for the Bachelor of Arts degree in History and the minor program in Political Science. The following courses are recommended: ACCT 201-202; ACCT 301-302; ECON 302; ENGL 353; HIST 321, 341, 343, 413 and 414; PHIL 301; POLS 101, 102, 221, 346, 363, 365; PSYC 201; SOCL 200; and SPCH 201.

The Minor in History

The minor program in history requires successful completion of the following 21 credits in history courses: HIST 101; 102; 201; 202; plus nine credits in history courses of the student's choosing at the 300-400-level.

Students pursuing the Bachelor of Arts degree in History or the minor program in history may complete the 100-and 200-level requirements in the Department of History through coursework or alternatively through: (1) The College-Level Examination Program (CLEP) testing program, details of which can be obtained from the Office of Counseling and Career Services; or (2) The successful completion of "Advanced Placement History" in high school and the earning of an acceptable score on the Advanced Placement (History) Examination of the College Entrance Examination Board.

The Curriculum in History

European History

HIST 101. History of Western Civilization to 1715 (3-3-0)

Prerequisite: None; corequisite: None. Taught fall and spring semesters.

A survey of the history of culture of Western man. Beginning with the traditions of the ancient world, the course traces the major developments of Western civilization to 1715.

HIST 102. History of Western Civilization 1715 to the Present (3-3-0)

Prerequisite: None; corequisite: None. Taught fall and spring semesters.

A survey of the major political, social, cultural, and intellectual developments of Western civilization from 1715 to the present.

HIST 301, 302. Ancient History (3-3-0) (3-3-0)

Prerequisite: HIST 101, 102, or junior standing, or consent of instructor; corequisite: None. First semester begins with the origin and nature of the great civilizations of the Near East and closes with the empire of Alexander the Great. Second semester begins with the early history of Italy and ends with the fall of the Roman Empire.

HIST 307, 308. Medieval History (3-3-0) (3-3-0)

Prerequisite: HIST 101, 102, or junior standing, or consent of instructor; corequisite: None. First semester deals with the decline of Rome,

the Germanic invasions, Justinian, Islam, Charlemagne, and the stabilizing of Europe. Second semester focuses on medieval culture, the feudal kingdoms, clash of Empire and Papacy, the Hundred Years War, and the waning of the Middle Ages.

HIST 313. The Renaissance (3-3-0)

Prerequisite: HIST 101, 102, or junior standing, or consent of instructor; corequisite: None. A study of the history and civilization of the Renaissance in Italy and northern Europe. The course will consider the many facets of Renaissance life and activity.

HIST 314. The Reformation (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. A study of the background, history, and ideas of the Protestant Reformation and the Catholic Reformation through the early seventeenth century.

HIST 316. Early Modern Europe, 1600-1789 (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. A study of the development of absolutism and constitutionalism, the scientific revolution and Enlightenment, and the impact of political and scientific developments on social and cultural patterns in 17th- and 18th-century European society to the French Revolution.

HIST 317. The Age of Revolution, 1789-1850 (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. The French Revolution and Napoleon, Metternich and the Era of Reaction, the Industrial Revolution, Liberalism, Nationalism, and the Revolutions of 1848.

HIST 318. The Rise and Clash of the National States, 1850-1919 (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. The unification of Italy and Germany, Darwin and Evolution, Marx and Socialism, Imperialism, the descent into violence, World War I, the Russian Revolution, and the Versailles Settlement.

HIST 319. Europe in the Fascist Era, 1919-1945 (3-3-0)

Prerequisite: HIST 101, 102, junior standing,

or consent of instructor; corequisite: None. Europe between the wars, establishment of Communist Russia, the rise of Fascism and Nazism, the collapse of the Versailles Settlement, the Second World War.

HIST 411. Modern Russian History (3-3-0)
Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. A survey of Russian history beginning with the emergence of modern Russia during the reign of Peter the Great and continuing to the present. Emphasis is placed on the rise of nineteenth-century radicalism, the Revolutions of 1905 and 1917, the nature of Russian Marxism, and Russia under the Soviet System.

HIST 413, 414. England under the Tudors and Stuarts (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. First semester begins with the establishment of the modern English state under the Yorkists and early Tudors and concludes with the Elizabethan age. Second semester concentrates on the Stuart period through the Glorious Revolution.

HIST 415. History of Modern Britain since the 18th Century (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. After a brief consideration of the eighteenth-century background, the course focuses on British history and civilization during the nineteenth and twentieth centuries.

HIST 421, 422. Modern Germany Since 1784. (3-3-0) (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. First semester briefly examines the ancient, medieval, and early modern background before concentrating on the period of the French Revolution, the Bismarck unification, and the period of World War I. Second semester covers the Weimar Republic, the Nazi period, and the divided Germany of today.

American History

HIST 201. American History to 1865 (3-3-0)

Prerequisite: None; corequisite: None. Taught both semesters.

A survey of the historical development of the United States from early colonial times through the Civil War including social, cultural, economic,

and political movements through these years of earlier growth.

HIST 202. American History since 1865 (3-3-0)

Prerequisite: HIST 101 or 201, junior standing, or consent of instructor; corequisite: None. Taught spring semester.

A survey of the historical development of the United States from the Civil War through the present time. The course emphasizes social, cultural, economic, and political developments during the later years of America's growth.

HIST 320. Colonial North America (3-3-0)

Prerequisite: HIST 101 or 201, junior standing, or consent of instructor; corequisite: None. An examination and analysis of the English, French, Spanish, and Dutch colonial experiences in the sixteenth, seventeenth, and eighteenth centuries to 1760.

HIST 321. The Founding of the United States, 1760-1840 (3-3-0)

Prerequisite: HIST 201, junior standing, or consent of instructor; corequisite: None.

An examination of the birth and early growth of the American Republic, concluding with the advent of democracy in the Age of Jackson.

HIST 323. Civil War and Reconstruction (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None.

An intensive study of slavery and expansion, social and intellectual developments of the era, the Civil War and Reconstruction.

HIST 324. Twentieth-Century America (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None.

A study of the major political, social, intellectual, and economic developments in the United States and an analysis of American foreign policy in the twentieth century.

HIST 341. American Economic Institutions (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None.

The study of America's economic growth and development from colonial times to the present. Includes the development of agriculture, manufacturing, trade and commerce, improved methods of transportation and communication, employer and employee organizations, governmental impact on the economy, and economic interdependence.

HIST 350. A History of Native-Americans (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. An examination of Native-Americans and their contacts with colonial European and post-revolutionary U.S. governments from the sixteenth century to the present. Included will be accounts of the origins and cultural developments of Native-Americans.

HIST 351. American Military History (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. A survey of American military history from the colonial era to the present. Major military developments, institutional changes, and modes of warfare will be studied, including strategy, tactics, weaponry, conscription and volunteerism, command decision-making, and the interrelationships between the military and civilian spheres of American life.

HIST 431. Modern American Diplomatic History (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. An examination of American relations with the rest of the world.

HIST 434. Urban History of the United States (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. A study of political, social, and intellectual impact of the city upon American history from the seventeenth to the twentieth century.

HIST 441. American Maritime and Naval History (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. A survey of the maritime development of the United States and its relationship to the Western world from the founding of the colonies to the present time. Emphasis is on the growth of American merchant shipping and naval power and its relationship to American political, military, economic, and cultural history.

Asian History

HIST 461. History of Modern Asia (3-3-0)

Prerequisite: HIST 101, 102, junior standing, or consent of instructor; corequisite: None. A history of Asia in the modern world, beginning with the opening of Asia to Western

influences in the 19th century and concluding with the modernization of Asia and the development of Asian Communism.

Latin American History

HIST 331. History of Modern Latin America (3-3-0)

Prerequisite: HIST 201, 202, junior standing, or consent of instructor; corequisite: None. After a brief consideration of the early development of Latin America, the course examines the independence movements and republican institutions to the present.

Contemporary History

HIST 343. The Contemporary World (3-3-0)

Prerequisites: HIST 101, 102, or 201, 202, junior standing, or consent of instructor; corequisite: None.

An historical analysis of world developments since World War II, with particular emphasis on the development of ideological and regional tensions. The goal of the course is to place the major concerns of the present in their proper historical perspective.

Topics Courses

HIST 295. Topics (3-3-0)

Prerequisite: None; corequisite: None. This course will offer topics at the introductory level of special interest in various areas and periods of history.

HIST 395. Topics (3-3-0)

Prerequisites: HIST 101, 102, or 202, 202, junior standing, or consent of instructor; corequisite: None.

A thorough analysis of a particular phase, movement, or subject area of history with emphasis on its impact upon the larger historical scene. Topics and instructors vary each semester according to departmental assignment. A maximum of nine hours in HIST 395 may be offered toward completion of major requirements.

HIST 490. Senior Seminar (3-3-0)

Prerequisite: Six credit hours in history above the 200-level. Required of all history majors; corequisite: None. Taught fall semester.

A seminar dealing with selected problems in history and an examination of historiography, methodology, and philosophy of history. The focus, form, and content of each seminar will be determined by the instructor. The nature of the seminar will be announced well in advance after consideration of student interest and staff availability.

Leisure Studies and Physical Education

Department Chairman: Associate Professor James N. Hubbard

Professor: Cummings

Associate Professor: Hubbard

Assistant Professors: Royall, Scheeter, Vaughan

The Department of Leisure Studies and Physical Education provides a wide variety of activities courses designed to fulfill the physical education distribution requirement. The department is committed to the ideal of a sound mind in a sound body and to the development of the total individual through participation in physical activity.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Activities Program

Any student participating in a Leisure Studies and Physical Education activity course must submit a medical examination form administered within the last two years. This form must be on file with the Department of Leisure Studies and Physical Education prior to the third class meeting.

The following activities courses carry two credits each and may be used to satisfy the Physical Education Distribution Requirement.

LSPE 102: Beginning Soccer
LSPE 103: Basketball and Volleyball
LSPE 106: Badminton
LSPE 107: Weight Training
LSPE 111: Lacrosse
LSPE 112: Intermediate Soccer
LSPE 140: Beginning Skiing
LSPE 155: Field Hockey and Basketball
LSPE 156: Softball and Volleyball
LSPE 170: Beginning Modern Dance
LSPE 171: Educational Rhythmics and Dance
LSPE 172: Beginning Tennis
LSPE 174: Archery and Volleyball
LSPE 175: Archery and Badminton
LSPE 178: Beginning Scuba
LSPE 179: Beginning Swimming
LSPE 180: Beginning Fencing
LSPE 181: Physical Conditioning
(emphases—general conditioning, aerobic dance, jogging, or nautilus; may be taken for credit more than once)
LSPE 182: Volleyball
LSPE 183: Intermediate Swimming
LSPE 184: Beginning Gymnastics
LSPE 186: Beginning Golf
LSPE 188: Intermediate Golf
LSPE 189: Intermediate Gymnastics
LSPE 190: Advanced Life Saving
LSPE 191: Archery
LSPE 193: Intermediate Tennis
LSPE 194: Intermediate Scuba

LSPE 195: Beginning Bowling
LSPE 196: Intermediate Bowling
LSPE 197: Beginning Karate
LSPE 198: Intermediate Karate
LSPE 199: Badminton and Volleyball

The Bachelor of Arts and Bachelor of Science degrees in Leisure Studies

The department offers interdisciplinary programs of study in recreation and physical education leading to the Bachelor of Arts and Bachelor of Science degrees in the field of leisure studies. A summary of the distribution requirements for these degrees appears in the Academic Policies and Regulations section of this Catalog under "Distribution and Other Degree Requirements."

The LSPE major may select program options in Recreation/Leisure Services or Physical Education Teacher Certification. All LSPE majors must complete a minimum of 21 semester hours of LSPE Core Requirements which consist of the following courses: LSPE 305; 309; 415; 417; SPCH 201; and one course in anatomy and physiology.

Recreation/Leisure Services

The Recreation/Leisure Services Option prepares students for a variety of professional careers in leisure settings such as municipal parks and recreation departments, YMCA agencies, campus recreation programs, travel and tourism agencies, community centers, youth agencies, racquet clubs, fitness centers, theme parks, golf clubs, resorts, military compounds, industrial complexes, nursing homes, retirement centers, hotels, marinas, camps and museums.

The Recreation/Leisure Services Option consists of the following required professional recreation courses: LSPE 300; 301; 311; 430; 431; 490; 491; and 492. In addition, a minimum of 18 credits must be completed in an approved Supportive Area such as: Recreation Management and Administration, Recreation Programming and Leadership, Recreational Sports and Coaching, and Outdoor Recreation. Electives are selected in consultation with an advisor according to the student's career objectives, needs, and interests.

Physical Education Teacher Education

The Physical Education Teacher Education option is a state approved teacher education program which leads to the BA or BS degree in Leisure Studies. Required courses are: LSPE 305; 309; 318; 321; LSPE 395D (Adaptive and Corrective P.E.); LSPE 403/403L; LSPE 409; 415; 417; plus 12 credits in LSPE activities courses, to include courses in Aquatics, Gymnastics, Rhythmics and Dance, Individual Sports, and Team Sports/Games; 9 credits in human anatomy, physiology, and kinetics; and those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education section of the Catalog.

The Minor in Leisure Studies

The minor in leisure studies requires: LSPE 305; 309; 415; 417; SPCH 201; and one course in anatomy and physiology.

The Minor in Coaching

The minor in coaching requires: LSPE 403; 403L; 409; 415; 417; SOCL 341; and one course in anatomy and physiology.

The Curriculum in Leisure Studies and Physical Education

LSPE 300. Social Recreation (3-3-0)

Prerequisite: Consent of instructor or equivalent experience; corequisite: None.

A study of the knowledge, skills, methods, and techniques necessary to adequately conduct social recreation activities in various settings. Emphasis will be placed on leadership skills, group dynamics, planning, administration, and evaluation of social activities and events for special groups.

LSPE 301. Introduction of Alternative Careers in Leisure Services (3-3-0)

Prerequisite: None; corequisite: None.

A survey course designed to inform the beginning student about alternative careers in the specialized areas of leisure, recreation, physical education, sport, and health. Emphasis will be placed on those professional job opportunities that do not require teacher certification.

LSPE 305. Outdoor Education and School Camping (3-3-0)

Prerequisite: None; corequisite: None.

A study of the skills and leadership techniques employed in planning outdoor education and recreational school camping activities. Participation in field trips and overnight camping experiences will be course requirements.

LSPE 308. Safety Education (3-3-0)

Prerequisite: None; *corequisite: None.

This course is designed to develop a knowledge of and attitudes concerning the safety aspects of all areas of activity in the home, school, and community. *The course should be taken along with LSPE 317 for driver training certification in the State of Virginia.

LSPE 309. History and Principles of Leisure/Physical Education/Health, and Sport (3-3-0)

Prerequisite: None; corequisite: None.

A study of the historical, biological, psychological, and sociological foundations of leisure, physical education, health, and sport in various societies. Emphasis will be placed on the nature, scope, and changing concepts of various professions.

LSPE 311. Recreation for Special Populations (3-3-0)

An introductory study of the concept of leisure and the planning and implementation of leisure activities for those who are considered limited in their social, physical, or psychological living patterns. Some of the groups examined will be the retarded, elderly, offenders, disabled, military and youth.

LSPE 315. Officiating Team Sports (3-3-0)

Prerequisite: None; corequisite: None.

A study of the official in relation to the mechanical and theoretical application of the rules of football, basketball, soccer, baseball, field hockey, and volleyball.

LSPE 316. Officiating Individual Sports (3-3-0)

Prerequisite: None; corequisite: None.

A study of the official in relation to the mechanical and theoretical application of the rules of badminton, tennis, swimming, wrestling, gymnastics, golf, and track and field.

LSPE 317. Driver Education and Traffic Safety (3-3-0)

*Prerequisite: None; corequisite: None.

Classroom instruction combined with road

training, observation of traffic safety, and the teaching of driving to beginners on a multiple car range. *Knowledge and experience in the use of a simulator and other audio-visual aids will be required.

LSPE 318. Physical Education in the Elementary School (3-3-0)

Prerequisite: None; corequisite: None.

The study of philosophy, content, methods, and materials of teaching elementary physical education, K-6. Topics covered will be the movement approach to teaching elementary physical education, motor skill development of elementary school children, teacher behavior, and lesson planning.

LSPE 321. Foundations of School Health (3-3-0)

Prerequisite: None; corequisite: None.

The study of the development of a desirable school health program. Emphasis will include: the historical development of the school health program; growth and development of the school age child as each relates to health practices, health services, and health instruction in the school environment.

LSPE 395. Elementary Topics (3-3-0)

Prerequisite: Consent of instructor; corequisite: None.

A variety of topical courses in Leisure Studies; Physical Education; Health and Sport, such as Anatomy and Physiology (see BIOL Dept.) of Sport; Special Populations; Aquatics and Pool Management; Physiology of Exercise. Adaptive and Corrective P.E. for Exceptional Learners is offered to satisfy changing needs and special interests of students.

LSPE 403. Individual and Team Sports: From Theory Into Practice (3-3-0)

Prerequisite: None; corequisite: None.

The study of philosophy, content, methods and materials of instruction relevant to the teaching of individual and team sports. Topics covered will be the principles of curriculum development, organization of lessons, motor skill development, and teaching behavior.

LSPE 403L. Individual and Team Sports Lab (1-0-3)

Prerequisite or corequisite: LSPE 403.

The practical application of individual and team sport theory through field experiences.

LSPE 409. Human Kinetics: From Theory to Practice (3-3-0)

Prerequisites: One lower level (two semester) natural science sequence, and a course in anatomy and physiology; corequisite: None.

An analysis of the interaction and psychological and physiological principles related to the study of kinesiology. Course content will be specifically related to the application of knowledge of teaching in physical education and athletic coaching situations.

LSPE 415. First Aid, Care, and Prevention of Athletic Injuries (3-3-1)

Prerequisite: A course in anatomy and physiology or consent of instructor; corequisite: None.

This course is designed to give the student a background in the prevention of athletic injuries, to instruct the student in various techniques of first aid, and to familiarize the student with rehabilitation techniques and types of equipment.

LSPE 417. Organization and Administration of Programs in Leisure/Physical Education/Health and Sport (3-3-0)

Prerequisite: LSPE 309; corequisite: None.

A study of the nature and function of administration as it relates to leisure, physical education, health and sport. Emphasis will be placed on management as it relates to budgeting, liability organization, staffing, scheduling, and directing.

LSPE 430. Program Planning in Leisure Services (3-3-0)

Prerequisite: Consent of instructor or equivalent experience; corequisite: None.

A study of the role of leadership concerned with the process of program development within the scope of leisure services, physical education, recreation and health agencies. Emphasis will be placed on the underlying principles necessary for effective supervision in community, outdoor, commercial, and therapeutic agencies.

LSPE 431. Facilities for Leisure, Physical Education, Recreation, Health and Sport (3-3-0)

Prerequisite: Consent of instructor or equivalent experience; corequisite: None.

A survey course designed to provide the student with basic information relative to the planning, construction, and assessment of the worth of facilities for leisure, physical educa-

The School of Social Science and Professional Studies

tion, recreation, health and sport. Emphasis will be placed on the fundamental procedures, indoor, athletic and sport, aquatic, recreation and park areas and facilities, and futuristic trends for areas and facilities in education and leisure.

LSPE 490. Seminar in Leisure Studies and Physical Education (3-3-0)

Prerequisite: LSPE major with senior standing; corequisite: None.

Discussion by faculty and students of current problems in Leisure Studies and Physical Education. A student is expected to demonstrate research skills and present a formal paper or project.

LSPE 491-492. Practicum in Leisure Studies (3-1-8) (3-1-8)

*Prerequisites: Senior standing and consent of in-

structor; corequisite: None. Taught both semesters. Part-time internship in appropriate agency/organization. Periodic conferences, evaluations, and an internship project. *Check departmental policy for additional standards and prerequisites.

LSPE 495. Advanced Topics (Credits vary)

Prerequisites: Upper-level standing and consent of instructor; corequisite: None.

A variety of advanced topical courses in Leisure Studies will be offered to satisfy changing needs and special interests of students.

LSPE 499. Independent Study (Credits vary)

Prerequisites: Approval of advisor and instructor; corequisite: None. Taught both semesters. Independent study on an approved topic under the direction of a faculty member.

Military Science (Army)

Department Chairman: MAJ Apolonio B. Garcia

Assistant Professors: Garcia, Thomson

A unit of the Reserve Officer's Training Corps (ROTC) was established at the College of William and Mary on July 1, 1947. The mission of the ROTC detachment is to qualify students for positions of leadership and management in the United States Army. By participating in the ROTC program, a student can earn a commission as a Second Lieutenant in the Regular Army or Army Reserve while pursuing a degree. A general military science curriculum is offered, which enables a cadet to qualify for assignment into any one of the fifteen branches of the Army. All courses will be taught at Christopher Newport College.

What ROTC Offers:

1. A minimum of \$2,000 in scholarship-type money to each cadet during his/her junior and senior years.
2. A commission as a Second Lieutenant in the United States Army.
3. A job opportunity with a starting salary and allowances of \$19,000 per year or an opportunity to serve in the Army Reserves or National Guard.
4. Extensive leadership and management courses which are applicable both to civilian industry and military service.
5. An opportunity to participate in such confidence-building activities as orienteering, survival, marksmanship, and range activities.

Scholarships

Four, three, and two-year Army ROTC scholarships are available on a competitive basis. The four-year scholarship is available to outstanding high school seniors and is applied for in the junior or senior year of high school. College freshman and sophomores who are already participating in the ROTC program, or who are eligible for placement credit in ROTC, may apply for three- and two-year scholarships respectively. The scholarship will pay for the following:

1. Tuition
2. Books
3. Laboratory Fees
4. \$100.00 per month (tax-free)

In addition, all non-scholarship cadets enrolled in the Advanced ROTC program receive scholarship-type monies of \$100 per month during the junior and senior years.

Books and Uniforms

All books, uniforms, and materials needed for participation in the ROTC programs are furnished by the Department of Military Science at no cost to the student.

Educational Delays

Newly commissioned officers may delay their entry on active duty to pursue graduate studies in a recognized field.

Requirements for Commissioning Four-Year Program:

1. Completion of three courses (MLSC 101, 102, 202) offered during the freshman and sophomore years and HIST 351 are required.
2. During the junior year a cadet must take MLSC 301 and 302.
3. Cadets must attend a six-week ROTC Advanced Camp during the summer between the junior and senior years or following the senior year.
4. During the senior year a cadet must take MLSC 401 and 402.

Two-Year Program:

1. During the summer, between the sophomore and junior years, a student must attend ROTC Basic Camp for six weeks to earn placement credit for coursework missed during the freshman and sophomore years. HIST 351 and MLSC 202 are required.
2. During the junior year a cadet must take MLSC 301 and 302.
3. Cadets must attend a six-week ROTC Advanced Camp during the summer, between the junior and senior years or following the senior year.
4. During the senior year a cadet must take MLSC 401 and 402.

Requirements for Enrollment

Any full-time freshman or sophomore student who is physically qualified and not already holding a commission in any armed forces may enroll in Basic Military Science. Those meeting the above qualifications, but who have had prior military experience or training, whether in the armed forces or in another college, or in junior ROTC in high school, and transfer students desiring to take advantage of previous military courses should consult the Department of Military Science when matriculating. Entrance into the Advanced Course (300- and 400-level) is based upon the following:

1. Satisfactory completion of the Basic Course, Basic Camp, or advanced placement due to prior military service.
2. Successful completion of an Army physical examination.
3. Execution of appropriate loyalty statements and contractual agreements.

4. Satisfactory completion of the appropriate screening tests.
5. Selection by the Professor of Military Science.

Obligations:

A student incurs no obligation to the military by participating in freshman or sophomore military science courses. The courses offer a cadet the opportunity to evaluate the prospect of military service and to qualify for the Advanced Program beginning in the junior year. When a cadet enters the Advanced Program, he or she is obligated to accept a commission as a Second Lieutenant in the United States Army Reserve (USAR) upon graduation.

There are two choices normally available to the cadet at graduation:

1. *Reserve Forces Duty* (National Guard or U.S. Army Reserve). The cadet may enter the service for approximately ninety days to attend a basic branch school and serve in the reserves for a period of approximately eight years while pursuing a civilian career. This option may be selected by the cadet and guaranteed to him/her prior to entrance into the MS III or junior year.
2. *Active Duty*. All cadets will incur a six-year total reserve obligation of which three years is served on active duty and the remainder in the standby reserves.
 - a. If desired, Army Reserve officers may remain on active duty for a military career in an indefinite status.
 - b. If a student is designated a Distinguished Military Student (DMS) due to excellence in both military and academic studies, he or she may apply for a Regular Army commission (RA).
 - c. Scholarship students will serve four years on active duty as an Army Reserve officer and/or have the option to request Regular Army commission.
 - d. Early commissioning into the National Guard and reserve components is available to those who have completed all ROTC requirements prior to completion of graduation requirements.

The Curriculum in Military Science MLSC 101. American National Security Policy (2-2-0)

Prerequisite: None; corequisite: MLSC 101L fall.

The School of Social Science and Professional Studies

Presents the U.S. National Security Structure and its comparisons with the Soviet Military Political Structure. Also, the basic organizational structure of the U.S. Army and its branches is studied.

MLSC 101L. Leadership Lab (0-0-1)

Prerequisite: None; corequisite: MLSC 101.

MLSC 102. Basic Leadership and Management Theory (2-2-0)

Prerequisite: None; corequisite: MLSC 102L spring.

Presents the rudiments of leadership and management. Included in the course of study are several case studies relating to areas of management and leadership. Also, the responsibilities of an officer's commission will be studied along with ethics, customs, courtesies, traditions, and military service.

MLSC 102L. Leadership Lab (0-0-1)

Prerequisite: None; corequisite: MLSC 102.

MLSC 201. Advanced Leadership and Management (2-2-0)

Prerequisites: MLSC 101, 102, 202 or equivalent; corequisite: None. fall.

Presents the classical analysis of the decision-making process, situational estimates, and leadership situational studies.

MLSC 202. Military Professional Ethics (2-2-1)

Prerequisite: None; corequisite: MLSC 202L spring

An in-depth study of the professional ethics demanded of officers of the U.S. Army in the progress of their duties under all circumstances of service. This course seeks to prepare the student to assume the proper profile befitting the high ethical standards of a U.S. Army officer by introducing the student to several case studies and thoroughly analyzing each.

MLSC 202L. Leadership Lab (0-0-1)

Prerequisite: None; corequisite: MLSC 202.

MLSC 301L. Leadership Lab (0-0-1)

Prerequisites: MLSC 101, 102, 201, 202 or equivalent; corequisite: HIST 351.

MLSC 302. Military Skills (2-2-0)

Prerequisite: None; corequisite: MLSC 302L spring.

Concentrates on general military subjects directed toward the reinforcement of military skills and the development of new skills required for Advanced Camp. Subjects presented are rifle marksmanship, mechanical instruction, physical fitness proficiency testing, map reading, and tactics.

MLSC 302L. Leadership Lab (0-0-1)

Prerequisite: MLSC 301L; corequisite: MLSC 302.

MLSC 401. Civil Military Relations (2-2-0)

Prerequisite: MLSC 302; corequisite: MLSC 401L fall.

Presents civil-military relations theories and their impact on the contemporary world scene. Emphasis is placed on the study of international laws of war and military laws as they relate to the military community.

MLSC 401L. Leadership Lab (0-0-1)

Prerequisite: MLSC 302L; corequisite: MLSC 401.

MLSC 402. Organizational Management (2-2-0)

Prerequisite: MLSC 401; corequisite: MLSC 402L spring.

Presents classical and behavioral theories of organizational leadership and introduces military race relations and drug abuse problems. Also included in the course of study are organizational motivation, use of the Army's organizational effectiveness staff officer, and military logistics movement.

MLSC 402L. Leadership Lab (0-0-1)

Prerequisite: MLSC 401L; corequisite: MLSC 402.

Political Science and Governmental Administration

Department Chairman: Associate Professor Buck G. Miller

Professors: Killam (Coordinator of Geography), Winter

Associate Professors: Doane, Miller, Williams

Political Science is the study of public decision-making. Because public decisions—those made by governments and their agencies—affect the lives of many people, it is important that citizens become knowledgeable of the complexity of the political processes and of the major issues which continue to confront the world's decision-makers. An understanding of political science is important to the continued maintenance of a free society and is crucial for individuals who aspire to participate directly in the political process at the local, state, national, or international levels.

The Department of Political Science offers two degrees: The Bachelor of Arts degree in Political Science, and the Bachelor of Science in Governmental Administration degree.

The Bachelor of Arts degree in Political Science

The Bachelor of Arts in Political Science enables students to maximize personal goals and to participate effectively in the society's political process. This curriculum is an excellent preparation of careers in a number of fields such as international relations, journalism, law, politics, military, non-profit organizations, and state, local and federal civil service. Students majoring in Political Science are encouraged to complete one of the following concentrations:

- Community Planning
- Corrections
- Criminal Justice Administration
- International Studies
- Policy Studies
- Public Management
- Pre-Law
- Teacher Education
- Urban Studies

Except for Pre-Law, Teacher Education, and Urban Studies, each of the above concentrations is also available as a professional specialty for students who earn the BSGA degree described below. The course requirements for each concentration and specialty are identical and are set forth in the BSGA section which follows.

A summary of Distribution Requirements for the BA degree appears in the Academic Policies section of the Catalog, under "Distribution and Other Degree Requirements." In addition to satisfying these requirements, all candidates for the BA degree in Political Science must successfully complete a minimum of 30 credits in post-freshman (200-300-400-level) political science courses, in addition to POLS 101-102. In addition to specific courses required for the concentration area, students must complete either POLS 491 or POLS 492. With the advisor's approval, 200-level political science courses may be substituted for POLS 101 and 102 as a major requirement.

The Bachelor of Science in Governmental Administration degree

This curriculum is designed to prepare students for careers in the public service at the local, state, and federal levels, the military, and non-profit organizations. The approach is multidisciplinary and provides the graduate with the analytical, political, and quantitative skills that are needed for the resolution of public-sector problems that call for a combination of technical knowledge and political sensitivity. Students learn to identify and appreciate values related to the formulation and implementation of public policies. Qualified graduates are encouraged to pursue graduate studies in the areas of public management, community planning, policy analysis, criminal justice and corrections administration, law, and international relations.

A summary of Distribution Requirements for the BSGA degree appears in the Academic Policies and Regulations section of the Catalog, under "Distribution and Other Degree Requirements." In addition to these BSGA Distribution Requirements, the following **Core Requirements** must be satisfied: A minimum of 27 credits is required. Courses should be selected in accordance with career interests where options are provided. **Courses selected for Core Requirements may not be applied toward the requirements for a specialty.** Care should be exercised to ensure that prerequisites have

been satisfied. The 27 credits required are allocated to three Core areas as follows: **Governmental Analysis:** Required courses are POLS 371 and three courses chosen from POLS 221, 331, 383, 451, and 461, and BIOL 306; **Normative Analysis:** Nine credits must be chosen from POLS 357, 358, 359, and PHIL 304; **Quantitative and Research Analysis:** Required courses are POLS 352 and 361.

BA Concentrations and BSGA Specialties

Community Planning: This concentration and specialty includes courses in planning analysis and techniques, planning law and site planning. Emphasis is placed on actual planning issues and problems drawn from surrounding communities. The required courses are: POLS 331, 335, 336, 337, 440, and either POLS 491 or 492. In addition, the student must select one of the following courses with the approval of the community planning advisor: POLS 334, 361, 391, 395, or 461.

Corrections: The objectives of this specialty are based on the assumption that criminal justice decision-making and policy-making in a democratic society require a broad academic background. To this end, the specialty employs the enhancement of innovative thinking based on a theoretical understanding of the field, appropriate research methodology, and the relevant principles of administration. The required courses are: POLS 395L, 363, and either 491 or 492. Three of the following courses: SOCL 220, 225, 319, and 321. One of the following courses: PSYC 309 or 315.

Criminal Justice Administration: This concentration and specialty is designed to prepare individuals for supervisory, middle-management, planning and line positions in law enforcement agencies at the local, state, and federal levels. A number of graduates in criminal justice administration now hold responsible positions in agencies throughout Tidewater and in the federal service. The required courses are: POLS 363, 365, 401, 461, and either POLS 491 or 492. Four of the following: POLS 368 or 395; SOCL 319, 321, or 322; PSYC 315; or eight ADJU or LWNF courses from Virginia Community Colleges.

International Studies: This concentration

and specialty is designed for students preparing for careers in the public and private sector which involve international affairs. The interdisciplinary curriculum requires 18 credits as follows: Either POLS 491 or 492; five of the following, three of which must be in POLS or GEOG; BUSN 441; ECON 385 or 470; GEOG 352 or 395; POLS 311, 321, 368, 395L, or 395N. Any two upper-level (300-400-level) French, German or Spanish *conversation* courses or the 311-312 series in either of these languages may be substituted for any two of the above-listed courses, provided that three of the five are POLS courses.

Policy Studies: This concentration and specialty combines a traditional liberal arts curriculum with courses which afford the student analytical and problem-solving skills. Competence in the policy process calls for factual information derived from political science, history, sociology, economics, psychology, and the physical and environmental sciences. Graduates with the policy studies concentration have the fundamentals for problem structuring, forecasting, policy recommendation, monitoring and evaluation of public policies. The required courses are: POLS 361, 363, 395, and either POLS 491 or 492. In addition, the student must successfully complete two of the following: ECON 351 or 492; POLS 383, 395, 395N, 440 or 461; SOCL 305 or 315; and must successfully complete one of the following: HIST 324; PHIL 304, 374, or 384; POLS 357, 358, or 359.

Public Management: This concentration and specialty is designed to prepare individuals for management careers in public and non-profit organizations and agencies. It introduces students to the components of an administrative system; personnel, budgeting, and management. Theoretical concepts, research skills, and practical experience are blended to broaden and strengthen the student's capacity for assuming responsible management positions. The required courses are: POLS 371, 381, 391, 401, and either POLS 491 or 492. In addition, the student must successfully complete two of the following: GEOG 351; POLS 363, 365, 383, 395, 440, 451, or 461.

Students who have majored in fire science at a Virginia Community College may substitute six semester credits of fire science or medical

technology courses for the above two-course requirement. An additional 24 semester credits in fire science and emergency medical technology courses may be transferred into the BSGA degree only, as electives.

Pre-Law Program: Political Science serves as a useful preparation for law school. While it provides knowledge of institutional processes which are essential to the practicing lawyer, the study of political science aids the student in developing skills in critical analysis, logical reasoning, and written and oral expression. For those planning to enroll in law school upon graduation, the following courses are recommended: ECON 201 and 202; POLS 101, 102, 221, 311, 363, 365, 440, 461, and 492.

The State-Approved Teacher Education Program in Social Studies

Students may complete a state-approved teacher education program in social studies under the Bachelor of Arts degree in Political Science. In addition to those courses identified as required under the heading "Secondary Teacher Education Programs" in the Department of Education of the Catalog, the total program of study must satisfy all requirements for the Bachelor of Arts degree in Political Science and must include: ECON 201 & 202; GEOG 201; GEOG 311 or GEOG elective; HIST 101-102 and 201-202; six credits of HIST electives; POLS 221; POLS 311 or 321; POLS 357, 358, or 359; plus SOCL 200.

Urban Studies Program: This concentration focuses on the social, political and economic dimensions of urban life. Students who complete this concentration and obtain appropriate administrative and quantitative skills will be prepared for careers in a variety of urban-based agencies, as well as graduate studies. The required courses are: GEOG 351; POLS 221, 331, 371, 440, 451, and 461.

The Curriculum in Political Science and Governmental Administration

POLS 101. Understanding Public Affairs: Public Issues and Controversies (3-3-0)
Prerequisite: None; corequisite: None. fall and spring.
An examination of major domestic and foreign

issues, such as urban problems, the role of bureaucracy in contemporary American society, oil crises, detente, hunger and economic development. Emphasis is placed on the influence of ideologies on American views of public issues and controversies.

POLS 102. Understanding Public Affairs II: The American Political Process (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

An examination of political dynamics within the American system. Consideration is given to American political institution, such as the President, Congress, judiciary, bureaucracy, elections, political parties, and interest groups.

POLS 221. State and Local Government (3-3-0)

Prerequisite: None; corequisite: None. spring.
A survey of the structure, functions, and issues of state and local governments in the United States. Includes such problems as frostbelt versus sunbelt politics, trends in state decision making, Presidential federalism, urban problems, trends in the distribution of power in local governments.

POLS 302. Public Finance (3-3-0)

Prerequisites: ECON 201-202; corequisite: None. Same as ECON 302. spring.

The nature and application of the fundamental principles which apply to the obtaining, managing and disbursing of the funds necessary for the performance of governmental functions at the local, state, and federal levels. The American tax system is given detailed consideration.

POLS 311. Comparative Politics (3-3-0)

Prerequisite: None; corequisite: None. fall.
A comparative study of the governmental processes of selected nations in terms of their ideologies, institutions, political organizations, and policies such as social welfare, crime control, urbanization, economic management, and foreign affairs.

POLS 321. International Relations (3-3-0)

Prerequisite: None; corequisite: None. spring.
Fundamental elements of international politics and an examination of the structure of the international system. Includes the role of state as political actors, their interrelationships with one another, and the major problems of the contemporary period.

POLS 331. Introduction to Community Planning (3-3-0)

Prerequisite: None; corequisite: None. fall and spring.

Examines the general nature of community planning and its development in the United States, including a survey of the problems with which planning seeks to cope.

POLS 334. Theory of Planning (3-3-0)

Prerequisite: POLS 331 or consent of instructor; corequisite: None. spring, alternate years. An examination of theories of planning process – both technical and political – and the policy implications of alternate theories. Substantial use is made of case studies in order to reveal the practical uses of the theories.

POLS 335. Site Planning and Design I (3-3-0)

Prerequisite: None; corequisite: None. fall.

An accelerated introduction to some major topics and skills of site planning and plan presentation. Includes isometric and perspective drawing, introduction to topography and grading, principles and practice in esthetic design of sites.

POLS 336. Site Planning and Design II (3-3-0)

Prerequisite: None; corequisite: None. spring, alternate years.

Exercises in and analyses of large scale site planning. For students in the planning programs the major projects will concern apartment developments and residential subdivisions. For those in the program in parks, open space, recreation and natural resource management, the major project will be a park design. Other students may choose either of the two project groupings.

POLS 337. Techniques of Community Planning (5-3-4)

Prerequisite: POLS 331 or consent of instructor; corequisite: None. spring, alternate years. Thorough survey of several planning techniques for the preparation of such preliminary studies as population analysis and land studies, and for the planning and programming of land use and public facilities. Exercises in the use of sources and techniques. Both individual and team projects.

POLS 352. Quantitative Techniques in Political Analysis (3-3-0)

Prerequisite: None; corequisite: None. fall. Fundamentals of statistical techniques used in

the analysis of political, administrative, and community behavior. Includes an examination of descriptive and inferential statistics, hypotheses testing, and correlation. Introduction to the construction, delivery, and analysis of surveys.

POLS 357. Theories of Democracy (3-3-0)

Prerequisite: Consent of instructor; corequisite: None.

A survey of various contemporary positions concerning the nature of democratic government. Particular emphasis will be placed on revisions of the democratic ideal and challenges to those revisions. Concepts to be considered include elite competition, oligarchy, polyarchal democracy, pluralism, apathy, participation, party systems, political stability, and the effect of technological change on representative institutions.

POLS 358. Political Thought and Criticism (3-3-0)

Prerequisite: None; corequisite: None. fall.

An analysis of the central issues raised by major political thinkers from Plato to Marx. Concepts to be examined include natural law, the state, freedom, obligation, equality, and political change.

POLS 359. Recent Political Ideas and Values (3-3-0)

Prerequisite: None; corequisite: None. spring. An analysis of such contemporary ideologies as capitalism, liberalism, democratic socialism, Marxism, fascism, conservatism, and nationalism in relation to their significance for contemporary political movements and policies.

POLS 361. Public Policy Analysis (3-3-0)

Prerequisite: None; corequisite: None.

An introduction to technical and conceptual skills for analyzing public policy problems, including problem structuring, forecasting, recommendation, monitoring, and evaluation.

POLS 363. Law and Public Policy (3-3-0)

Prerequisite: None; corequisite: None.

An examination of public law and public policy issues in selected areas, such as, criminal justice and court administration policy, school busing, abortion, affirmative action, among others.

POLS 365. Civil Liberties Policy (3-3-0)

Prerequisite: None; corequisite: None.

A review of United States Supreme Court cases with application of public policy analyti-

cal concepts and legal analysis. Consideration is given to religious liberty; freedom of expression, assembly, and association; the rights of accused; racial discrimination; political participation; sex, privacy, and poverty.

POLS 368. Comparative Legal Systems (3-3-0)

Prerequisites: POLS 101 & 102 or consent of instructor; corequisite: None.

A comparative analysis of several legal systems and their political environments. Various forms of "social order" mechanisms with particular emphasis given to the comparison of American jurisprudence will be examined along with the legal systems of England, France, the Soviet Union, Japan, the People's Republic of China, and selected African nations.

POLS 371. Public Administration (3-3-0)

Prerequisite: None; corequisite: None. both. This course serves as an introduction to the field of management in the public, non-profit and international sectors. It investigates the growth and patterns of modern bureaucracies. The theories and practice of administration are studied along with related topics such as political power, ethics, women in management, cultural norms and stress.

POLS 381. Public Personnel Administration (3-3-0)

Prerequisite: None; corequisite: None. fall.

An analysis of modern methods and theories in personnel administration including hiring, promotion, performance evaluation, dismissal, and training. Critical issues such as merit, affirmative action, reverse discrimination, unionization, and employee strikes are studied to assess their impact upon individuals, selected population groups, and organizations.

POLS 383. The Politics of Unemployment and Underemployment (3-3-0)

Prerequisites: POLS 101, ECON 201; corequisite: None.

An introduction to the contentious political issues concerning the problems of work, the causes of those problems, their consequences, and the responding directions of proposed public policy. Considers the widely varying explanations of unemployment, subemployment, underemployment and job security, and the varying interpretations of their impacts on the public and on special groups such as the

young, the elderly, and minorities. Also considers relationships between the issues surrounding work and those relating to such matters as education, institutional accountability and institutional inertia, and material living standards. Reviews emerging directions of public policy, and its results, in other countries.

POLS 391. Public Budgeting (3-3-0)

Prerequisite: None; corequisite: None. spring.

A critical study of the theories and practice and budgeting. Particular emphasis will be directed toward the role of politics and program evaluation in the budgetary process, value issues in tax policy, and related contemporary issues.

POLS 395. Elementary Topics in Political Science (3-3-0)

Prerequisite: Junior standing or consent of instructor; corequisite: None. fall and spring.

An examination of problems, issues, practices, or recent developments in Political Science and Governmental Administration. A maximum of nine credits may be counted toward a degree.

POLS 401. Public Management (3-3-0)

Prerequisite: None; corequisite: None. spring.

A study of modern management strategies and their applicability to the public and non-profit sectors. The course covers such topics as planned change, organization development, management by objectives, democratic management, interpersonal interaction, and structural reorganization.

POLS 440. Planning Law and Administration (3-3-0)

Prerequisite: POLS 331 or consent of instructor; corequisite: None. fall, alternate years.

Investigation of the range of legal tools for land use planning and of the various political and administrative levels of planning. Includes a brief consideration of types of planning administration. Special attention is given to zoning as a land use control.

POLS 442. Planning of Open Space and Recreation Areas (3-3-0)

Prerequisite: LSPE 190, or BIOL 306, or POLS 331, or consent of instructor; corequisite: None. fall, alternate years.

Principles of planning for open space and recreation areas. The course examines the principles employed in serving suburban and rural

populations and those emerging principles proposed for serving inner city populations. It includes the identification of goals, needs, and resources; the standards of space and location design; and the laws and financing methods available for plan implementation. Attention is given also to the range of public administrative agencies responsible for recreation area planning. The course concludes with some discussion of site design.

POLS 451. Urban Government and Politics (3-3-0)

Prerequisite: None; corequisite: None. fall. Examination of modern urban governments, including urban reform movements, community control, regionalism, city-suburban conflicts, super-cities, major urban problems, and the future of urban areas.

POLS 461. Seminar in Urban Processes (3-3-0)

Prerequisite: None; corequisite: None. spring. An examination of specialized urban processes such as urban planning, urban criminal justice systems, urban decision-making systems, and selected urban development projects (such as harbor developments in Baltimore and Norfolk). Site visits may be included.

POLS 490. Senior Seminar in Political Science (3-3-0)

Prerequisites: Senior standing; departmental major; corequisite: None. fall and spring. A seminar course in which each student is expected to master research skills, present a formal paper, and participate in the discussion and analysis of presentations by other members of the seminar.

POLS 491. Practicum in Governmental Administration (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None. fall and spring. Part-time internship with a governmental, military or nonprofit organization. Periodic conferences, written evaluations, and research project. **A maximum of six credits may be counted toward a degree.**

POLS 492. Research (3-3-0)

Prerequisites: POLS 101 & 102, senior standing; corequisite: None. **Recommended for Political Science and Governmental Administration majors and minors only.**

This course is designed to permit seniors an opportunity to explore their major or specialty fields through an applied or theoretical research effort. Participants jointly critique the proposed problem, hypotheses, and methodology of each student to ensure that a research focus is workable and meaningful. Data collection and final paper are prepared independently. The final product is presented and defended orally to the faculty and majors of the department.

POLS 495. Advanced Topics in Political Science (3-3-0)

Prerequisite: Senior standing or consent of instructor; corequisite: None. fall and spring. An examination at an advanced level of problems. Issues, practices, or recent developments in political science and governmental administration. **A maximum of nine credits may be counted toward a degree.**

POLS 499. Independent Studies in Political Science (3-3-0)

Prerequisite: Junior or senior standing; corequisite: None.

The purpose of this course is to enable a qualified student to enrich his/her program through independent work. The topic, stages, and grading are agreed upon in writing by the student and faculty member supervising the effort. This should be completed by the end of pre-registration for the session in which the study is to be executed. **A student should have a minimum overall GPA of 2.5.** Copies of the study plan must be filed with appropriate college offices attached to an *Independent Study Authorization* form. **A student may take a maximum of three hours of independent study in a semester and a maximum of six hours in his/her total academic program.**

The Minors in Geography and in Geography and Community Planning

Coordinator: Professor Paul Killam

Geography is one of the oldest sciences and investigates location and spatial distribution. Courses in geography are offered within the Department of Political Science and Governmental Administration. Students have options to minor in either Geography or in Geography and Community Planning. The minor in Geography requires 18 credits in geography courses. The minor in Geography and Community Planning requires 18 credits distributed as follows: At least nine credits in geography, including GEOG 201; at least nine credits in community planning, including POLS 331; the remaining nine credits may be in geography, community planning, geology, or, with permission of the coordinator, in certain other courses. **Note:** GEOG 201 and 311 are recommended for education majors.

The Curriculum in Geography

GEOG 101. Maps and Charts (3-3-0)

Prerequisite: None; corequisite: None.

A course on introductory cartography and remote sensing favoring a practical approach. In conjunction with Lab Section, the student has an opportunity to develop skills not only in map-reading and photo-interpretation but also in designing and executing maps, charts, and visual aids.

GEOG 103. Maps and Charts Laboratory (1-0-3)

Prerequisite: None; corequisite: GEOG 101. Practical and experimental techniques of cartography, hydrography, and remote sensing.

GEOG 201. Introduction to Geography (3-3-0)

Prerequisite: None; corequisite: None.

A broad overview of physical and cultural aspects of geography. The course will include facts and concepts concerning climates of the world and landform classification, emphasis on major world ecosystems (soils, vegetation, and climate), and tools of geography (map and globe skills). **Recommended for education majors.**

After a basic introduction, the course will move to an examination of selected culture regions of the earth. The various continents inhabited by man will be discussed: North and South America, Europe, Asia, Africa, and Australia. The course will consider customs of the people, urban and rural patterns of settlement, world religions, regional economic products, special political units, etc. Throughout the course, many relationships between man and his environment (hydrosphere, biosphere, lithosphere, and atmosphere) will be stressed. A variety of visual aids will be used for concept reinforcement.

GEOG 311. Physical Geography (3-3-0)

Prerequisite: GEOG 201 or consent of instructor; corequisite: None.

This is a survey course stressing the areal distribution and functional interrelationships of the physical elements over the surface of the earth. The course aims to increase student awareness of similarities and differences in the physical environment from place to place. In order to understand these place to place variations, students must study the physical processes involved. Topics to be covered include weathering, erosion, deposition, diastrophism and volcanism, the study of landforms, aspects of the atmosphere and weather, the soils and minerals of the world.

Mapping skills are key to this course as several essential maps will be shown and student will be creating maps illustrating the distribution of several of the above processes and features as they relate to human activities around the globe. **Recommended for education majors.**

GEOG 351. Geography of Cities (3-3-0)

Prerequisite: Three hours of geography or consent of instructor; corequisite: None.

An analysis of urban settlements and cultural features in the landscape. Location and distribution, geological foundations, and cultural patterns are investigated. City functions and classifications, center place theories, and land use planning are examined.

The School of Social Science and Professional Studies

GEOG 352. Economic Geography (3-3-0)

Prerequisite: GEOG 201 or consent of instructor; corequisite: None.

Economic Geography is the study of the relation of the physical factors of the environment and of political and economic conditions to the productive activities and occupations and the distribution of their output. The course will focus on the distribution of such activities and occupations as hunting, fishing, gathering of forest products and lumbering, grazing, mining, manufacturing, transportation, and foreign trade. This occupational approach to the subject will enable students to analyze all commodities as they are related to a given activity and to the world regions where the activity is located. In doing so the purpose is to help the student maintain a world perspective. Information concerning the technological revolution in several occupational activities is also included in the course as is the impact of government regulations on the production and distribution of the various important commercial products.

GEOG 375. Geography of Virginia (3-3-0)

Prerequisite: Three hours in geography, or consent of instructor; corequisite: None.

A regional analysis of Virginia as a key state on the Eastern Seaboard. The Chesapeake Bay, effects of sea level changes on the Tidewater region, land-forms and physiographic characteristics, economic and cultural patterns are examined. (Overnight field trips involving fish and fall line, mud and mountains, scarps and spelunking are parts of the course.)

GEOG 395. Topics in Geography (3-3-0)

Prerequisite: None; corequisite: None.

Selected topics in geographic subjects.

GEOG 450. Maritime Geography (3-3-0)

Prerequisite: GEOL 202, OCEA 212, or consent of instructor; corequisite: None.

The seas are examined as a source of wealth, as means of transportation, and as seaward extensions of national interests. Special emphasis is placed on maritime activities and human occupancy of coastal areas.



Psychology

Department Chairman: Professor Robert W. Hermann

Professors: Bauer, Doerries, Hermann, Lopater, Squires, Windsor

Associate Professors: Dooley, Hoiberg, Tseng

Instructor: Mathieu

The aims of the psychology program are to enable students to learn facts, principles, theories, and methods in psychology and to apply this knowledge usefully and responsibly. The department is organized so that the major student may survey the entire field of psychology and learn to use the tools of psychological research.

Some students majoring in psychology will go on to graduate study; others will find employment opportunities as personnel officers, case workers in welfare departments, probation officers, mental health technicians, teachers of early childhood education or special education.

The Bachelor of Arts and Bachelor of Science degrees in Psychology

The Bachelor of Arts and Bachelor of Science degrees in Psychology require a minimum of 36 credits in psychology and must include: PSYC 201 (prerequisite to all PSYC courses except PSYC 203); PSYC 202 or 203; PSYC 300, 301, and 302; successful completion of two of the following: PSYC 303, 304, 307, 314, or 315; successful completion of one of the following: PSYC 305 or 306; successful completion of one of the following: PSYC 404 or 410; and one enrollment in PSYC 490. All students pursuing the Bachelor of Arts or Bachelor of Science degree in Psychology must successfully complete PSYC 300, 301, and 302 within the first 90 hours of the degree program. Care should be exercised to ensure that prerequisites have been satisfied.

Students pursuing the Bachelor of Science degree in Psychology must successfully complete one additional laboratory science sequence. PSYC 404 may be used to satisfy this additional requirement.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

Concentrations for Psychology Majors

Three concentrations are offered for psychology majors: A general psychology concentration; a psychological technician concentration; and an organizational psychology concentration. Students pursuing the Bachelor of Arts or Bachelor of Science degree in Psychology must select one of these concentrations prior to completing 75 credits or no later than enrolling in PSYC 301. This choice must be registered with the chairman of the department.

General Psychology Concentration: Students who plan to attend graduate school but who have not chosen a specific concentration should have the broadest possible preparation. To that end, it is recommended that elective courses in psychology be chosen from the following courses: PSYC 303, 304, 305, 306, 307, 314, 315, 404, 405, 406, 410, and 491.

Psychological Technician: With the increased emphasis on paraprofessional training in the field of mental health, the Department of Psychology offers a concentration for students interested in becoming psychological technicians. Some of the following courses satisfy part of the core curriculum in psychology. The required courses are: PSYC 304, 314, 315, 316, 410, 440, and 491. Recommended electives are: PSYC 303, 313, 340 and 420; SOCL 220, 225, 321, and 324. It is recommended that students in this concentration fulfill the language distribution requirement using Spanish.

Students from other academic disciplines may choose this concentration as a minor. The required courses are: PSYC 315, 316, and 410. In addition, students must successfully complete three of the following, one of which must be a 400-level course: PSYC 304, 340, 420, 440, and 490.

Organizational Psychology Concentration: This concentration is designed for students who desire to pursue interests in psychology as applied to organizations, agencies and busi-

ness in such areas as management, administration and personnel. Some of the following courses satisfy part of the core curriculum in psychology. For students pursuing the Bachelor of Arts or Bachelor of Science degrees in Psychology or those from other academic disciplines pursuing a double major, the following courses are required: PSYC 303, 313, 316, 333, 410, 413, and 491. Recommended electives are: BUSN 324, 412, 452, and 454; CPSC 210; POLS 371, 381, and 401; SOCL 210, 332, and 333.

Students from other academic disciplines may choose this concentration as their minor. The required courses are: PSYC 303, 316, and 333. In addition, students must successfully complete three of the following, two of which must be 400-level courses: PSYC 304, 313, 410, 413, and 490.

The Minor in Psychology

The minor in psychology requires 18 credits in psychology and must include PSYC 201 and a minimum of two 400-level courses, one of which may be PSYC 490.

The Curriculum in Psychology

PSYC 201. Principles of Psychology (3-3-0)

Prerequisite: None; corequisite: None.

Basic principles of behavior according to the categories of general psychology: motivation, learning, maturation, emotion, thinking, perception, intelligence, and the organization of personality. **This course is prerequisite to all courses in psychology except PSYC 203.**

PSYC 202. Contemporary Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

A continuation of the introduction to psychology through the study of original literature in various fields of contemporary interest and importance.

PSYC 203. Psychology of Adjustment (3-3-0)

Prerequisite: None; corequisite: None.

An examination of research and literature concerning the interaction between the individual and persons and events in his or her bio-social environments. The problems of daily living will be emphasized.

PSYC 295. Topics in Contemporary Psychology (Credits vary)

Prerequisite: PSYC 201; corequisite: None.

This course will offer topics of special interest in areas of contemporary psychology. These topics may be suggested by students or by faculty. **Only one 295 course may be offered toward a degree in psychology.**

PSYC 300. Statistical Applications in Social Science Research (3-3-0)

Prerequisites: PSYC 201 and MATH 110 or its equivalent; corequisite: None.

An introduction to elementary statistical usage including descriptive statistics, probability, inferential statistics, correlation and regression and distribution free techniques.

PSYC 301. Experimental Psychology (3-3-0)

Prerequisites: PSYC 201 and 300, at least three credits of college mathematics MATH 125 is highly recommended; corequisite: None.

A treatment of the historical, philosophical, and methodological issues of contemporary concern in empirical psychology. Content areas include biological bases of behavior, sensation, and perception.

PSYC 302. Experimental Psychology and Advanced Methodology (3-3-0)

Prerequisite: PSYC 201 and 301; corequisite: None.

Advanced methodology pertinent to research designs in the areas of human and animal learning, memory, information processing and perceptual-motor skills. The content will also cover a treatment of the ethics of the usage of human and animal participants in psychological research.

PSYC 303. Organizational Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

An examination of the dynamics of organizational socialization, motivation, leadership, decision making, intra- and intergroup functioning, power relationships, conflict and conflict management, and the more traditional functions of selection, safety, and human engineering are studied.

PSYC 304. Social Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

An examination of the psychological processes involved in social relationships of various types. The focus is upon person-perception

processes, self-concept, attitude change, aggression, and interpersonal influence.

PSYC 305. Psychology of Learning (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

A study of the principles of human and animal learning, retention, and problem-solving, with consideration also given to methods of investigation and recent theories of learning.

PSYC 306. History of Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

A survey from Aristotle to the present with special emphasis on the nineteenth and twentieth centuries.

PSYC 307. Developmental Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

A study of data and theory concerning the development of the individual through the life span, including mental, physical, and emotional processes.

PSYC 308. Child Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

The biological, social, and emotional factors influencing the normal growth and development of the child from birth to adolescence.

PSYC 309. Psychology of Adolescence and Young Adulthood (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

This course examines the psycho/socio/biological development of humans from pre-adolescence through early adulthood. Theories, research, and problems in the developmental process are studied.

PSYC 311. Job Survival and Success Skills (3-3-0)

Prerequisite: PSYC 201 or consent of instructor; corequisite: None.

An applied and activity-oriented approach to learning the interpersonal skills that are necessary for surviving on the job and working successfully with other people. Training will focus on forming career objectives, cooperating and leading, expressing and controlling feelings, conflict management, and forming good working relations. *May only be taken as Pass/Fail.*

PSYC 312. Educational Psychology (3-3-0) (Same as EDUC 312)

Prerequisite: PSYC 201; corequisite: None.

The application of psychological facts, principles, and methods to learning in the classroom, including skill development in evaluation of student performance as an aid to learning and teaching.

PSYC 313. Human Relations in Organizations (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

An experiential approach to skill training in leadership, decision-making, communication, problem-solving, conflict-resolution, creativity, and other issues faced by task-oriented groups in organizations. *May only be taken as Pass/Fail.*

PSYC 314. Psychology of Personality (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

An examination of historical and contemporary psychological theories relating to the development, functioning, and modification of personality. A comparative approach is used, focusing upon the different perspectives of psychoanalysis, behaviorism, and humanistic psychology.

PSYC 315. Psychology of Abnormal Behavior (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

A survey of behavior pathology emphasizing anxiety disorders, character disorders, psychoses, and somatoform disorders and their relationship to current concepts of normal personality development.

PSYC 316. Principles of Interviewing (3-3-0)

Prerequisite: PSYC 201, junior standing or permission of instructor; corequisite: None.

Provides the student with the theory and skills necessary to observe, record, summarize, and communicate information obtained in the interview process. This process will be studied as it relates to employment, survey, organizational, and counseling situations. Students will be required to conduct interviews both in role-play and actual interview situations.

PSYC 333. Personnel Psychology (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

The focus of this course, which has a heavily applied accent, is on the application of psychological principles and methods to the assessment of personnel techniques and programs. Specifically, the objectives of this course are to enable students to: (1) become aware of per-

sonnel problems and to identify the need for personnel programs; (2) develop skills in implementing and evaluating programs of personnel selection/placement, performance appraisal, and training; and (3) analyze the impact of social movements on personnel programs (i.e., the issues of sex, age, and racial discrimination will be examined.)

PSYC 340. Psychology of Adulthood and Aging (3-3-0)

Prerequisite: PSYC 201 or permission of instructor; corequisite: None.

A study of the psychological processes involved in the middle and later years of human development from young adulthood to the end of the life cycle.

PSYC 395. Elementary Topics (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

Will present from time to time topics of special interest to the students and faculty of the department. Students who are interested in having a topics course in a certain area should make their suggestion to the department chairman. Students should also check the current list of courses taught to determine what topics will be offered in any given semester. **Only one elementary topics course may be offered towards a degree in psychology.**

PSYC 404. Physiological Psychology (3-3-0)

Prerequisite: PSYC 201, 301-302 or consent of instructor; corequisite: None.

A critical analysis of selected physiological mechanisms controlling behavior. Lecture topics include neuroanatomy/neurophysiology, sensory systems, homeostatically regulated systems, emotion, and psychopharmacology. **Concurrent registration in PSYC 404L is suggested, but not required.**

PSYC 404L. Laboratory in Physiological Psychology (1-0-3)

Prerequisite: PSYC 201, 301-302 or consent of instructor; corequisite: None.

Companion laboratory experience to PSYC 404, includes hands-on experience in small animal surgery, histology, electrical recording and brain stimulation. **PSYC 404 and 404L count as the fifth semester of lab science for the B.S. degree.**

PSYC 405. Psychology of Motivation (3-3-0)

Prerequisite: PSYC 201, 301-302 or consent of instructor; corequisite: None.

A study of the energizing factors in behavior, including such concepts as instincts, drives, homeostatically regulated systems, the emotions, stress, anxiety, and aggression. Both theoretical and experimental arguments are considered.

PSYC 406. Psychology of Sensation and Perception (3-3-0)

Prerequisite: PSYC 201, 301-302 or consent of instructor; corequisite: None.

Sensory and perceptual processes presented in the framework of both theoretical and experimental issues.

PSYC 407, 408. Psychology of the Exceptional Child (3-3-0) (3-3-0)

Prerequisites: PSYC 201 and 307 (or its equivalent); corequisite: None.

The psychological development of children with physical, emotional, educational, social and intellectual deviation, and communication problems. During the first semester, emphasis will be on psychological aspects of giftedness, physical disability, and mental retardation. During the second semester, learning disabilities and the problems of the emotionally disturbed child will be stressed. **The laboratory section is optional.**

PSYC 407L, 408L. Psychology of the Exceptional Child (1-0-3) (1-0-3)

Prerequisites: PSYC 201 and 307 (or its equivalent); corequisite: None.

The laboratory experience enables the student to gain practical knowledge through real-life experience, in a school, home, or recreational setting. Placement will be made in community agencies working with exceptional children. **This laboratory section is optional.**

PSYC 410. Introduction to Tests and Measurements (4-3-3)

Prerequisites: PSYC 201 and 301-302 or consent of instructor; corequisite: None.

Psychometric principles of test construction, development, validation, and utilization are examined. Practice in test administration, interpretation, and evaluation are part of the classroom and laboratory experience. Current psychological instruments are studied in depth.

PSYC 413. Job Satisfaction and Work Motivation (3-3-0)

Prerequisites: PSYC 201 and 303 or consent of instructor; corequisite: None.

An examination of contemporary theories of job motivation and research applications to worker satisfaction and work behavior (such as productivity, turnover, and absenteeism), including the relationship of motivational processes to other organizational variables.

PSYC 415. Psychoeducational Diagnosis (3-3-0)

Prerequisite: PSYC 201; corequisite: None.

Designed to help teachers develop skills of informal diagnostic evaluation which can be used in the classroom to individualize instruction and to design classroom programs for the individual student.

PSYC 417. Behavior Management of the Exceptional Child (3-3-0)

Prerequisite: PSYC 201 corequisite: None.

A comprehensive presentation of innovative behavioral treatment techniques, instructive results of systematic research, and usable intervention strategies for individuals who work or plan to work with exceptional children.

PSYC 420. Human Sexuality (3-3-0)

Prerequisite: PSYC 201 or consent of instructor; corequisite: None.

Biological, psychological, and social aspects of human sexual behavior throughout the life span.

PSYC 425. The Social Psychology of Marital and Family Relationships (3-3-0)

Prerequisites: PSYC 201 and junior standing, or consent of instructor; corequisite: None. Will examine marriage and family as social psychological systems. Emphasis will be on the intra- and interpersonal dynamics and processes that characterize persons living in a family unit. Attention will also be given to *critical issues* which differentiate successful families from dysfunctional families, and current approaches for resolving common problems will be discussed. Will be of value in understanding one's own marriage.

PSYC 435. Clinical Psychology (3-3-0)

Prerequisites: PSYC 201 and consent of instructor; corequisite: None.

A comprehensive study of the history, methods, and aims of clinical psychology as related to theory, assessment, diagnosis, and intervention

strategies. Several in-depth case studies and a term paper may be required.

PSYC 440. Group Processes (3-3-0)

Prerequisites: PSYC 201 and consent of instructor (PSYC 304 and/or 313 are strongly recommended); corequisite: None.

Personal growth groups are increasingly being used in our society as a means of expanding self-awareness and increasing people's abilities to relate in productive ways with others. This course examines the techniques and dynamics of such groups, and the focus is upon *experimental learning*. Students are personally involved in various group activities designed to enhance their social skills and their understanding of others. **May only be taken as Pass/Fail.**

PSYC 490. Senior Seminar (3-3-0)

Prerequisites: PSYC 201 and completion of all required 300-level PSYC courses or consent of instructor; corequisite: None.

Topical seminars to cover a variety of areas. **These seminars are limited to seniors only.**

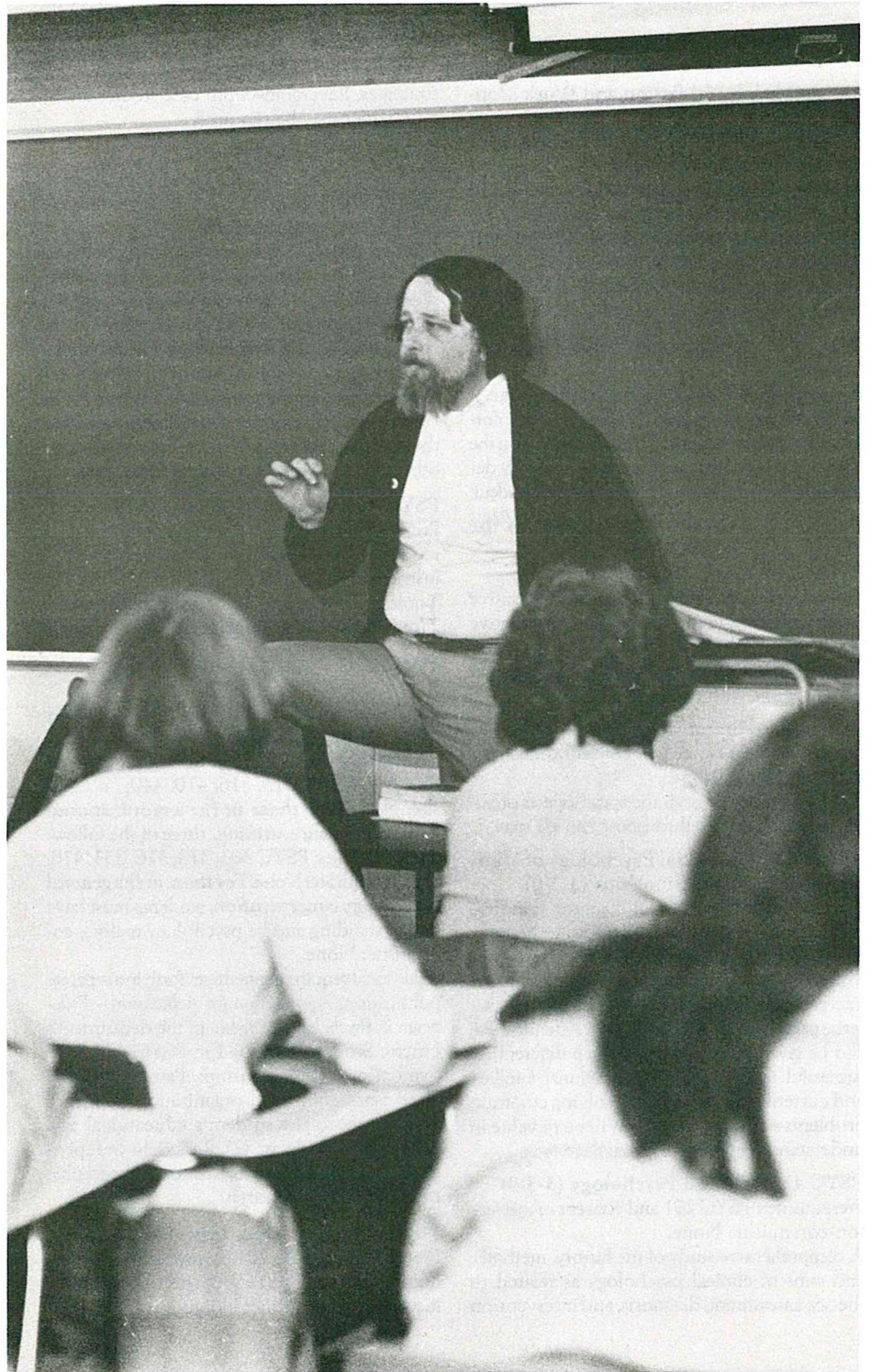
PSYC 491. Practicum in Psychology (Credits vary)

Prerequisites: PSYC 201 and as follows: **For those in the psychological technician concentration**, three of the following six courses: PSYC 304, 314, 315, 316, 410, 440; corequisite: None. **For those in the organizational psychology concentration**, three of the following six courses: PSYC 303, 313, 316, 333, 410, 413; corequisite: None. **For those in the general psychology concentration**, students must have senior standing and be psychology majors; corequisite: None.

Additional requirements are set forth in a separate publication, *Application for Admission – Practicum in Psychology*, available in the department's offices. Students enrolled in PSYC 491 have two options: (1) Internships: Part-time supervised placement in an organization or agency appropriate to the student's educational and professional goals, or (2) Research: Independent study which may consist of bibliographic or experimental research.

PSYC 495. Advanced Topics (3-3-0)

Prerequisites: PSYC 201, completion of all required 300-level PSYC courses or consent of instructor; corequisite: None.



Sociology and Social Work

Department Chairman: Associate Professor Ruth L. Kernodle

Professor: Healey

Associate Professors: Durel, Kernodle

Assistant Professors: Butchko, Mathews (Director, Social Work), Pellett

Field Instructors: Alword, Aquirre, Haywood, Miller, Newborn, Purcell

The Department of Sociology and Social Work offers two degrees, the BA degree in sociology and the BA degree in social work. Both degrees are committed to the student's acquiring a firm liberal arts background.

The degree in sociology will provide the student with the experience of analyzing the society from a sociological perspective. This can serve as the basis for intelligent citizen participation; it can provide skills and perspectives that will be helpful in the work world; and it can also provide a foundation for graduate work. The concentrations in organizational sociology and in criminology offer ways to specialize within the sociology major.

The BA in social work offers a strong liberal arts base and preparation for entry into social work at the first level of professional practice. **The social work program is accredited by the Council on Social Work Education.** The highly integrated curriculum includes sequences of work in social welfare policy and services, human behavior and the social environment, research, and social work practice. Coursework will emphasize not only work with families but also the consideration of minorities, women, and other special populations. The culmination of the program is the educationally directed field instruction which places students in social agencies in the community. Graduates of the program find employment in such areas as public and private social service agencies in the fields of family and child welfare, health, mental health, drug and alcohol rehabilitation, school, corrections, probation, etc.

Both majors use the community as a learning laboratory through guest speakers, field trips, practicum experiences, and field work – experiences which will help to synthesize the theoretical with practical application.

All students must satisfy Distribution Requirements. See "Distribution and Other Degree Requirements" for details.

The Bachelor of Arts degree in Sociology

The Bachelor of Arts degree in Sociology requires a minimum of 37 credits in sociology including 27 credits above the 200-level. Required courses are: SOCL 200, 310, 391, 392, and 393. In addition, students must successfully complete two of the following: SOCL 490, 493, and 499. The department attempts to offer all required courses at night at least once every three years so that evening and part-time students may complete their desired program.

The Minor in Sociology

The minor in sociology requires 18 credits in sociology, of which 12 credits must be above the 200-level. Required courses are: SOCL 200, 310, and either SOCL 490 or 493. In addition, students pursuing a minor in sociology must have a proficiency in research methods and statistics.

The Bachelor of Arts degree in Social Work

Course Requirements: Students pursuing the Bachelor of Arts degree in Social Work must complete the distribution requirements for the BA degree as listed in the Academic Policies and Regulations section of the Catalog, under "Distribution and Other Degree Requirements," so as to have them include BIOL 101-102 and PSYC 201-203.

The Bachelor of Arts degree in Social Work requires the following courses, which, because of their sequential nature, should be completed in the year indicated. **Sophomore Year:** SOCL 200 and 225; **Junior Year:** PSYC 307; SOCL 303 and 304; SOSW 300, 367, 368, 391 and 392; and SOWK 399 and 399L; **Senior Year:** SOWK 400; 401; 402; 406; and 490. Electives must include 12 credits at the upper (300-400) level *outside* the department. A maximum of 60 Sociology/Social Work credits may be presented for the Bachelor of Arts degree in Social Work. Social work majors desiring to combine a major

in social work with a minor in gerontology can learn of the special agreements regarding field instruction by consulting the Director of Social Work.

Admission and Evaluation Procedures

The application for social work major follows successful completion of SOSW 300 and must be completed prior to enrollment in SOWK 399. The application will consist of: 1) Enrollment in or completion of SOSW 300, with a grade of "C" or higher; 2) Transcript showing GPA above 2.0, near completion of distribution requirements, and accumulation of at least 50 credits; 3) A 150-200 word statement on "Why I want to be a social worker"; 4) Completed application form, and; 5) Interview with the Director of Social Work to assess student strengths and weaknesses for a career in social work and to review program requirements.

Application Dispositions

All dispositions will be made in writing and records maintained on all decisions. The dispositions are: 1) Full acceptance; 2) Probationary acceptance (spells out what must be done to achieve full acceptance); and 3) Denial.

Automatic review of accepted standing occurs when grades of "D" or "F" are made in any required course in the major or when a student is on academic probation. Probationary status in the major would keep a student from taking a 400-level social work course. Readmission to good standing will be determined by GPA and approval of the Director of Social Work.

Successful completion of SOWK 399 and 399L ("C" or better).

A written lab evaluation, completed by the 399L instructor, will become part of the student's permanent record. A grade below a "C" or an unfavorable assessment of potential for a career in social work will result in an advising session with the DSW and possible probationary status.

Student Field Placement Application

Prerequisites to SOWK 401-402 are as follows: 1) Senior status; 2) Successful completion ("C" or better) of SOWK 399 and 399L; 3) Concurrent enrollment in SOWK 400; 4) Overall GPA of 2.0 and GPA of 2.5 in the required courses.

Applications for field instruction (SOWK 401-402) must be completed by the last day for withdrawing from classes without penalty of failing grade. The application itself consists of a completed application; three typed copies of your resume, and an interview with the Field Instruction Coordinator.

Note: All of the above may be appealed by students to the Social Work Committee. Submit appeals, in writing, to any member of the committee. See current list of members in the Sociology/Social Work Department office.

The Curriculum in Sociology and Social Work

In the following course listings, SOCL designates courses toward the BA in Sociology; SOSW designates courses for either the BA degree in Sociology or the BA degree in Social Work; and SOWK designates courses toward the BA degree in Social Work.

Sociology

SOCL 200. Introduction to Sociology (3-3-0)
Prerequisite: None; corequisite: None. fall and spring.

An introduction to the study of human society, including concepts of culture, socialization, role and status, stratification, social organization, institutions, and social change.

SOCL 210. Social Organization (3-3-0)
Prerequisite: SOCL 200 or junior or senior standing; corequisite: None spring.

An analysis of social organization at the various levels of group interaction, including small groups, social institutions, and bureaucracies. Course will include fundamental concepts, theories, and research as appropriate.

SOCL 220. Social Problems (3-3-0)
Prerequisite: SOCL 200 or junior/senior standing; corequisite: None. fall and spring.

A survey of social problems affecting contemporary societies, such as technological displacement, population growth, environmental abuse, work and alienation, economic and political inequality.

SOCL 225. Minorities in Society (3-3-0)
Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. spring.

A comprehensive analysis of a variety of minority groups including American Indians, women,

Spanish-speaking and Asian minorities, European immigrants, and Blacks. The course will concentrate on the problems of prejudice and discrimination, integration and conflict, and trends of change.

SOCL 303. Marriage and the Family (3-3-0)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. fall.

Analysis of the American family system in historical and cross-cultural perspective. Relationship of the family to other social systems and to social change. Variations in the American family by social class, race, ethnicity, and family structure. Effects of changing gender roles on marriage and the family.

SOCL 304. Socialization and Society (3-3-0)

Prerequisite: SOCL 200; corequisite: None. spring.

Emphasis will be on the generic process by which individuals become members of society. Consideration of the impact of family, sex, race, socio-economic class on socialization and personality. The importance of the major agencies of socialization, such as family, school, peer group, and media. Socialization through the life cycle.

SOCL 305. Sociology of Aging (3-3-0)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. fall.

Study of the process and effects of aging and ageism. Demographic trends and their implications. Impact of sociocultural factors on physical and psychological functioning. The social environment of older people, including living environments, finances, family, and friends. Effect of retirement. Programs serving the elderly.

SOCL 310. Social Theory (3-3-0)

Pre or Corequisites: SOCL 200 and nine credits of sociology and junior or senior standing. fall.

An examination of the development of sociological thought with a special emphasis on major classical and contemporary sociological theorists. Includes an analysis of the basic philosophical and sociological assumptions concerning man and society, their political and social implications, and the historical setting in which the sociologist is writing.

SOCL 313. Sociology of Religion (3-3-0)

Prerequisite: SOCL 200 or junior or senior

standing; corequisite: None.

A sociological analysis of religion as a social institution with emphasis on the interrelationship between religion, society, and the individual. Topics covered include theoretical perspectives, empirical measurements of religiosity, and trends in secularization and religious pluralism.

SOCL 315. Sociology of Health and Health Care (3-3-0)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. spring.

Analysis of the socio-cultural context of illness, including disease etiology, epidemiology, and illness behaviors. The formal and informal organization of the health professions and institutions, and the system of health care delivery.

SOCL 319. Deviant Behavior (3-3-0)

Prerequisite: SOCL 200 or junior/senior standing; corequisite: None. fall.

An analysis of the social processes which result in defining and reacting to behavior as deviant. Emphasis is on the cultural context of deviance, deviant behavior patterns, and the effects of societal responses to deviance. Various forms of deviance will be analyzed, including sexual deviance, mental illness, alcoholism and drug abuse, crime, and juvenile delinquency.

SOCL 321. Criminology (3-3-0)

Prerequisite: SOCL 200 or junior/senior standing or consent of instructor; corequisite: None. fall.

A sociological analysis of the nature and extent of crime as revealed by official statistics, victimization surveys, and self-reported crime. Emphasis will be on sociological theories of crime; characteristic patterns of crime; psychological, biological, and economic factors in criminal behavior; crime and social change; and the relationship between social policies and criminal behavior.

SOCL 322. Corrections (3-3-0)

Prerequisites: SOCL 200, SOCL 321; corequisite: None. spring.

A sociological analysis of correctional institutions and community corrections programs within the criminal justice system. Emphasis will be on the historical development of corrections, institutional treatment programs, an assessment of community alternatives to imprisonment, and

an examination of current issues affecting the future of correctional policies.

SOCL 324. Juvenile Delinquency (3-3-0)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. spring.

A sociological examination of juvenile delinquency with emphasis on the nature and extent of juvenile delinquency, the historical development of the juvenile court, institutional and community corrections aimed at delinquents, and an assessment of social policies as they affect delinquents. A review of sociological theory and research on delinquency will emphasize family patterns, school systems, juvenile gangs, and broader social processes related to delinquency.

SOCL 332. Industrial Sociology (3-3-0)

Prerequisite: Junior or senior standing; corequisite: None.

A study of the patterns of industrialization, industrial work organizations, and management approaches. The course addresses the cross-cultural dimensions of industrial work and investigates major issues of industrial society, such as industrial relations, unemployment, the meaning of work, and the conditions of women and minorities in the labor force.

SOCL 333. Occupations and Society (3-3-0)

Prerequisite: None; corequisite: None.

An analysis of occupations with particular emphasis on the interrelationship between work, society, and the individual. Topics covered include work as a social institution, occupations specializations, career choice and mobility, occupational status and professionalization, and the socio-cultural dimensions of labor force participation.

SOCL 341. Sports and Society (3-3-0)

Prerequisite: None; corequisite: None. fall.

A comprehensive analysis of American sports and their place in the American lifestyle. Topics include: the nature and meaning of sport, work, and play; children and organized sports; interscholastic and intercollegiate sports; professional sports; minorities and women in sports; and violence in sports.

SOCL 361. Population Analysis (3-3-0)

Prerequisite: None; corequisite: None. spring. Analysis of demographic changes, including patterns of fertility, mortality, migration, changing age composition of the population, patterns of

labor force participation, changing family structures. Implications of these changes for business, government, and social planning. Methods of measurement and basic techniques of analysis.

SOCL 490. Senior Seminar in Sociology (3-3-0)

Prerequisite: 12 credits in sociology, senior standing; corequisite: None. spring.

A critical review and analysis of issues and selected substantive problems in the discipline of sociology.

SOCL 491. Practicum in Sociology (3-3-0)

Prerequisites: SOCL 310, 391, 392, and senior standing; corequisite: None.

The practicum in sociology consists of 150 hours in an approved community setting. Its purpose is to give the student the opportunity to correlate theory with practice. Written work will include a log and a final paper synthesizing the student's experience. Practicum must be planned for at the time of preregistration with the faculty member designated by the department chairman to supervise the experience. Final paper will be presented orally to the department.

SOCL 493. The Future of American Society (3-3-0)

Prerequisites: 12 credits in social sciences and junior or senior standing; corequisite: None. spring.

An analysis of the rapid changes in the social, cultural, and economic institutions, social structure, and social behavior as we move from an industrial to a technological society. Predictions for the future based on these analyses and related to major sociological theories.

SOCL 495. Advanced Topics in Sociology (3-3-0)

Prerequisite: Nine credits in sociology, junior or senior status, or consent of instructor; corequisite: None.

Topics will vary and may be interdisciplinary.

Sociology and Social Work

SOSW 300. Introduction to Social Work (3-3-0)

Prerequisite: Three credits in social science or consent of instructor; corequisite: None. fall.

An examination of the profession of social work and the settings in which it is practiced. Emphasis will be on describing social work, describing

The School of Social Science and Professional Studies

social work practice, and reviewing the types of agencies in which social workers practice.

SOSW 367. The Social Welfare Institution (3-3-0)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None. fall.

History, philosophy, and issues of the social welfare system and the profession of social work in the United States. Includes study of poverty and income maintenance programs and policies and a study of current and future trends in social welfare and social work.

SOSW 368. Social Policy Analysis (3-3-0)

Prerequisites: SOCL 200, SOSW 300 or 367 recommended (*required for social work majors*); corequisite: None. spring.

Introduces a framework for the analysis of social policies and services. Focuses upon the variables that shape human service delivery systems. Application of analysis skills to an area of student interest is a required component of the course.

SOSW 369. Family and Child Welfare Policies and Services (3-3-0)

Prerequisite: Consent of instructor; corequisite: None. spring.

Review and analysis developed to assist or substitute for the family in meeting the needs and enhancing the development of children in the United States. Focuses upon understanding and utilizing policies and services affecting families and children.

SOSW 391/392. Methods and Tools of Social Research (3-3-0) (3-3-0)

Prerequisite: SOCL 200; corequisite: None. 391 in fall and 392 in spring.

391. Examination of the methodological problems of social research. Selection and definition of problems of investigation, research designs, data gathering techniques, and sampling.

392. Data-analysis techniques, including statistical analysis, measurement, scaling, multivariate analysis, and quantitative measures of association.

SOSW 393. Computer Applications for the Social Sciences (3-3-0)

Pre-Corequisite: Junior or senior standing, SOSW 391-392, or consent of instructor.

A survey of the applications of computers in the social sciences. Topics include: basic computer literacy, introduction to programming, use of statistical packages, data base management, and

the impact of computerization on the social sciences, society, and the work place. Students will complete a variety of computer-related tasks and will be exposed to both the PRIME 750 System and micro-computers.

SOSW 395. Elementary Topics (Credits vary)

Prerequisite: SOCL 200 or junior or senior standing; corequisite: None.

Topics vary and may be interdisciplinary.

SOSW 492. Readings in Sociology/Social Work

Prerequisites: 12 credits in sociology or social work, senior status, and consent of instructor; corequisite: None. fall and spring.

Extensive reading in a chosen subject under the direction of a faculty member. Subject must be decided upon and permission of instructor secured before registration. Final paper will be presented orally to the department.

SOSW 499. Independent Research or Research Internship (3-3-0)

Prerequisites: SOSW 391-392, senior status and consent of instructor; corequisite: None. fall and spring.

Independent research allows the student to do a research project on a chosen subject under the direction of a staff member. The research topic must be decided upon and permission of staff member secured before registration. The research internship provides the student with the opportunity of doing research in an agency or program setting. Students interested in the internship must receive permission from the department chairman prior to registration. Final paper will be presented orally to the department.

Social Work

SOWK 399. Social Work Practice I (3-3-0)

Prerequisite: Acceptance as a social work major; corequisite: SOWK 399L. spring.

Designed to develop beginning professional social work skills, knowledge, and values. Provides an introduction to the generalist approach, systems theory, and problem-solving methods as utilized in work with individuals, families, groups, and communities. Teaches skills in: use of self in the helping role; interviewing techniques; client assessments, intervention strategies, evaluation of outcomes; and integration of these skills with knowledge of diverse lifestyles

The School of Social Science and Professional Studies

and racial, ethnic, and cultural patterns. Stresses work with individuals.

SOWK 399L. Social Work Practice Lab (1-0-3)

Prerequisite: Acceptance as a social work major; corequisite: SOWK 399. spring.

A 50 clock-hour laboratory taken concurrently with SOWK 399. Includes off-campus observations in three to five social agencies, use of video equipment as a learning tool, role-playing exercises, and various methods of practicing skills learned in SOWK 399.

SOWK 400. Social Work Practice II (3-3-0)

Prerequisite: Grade of C or better in SOWK 399 and 399L; corequisite: SOWK 401 and 406. Continues development of beginning social work knowledge, skills, and values, using the generalist approach to practice. Stresses work with families and groups.

SOWK 401. Field Instruction I (4-1-0)

Prerequisite: Acceptance of field instruction application (See admission and evaluation procedures); corequisite: SOWK 400. fall.

A 215 clock-hour (minimum) field experience with directed engagement in social work practice in one of a variety of community social service settings.

SOWK 402. Field Instruction II (4-1-0)

Prerequisite: SOWK 401; corequisite: SOWK 490. spring.

A 215 clock-hour (minimum) field experience

with directed engagement in social work practice in one of a variety of community social service settings.

SOWK 406. Human Behavior in the Social Environment (3-3-0)

Prerequisites: SOCL 304, PSYC 307, acceptance as social work major; corequisite: SOWK 400. fall.

A course designed to help social work students build a base for social work practice upon the theoretical knowledge gained from the applied and social sciences. Behavior is studied as a dynamic process involving the on-going dialogue between persons throughout various developmental stages of life. A holistic framework will be used which presents human behavior as an adaptive process for living in one's environment.

SOWK 490. Senior Work Practice III (3-3-0)

Prerequisites: SOWK 400 and 401; corequisite: SOWK 402.

Continues development of beginning social work knowledge, skills, and values, using the generalist approach to practice. Helping at the macro level is stressed with particular emphasis on work with organizations and communities.

SOWK 495. Advanced Topics in Social Work (3-3-0)

Prerequisites: Nine credits in social work, senior status and consent of instructor.

Topics will vary and may be interdisciplinary.

Special Academic Programs

Honors

Coordinator: Associate Professor Jane C. Webb

Professors: Bostick (History), Lopater (Psychology), Summerville (Mathematics; VPAA)

Associate Professors: Boyd (Management & Marketing, Guthrie (Modern & Classical Languages & Literatures), Paul (English), J. Webb (Physics)

Assistant Professors: McLoughland (Dean, Admissions & Records)

The Honors Program is designed to attract superior and exceptionally motivated students to Christopher Newport College and to provide them with an enriched educational experience. The Honors Program is governed by the College Honors Council, a committee of six faculty members representing various disciplines on campus, the Dean of Admissions, and the Vice President for Academic Affairs.

The program recognizes two categories of honors students: (1) Honors Scholars, who are full-time students drawn from the freshman, sophomore, junior and senior classes, and (2) Christopher Newport College Scholars, who are mature full- or part-time students entering their last three semesters.

Honors Scholars

All first-time, classified, full-time freshmen applicants who meet SAT, grade point and class rank criteria set by the Honors Council will be designated Honors Scholars. The 10 highest ranking Honors Scholars are designated Styron Scholars of the freshman class. All Honors Scholars receive special advising and registration privileges, and may participate in the curricular offerings of the Honors Program and in the social activities sponsored by the Council. At the end of the freshman year, the Honors Scholars are evaluated by the Honors Council, and 10 students from this group will be named the Styron Scholars of the sophomore class. Honors Scholars must maintain a grade point average of 3.0 and must carry at least 12 hours per semester. It is anticipated that the top 10 of these Honors Scholars will receive scholarship aid in their junior and senior years. Junior and senior Honors Scholars must take part in the Honors curriculum. When vacancies occur in a class of Honors Scholars, the Honors Council will select from among full-time students whose grade point average is higher than 3.2 additional Honors Scholars.

Styron Scholars

Styron Scholars are the 10 highest ranking Honors Scholars in the freshman and sophomore class. They receive scholarships, awarded

annually, and must participate in the Honors curriculum for the freshman and sophomore years.

Christopher Newport College Scholars

Honors Scholars are mature full- or part-time students of exceptional ability. Students who hold a 3.5 grade point average and who are either midway through the junior year or have completed 75 hours may apply to the Honors Council for admission to the program. Applications require a letter of nomination from a regular CNC faculty member who has taught the candidate, and the nomination is expected to give evidence of the student's intellectual maturity. CNC Honors Scholars are released from all formal curricular requirements for the last three semesters, other than the completion of the requisite number of hours for graduation. Each Honors Scholar will plan his or her academic program with the help of a three-person committee consisting of a faculty member, a member of the Honors Council, and the Vice President for Academic Affairs (or his designee). Like the other students in the Honors Program, CNC Honors Scholars are expected to approach their subjects in unusual depth, demonstrating a high level of performance in their work.

The Honors Council, acting as an academic department, administers the Honors Program and those courses which are a part of the honors curriculum. Honors courses are open by permission of the instructor to other members of the student body who are not in the Honors curriculum.

Course Requirements

Required of Styron Scholars, this curriculum is also strongly recommended for Honors Scholars.

Freshman Year:

Fall – English 103 Honors, three credits

Spring – Honors 290, Great Trials, three credits

Special Academic Programs

Sophomore Year:

- Fall – Honors Seminar, one credit
- Spring – Honors Seminar, one credit

Additionally, *all* Honors Scholars must complete:

After 60 hours: *either* an upgraded course in the major, for three credits or more, *or* a research-oriented, independent study for three or more credits in the major.

After 90 hours: Honors 490, Problems in the Modern World, three credits.

The Honors Curriculum

ENGL 103H. Composition, Rhetoric and Literature (3-3-0)

Offered fall semester. A study of the principles of composition and rhetoric and an introduction to the major literary forms, with themes arising from this study. Emphasis in this course is on critical reading and writing skills, to prepare Honors Scholars for HONR 290. Required of Styron Scholars, recommended for all Honors Scholars.

HONR 290. Great Trials in History (3-3-0)

A seminar for Honors Scholars, Great Trials considers the historical and ethical issues in a series of famous trials. Required of Styron Scholars, recommended for all Honors Scholars.

HONR 291. Seminar in the Social Sciences (1-1-0)

Topics will vary. For example, in *The Dig: Contribution to Archaeology to the Study of Early Virginia*, students participated in a dig, discovered artifacts, studied the relationship between the artifacts and the on-going reconstruction of life

in early Virginia.

HONR 292. Seminar in the Arts or Humanities (1-1-0)

Topics will vary. For example, *Creativity in Art* included a study of creativity in several different fields of art. A field trip to Washington D.C. was made, to see first-hand the objects of study.

HONR 293. Seminar in the Natural and Quantitative Sciences (1-1-0)

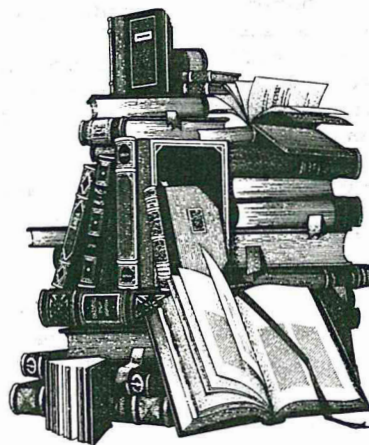
Topics will vary. For example, *Who Discovered Calculus?* studied the famous quarrel between supporters of Newton and Leibnitz over the origin of calculus.

HONR 490. Problems in the Modern World (3-3-0)

This course is designed to encourage students to examine the special concerns of the world they are about to enter. The course will have its own unique focus, which may change each year. Each student will prepare a research project on an issue of current concern viewed from the perspective of the student's major discipline.

(Major Field) 499H. Independent Study in the Major (3-3-0)

The opportunity to undertake a semester-long, independent research problem. Designed primarily for students intending to pursue graduate study, the course will be in the major field under the supervision of a faculty member and will result in a substantial document: a senior thesis, the report of a research project, or a similar written expression of the work accomplished.



Interdisciplinary Studies

The interdisciplinary major is a degree program at Christopher Newport College which permits a student, under the guidance of a faculty committee, to design and carry out an individual plan of study involving two or more academic disciplines. The student may earn either the Bachelor of Arts or the Bachelor of Science degree with a major in interdisciplinary studies.

An important objective of the interdisciplinary major is to involve the student in formulating a rationale for the design of a coherent individual program of study. This is a difficult task and requires a certain amount of knowledge and direction. The student will have to give considerable thought to his or her long-range learning objectives and to the best way to meet those objectives. For this reason, it is advisable for the student first to complete thirty or more semester hours of study. In order to complete predetermined learning objectives, a student must have his/her program approved by his/her faculty committee prior to the completion of seventy-five hours of course work. Before applying to the program, the student must make certain that his/her educational goals cannot be achieved by a regular departmental major supported by a minor and/or careful selection of electives.

The student's plan of study must meet College distribution requirements, must give evidence of the student's ability in the methods of disciplined academic inquiry, and must include a minimum of thirty credits in 300- and 400-level courses in the traditional academic disciplines.

To enter the program the student must first complete an application form which calls for a brief description of his/her proposed plan of study, a rationale for the plan, and an identi-

fication of those disciplines that will be involved in the student's plan of study. Application forms are available in the office of the Vice President for Academic Affairs. Applications must be submitted to the vice president by November 1 during the fall semester or March 15 during the spring semester. It is advisable for a student to discuss his/her plan of study with the vice president before submitting an application.

The vice president or his designate reviews the student's application; and if he judges the student's proposal to be viable, he appoints a faculty committee who represents the primary disciplines involved in the student's plan of study. The vice president also identifies one of the members of his committee as the student's major advisor. If the vice president is unable to approve the student's proposed plan of study, he does not appoint a faculty committee and notifies the student of the reason for his decision.

The appointed faculty committee initially meets with the student to discuss the proposed plan of study and continues to assist the student in the implementation of the details. This includes specifying the individual courses that the student must take to meet all requirements for the Bachelor of Arts or Bachelor of Science degree. All members of the committee must approve the student's program or any subsequent changes in an already approved program. Members of the committee as individuals advise the student throughout his/her program of study with regard to those academic disciplines in which the committee member has expertise. The student's major advisor oversees the total work of the student and confirms, prior to graduation, that he/she has completed all necessary requirements.

Payments and Fees

***Academic Tuition – Per Credit Hour**

In-State Students.	\$51.50
Out-of-State Students.	\$86.50
Off-Campus-Out-of-State Students	\$56.50
Audit Charge	\$51.50
Applied Music Fee: Students taking an applied music course must pay tuition plus an Applied Music Fee, as follows:	
● For a one-credit applied music course: Tuition plus \$105 Applied Music Fee	
● For a two-credit applied music course: Tuition plus \$210 Applied Music Fee	
● For a three-credit applied music course: Tuition plus \$210 Applied Music Fee.	
Continuing Studies Courses.	As announced in course books

***1985-86 Rates**
—Subject to change—

General Fees

Application Fee.	\$10.00
Classified Status Fee.	\$10.00
Registration Fee (per registration period).	\$10.00
Laboratory Fee	\$10.00
Late Registration Fee.	\$15.00
Challenge Examinations (each)	\$20.00
Transcripts (first free; others, each)	\$ 1.00
Returned Check Fee (per check)	\$10.00
Graduation Fee.	\$25.00
Late Payment of Promissory Note (per late payment)	\$10.00
Student Identity Card (I.D.)	\$ 5.00
Vehicle Parking Decal (entire year)	\$ 9.00
(half-year)	\$ 6.00
(summer and continuing studies courses)	\$ 3.00

—Subject to change—

The College reserves for itself and its departments, the right to withdraw or change the fees announced in this catalog. Interpretation of matters concerning fees in this catalog is the responsibility of the Vice President for Financial Affairs. The President of Christopher Newport College has final authority in the interpretation.

The *Registration News* should be consulted for the most current fees.

● **General Fees listed above are non-refundable.**

● **Academic Tuition is fully-earned and due at registration.**

Payments and Fees Semester Hours of Credit Part-Time

Virginia

1	2	3	4	5	6	7	8	9	10	11
\$51.50	\$103	\$154.50	\$206	\$257.50	\$309	\$360.50	\$412	\$463.50	\$515	\$566.50

Out-of-State

1	2	3	4	5	6	7	8	9	10	11
\$86.50	\$173	\$259.50	\$346	\$432.50	\$519	\$605.50	\$692	\$778.50	\$865	\$951.50

Semester Hours of Credit Full-Time

Virginia

12	13	14	15	16	17	18
\$618	\$669.50	\$721	\$772.50	\$824	\$875.50	\$927

Out-of-State

12	13	14	15	16	17	18
\$1038	\$1124.50	\$1211	\$1297.50	\$1384	\$1470.50	\$1557

Sample Tuition and Fee Arrangement

Student applies for classified admission: \$10 Application Fee; \$10 Classified Status Fee.

After being admitted and attending orientation, the student reports for registration to register for 15 credit hours, as an in-state student: 15 credit hours \times \$51.50 per credit hour = \$772.50

At registration, the student pays a Registration Fee (each semester): \$10 Registration Fee.

Subtotal: \$20 + \$772.50 + \$10 = \$802.50

After applying and being approved for the College Deferred Payment Plan, the student signs a Promissory Note for 60% of tuition: \$463.50 (Promissory Note).

Deferred Payment Plan down-payment (Minimum 40%) is made: \$309.

Subtotal: \$463.50 + \$309 = \$772.50

Three weeks into the semester, the student believes (s) he can receive credit for a CNC course by taking a Challenge Exam: \$20 Challenge Fee (Per Exam).

The student later misses payment deadline on the Promissory Note: \$10 Late Payment Fee.

The student purchases a student identity (I.D.) card: \$5 per card

The student registers his/her motor vehicle at the Parking Office: \$9 Decal Fee (Full-Year Fee)

Total Charges This Semester: \$20 + \$772.50 + \$10 + \$20 + \$10 + \$5 + \$9 = \$846.50

A Classified Applicant is one who plans to earn a degree at CNC. Transfer students officially transfer credits earned elsewhere, in accordance with College transfer policy. (See "Admissions" section for details).

Fees

All persons applying for admission to the College must submit a **\$10 Application Fee**. This **Application Fee** will not apply to auditors, students taking only Non-Credit College-Preparatory courses, Summer Session students, cross-registrants from other institutions, Riverside Nursing School students, and Senior Citizens. The **Application Fee**, in the form of a check or a money order made payable to Christopher Newport College, must accompany the application for admission. If a student pays the **Application Fee** but does not enroll in coursework for two consecutive semesters (summers excluded), the fee must be paid upon re-entry to the College. If the student does not enroll in the semester for which (s) he originally applied, the **Application Fee** may be carried forward only to the next semester. **This fee is non-refundable and may not be applied to other fees.**

Persons who initially apply for admission as Classified students and those requesting to change their status to Classified must submit a **\$10 Classified Status Fee**. This fee is in addition to the **Application Fee**. The **Classified Status Fee** is a one-time, non-refundable fee which may not be applied to other fees. If a student does not enroll in the semester for which (s) he originally applied as a Classified student, the **Classified Status Fee** may be carried forward only to the next semester (summers excluded).

The **Registration Fee** applies to each student for each semester. Registration for multiple sessions during summer school is considered one registration for the purpose of determining this charge.

The **Laboratory Fee** applies to any course so identified in the appropriate *Registration News* and/or *College Catalog*. The student must pay this fee for each "Laboratory Fee Required" course in which the student enrolls. **This fee is non-refundable.**

The **Late Registration Fee** applies to any student registration not completed within the announced preregistration or regular registration period.

The **Registration News** should be consulted for announced registration periods and other specific requirements.

Questions concerning payments and fees should be directed to the Office of Student Accounts, second floor, Administration Building (Phone: 599-7060).

Payment

All previous charges owed to the College must be paid prior to completion of registration. Students who preregister must make payment in-full or make other arrangements with the Business Office on/or before the announced preregistration payment date.

Registration is not complete until your bill has been settled with the Business Office.

Several methods of payment are accepted by the College: Cash, check, Money Order, MasterCard, VISA, and the College's Deferred Payment Plan. Students receiving any form of financial aid should provide the Student Accounts Office with properly-approved tuition assistance forms and pay the balance prior to the applicable payment date stated in the *Registration News*. Credit card charges in excess of \$300 are subject to verification of adequate credit limit balance, and registration is not considered complete until verification is complete.

Registration will be cancelled for any student who has not settled his/her account by the prescribed payment date.

Deferred Payment Plan

Students wishing to use the Deferred Payment Plan must make application to the Office of Student Accounts. In general, students must be in good standing with the College to be eligible to use this plan. All previous charges, fees or fines must have been paid in-full before students are allowed to use the plan. Students who have a record of late payment or returned checks from previous semesters may be denied use of the plan.

To avoid delays, students should make application for the plan *prior* to registration. The following charges are **not** included in the plan:

- 1) Courses added during drop/add periods;
- 2) Applied music fees; or
- 3) Continuing education course charges.

The Following Terms Apply to the Deferred Payment Plan:

- 1) *Downpayment* of \$150 or 40 percent of the total charge, whichever is larger.
- 2) The *balance* will be due in either one or two installments depending on the amount of the remaining unpaid balance.
- 3) A *late payment charge* of \$10 will be added to all accounts that are not paid by the due date.
- 4) If the terms of the Deferred Payment Plan are not adhered to, a student's registration will be **CANCELLED** and all money previously paid to the College will be retained by the College.

All students using the Deferred Payment Plan must sign a promissory note. Normally, in-state students registering for fewer than five credit hours and out-of-state students registering for fewer than four credit hours should not apply for the plan. The note payments are generally due on the business day falling closest to September 15 and October 15 for the fall semester, and February 15 and March 15 for the spring semester.

Checks

Checks for payment of tuition and fees should be made payable to Christopher Newport College. A returned check fee will be charged for checks returned to the College. If the check is not covered within seven calendar days of the date when the check is returned, the student's registration will be cancelled.

Impound Policy

Registration of returning students will not be permitted unless:

- 1) Previous College financial obligations have been met;
- 2) College property (including library books and materials) has been returned in satisfactory condition.

If these conditions have not been met, the College reserves the right to withhold release of transcripts and the awarding of degrees.

In accordance with Commonwealth of Virginia policy, delinquent accounts must be referred for collection to the Attorney General of the Commonwealth of Virginia, or to a collection agency. The College also participates in the Commonwealth's set-off debt collection. This allows the College to attach a state income tax refund due a student in the amount owed to the College.

Veterans Administration Benefits

Veterans, servicemembers, and dependents using V.A. education benefits should be aware that all financial arrangements must be made at the point of registration, in accordance with College policy pertaining to tuition and fee payment. Persons using V.A. education benefits for the first time should anticipate a delay of approximately eight weeks before the first education allowance check is mailed to the recipient. The Office of Veteran Affairs, located in Room 116 of the Administration Building, is open on a part-time basis, and persons with V.A. questions should contact 599-7175.

Notice to Students Receiving Financial Aid

Courseload reductions and additions may affect the amount of financial aid awarded to the student. Students will be responsible for any charges remaining after a reduction, in accordance with College policy on refunds. Students who have been awarded financial aid on the basis of a full-time courseload loan should contact the Office of Financial Aid, if the student is reducing his/her total hours to less than 12 credit hours.

College Refund Policy

Students who wish to withdraw from the College must notify the College on a form available in the Office of the Registrar. No refund will be made to a student who withdraws unofficially or who has been required to withdraw by the College, regardless of the date of the withdrawal. Since all refund checks come from the State Treasurer's Office in Richmond, processing may take as much as 90 days from the time of registration or withdrawal, whichever is applicable. Subject to the following regulations and exceptions, all charges made by the College for fees are considered to be fully-earned by the College when the student completes registration.

Exceptions	% of Charges Refunded
When a student drops a class(es) or withdraws before classes begin	100%
When a class(es) is/are cancelled or moved at the option of the College	100%
When a student drops a class(es) or withdraws during the 1st week of class	80%
When a student drops a class(es) or withdraws during the 2nd week of class	60%
When a student drops a class(es) or withdraws during the 3rd week of class	40%
When a student drops a class(es) or withdraws during the 4th week of class	20%
When a student drops a class(es) or withdraws after the 4th week of class	No Refund

No refunds will be given for non-credit courses or registration fees. The applied music fee is not refundable after the start of classes.

Incidental Expenses

It is impossible to estimate the exact costs of clothing, travel, and other incidental expenses which the student incurs, for these are governed largely by the habits of the individual. The cost of books depends on the courses taken. Money for textbooks cannot be included in checks covering tuition and fees; they should be paid for in cash or by separate check/money order when purchased.

Cashing of Student Checks

The College does not have facilities for handling deposits for students' expenses, but the Business Office is prepared to cash checks up to \$25.00. Checks should be made payable to Cash. Two-party checks will be cashed only when payable to the student by his/her parent. Under regulations governing state-supported agencies, the College is not permitted to cash checks made payable to Christopher Newport College.

Senior Citizens

The Senior Citizens Higher Education Act of 1974 provides tuition abatement for senior citizens. The Act defines a senior citizen as "a person who, before the beginning of any term, semester or quarter in which such person claims entitlement for the benefits. . . (i) has reached 60 years of age and (ii) has had his/her legal domicile in this state for one year."

The Act further stipulates that credit course entitlement is limited to those senior citizens whose income for federal income tax purposes was less than \$5,000 for the year preceding the period in which entitlement is sought. This income limitation is applicable to registration for credit-bearing courses only. **There is no income limitation for those auditing or enrolled in continuing studies courses.**

Senior citizens may register for continuing education non-credit courses without paying tuition and fees, except fees established for course materials, and other consumable items. The continuing education program welcomes the participation of senior citizens with the understanding that their registration is on a space-available basis and that a minimum number of paying students is required to enable the course's formation. Also, there is no limitation on the number of semesters or sessions, but no more than three courses may be taken in any

one semester or summer session. Forms to request the senior citizens' abatement are available in the Office of Student Accounts.

Classification as a Virginia Student

The *Code of Virginia* (Section 23-7) governs eligibility for in-state tuition privileges. Revisions to Section 23-7 became effective on July 2, 1984.

At Christopher Newport College, the office responsible for making the determination as to the applicant's eligibility for in-state tuition is the Office of Admissions, located in Room 113 of the Administration Building. Copies of the Guidelines associated with the revised Code are available in that office, as well as a summary of the applicant's appellate rights regarding this matter. Following is a summary of the definitions that apply in that section of the Code of Virginia. Applicants who have questions concerning in-state tuition privileges should contact the Office of Admissions as soon as possible prior to submitting their applications for in-state privileges. All applicants for admission to the College who wish to be considered for in-state tuition rates must complete the "Application for Virginia In-State Tuition Rates" form available in the Office of Admissions. Failure to submit this form to the Office of Admissions will result in the College declaring you out-of-state, for tuition purposes.

Section 23.7-4, of the *Code of Virginia*, governs eligibility for in-state tuition. Effective July 1, 1984, the statute provides:

S 23-7.4. Eligibility for in-state tuition charges. — A. For purposes of this section the following definitions shall apply:

"Date of the alleged entitlement" means the first official day of class within the term, semester or quarter of the student's program.

"Dependent student" means one who is listed as a dependent on the federal or state income tax return of his parents or legal guardian or who receives substantial financial support from his parents or legal guardian.

"Domicile" means the present, fixed home of an individual to which he returns following temporary absences and at

which he intends to stay indefinitely. No individual may have more than one domicile at a time. Domicile, once established, shall not be affected by mere transient or temporary physical presence in another jurisdiction.

"Domiciliary intent" means present intent to remain indefinitely.

"Emancipated minor" means a student under age of eighteen on the date of the alleged entitlement to his care, custody and earnings and who no longer claim him as a dependent for tax purposes.

"Full-time employment" means employment resulting in, at least, an annual earned income reported for tax purposes equivalent to fifty work weeks of forty hours at minimum wage.

"Independent student" means one whose parents have surrendered the right to his care, custody and earnings, have ceased to support him, and have not claimed him as a dependent on federal and state income tax returns for at least twelve months prior to the date of the alleged entitlement.

"Substantial financial support" means financial support in an amount which equals or exceeds that required to qualify the individual to be listed as a dependent on federal and state income tax returns.

"Unemancipated minor" means a student under the age of eighteen on the date of the alleged entitlement who is under the legal control of and is financially supported by either of his parents, legal guardian or other person having legal custody.

B. In order to become eligible for in-state tuition, an independent student shall establish by clear and convincing evidence that for a period of at least one year immediately prior to the date of the alleged entitlement, he was domiciled in Virginia and had abandoned any previous domicile, if such existed.

In order to become eligible for in-state tuition, a dependent student or unemancipated minor shall establish by clear and convincing evidence that for a

period of at least one year prior to the date of the alleged entitlement, the person through whom he claims eligibility was domiciled in Virginia and had abandoned any previous domicile, if such existed.

In determining domiciliary intent, all of the following applicable factors shall be considered: continuous residence for at least one year prior to the date of alleged entitlement, state to which income taxes are filed or paid, driver's license, motor vehicle registration, voter registration, employment, property ownership, sources of financial support, location of checking or passbook savings accounts and any other social or economic relationships with the Commonwealth and other jurisdictions. Domiciliary status shall not ordinarily be conferred by the performance of acts which are auxiliary to fulfilling educational objectives or are required or routinely performed by temporary residents of the Commonwealth. Mere physical presence or residence primarily for educational purposes shall not confer domiciliary status.

Those factors presented in support of entitlement to in-state tuition shall have existed for the one-year period prior to the date of the alleged entitlement.

C. The domicile of a married person shall be determined in the same manner as the domicile of an unmarried person.

The domicile of an emancipated minor shall be established in the same manner as any other independent student.

Any alien holding an immigration visa or classified as a political refugee shall also establish eligibility for in-state tuition in the same manner as any other student. However, absent congressional intent to the contrary, any person holding a student or other temporary visa shall not have the capacity to intend to remain in Virginia indefinitely and, therefore, shall be ineligible for Virginia domicile and for in-state tuition charges.

The domicile of a dependent student shall be rebuttably presumed to be the domicile of the parent or legal guardian claiming him as an exemption on federal

or state income tax returns currently and for the tax year prior to the date of the alleged entitlement or providing him substantial financial support.

A matriculating student who has entered an institution classified as out-of-state shall be required to rebut by clear and convincing evidence the presumption that he is in the Commonwealth for the purpose of attending school and not as a bona fide domicile.

For the purposes of this section, the domicile of an unemancipated minor or a dependent student eighteen years of age or older may be either the domicile of the parent with whom he resides or the parent who claims the student as a dependent for federal and Virginia income tax purposes for the tax year prior to the date of the alleged entitlement and is currently so claiming the student. If there is no surviving parent or the whereabouts of the parents are unknown, then the domicile of an unemancipated minor shall be the domicile of the legal guardian of such unemancipated minor unless there are circumstances indicating that such guardianship was created primarily for the purpose of conferring a Virginia domicile on the unemancipated minor.

D. It is incumbent on the student to apply for change in domiciliary status on becoming eligible for such change. Changes in domiciliary status shall only be granted prospectively from the date such application is received.

A student who knowingly provides erroneous information in an attempt to evade payment of out-of-state fees shall be charged out-of-state tuition fees for each term, semester or quarter attended and may be subject to dismissal from the institution. All disputes related to the veracity of information provided to establish Virginia domicile shall be appealable through the due process procedure required by paragraph H below.

E. A nonmilitary student whose parent or spouse is a member of the armed forces may establish domicile in the same manner as any other student. However, a

nonmilitary student, not otherwise eligible for in-state tuition, whose parent or spouse is a member of the military stationed or residing in the Commonwealth pursuant to military orders and claiming a state other than Virginia on their State of Legal Residence Certificate, shall be entitled to in-state tuition charges when the following conditions are met: (i) if the student is a child of a member of the armed forces, then the nonmilitary parent shall have, for at least one year immediately prior to the date of alleged entitlement for in-state tuition charges, resided in Virginia, been employed full time and paid individual income taxes to Virginia. Such student shall be eligible for in-state tuition charges only if the nonmilitary parent claims him as a dependent for Virginia and Federal income tax purposes; or (ii) if the student is the spouse of a member of the armed forces, then such student shall have, for at least one year immediately prior to the date of alleged entitlement for in-state tuition, resided in Virginia, been employed full time and paid individual income taxes in Virginia. Any student whose spouse or parent is a member of the armed forces shall be eligible for in-state tuition charges for so long as these conditions continue to be met.

F. Student who live outside this Commonwealth and have been employed full time inside Virginia for at least one year immediately prior to the date of the alleged entitlement for in-state tuition shall be eligible for in-state tuition charges if such student has paid Virginia income taxes on all taxable income earned in this Commonwealth for the tax year prior to the date of the alleged entitlement. Students claimed as dependents for federal and Virginia income tax purposes who live outside this Commonwealth shall become eligible for in-state tuition charges if the nonresident parent claiming him as a dependent has been employed full time inside Virginia for at least one year immediately prior to the date of the alleged entitlement and paid Virginia income taxes on all taxable

income earned in this Commonwealth for the tax year prior to the date of the alleged entitlement. Such students shall continue to be eligible for in-state tuition charges for so long as they or their qualifying parent are employed full time in Virginia, paying Virginia income taxes on all taxable income earned in this Commonwealth and the student is claimed as a dependent for Virginia and federal income tax purposes.

H. Each public institution of higher education shall establish an appeals process for those students who are aggrieved by decisions on eligibility for in-state tuition charges. The Administrative Process Act (SS 9-6.14:1 et seq.) shall not apply to these administrative reviews.

An initial determination shall be made. Each appeals process shall include an intermediate review of the initial determination and a final administrative review. The final administrative decision shall be in writing. A copy of this decision shall be sent to the student. Either the intermediate review or the final administrative review shall be conducted by an appeals committee consisting of an odd number of members. No person who serves at one level of this appeal process shall be eligible to serve at any other level of this review. All such due process procedures shall be in writing and shall include time limitations in order to provide for orderly and timely resolutions of all disputes.

Any party aggrieved by a final administrative decision shall have the right to review in the circuit court for the jurisdiction in which the relevant institution is located. A petition for review of the final administrative decision shall be filed within thirty days of receiving the written decision. In any such action, the institution shall forward the record to the court, whose function shall be only to determine whether the decision reached by the institution could reasonably be said, on the basis of the record, to be supported by substantial evidence and not to be arbitrary, capricious or otherwise contrary to law.

Procedure

Upon receipt in the Office of Admissions, your "Application for Virginia In-State Tuition Rates" form will be reviewed by a staff member for an initial determination. If the staff member disagrees with your own determination for in-state privileges, you will be contacted immediately and given an explanation of the determination.

Appeals

If you disagree, you may request an immediate appeal. You may make this request orally or in writing, but it must be done within 10 working days of being notified of the initial determination. A panel of three staff members in the Office of Admissions will then meet with you to hear your appeal. You are welcome to bring any supporting documentation with you (e.g., income tax returns) that you think may help. The panel will respond to your appeal within five working days.

If you still disagree, you may request a final appeal. This appeal must be made in writing, addressed to the Dean of Admissions and Records, within five working days of the first appeal decision. A panel of College officials will then convene to consider your appeal. A written determination will be sent to you by U.S. Registered Mail within five days of the hearing. Should you disagree with the final determination, you then have 30 days to take this matter to the appropriate Circuit Court.

Changing Status

If you enter the College as a non-domiciliary paying out-of-state tuition, and believe that you have subsequently become a resident of Virginia for tuition purposes, you must complete the appropriate application in the Office of Admissions. If you are correct, you will become eligible for in-state tuition privileges for the next semester in which you enroll.

The Board of Visitors 1984-85 Session

Officers of the Board

Stephen D. Halliday
Rector
Hampton, VA

William T. O'Neill
Vice Rector
Williamsburg, VA

Billie M. Millner
Secretary
Newport News, VA

Executive Committee

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William T. O'Neill
Vice Chairman

Billie M. Millner
Secretary

J. Dewey Wilson
Member-at-Large

Martha M. Ailor
Member-at-Large

Visitors

Term Expires: June 30, 1985

Mary L. Passage
Newport News, VA

William R. Savage, Jr.
Suffolk, VA

June 30, 1986

Martha M. Ailor
Hampton, VA

Stephen D. Halliday
Hampton, VA

Billie M. Millner
Newport News, VA

William T. O'Neill
Williamsburg, VA

William R. Walker, Jr.
Newport News, VA

June 30, 1987

Erwin B. Drucker
Newport News, VA

Dorothy B. Duffy
Hampton, VA

J. Dewey Wilson
Hampton, VA

June 30, 1988

A. Jack Georgalas
Newport News, VA

Betty N. Levin
Newport News, VA

Mary Alice Spear
Hampton, VA

Faculty*

Where dates appear, the first date indicates the year when the individual was first appointed as a member of the faculty; the second date indicates the year when the present rank was attained.

Emeriti

Professors

Joyce K. Sancetta

Department of English. B.A., College of Wooster; Ph.D., Yale University. 1966; 1971. Emerita: 1976.

Edward Spencer Wise

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Associate Professors

Daisy Davis Bright

Department of Mathematics. A.B., M.A., University of Alabama. 1965; 1971. Emerita: 1977.

Alice Fracker Randall

Department of English. A.B., George Washington University; M.Ed., College of William and Mary. 1969; 1982. Emerita: 1984.

Active Faculty

Professors

John Edwin Anderson, Jr.

Department of Management and Marketing. B.A., University of Akron; Ph.D., Ohio State University. 1980; 1963.

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Department of Biology, Chemistry, and Environmental Science. B.S., University of Delaware; M.S., Ph.D., Ohio State University. 1970; 1978.

Martin William Bartelt

Department of Mathematics. B.A., Hofstra University; M.A., Ph.D., University of Wisconsin. 1975; 1982.

Franklin Samuel Bauer

Department of Psychology. B.A., M.A., Ph.D., University of Illinois. 1971; 1978.

Henry Marshall Booker

Department of Economics (Brauer Professor of Economics, 1983-84). B.A., Lynchburg College; Ph.D., University of Virginia. 1969; 1972.

Theodora Pierdos Bostick

Department of History. B.A., Mundelein College; M.A., Ph.D., University of Illinois. 1970; 1977.

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Robert Lewis Causey

Department of Computer Science. B.S., Western Kentucky University; M.S., University of Kentucky; Ph.D., Stanford University. 1983, 1980.

Robert Charles Coker

Department of Management and Marketing. B.S., West Virginia Wesleyan College; M.S., Ph.D. University of Illinois. 1977; 1980.

**as of March 1, 1985*

Professors (cont'd.)

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Department of Education. B.A., Suffolk University; Ed.M., Boston University; Ed.D., College of William and Mary. 1972; 1983.

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Robert Johnson Edwards

Department of Biology, Chemistry, and Environmental Science. B.A., Hobart College; Ph.D., University of Rochester. 1968; 1976.

Lora Ruth Friedman

Department of Education. B.S., M.A., City College of New York; Ed.D., University of Florida. 1974; 1977.

Gary Hammer

Department of Biology, Chemistry, and Environmental Science. B.S., M.S., Wichita State University; Ph.D., Georgia Institute of Technology. 1967; 1972.

Joseph Francis Healey

Department of Sociology and Social Work. A.B., M.A., College of William and Mary; Ph.D., University of Virginia. 1969; 1984.

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Department of Psychology. B.A., George Washington University; M.A., Ph.D., Michigan State University. 1973; 1982.

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Department of Philosophy and Religious Studies. Ph.D., Free University of Berlin. 1972; 1979.

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Department of Management and Marketing. A.B., University of South Carolina; M.S., New York University; Ph.D., Ohio State University. 1976; 1959.

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Department of Arts and Communication. B.A., Baylor University; M.A., University of Houston; Ph.D., University of Michigan. 1976; 1984.

Sanford Edward Lopater

Department of Psychology. B.A., Miami University; Ph.D., University of Virginia. 1973; 1984.

Professors (cont'd.)

Vinod Premchand Maniyar

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Professors (cont'd.)

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Associate Professors

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Office of the Vice President for Financial Affairs. B.A., Duke University; M.S.A., George Washington University. 1982; 1982.

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Department of Computer Science. B.S., Hampden-Sydney College; M.A., Louisiana State University; D.Ed., Pennsylvania State University. 1979; 1979.

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Associate Professors (cont'd.)

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Associate Professors (cont'd.)

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Dexter R. Rowell

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Department of Philosophy and Religious Studies. B.A., Rutgers University; M.A., New York University; Ph.D., The New School of Social Research. 1976; 1979.

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Department of Psychology. B.S., National Taiwan University; M.A., Ph.D., University of Utah. 1976; 1980.

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Department of Mathematics. B.S., Polytechnic Institute of Brooklyn; M.S., Ph.D., Cornell University. 1977; 1981.

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Assistant Professors

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Franklin Kenneth Babcock

Office of Counseling and Career Services. B.S., Union College; M.A., University of Kentucky; Ph.D., Ohio University. 1976; 1976.

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Captain John Smith Library. B.A., University of Florida; M.A., M.S., University of Illinois; J.D., John Marshall Law School. 1983; 1983.

Charles Edward Behymer, Jr.

Office of the Vice President for Student Affairs. B.A., University of Maryland; M.A., Eastern Michigan University; Ph.D., University of Michigan. 1978; 1978.

Assistant Professors (cont'd.)

Agnes Logan Braganza

Office of Continuing Studies and Community Education. B.S.N., Duke University; M.A., College of William and Mary. 1978; 1984.

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Richard Walter Butchko

Department of Sociology and Social Work. B.S., Pennsylvania State University; M.S.W., West Virginia University; M.A., Duquesne University. 1980; 1982.

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Department of English. B.A., University of San Francisco; M.A., San Francisco State University; Ph.D., New York University. 1984; 1982.

Susan Lewis Casey

Department of Management and Marketing. B.B.A., M.B.A., College of William and Mary. 1979; 1984.

Ronnie Cohen

Department of Management and Marketing. B.A., Kirkland College; J.D., College of William and Mary. 1983; 1983.

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Department of Physics. B.A., Rutgers University; Ph.D., University of Pennsylvania. 1984; 1984.

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Office of Financial Aid. B.S., Louisiana State University; M.B.A., Southeastern Louisiana University. 1983; 1983.

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Charles Earle Edwards

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Robert Evans Fellowes

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Department of Computer Science. B.A., Cornell University; M.S., Stevens Institute of Technology. 1984; 1977.

David Earl Game

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Apolonio Garcia (Major, U.S. Army)

Department of Military Science. B.S., United States Military Academy; M.S., Florida Institute of Technology. 1984; 1984.

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Department of Accounting and Finance. B.A., Carroll College; J.D., University of Montana; M.L.T., College of William and Mary. 1982; 1982.

Judith Hietanen

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Assistant Professors (cont'd.)

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Department of Education. B.S., Longwood College; M.Ed., Texas A & M University; Ed.D., Virginia Polytechnic Institute and State University. 1976; 1981.

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Department of Management and Marketing. B.S., Duke University; M.B.A., New York University. 1982; 1982.

John Emmett Jenkins

Department of Education. A.B., University of Richmond; M.Ed., College of William and Mary. 1972; 1972.

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Department of Sociology and Social Work. B.A., Grove City College; M.S.W., University of Hawaii. 1979; 1979.

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Office of Student Life. B.S., State University College at Geneseo; M.S., State University of New York at Albany. 1978; 1978.

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Office of Admissions. A.B., A.M., Rutgers University. 1975; 1975.

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Instructors

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Office of the Registrar. B.A., Virginia Union University. 1972; 1972.

Gordon Vincent Brown, Jr.

Office of Intercollegiate Athletics. B.A., Emory and Henry College; M.S., Virginia Polytechnic Institute and State University. 1982; 1982.

Norma Johnson Brown

Office of Continuing Studies and Community Education. B.S., M.S., Radford University. 1984; 1984.

Instructors (cont'd.)

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Michael Paul Loizides

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Department of Mathematics. B.A., Youngstown State University; M.S., Ohio State University. 1984; 1982.

Instructors (cont'd.)

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Robert G. Bryan, B.S., M.S.	Computer Science
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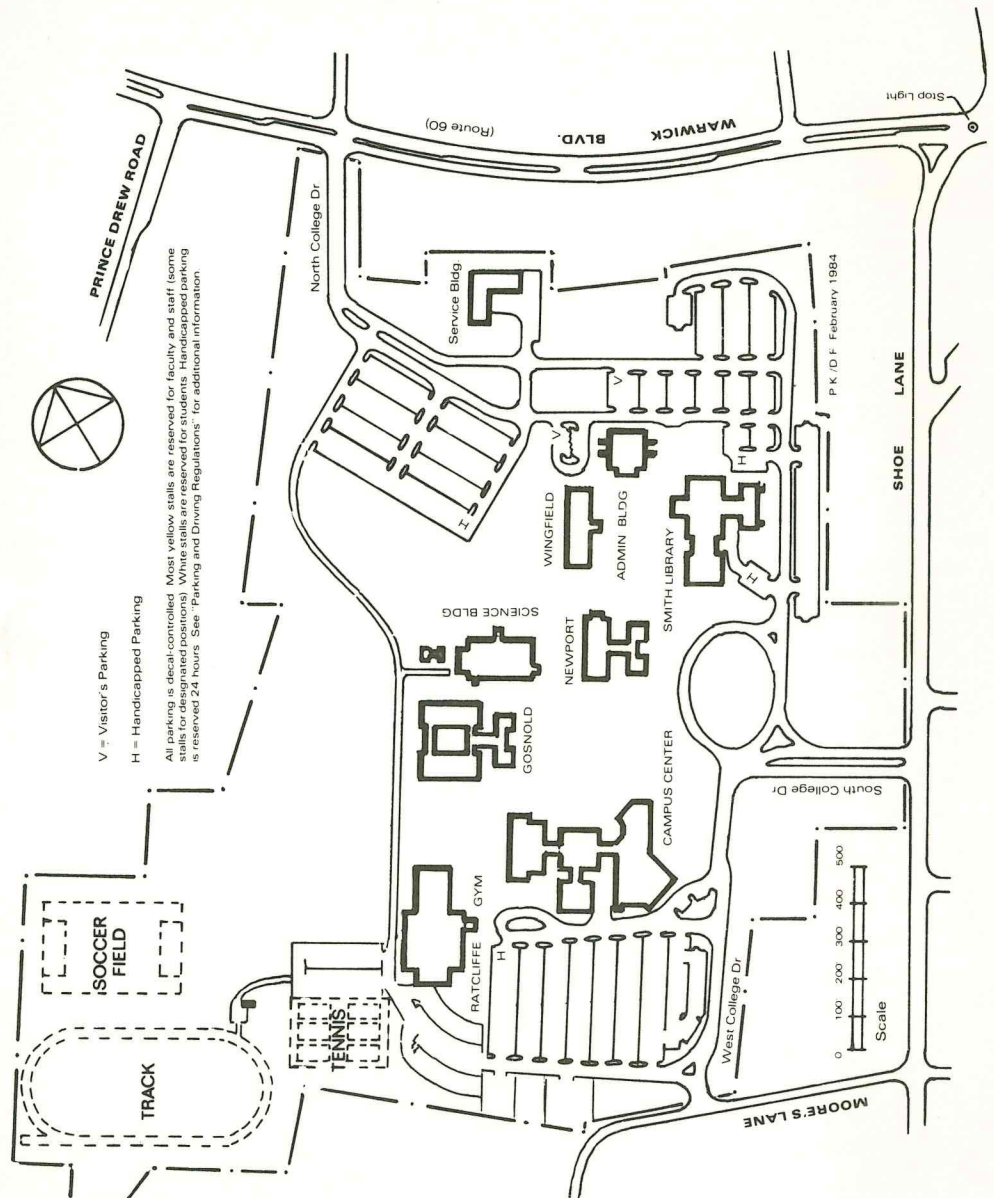
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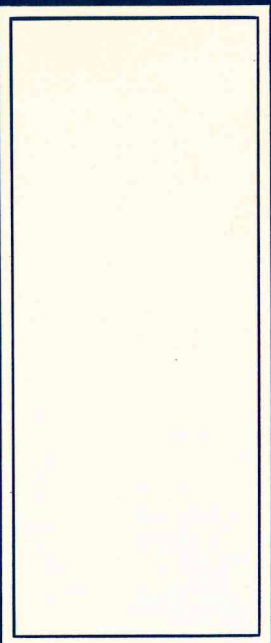
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