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*Associate Professor of
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Associate Professor of History
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Associate Professor of Religion
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*Associate Professor of
Physical Education*
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*Associate Professor of Journalism
and Mass Communications*
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- Darcy L. Russell, Ph.D.
Associate Professor of Biology
- Maryanne C. Simurda, Ph.D.
Associate Professor of Biology
- Ken'ichi Ujie, M.A.
*Associate Professor of
East Asian Languages*
- Jeffrey C. Barnett, Ph.D.
*Associate Professor of
Romance Languages*
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*Associate Professor of
Physical Education*
- John A. Tucker, M.S.
*Associate Professor of
Physical Education*
- Frank S. Miriello, B.S.
*Associate Professor of
Physical Education*
- Yolanda D. Warren, M.A., M.L.S.
Associate Professor
- M. Jeffries Stickley, M.Ed.
*Associate Professor of
Physical Education*

Kristin L. Jacobs Moore, M.A.
*Associate Professor of Physical
Education*

Hugh A. Blackmer, M.L.S., Ph.D.
Associate Professor

Suzanne Keen, Ph.D.
Associate Professor of English

J. Gavin Colliton, M.Ed.
*Assistant Professor of
Physical Education*

Kary D. Smout, Ph.D.
Assistant Professor of English

Bill Oliver, Ph.D.
Assistant Professor of English

David Jorgensen Harbor, Ph.D.
Assistant Professor of Geology

Domnica V. Radulescu, Ph.D.
*Assistant Professor of
Romance Languages*

C. Vaughan Stanley, M.A., M.A.
Assistant Professor

Edward Adams, Ph.D.
Assistant Professor of English

George R. Bent, Ph.D.
Assistant Professor of Art

Terri A. Dadio, B.A.
*Assistant Professor of
Physical Education*

Erich S. Uffelman, Ph.D.
Assistant Professor of Chemistry

Anna Brodsky, Ph.D.
Assistant Professor of Russian

Marcia B. France, Ph.D.
Assistant Professor of Chemistry

Jeanine Stewart, Ph.D.
Assistant Professor of Psychology

Pamela J. Vermeer, Ph.D.
*Assistant Professor of
Computer Science*

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Assistant Professor of English

Winnifred F. Sullivan, Ph.D.
Assistant Professor of Religion

Theodore C. DeLaney, Ph.D.
Assistant Professor of History

Helen I'Anson, Ph.D.
Assistant Professor of Biology

Kevin M. Moore, B.S.
*Assistant Professor of
Physical Education*

Marc Conner, Ph.D.
Assistant Professor of English

Francoise Frégnac-Clave, Ph.D.
*Assistant Professor of
Romance Languages*

Jack A. Wilson, Ph.D.
Assistant Professor of Philosophy

John W. Tombarge, M.L.S.
Assistant Professor

Terry Vosbein, D.M.A.
Assistant Professor of Music

Claudette Artwick, Ph.D.
*Assistant Professor of Journalism
and Mass Communications*

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Assistant Professor of English

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Assistant Professor of Mathematics

Elizabeth P. Knapp, Ph.D.
Assistant Professor of Geology

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Assistant Professor of Religion

Ellen C. Mayock, Ph.D.
*Assistant Professor of Romance
Languages*

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Assistant Professor of Mathematics

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Assistant Professor of Geology

Andrew Pulsifer, M.S.
*Assistant Professor of Physical
Education*

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Assistant Professor of Psychology

Marshall Kirkland Follo, M.A.
Instructor in German

Greta McCaughrin, M.A.
Instructor in Russian

Dennis G. Manning, M.A.
Instructor in English

Alison Bell, M.A.
*Instructor in Anthropology and
Sociology*

Scott Williamson, M.M.
Instructor in Music

PURPOSES OF THE COLLEGE

The purposes of the College are several: to provide the essentials of a liberal education to all undergraduates before they separate into their fields of specialization; to offer courses and majors leading to the degrees of Bachelor of Arts and Bachelor of Science; to encourage independent work and scholarly investigation; and to present courses preliminary to professional training in such fields as engineering, journalism, law, and health.

All freshmen in the University are members of the College. Their work will be taken in those studies which, in the opinion of the faculty, provide the fundamentals of a liberal education. The prescriptions of this first year make possible an intelligent freedom in later years of study and a wise choice of a major field. During the May registration for the fall term of their sophomore year, all freshmen who wish to enter the Ernest Williams II School of Commerce, Economics, and Politics will register in the office of the dean of that school. All other freshmen will consult with their faculty advisers in the selection of their courses for their sophomore year.

The aim of the work of the first two years is the achievement of breadth; the work of the junior and senior years is directed toward the mastery of a particular study. Students who expect to receive the degree of Bachelor of Arts will do their major work in the liberal arts and humanities, the social sciences, or the natural sciences; the student who expects to receive the degree of Bachelor of Science will take specialized work in the natural sciences.

The College offers the Bachelor of Arts degree, the Bachelor of Science degree, and the Bachelor of Science degree with Special Attainments in Chemistry. A student may work toward either a B.A. with a major in a single department, or a B.A. in an interdepartmental grouping or in Independent Work. A student may also work toward a B.S. in biology, chemistry, chemistry-engineering, computer science, geology, mathematics, neuroscience, physics-engineering,

psychology, interdepartmental natural sciences and mathematics, or in Independent Work, or the B.S. with Special Attainments in Chemistry. Interdepartmental majors are planned to provide concentration in a field rather than in a single department.

A major in Independent Work, leading to a B.A. or B.S., is available to students who before the beginning of their junior year receive special permission from the Committee on Courses and Degrees. (See "Major in Independent Work.") The work may be in the humanities, the social sciences, the natural sciences, or any combination of these fields. There are also combined-plan programs in engineering in cooperation with Rensselaer Polytechnic Institute, Columbia University, and Washington University and a combined plan program in forestry in cooperation with Duke University.

THE BACCALAUREATE DEGREE

The curriculum at Washington and Lee University permits students flexibility and individual responsibility in their choice of courses. With the help of a faculty adviser, students choose a series of courses that will lead them along one of several routes to a Bachelor of Arts or a Bachelor of Science degree.

A student qualifies for a degree by completing the following requirements of the Faculty:

1. The General Education Requirements (see "General Education Requirements," page 82). These will usually be met during the freshman and sophomore years.

2. A minimum of 121 credits with passing grades, including one credit (five courses) for 100- and 200-level work in physical education. A student must achieve at least the following cumulative grade-point averages: 1.900 on all work attempted at Washington and Lee; 2.000 on all Washington and Lee work used to meet degree requirements; and 2.000 on the work of the major, both as a whole and in the major subject.

3. 30 to 50 credits in a major. Majors may be departmental, interdepartmental, independent, or in one of the special programs. (See "The Major.") The work of the major, both as a whole and in the major subject, must be completed with a grade-point average of 2.000 or better.

THE BACHELOR OF ARTS DEGREE

The candidate for the degree of Bachelor of Arts must, before graduation, complete the following requirements of the faculty:

1. A student must submit a minimum of 121 credits (See "The Baccalaureate Degree") with passing grades, including one credit (five courses) for 100- and 200-level work in physical education. A student must achieve at least the following cumulative grade-point averages: 1.900 on all work attempted at Washington and Lee; 2.000 on all Washington and Lee work used to meet degree requirements; and 2.000 on the work of the major, both as a whole and in the major subject.

2. A distribution of courses according to the specifications given under "General Education Requirements."

3. The work in a major as outlined by the department or interdepartmental program concerned.

If admitted to the School of Law the student may elect to meet these requirements of the B.A. degree in conjunction with first-year law studies.

THE BACHELOR OF SCIENCE DEGREE

The degree of Bachelor of Science is conferred upon those students who have completed a course of study with concentration (50 credits) in the field of the natural sciences, mathematics, and computer science, and who have fulfilled the above requirements of the faculty. The degree is designed for those who are attracted by scientific work, whether or not their plans involve its direct application, and for those who intend to pursue graduate study in certain scientific fields.

Students should seek advice from a member of the appropriate departments in planning their schedules. Opportunities for concentra-

tion include biology, chemistry, chemistry-engineering, computer science, geology, mathematics, neuroscience, physics, physics-engineering, psychology, or the interdepartmental major in the natural sciences and mathematics.

BACHELOR OF SCIENCE WITH SPECIAL ATTAINMENTS IN CHEMISTRY

The requirements for the degree of Bachelor of Science with Special Attainments in Chemistry are flexible enough to meet the needs of all undergraduate students who are seriously interested in chemistry. The curriculum affords an excellent basis for graduate work, either with a view to teaching or research, or for chemical engineering. It also provides the full training ordinarily expected of college graduates at the bachelor's level who seek positions as chemists in industry. Upon satisfactory completion of this course of study, the student is offered associate membership status in the American Chemical Society. (See Chemistry in the "Courses of Study.")

THE FRESHMAN YEAR

Entering freshmen are expected to select courses which will enable them to begin satisfying the general education requirements, to explore possibilities for a major and, perhaps, to continue study in a field of special interest to them. To assist in the selection of courses, freshmen are assigned faculty advisers with whom they confer during the first week of the academic year and who remain available for consultation until a major is chosen. In certain fields placement tests will be offered on an optional basis to entering freshmen, and their results, along with any advanced placement reports, will be used in determining the level of work which should be pursued.

In choosing courses freshmen should consider that the skills in mathematics and language study they have acquired may deteriorate if they do not continue work in them immediately. They should also be sure to take the courses prerequisite to later work they

desire. If they are interested in working for the degree of Bachelor of Science or for the Bachelor of Arts with a major in science, including premedical work, they should register for mathematics and science in their freshman year. Chemistry is required for majors in biology, chemistry or chemistry-engineering, and for those planning careers in medicine. Physics 108, 109 is the normal choice for freshmen intending to major in physics or physics-engineering. Students planning to major in geology or related earth sciences should take geology, and chemistry or physics. Students planning to major in biology should, if qualified, take both chemistry and biology in the freshman year. Students planning to major in business administration, business administration and accounting, or economics are advised to take mathematics; those planning to major in politics are advised to take statistics. All students, in planning their first year, should examine the requirements for any major of potential interest listed under "Courses of Study."

Students considering graduate work should consult their advisers with regard to possible language and mathematics requirements for advanced degrees.

GENERAL EDUCATION REQUIREMENTS

The goals of a liberal education include both breadth of knowledge (general education) and competency in a specialized discipline or field of knowledge (the major). The general education component seeks to expose students to various modes of thought and to the variety of ideas and values in today's world. Students need to demonstrate particular proficiencies to assure their general education and have a reasonable degree of choice in making course selections to meet these requirements. In every case the requirement can be satisfied by students' placement examinations or by taking a course or courses. No single course may satisfy more than one general education requirement. The requirements are:

1. *English Composition.*

Students will receive extensive practice in critical reading and writing; will be introduced to conventions governing appropriateness and persuasiveness in writing; learn the conventions of standard English; learn to choose words more precisely, to write clearer sentences and more effective paragraphs, to argue a workable thesis, to use an effective voice, and to integrate the work of others into their own work properly; and, overall, learn to increase precision, fluency, and confidence with written language.

The English department will assess the proficiency of entering students by a placement examination. The most proficient will be exempt from the composition requirement. Others may demonstrate their proficiency by completing successfully one of the following courses—English 101 or 105.

2. *Foreign Language.*

Students will acquire oral and written skills in at least one foreign language; begin to define the differences between their own culture and a foreign culture; acquire basic tools that will provide access to broader cultural knowledge; and gain a deeper and more thorough knowledge of their own language and culture.

Entering students who demonstrate, on placement tests administered by the language departments, that they are qualified to enter third-year language courses have met this foreign language requirement. All others may meet it by completing satisfactorily one of the following courses—Chinese 262, French 162 or 164, German 262, Greek 202, Japanese 262, Latin 202, Russian 262, or Spanish 162 or 164.

3. *Literature.*

Students will acquire knowledge about the cultural context of literature; learn to analyze complex, ambiguous and difficult language; learn to read with imagination and to respond to literature orally and in writing; learn new ways of thinking about literature; and acquire an aesthetic interest to pursue in later life.

To meet this requirement a student must take two courses (six credits of work) from among the following:

- a. Chinese 312 and 400-level courses if the subject matter is literary
- b. Classics 203, 204, 300 (History 300)
- c. English—all 200- and 300-level courses except 201, 203, 204, 301, 303, 307, 308, 370, 385, and 386
- d. French 262 and all 300-level courses
- e. German—all 300-level courses except 301, 302, 303, 311, 312, 321, 325, 332, and 334. German 321 is acceptable if the subject is literary.
- f. Greek—all 300-level courses except 307 and 308
- g. Italian—400-level courses if the subject matter is literary
- h. Japanese 311, 312 and 400-level courses if the subject matter is literary
- i. Latin—all 300-level courses
- j. Literature in Translation—all courses
- k. Religion 206 (Literature in Translation 206)
- l. Russian 315, 316
- m. Spanish 207, 208, and all 300-level courses

4. *Fine Arts, History, Philosophy, and Religion.*

A student must take at least 12 credits, which may include Interdepartmental 101 and must include courses from at least two of the following four areas:

- a. Fine Arts—Students acquire historical knowledge about artistic, musical and theatrical traditions; are introduced to works representative of both historical and contemporary traditions; gain practical experience in the creative, musical and theatrical arts; acquire skills in using words, concepts and methods to analyze past and contemporary art, music and theatre; and learn ways to express personal creativity and employ their imaginations.

Art—all courses below the 400 level
Classics 200, 287 and 288

Medieval and Renaissance Studies 110

Music—all courses below the 400 level except Music 100, 101, 108, 109, 110, 112, 113, 114, 117, 361, 362 and the applied music courses

Theatre—all courses below the 400 level except Theatre 142, 242 and 397.

- b. History—Students will acquire knowledge about the past; learn to read texts critically; acquire an appreciation of the importance of evidence in reaching conclusions; acquire an appreciation for the historical approach to understanding the present; and improve his or her writing style and learn to write an historical essay.

Classics 300

History—all courses below the 400 level except History 190

- c. Philosophy—Students will acquire knowledge about political and ethical theory or about fundamental questions in metaphysics or epistemology; develop the ability to scrutinize their unquestioned assumptions about reality, the right and the good, and the sort of life they ought to live; acquire knowledge about the history of philosophy; acquire insight into disparate positions taken by well-known thinkers of our past; and develop abstract reasoning skills and ability to identify faulty reasoning and make sound arguments.

Classics 221

Greek 302

Philosophy—all courses below the 400 level except Philosophy 305

- d. Religion—Students will learn about one or more of the historic or living religious traditions, the thought, beliefs, institutions, worship, ethical implications of such traditions, and their interaction with other social and cultural forms, including other religious traditions; learn about one or more methods used in religious studies, e.g. historical, sociological, comparative, theological, philosophical, anthropological, hermeneutical, textual; and learn to

think about religious ways of life tolerantly, sympathetically and yet critically.
 Religion—all courses below the 400 level except Religion 200 and 206
 Sociology 221, 315

5. *Science and Mathematics.*

A student is required to complete 10 credits in science and mathematics, including at least four credits of laboratory science from requirement “5a” and a course chosen from requirement “5b” below:

- a. Laboratory Science Courses—Students will understand the methods that scientists employ in seeking to understand the natural world; gain an appreciation for the character of the evidence used in science, and the methods used to gather and interpret data; obtain a basic understanding of the language and procedures involved in at least one of the natural sciences; learn how to make and interpret observations of natural phenomena; and acquire a better understanding of the operation of natural processes and phenomena.

Biology 100, 111 or 112

Chemistry 100 or 111

Geology 100 or 101

Physics 101 and 103; 111 and 113; 112 and 114; 150; or 151

- b. Mathematics and Computer Science—Students will gain experience modeling real-world problems in the precise languages of mathematics or computer science; acquire problem-solving skills and strategies for obtaining mathematical or computer solutions for a variety of problems; achieve an understanding of how theoretical results and concepts can be developed and then used for problem solving or for further investigation; gain appreciation of how complex systems are formed from simpler systems; and develop understanding of criteria such as efficiency and elegance by which alternate solutions to problems might be compared.

Computer Science 111

Mathematics 101, 121

- c. Additional courses in mathematics or science

Any of the courses listed above not used to meet requirement “5a” or “5b”

Biology 230, 231, 235, 240

Chemistry 104, 105, 106, 112

Computer Science 112

Engineering 160

Geology 102, 104, 108, 135, 140, 146, 150, 160, 195, 201, 210, 247

Mathematics 102, 118, 122, 195

Physics 104, 110

6. *Social Sciences.*

Students will acquire knowledge about human beings and their economic, political and social institutions; become familiar with the analytical skills employed in any one of these disciplines; and acquire knowledge useful in discussing and evaluating anthropological, economic, political, psychological and sociological issues.

A student must take at least nine credits, which may include Interdepartmental 110 and must include courses from at least two of the following four areas:

- a. Economics 101, 102

- b. Politics 100, 101, 104, 111, 201, 203 (Journalism 203), 214, 233

- c. Cognitive Science 110, Psychology 111, 112, 113, 240

- d. Anthropology 101, 205, 207, Sociology 102, 200 (Religion 200), 202, 225

7. *Physical Education.*

Students will improve physical fitness and dexterity; develop skills in various sports and activities; and acquire knowledge or skills useful in the pursuit of physical fitness and recreation after college. A student is required to pass a proficiency test in swimming and to complete five terms of physical education activity classes selected from Physical Education 101 to 214. (See page 183 for additional information.)

THE MAJOR

The Bachelor of Arts degree is given with majors in the following departments and special programs:

Archaeology and Anthropology	Journalism and Mass Communications
Art History	Mathematics
Biology	Medieval and Renaissance Studies
Chemistry	Music
Classics	Natural Sciences and Mathematics
Cognitive Science	Philosophy
Computer Science	Physics
East Asian Studies	Politics
Economics	Psychology
English	Public Policy
Environmental Studies in Geology	Religion
Forestry and Environmental Studies (3-2)	Romance Languages
French	Russian Studies
Geology	Sociology and Anthropology
German Language	Spanish
German Literature	Studio Art
History	Theatre
Independent Work	

The Bachelor of Science degree is given with majors in the following departments and special programs:

Biology	Independent Work
Chemistry	Mathematics
Chemistry-Engineering	Natural Sciences and Mathematics
Chemistry-Engineering (3-2)	Neuroscience
Computer Science	Physics
Forestry and Environmental Studies (3-2)	Physics-Engineering
Geology	Physics-Engineering (3-2)
	Psychology

The Bachelor of Science degree with Special Attainments in Chemistry is a special program designed primarily for those who wish to pursue graduate work in chemistry or chemistry-engineering.

The Bachelor of Science degree with Special Attainments in Commerce is given with majors in the following disciplines and special program:

Business Administration
Business Administration and Accounting

The requirements for departmental majors are described at the beginning of the course listings for each department. (See “Courses of Study.”)

Students who wish to follow a program not outlined in this catalogue may choose an adviser prior to the beginning of their junior year and present an “independent work major” program for approval by the Committee on Courses and Degrees. Such a major may be used for either the Bachelor of Arts or Bachelor of Science degree. Application for an independent major will not be accepted after the first term of a student’s junior year. (See “Major in Independent Work.”)

Students may major in more than one department by completing the requirements of each department. Those who find a double major more attractive should recognize the costs in constrained breadth of education (i.e. fewer electives) and consider the option of a secondary emphasis without fulfilling formally the requirements of a second major.

DECLARATION AND CHANGE OF MAJOR

When a student decides upon a major, he or she works out a course of study with the head of that department. A student who elects more than one major must work out a course of study with the heads of departments involved. When majors involve two different schools or two different degrees, the University Registrar must be informed of the student’s preference as to school and degree. This must be done by the time of registration for the fall term of the student’s junior year, at which time a “Declaration of Major and Adviser” form must be filled out and filed in the University Registrar’s Office. Failure to do so constitutes incomplete registration and will be subject to a late registration fee. Each subsequent registration week the student confers with his or her adviser(s) on progress toward the major(s) and makes any appropriate revisions.

Notwithstanding anything to the contrary contained in the catalogue, the faculty may change the requirements to satisfy any major after a student has commenced studies at the

University. In this case, the student, upon declaring a major, may be required to satisfy the major requirements as revised.

Change of major requires approval of the head of the new department on a "Declaration of Major and Adviser" form. Before the beginning of the winter term of the senior year, the student may not change his or her declared major (or the degree of which that major is a component), except that a student with two or more majors may drop all but one with permission of the Faculty Executive Committee if that student has not failed a comprehensive examination.

COMPREHENSIVE EXAMINATIONS

A comprehensive examination is given to all seniors majoring in classics, English, geology (leading to a Bachelor of Science degree), and German literature. The examination is given on a date in the winter or spring term set in advance by the department concerned.

Grades given on the examination will be Excellent, Pass, or Fail. A student receiving a failing grade must re-take and pass the comprehensive examination before being permitted to graduate.

A student working toward a combination degree (3-3 law or 3-2 forestry) will not take a comprehensive examination.

MAJOR IN INDEPENDENT WORK

Students who have achieved a minimum cumulative grade-point average of 2.750 by the end of the sophomore year and who believe they would benefit educationally from a major not outlined in this catalogue may prepare a proposal for a major of independent work. The Dean of the College has guidelines and forms for preparing such a proposal. Working with faculty advisers from at least two disciplines, the student should develop a clear and coherent plan of study that promises benefits unobtainable from an established major. The program should consist of 30 to 50 credits and must be the only major the student is pursuing. The proposal should be submitted to the Committee on Courses and Degrees prior to the beginning of the junior year but in no case later than October 15 of the junior year. Once approval is

granted, any subsequent changes must be approved by the Committee on Courses and Degrees.

Students majoring in independent work are allowed to apply for an honors program. The major will be noted on transcripts as, for example, "Independent Work (International Affairs)."

HONORS IN THE MAJOR

In order to encourage independent work and scholarly investigation by students and to foster their intellectual curiosity, a number of departments have established programs leading to a degree "with honors" in the major. Such programs provide an enhancement of the regular program for departmental majors and also of interdepartmental and independent majors. Featuring a special profundity and intensity, and characterized by a close rapport between student and mentor, the honors programs are designed as an enrichment opportunity for students who demonstrate superior aptitude and self-discipline in the pursuit of their major study.

Descriptions of the honors programs of individual departments may be obtained from the department heads. Interested students should make inquiry by the time of declaration of major, in order to identify any special admission requirements or related standards that have been set by the department for its particular honors program.

Participants in the University Scholars program, in meeting the requirements of that special program, are encouraged to undertake honors work in their chosen major.

Admission into Honors Work

A prospective honors student applies in writing to the departmental head or major adviser. In general, application must be made by May 1 of the junior year; in certain departments, earlier application is required (often to accommodate special course work in the junior year).

In all departments, admission into honors work is subject to availability of advisory staff and assessment of the individual's ability to profit significantly from the program's special demands.

Minimum eligibility for honors candidacy is a 3.000 cumulative grade-point average by the time of enrollment in the honors thesis courses (numbered in the 490s). Many departments have established additional eligibility requirements for their own honors programs, such as special academic standing within the department, and these criteria must also be met.

Requirements for Honors in the Major

All Honors programs require an Honors Thesis during the senior year, involving 6 credits (no more, no less) of independent work, such as a significant report based upon field or laboratory research, a creative accomplishment in the arts, or a comparable scholarly undertaking demonstrating more than simply a mastery of subject matter.

The student must begin work on the thesis at the start of the fall term of the senior year. Background work on the thesis topic normally is expected to be in progress by the end of the junior year, and the subject and approach for the thesis should already be established before the start of the senior year's thesis work. Work on the thesis is to be accompanied by periodic conferences with the adviser and the submitting of interim reports showing the progress achieved to that point. (Only under extraordinary circumstances—not general practice—may the thesis work be assigned entirely to a single term, and in such an instance the student must be prepared to begin intensive work on the thesis itself by the first week of the term, the subject and approach already having been established in preliminary study.)

The final draft of the thesis is due by May 1 (or by the end of the winter term in certain departments). A permanent copy of the thesis must be deposited in the Leyburn Library.

Remaining credits in the major are gained in regular course work, honors seminars, internships, directed individual study or tutorials, or a combination of these as prescribed in the department's program. Many departments require a comprehensive examination (written and/or oral) and/or a formal oral presentation and defense of the completed thesis.

Upon successful completion of an approved honors program, the student is awarded a bachelor's degree "with honors" in the major, and, for those also participating as University Scholars, the additional citation of "University Scholar."

An Honors program may prescribe no more than 3/4 of a normal course load for a student in the junior and senior years, so that adequate time for free electives is permitted.

Credits and Grades

Degree credits and grades for the thesis work will be awarded on completion of the thesis and any honors examinations, in the manner customary for completed projects and courses. These credits will be spread over the fall and winter terms of the senior year, under the rubric 493 (3-3), Honors Thesis.

A student's continuing eligibility as an honors candidate will be determined by subjecting that student's work to periodic review based on the level of work to that point.

A student who resigns or is dropped from an honors program will not ordinarily be readmitted; completed work would in such cases be translated by the student's advisers into alternate course credits, with grades, appropriate to a regular major. In this manner, a student not successfully completing all the requirements for the honors citation might still be able to graduate with the class, but without receiving an honors citation.

INTERDEPARTMENTAL MAJORS

MAJOR IN COGNITIVE SCIENCE

An interdisciplinary cognitive science major gives students the opportunity to investigate the nature of the human mind from the perspectives of computer science, philosophy, and psychology. The bridge areas of artificial intelligence, logic, linguistics, and neuroscience are of particular importance in devel-

oping models of the cognitive capacities underlying intelligent behavior. Memory, language, vision, concept formation, and problem solving are some of the areas currently under investigation.

The required core curriculum of the cognitive science major provides a background in computer science, philosophy, and psychology. Students then choose one of four areas of specialization for additional course work and a senior thesis: Formal Systems in Cognitive Science (computer science), Philosophical Foundations of Cognitive Science (philosophy), Experimental Cognitive Science (psychology), or Cognitive Neuropsychology (psychology). The senior thesis is an original research project and may be centered around computer programming, a research paper, or a laboratory experiment according to the student's interests and area of specialization. The Bachelor of Arts degree in cognitive science prepares students for graduate work in cognitive science, computer science, philosophy, and psychology, as well as for careers in a range of areas in the information technology industry.

The Cognitive Science Program faculty includes Lambert (computer science), Pemberton (philosophy), and Elmes, Jarrard, Lorig, Margand, and Thompson (psychology). The Leyburn Library has extensive holdings in cognitive science and the computer science and psychology departments have excellent facilities for artificial intelligence and laboratory research.

Further information concerning the major may be obtained from the above faculty or the head of the Cognitive Science Program Committee, Professor Joseph Thompson (Parmly Hall).

MAJOR IN EAST ASIAN STUDIES

The East Asian Studies major is interdisciplinary and involves seven departments of the University. It includes work in Chinese or Japanese, as well as courses in a wide variety of fields to introduce the student to the civilizations of China and Japan. The student should begin language work as early as possible, preferably in the freshman year, since proficiency in one of the languages is both a requirement for the major and vital preparation for study abroad. Depending

upon the language selected, the student usually focuses on either China or Japan.

East Asian majors are strongly encouraged to participate in Washington and Lee's study and exchange programs in China and Japan or in another approved study abroad program. Information and applications for these programs are available through the Office of International Education. Adjustments in the major requirements will be made where necessary to allow the student to take advantage of these opportunities. Non-language spring term programs are also offered in China and Japan.

The major is encouraged to apply for selection as an exchange student at Chung Chi College of The Chinese University of Hong Kong (academic year program), at Rikkyo University in Tokyo (for one or two semesters), or at The Kansai University of Foreign Studies near Kyoto (for one or two semesters). Prior study of Chinese is not required, but is recommended for the Hong Kong program; elementary Japanese is recommended for both programs in Japan.

By arrangement with the University of Massachusetts, Washington and Lee students who have had two years of Chinese (one year for the summer program alone) and a 3.000 cumulative grade-point average may study Chinese for the summer at Tunghai University in Taiwan and/or may spend one or two semesters at Tunghai, at Beijing Normal University, or at Shaanxi Normal University (People's Republic of China). Students in these programs pay University of Massachusetts fees. Participation requires prior consultation with the head of the East Asian Studies committee.

Modest financial aid may be available for study in Asia. Students accepted for study at Rikkyo University may apply for the Rikkyo University International Scholarship.

The East Asian Studies faculty includes O'Mara (art), Hill (Chinese), Smitka (economics), Jeans (history), Ujie (Japanese), Sessions (philosophy), and Davis (religion).

Further information concerning the major, the possibility of its combination with other majors, and opportunities to study abroad may be obtained from the head of the East Asian Studies Committee, Joan O'Mara.

MAJOR IN MEDIEVAL AND RENAISSANCE STUDIES

The major in Medieval and Renaissance Studies allows students to engage in examinations of the history and culture of European society from the fall of the Roman Empire to the end of the 16th century. Majors will develop an understanding of a broad range of period aspects and the ability to consider the era from a number of perspectives. This interdisciplinary major enables an examination of issues of art, economics, literature, music, philosophy, politics, religion, and social hierarchies and an understanding of specific problems within the context of an entire society.

The requirements for the major are described on page 175 and involve faculty and courses in art (Bent), classics (Craun, Pellicciaro), English (Craun, Evans, Ray), French (Fralin), German (Crockett), history (Cecil, Futch, Sanders), music (Spice), philosophy (Pemberton, Sessions), physics (Reese), politics (Velásquez), religion (Brown, Marks), and Spanish (Campbell, Williams).

MAJOR IN NATURAL SCIENCES AND MATHEMATICS

The Bachelor of Science or Bachelor of Arts degree is awarded subject to meeting graduation requirements of the University, including the following:

1. The general education requirements for all students.

2. One year of mathematics, including Mathematics 101, 102 or higher courses. Any mathematics elected in the categories below must be in addition to this requirement.

3. *Major Concentration*: 36 credits in natural sciences (biology, chemistry, geology, or physics) and mathematics distributed as shown below. Courses meeting this requirement are the equivalent of courses taken in a major department with respect to regulations concerning summer school courses.

- A. 16 credits in one department. This department will ordinarily provide the student's adviser.

- B. 12 credits in another department.

- C. Eight credits, the introductory sequence, in a third department.

4. *Cognate Requirements*: 14 additional credits in the above departments or engineering. Within University limitations, courses fulfilling this requirement may be taken in summer school.

MAJOR IN NEUROSCIENCE

An interdisciplinary major leading to a Bachelor of Science degree in neuroscience is available to interested students. The central theme of neuroscience is an understanding of the structure and function of the brain and how it is involved in controlling behavior. Thus, the area draws heavily from biology, chemistry, psychology, mathematics, and the computational sciences. The major in neuroscience is intended to prepare students to pursue graduate studies in the biomedical sciences, including graduate training in neuroscience, biology, chemistry, and psychology, as well as medical school.

The requirements for a major in neuroscience are described on page 179, but generally involve courses from the departments of biology, chemistry, physics/engineering, and psychology. An essential element of the neuroscience program at Washington and Lee is the opportunity for the student to become involved in laboratory research with a faculty member. While the areas of research may differ from year to year, they generally include neurochemical research on mechanisms of neural excitation, involvement of the brain in learning and memory, preparation of neurotoxic agents for possible use in insect control, and evaluation of electrical activity recorded from human brains.

The Neuroscience Program faculty includes I'Anson and Wielgus (biology), Alty (chemistry), and Jarrard, Lorig, J. Stewart, and R. Stewart (psychology).

Further information concerning the major can be obtained from the head of the Neuroscience Program Committee, Dr. Leonard Jarrard, or from any of the above faculty.

MAJOR IN RUSSIAN STUDIES

The Russian Studies major is interdisciplinary and offers instruction in Russian language, literature (both in Russian and in translation), art, history, politics, sociology, and economics. The requirements for the major are described on page 202. Students should begin Russian language instruction as early as possible, preferably in the freshman year, since third-year language proficiency is required for the major. Language courses are taught by two core faculty members, who are assisted by a visiting Russian professor.

Majors are encouraged to study the Russian language in Russia for a spring term or a longer period. Russian 363 (Supervised Study Abroad), a six-credit course, is taught during the spring term at a Russian university.

Other features of the Russian Studies program include: a state-of-the-art language laboratory, computer-aided language instruction, guest lectures, various library collections for faculty and student research, a Russian film series, and daily television and Internet transmissions from Russia.

Further information concerning the major, the possibility of its combination with other majors, and opportunities for study abroad may be obtained from the head of the Russian Studies committee, Richard Bidlack.

SPECIAL DEGREE PROGRAMS

THE BACHELOR OF ARTS IN COMBINATION WITH FIRST-YEAR LAW STUDIES

Students of Washington and Lee University may apply in the junior year for admission to the School of Law. If accepted for admission, the student, upon completion in full of the first year of work in the School of Law, may substitute these law credits for the remaining free electives required for the Bachelor of Arts degree, subject to the following requirements:

1. All but 28 degree credits toward the Bachelor of Arts degree, including completion of all General Education requirements. A student must achieve at least the following cumulative grade-point averages: 1.900 on all work attempted at Washington and Lee; and 2.000 on all Washington and Lee work used to meet degree requirements.

2. 24 credits toward a major, at least 18 of which must be in one subject. The work of the major, both as a whole and in the major subject, must be completed with a grade-point average of at least 2.000.

3. In completing the first year of work in the School of Law, a student must pass all law courses with a grade-point average of at least 2.000 and no grade lower than 1.0. Faculty regulations further require that all undergraduate work toward the combination degree must be completed before any work in law is undertaken, and may not be done concurrently.

COMBINATION DEGREE PROGRAM IN ENGINEERING

For students interested in entering engineering and allied professions, Washington and Lee offers combined-plan programs with Rensselaer Polytechnic Institute (RPI), Columbia University, and Washington University. Through these programs the students are given the opportunity to broaden their academic background at a liberal arts college before beginning professional studies.

A 4-2 program is offered whereby a student who has graduated with a major in chemistry-engineering or physics-engineering (See "Pre-Engineering") will, when so recommended by the Dean of the College, be enrolled in a two-year course of instruction at RPI, Columbia, or Washington leading to a Master's Degree in any designated field of engineering. To be recommended in this program, the student should have a 3.000 or better average on all work completed at Washington and Lee.

Under the 3-2 plan students who complete three years' work at Washington and Lee and are recommended may enroll at RPI, Columbia, or Washington for a two-year course in

their chosen field of engineering. Upon completion of the five-year program the student is awarded a degree from Washington and Lee and an engineering degree from the affiliated professional school. To be recommended for this program the student should have completed at least 86 credits exclusive of physical education and should have a 3.000 or better average in the science, mathematics, and engineering courses taken at Washington and Lee.

COMBINATION DEGREE PROGRAM IN FORESTRY AND ENVIRONMENTAL STUDIES

The liberal arts program at Washington and Lee offers an excellent opportunity for developing the well-rounded undergraduate education necessary to understanding the study of forest resources and the environment.

In cooperation with the School of Forestry and Environmental Studies at Duke University, Washington and Lee is able to offer a combined plan in this area of study. Students may enter a 3-2 program which may ultimately culminate in either a Master's Degree in Forestry or a Master's Degree in Environmental Management.

Under this program the first full year of work in the School of Forestry and Environmental Studies at Duke University, regarded as a unit and totally completed, may be substituted for the remaining free electives necessary for either the Bachelor of Arts or Bachelor of Science degrees at Washington and Lee. The following must also have been completed prior to leaving Washington and Lee.

1. All but 28 degree credits toward either the Bachelor of Arts or Bachelor of Science degree, including the completion of all General Education requirements. A student must achieve at least the following cumulative grade-point averages: 1.900 on all work attempted at Washington and Lee; and 2.000 on all Washington and Lee work used to meet degree requirements.

2. 60 percent of the credits required for the major, at least 80 percent of which must be in one subject. The work of the major, both as a whole and in the major subject, must be completed with a grade-point average of at least 2.000 or better.

3. One credit (five courses) in 100- and 200-level physical education which counts toward the total required credits.

4. Recommended preparatory courses may vary according to student interest and according to the program of study the student intends to enter in the School of Forestry and Environmental Studies at Duke. The following courses represent the minimum courses required for the program.

Biology 112, 230, 231, and 245, and either 235 or 330

Chemistry 111 and 112

Computer Science 111

Economics 101, 102

Mathematics 101, 102, and either 118 or Management/Economics 201

Physics 111, 112, 113 and 114

Additional electives which have been suggested by Duke include Economics 120 (Economics, Ecology and Resource Conservation), Economics 210 (Microeconomic Theory), and Geology 100 or 101 (General Geology).

Students should be aware that admission to the School of Forestry and Environmental Studies at Duke University is not guaranteed under this program and that admissions requirements are not necessarily fulfilled by simply completing the above requirements. (See Bulletin of Duke University School of Forestry and Environmental Studies.)

In completing the first year of study at Duke University the student must pass all courses with a minimum average of 2.000 on the year's work.

ADDITIONAL BACHELOR'S DEGREE

Students who have already received either the B.A. or the B.S. degree may wish to obtain the other degree. In order to receive the other bachelor's degree, the student must fulfill the requirements of each of the two degrees, either separately or concurrently, and must present a minimum of 27 credits more than the baccalaureate requirement for one degree for that year. A student must achieve at least the following cumulative grade-point averages: 1.900 on all work attempted at Washington and Lee; 2.000 on all Washington and Lee work used to meet

degree requirements; and 2.000 on the work of the major, both as a whole and in the major subject.

Students may not receive two B.A. or two B.S. degrees.

SPECIAL ACADEMIC OPPORTUNITIES

UNIVERSITY SCHOLARS

The faculty of Washington and Lee created the University Scholars program in order to provide extra challenge and opportunity for some of our best prepared, most able students. The program combines broad yet intensive studies in the liberal arts with independent study leading to a thesis.

At the beginning of the winter term, a group of up to 18 Scholars will be chosen. No more than six of these may be sophomores, and the rest will be freshmen. Students with an outstanding record are invited to apply in January for admission to the program. Applications should be delivered to the Director of the University Scholars Program, Professor John Lambeth, in Tucker Hall. Selections are based on the student's record, an essay, faculty letters of recommendation, and personal interviews. Students selected will be notified before the Washington Holiday. A limited number of juniors who complete at least two University Scholars courses with a grade of B+ or better will be considered for the program by the beginning of the winter term of the junior year.

The academic program consists of the reading course, three seminars and a thesis. The new Scholars typically begin participation with a one-credit reading course in the second half of the winter term, when they read a set of challenging works which they discuss in informal meetings with faculty. During the spring term, Scholars enroll in a seminar on a topic in the humanities coordinated with their winter term reading. In their sophomore and junior years, Scholars have a choice of seminars on

topics in the natural sciences and social sciences. A limited number of non University scholars may enroll in these seminars with the permission of the instructor. During the senior year, most Scholars participate in the Honors program of their major department and prepare an honors thesis. In special cases, the student may fulfill the thesis requirement with an independent study of at least three credits. The courses and thesis contribute fully to satisfying degree requirements. In recent years, seminar topics have included the following: Art, Culture and Society in the 13th Century; Max Weber; Negritude; Botany for Poets; Evolution of Consciousness; Constitution of Civility; Pilgrimage in Religious Traditions; Economic Themes in Literature and Film; and Statistics, Inference and the Normal Curve.

To graduate as a University Scholar, a student must complete the reading course and three seminars, one in each discipline, achieve at least a 3.250 cumulative grade-point average, and receive at least a B for the thesis work. "University Scholar" will be noted at Commencement and on the transcript.

Special academic opportunities supplement the required courses. Scholars are eligible to design their own independent seminars (University Scholars 200) and may take as many as two courses a year as tutorials. The exact nature of each tutorial will vary, as arranged between the Scholar and the faculty member, but generally a tutorial allows the student to work independently under the instructor's direction, to do extra or advanced reading, to write essays more frequently, and to sharpen thinking in regular conferences with the instructor.

The Scholars elect officers to serve on the University Scholars Advisory Committee and to take charge of the program's extracurricular functions. This may involve bringing in speakers, having special opportunities for personal interaction with some of the numerous distinguished visitors who are brought to campus each year, monthly dinners, meetings, and retreats. The director of the program and the University Scholars Committee act as advisers for the group.

PRE-LAW STUDENTS

Washington and Lee does not offer a “pre-law major” nor a “pre-law curriculum,” believing instead—as does the Association of American Law Schools (as expressed in its statement on pre-legal education)—that no single series of courses can accurately be said to be “right” for every student who intends to enter law school. Accordingly, a pre-law student at the University may select any major offered in the College or in the Williams School.

Washington and Lee views a broad-based foundation in the liberal arts, perhaps supplemented by specific pre-professional training, as the best intellectual preparation for the study of law. The University encourages pre-law students to select courses which will provide them with an understanding of the history and nature of contemporary society, which will develop their critical abilities to their fullest, and which will train them to articulate conclusions and reasons clearly, concisely, and precisely.

The University offers a course in legal ethics (Interdepartmental 342), designed specifically for the undergraduate senior who intends to enter the legal profession.

The pre-law student’s academic adviser will be a faculty member in the department in which the student chooses to major. From time to time, however, the pre-law student will also want to consult with Professor Lewis John, the University’s adviser on pre-legal studies.

HEALTH PROFESSIONS STUDENTS

The training represented by a bachelor’s degree is strongly recommended for those students who are interested in a career in medicine, dentistry, or veterinary medicine as well as other health careers. This degree allows for the specific work in the sciences required for admission to these schools and also provides a sound general education focussing on the development of cultural interests and social consciousness as strongly urged by health professions educators.

A major in any academic department (see department concerned for requirements) or the interdepartmental major in the natural sciences and mathematics is acceptable for admission to medical, dental or veterinary schools provided their entrance requirements are met.

The minimum admission requirements for most of these schools in the United States and Canada are a year of each of the following: general biology; general chemistry; organic chemistry; general physics; English; and mathematics. These requirements should be taken as early as possible and completed by the end of the junior year. Additional courses may be required. Since the entrance requirements vary from one school to another, pre-professional students should acquaint themselves with the admission requirements of the schools in which they are interested and select a course of study accordingly. This should be done before the junior year.

As soon as a student becomes seriously interested in a health professions career and not later than the end of the sophomore year, that student should visit the Coordinator of the Health Professions Advisory Committee, Professor Lisa Alty. Her office contains information about specific schools as well as general requirements for admission to most health professions programs, including medical, dental, veterinary, physical therapy, physician assistant, pharmacy and optometry schools.

A descriptive brochure on pre-medicine at Washington and Lee is available from the Office of Admissions.

PRE-ENGINEERING

The work in pre-engineering is designed to meet the needs of two classes of students: those who may desire, after graduation, to enter some professional engineering school; and those who do not expect to pursue further study but who wish a general education in engineering subjects, combined with advanced chemistry, physics, and mathematics.

A student in pre-engineering will usually work toward the Bachelor of Science or Bach-

elor of Arts degree with a major in chemistry-engineering or physics-engineering.

The courses to be scheduled for a student in this area are determined in consultation with the faculty adviser in engineering. Although some freshmen may be placed in advanced classes, generally the first year will include Mathematics 101, 102; Physics 111, 112, 113 and 114 for physics-engineering or Chemistry 111 and 112 for chemistry-engineering; and general education requirements in other areas and physical education. The sophomore year normally includes Mathematics 221, 222, Engineering 203, 301 and six additional credits in the major requirements, and physical education. The third year will normally include nine credits of electives, 12 credits of engineering and physics, and six credits of mathematics.

PRE-MINISTERIAL STUDENTS

In cooperation with The American Association of Theological Schools, the University encourages pre-ministerial students to undertake a broad cultural preparation for their graduate studies. Of the various possible areas of major concentration, religion, English, history, and philosophy are regarded as the most desirable. Individual courses of study should be planned in consultation with the head of the Department of Religion.

PREPARATION FOR TEACHING

A liberal arts education gives excellent preparation for elementary and secondary school teaching. Most states require certain professional education courses for certification to teach in public schools, although requirements differ from state to state. Any student who meets the requirements for a Virginia certificate may receive initial certification to teach in more than 35 states through reciprocal agreements among State Directors of Teacher Education. Students should be aware that private secondary schools now tend to favor applicants who have been certified through a state-approved program.

Students interested in attaining a Virginia state certificate should plan to take Psychology

113 at Washington and Lee and to complete part of their requirements at Mary Baldwin College through the EXCHANGE Program. (Applicants must have a 2.500 cumulative grade-point average. Applications for EXCHANGE are available from the University Registrar.) In order to assure that they may meet all the various requirements for certification, students should see the Associate Dean of the College early in their freshman year.

Students hoping to teach in college should expect to do graduate study.

PREPARATION FOR A CAREER IN SOCIAL WORK

Washington and Lee University, in conjunction with Mary Baldwin College, offers a program which prepares students for careers in social work. The Washington and Lee student may take the recommended courses drawn from sociology, psychology, politics, and economics, on the Washington and Lee campus. A specific listing of recommended courses may be found under Sociology and Anthropology in the Courses of Study section of this catalogue. All inquiries should be addressed to the head of the Department of Sociology and Anthropology. Students interested in the possibility of a career in social work should begin planning their program of study in consultation with members of the department as soon as possible, certainly no later than the sophomore year.

AREA STUDIES

In addition to the traditional courses emphasizing European and North American cultures, Washington and Lee offers the following courses which will allow students to concentrate on a particular area of study. *These do not constitute majors.*

AFRICA/AFRICAN HERITAGE

- Anthropology 207—Physical Anthropology
- Economics 380—Economic Development of Low Income Countries
- English 209—Southern American Literature
- English 350—Postcolonial Literature

English 351—Commonwealth Fiction
 English 365—African-American Literature
 French 397—Séminaire Avancé
 History 109—History of Ancient Egypt
 History 133—Survey of Brazilian History
 History 158—Seminar in 19th and 20th Century Africa for Freshman and Sophomores
 History 359—History of African-American People to 1877
 History 360—History of African-American People since 1877
 History 362—The Old South to 1860
 History 366—Slavery in the Americas
 History 374—History of Southern Africa from the 17th Century
 History 375—European Imperialism in East and Central Africa in the 19th and 20th Centuries and the Successor States
 History 389—Topics in Asian or African History
 Politics 221—The British Political System
 Politics 250—African-American Politics
 Religion 105—Introduction to Islam and Judaism
 Sociology 228—Race and Ethnic Relations

EAST ASIAN STUDIES

(See pages 88 and 131.)

GENERAL

History 335—Canada Since 1837
 History 370—Australia and New Zealand

LATIN AMERICA

History 130—Survey of Colonial Latin America
 History 131—Survey of Latin America, 1750 to the Present
 History 132—Case Studies in Latin American Nationalism
 History 133—Survey of Brazilian History
 History 330—Colonial Latin America
 History 331—Latin American Nations
 History 332—The Dynamics of Political Change in Latin America
 Literature in Translation 253—Contemporary Spanish-American Prose Fiction in Translation

Spanish 111-112—Elementary Spanish
 Spanish 161-162—Intermediate Spanish
 Spanish 164—Advanced Intermediate Spanish
 Spanish 207—Introducción a la literatura hispanoamericana
 Spanish 212—Spanish-American Civilization and Cultures
 Spanish 315—The Spanish-American Short Story
 Spanish 317—The Contemporary Spanish-American Novel
 Spanish 396—Spanish-American Seminar

RUSSIAN STUDIES

(See page 90.)

ENVIRONMENTAL STUDIES

Environmental issues have become increasingly important for government, business, and society. Students interested in these issues have a number of options at Washington and Lee. The Geology Department offers a major in environmental studies (see page 147). Students majoring in other areas who wish to supplement their course of study with courses on environmental issues may wish to enroll in a series of seminars designed to complement each other and emphasize the interdisciplinary nature of environmental problems: Geology 150: Water Resources; Philosophy 260: Philosophy of Nature; and Politics 233: Environmental Policy. (See the departmental listings and Environmental Studies on page 144).

There are also two co-curricular programs. The A. Paul Knight Memorial Program in Conservation provides financial support to students who undertake internships with non-profit environmental and outdoor recreation programs. The Outing Club organizes several recreational and educational programs that enable students to become familiar with the local environment.

SHEPHERD PROGRAM FOR THE INTERDISCIPLINARY STUDY OF POVERTY

This program of study and experiential learning supplements an undergraduate major or course

of study in the law school. It offers courses at the introductory and advanced levels, volunteer opportunities in the Rockbridge County area, subsidized summer service-learning projects working with poor people, and a variety of lectures and seminars presented by national and international visitors. Students who have suitable course preparation (usually Interdepartmental 101) are eligible to apply for summer work with poor people in rural or urban areas of the United States, in Latin America, or, through special arrangements, in other parts of the world. Expenses are reimbursable and some students will be eligible for a stipend. This service-learning program is conducted in association with Spelman College in Atlanta, Georgia, and Berea College in Berea, Kentucky. All student volunteers will participate in an orientation prior to their work in the field and a concluding colloquium to share knowledge gained during their internships. During the academic year, students are invited to participate in lectures, seminars, and conferences sponsored by the Shepherd Program and to join in volunteer work in the local community, which the Shepherd Program promotes.

Undergraduates are encouraged to integrate their course work in poverty studies and their experiential learning through volunteer work with their major field of study. With permission from departments or programs in which they major, students may combine Interdepartmental 423 with independent studies or honors theses that count toward their major requirements.

Made possible through the generosity of Thomas and Nancy Shepherd, this program, established in 1997, is a tangible means by which the University seeks to promote important aspects of its mission: to cultivate in its students "the responsibility to serve society through the productive use of talent and training" and the capacity "for self-sacrifice in behalf of their fellow citizens."

SOCIETY AND THE PROFESSIONS: STUDIES IN APPLIED ETHICS

Washington and Lee recognizes an increasing social need for specific and systematic attention to ethics, to questions of human value as they relate

to business and the professions. The program studies ethics in four fields: business, journalism, law, and medicine. The goal is to raise for undergraduates the critical questions of social responsibility inherent in the occupation they are about to enter. (For course listings in the ethics of business, journalism, law, and medicine refer to the Interdepartmental course listings.)

The program in Society and the Professions creates a close association between undergraduate students and visiting practitioners in each of the four fields. For a two-day period students engage in an intensive schedule of seminars with visiting professionals.

The program brings nationally recognized scholars to Washington and Lee each year in each field. These visiting lecturers remain on campus for the two days, engage in classroom discussion, and deliver a public lecture. At the end of each academic year the text of these lectures is published and distributed to interested alumni, friends, and libraries throughout the United States.

Further information on this program is available from Ms. Adrienne Hall Bodie, Newcomb Hall.

INDEPENDENT SCHOLARS

Students who have achieved a bachelor's degree and wish to take additional work may, with the approval of the Committee on Courses and Degrees, apply for admission to individual courses and pursue work on an independent basis.

EXCHANGE PROGRAMS

Washington and Lee University participates with Hampden-Sydney, Hollins, Mary Baldwin, Randolph-Macon, Randolph-Macon Woman's, and Sweet Briar Colleges in a student exchange program. The program is designed primarily for juniors. Additional information and catalogues of the participating colleges are available in the Office of the University Registrar.

Washington and Lee also has an exchange agreement with Bates College in Lewiston, Maine. Additional information is available from the Office of the University Registrar.

Students must have a 2.500 cumulative grade-point average in order to apply for any exchange program sponsored by the University.

FOREIGN EXCHANGE PROGRAMS

Washington and Lee has exchange programs with Chung Chi College of the Chinese University of Hong Kong (elementary Chinese recommended), Rikkyo University in Tokyo, and the Kansai University of Foreign Studies near Kyoto (elementary Japanese recommended for both Japan programs). Under these programs, Washington and Lee students spend a year studying at Chung Chi and students from Chung Chi spend the same year studying at Washington and Lee. Washington and Lee students also have the opportunity to spend one or two semesters at Rikkyo or the Kansai University of Foreign Studies; these institutions generally send students to Washington and Lee for the entire year.

For information on the Rikkyo University International Scholarships, designed for students of the institutions with which Rikkyo has exchange agreements, or for general information concerning Rikkyo and the Kansai University of Foreign Studies, see Professors Rogers or Ujie. See Professor Hill for information concerning Chung Chi.

University College of Oxford University has invited Washington and Lee to send one student a year as an exchange student for a year-long program in some area in which a tutor is available on the University College faculty. The program is designed for students in their junior year but in exceptional cases a senior may be considered. A student is chosen by the Oxford Exchange Committee each year to participate in this program. Nominations by faculty members are due by January 15. They should be sent to Professor Jarrard, who will also provide further information about the program.

Students with advanced Russian language training may study for one year at a university or institute in the Commonwealth of Independent States. For further information, contact the Russian Studies Committee chairman, Professor Bidlack, in the history department.

Students interested in these or other foreign study programs should consult the head of the appropriate department or the foreign study adviser.

STUDY ABROAD

International experience is viewed as an important part of a comprehensive Washington and Lee education. There are numerous opportunities to participate in an overseas project or study program, during the academic year or the summer. Students are encouraged to work with faculty and the Office of International Education to identify appropriate programs which will complement their academic, personal and professional goals.

Washington and Lee offers a number of courses which include overseas study during the spring term. Recently, these have included courses in China, Costa Rica, England, France, Germany, Greece, Italy, Japan, Poland, and Russia. Students enroll for these as they would for any other spring term course on campus and in most cases may elect to split the required six credits between the sponsoring department and a second department if prior approval is granted. As with many upper-level courses, there may be specific prerequisites.

Travel costs for these spring term courses will be in addition to the regular comprehensive tuition and will be borne by the individual student. Students who qualify for financial aid may be eligible to receive a loan or other assistance to help cover the cost of the program.

Many Washington and Lee students also elect to study abroad through programs offered by other U.S. institutions or through direct enrollment as a visiting student at an overseas university or college. They may study for a term, a summer, or a full academic year. Most students undertake such study during their junior year although there are opportunities to study abroad at other points in a student's Washington and Lee career.

The Office of International Education maintains a comprehensive library of catalogs of study abroad programs and foreign institutions. The Office's web site also provides links to many of these locations (www.wlu.edu/~intled). The Director of International Education will work with students individually to find a study program most suited to that student's needs. The faculty's Foreign Study Committee approves

programs while individual Washington and Lee departments authorize credit for courses taken abroad. With such approval, full academic credit may be transferred to Washington and Lee for study abroad undertaken through a recognized program.

A student must have a cumulative grade-point average of at least 2.500 to undertake Washington and Lee approved study at another institution during the academic year. To undertake summer study at another institution, a student must have a minimum cumulative grade-point average of 2.000. Grades received for approved study abroad are not counted towards a student's Washington and Lee cumulative grade-point average; grades received while on an exchange program are included. Applications for receiving credit for study abroad as well as information on application deadlines are available through the Office of International Education.

Washington and Lee also maintains specific arrangements or agreements with a number of study abroad programs. By arrangement with the University of Massachusetts, Washington and Lee students who have had two years of Chinese (one year for the summer program alone) and a 3.000 cumulative grade-point average may study Chinese for the summer at Tunghai University in Taiwan and/or may spend one or two semesters at either Tunghai or Beijing Normal University (People's Republic of China). Students in these programs pay University of Massachusetts fees and assume the status of transient students. Participation in this program requires prior consultation with the head of the Department of East Asian Languages and Literatures and the approval of the East Asian Studies committee.

The University is also a coordinating institution for Denmark's International Study Program in Copenhagen. This program offers semester and academic year programs for students in the arts, humanities, social sciences, business administration, and architecture and design. Further information about the program may be obtained from the Foreign Study Adviser.

Washington and Lee, along with three other Virginia colleges, holds membership in the Intercollegiate Center for Classical Studies in Rome,

a one-semester program administered by Stanford University. All students in the program must take an integrated and comprehensive course titled "The Ancient City." Optional courses include Greek and Latin language, Renaissance and Baroque Art History, and Elementary Italian. Students may attend either the fall or the spring term. Applicants must be majoring in classics, history, or archaeology and anthropology, or must be art majors with strong classical interests and background. All applicants must have at least a B average, and background in Roman history is advised. Interested students should see Professor Taylor in classics for information and application forms. Applications must be submitted by March 15 for the fall term and by October 15 for the winter term.

Washington and Lee is one of ten U.S. colleges and universities affiliated with Advanced Studies in England (ASE), an undergraduate humanities program based in the city of Bath which offers qualified students a one- or two-semester experience. Students live in Georgian townhouses near the city center. The seminar-sized classes taught by British faculty often include study trips designed to deepen the students' understanding of the particular curricular subjects and English culture. ASE is formally associated with University College, Oxford University where students study for a two-week residency each semester. Dr. Christopher Pelling, Fellow in Classics at University College, appoints the Oxford faculty and oversees the fortnight in Oxford. Students also spend a week each semester in Stratford-upon-Avon while attending the Royal Shakespeare Company productions. Applicants to ASE should have a 3.000 cumulative grade-point average. Interested students should see the Foreign Study Adviser or Professor Ray, the U.S. Academic Adviser for ASE, for further information, catalogs, and application forms.

There are also opportunities for Washington and Lee students to pursue internship, work, or volunteer experiences abroad through a number of program options. Several organizations are involved in exchanges that provide temporary work permits for U.S. students to work in other countries. There are numerous programs that

offer hands-on teaching and other public service options for students. Business, technical and other professional internships may be available to qualified students. Information and advising on these programs is available through the Office of International Education.

THE VIRGINIA PROGRAM AT OXFORD

Washington and Lee, along with five other Virginia colleges, sponsors a six-week summer program on Tudor-Stuart history, literature, and society at St. Anne's College, Oxford. The lecturers for the program are eminent British scholars; the tutors, Oxford dons. Students from Washington and Lee who complete the program will receive six credits, split evenly between English and history electives. (Credits earned under this program will be treated as summer school work, not as Washington and Lee work.) Interested students should see Professor Simpson in the art department before March 1 of the year in which they would like to attend the program. Students are required to have a cumulative grade-point average of at least 2.000 by the end of spring term in the year for which they apply.

LUCE SCHOLARS PROGRAM

The Henry Luce Foundation has invited Washington and Lee to participate as one of 60 colleges and universities annually nominating two or three candidates for Luce Scholarships. The candidates may be students or alumni between the ages of 21 and 28 who will have received a baccalaureate degree by the time they begin their year as a Luce Scholar. With Luce Foundation support, Luce Scholars spend a year in East Asia studying and working with people and firms in the field of their career interest. Persons with vocational interests in East Asia are ineligible, as are persons who have lived or who have traveled extensively there. Other qualifications include high academic achievement, clearly defined career interests, and demonstrated leadership capacity. Further information is available from the Office of the Associate Dean of the College.

LEYBURN SCHOLARS PROGRAM IN ANTHROPOLOGY

The James G. Leyburn Scholars Program in Anthropology was established in 1981 by three anonymous gifts totaling \$135,000. Since the program's inception, more than 100 former students and friends of Dean Leyburn have made additional gifts.

James G. Leyburn was named dean of the University in 1947 after 20 distinguished years on the sociology faculty at Yale. As dean, he offered the University a series of bold challenges, which were part of what became known as the Leyburn Plan—a blueprint for strengthening the University's academic standards. He relinquished his duties as dean in 1955, choosing to devote all his time to teaching. He was head of the sociology/anthropology department until 1967 and retired from active teaching in June 1972. In 1993, the University Library was named the James G. Leyburn Library in recognition of Dean Leyburn's many contributions to shaping the mission and character of the University.

While his contributions to Washington and Lee were myriad, one of Leyburn's more important contributions was his development of teaching and research in anthropology. The Leyburn Scholars program is designed to further the study of and research in anthropology by enabling the University to provide stipends supporting student research during both the academic year and summer. Projects are structured to provide the student with the opportunity to develop skills in research design, field work, data collection and analysis, and report preparation. All Washington and Lee undergraduates and alumni working in anthropology are eligible to compete for the stipends. Participants are encouraged to have as a goal the publication of the findings their work generates. In the context of publications, additional gifts received during 1982 allowed an ongoing publication series to be initiated in 1984.

In 1985, the Leyburn Scholars program received national recognition as an example of "collaborative learning" in *The Forum for Liberal Education*.

MARINE SCIENCE EDUCATION

The Marine Science Education Consortium with the Duke University Marine Laboratory makes it possible for Washington and Lee biology majors to spend one fall term at the Duke University Marine Laboratory in Beaufort, North Carolina. Usually this term is during the junior or senior year. All credits successfully completed will apply toward the major in biology and the degree from Washington and Lee.

THE MARSHALL UNDERGRADUATE PROGRAM

The George C. Marshall Research Foundation offers outstanding Washington and Lee students the opportunity to study and work at the Marshall Library, virtually next door to Washington and Lee. Marshall scholars, jointly chosen by the University and the Foundation, prepare research papers at the Library, attend seminars, and participate in conferences and other Library activities.

WRITING PROGRAM

The Washington and Lee Writing Program helps students learn to write more effectively in college and prepares them for the personal and professional writing they will do later in their lives. It includes various components that support the faculty in helping students to achieve these goals. The component of the program that works with students directly is the Writing Center.

THE WRITING CENTER

The Writing Center offers individual tutorial assistance to students on any college writing task, from papers and lab reports in any stage of completion to resumés and application essays. Open evenings, the Center is directed by the coordinator of the Writing Program and staffed by upperclass

students in various major fields chosen for their superior writing and teaching abilities. Writing tutors do not proofread or edit student work; rather, they teach students to recognize and correct their own errors with the goal of making each student a more confident and self-sufficient writer. In keeping with the Honor System, students who come to the Center must acknowledge assistance on any project they submit for a grade.

ROBERT E. LEE UNDERGRADUATE RESEARCH PROGRAM

Under this distinctive program, funds are available to encourage well-qualified and strongly motivated students to become familiar with research tools, techniques, and methodology. Participation is an enriching and broadening experience. It is particularly valuable to students who intend to pursue graduate work, for they are introduced to the kind of research activities they will encounter at the graduate level.

Projects are chiefly of two types: assisting a professor in research, or carrying out a student-planned project under the supervision of a professor. In either case, the professor and student benefit from the joint participation.

Students are normally nominated for grants-in-aid by a professor with whom they are studying. Most recipients are known as Robert E. Lee Research Assistants or, if they have and maintain a 3.000 average, as Robert E. Lee Research Scholars; several outstanding students in the sciences will be designated Christian A. Johnson Scholars. While participants receive no academic credit, the grants-in-aid enable them to earn a part of the cost of their education in work that has exceptional educational value.

The Robert E. Lee Research Fund was established in 1960 through a gift from the late Dr. Gustavus Benz Capito, an 1899 graduate of Washington and Lee. Additional support has come from various sources, including the Christian A. Johnson Foundation.