

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

1971 - 1972

UNDERGRADUATE CATALOG

Note: This catalog provides a record for the 1971-72 academic year and announcements for the 1972-73 year.

THE COVER: On the cover is The Coat of Arms granted to the College by the College of Heralds, May 14, 1694.

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THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

BULLETIN—THE UNDERGRADUATE CATALOG

TWO HUNDRED AND SEVENTY-NINTH YEAR
1971-1972

Announcements, Session 1972-1973

WILLIAMSBURG, VIRGINIA



CORRESPONDENCE DIRECTORY

To facilitate prompt attention, inquiries should be directed to the following:

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Business Matters, Fees and Expenses

Robert T. English, Jr., Vice President for Business Affairs

DEVELOPMENT

Warren Heemann, Vice President for College Development

ALUMNI AFFAIRS

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GRADUATE STUDIES

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Richard B. Brooks, Dean of School of Education

James P. Whyte, Jr., Dean of Marshall-Wythe School of Law

William J. Hargis, Jr., Dean of School of Marine Science

Chairman of Department concerned

LIBRARY

William C. Pollard, Librarian

PUBLIC INFORMATION SERVICES

Ross L. Weeks, Jr., Director

RECORDS AND TRANSCRIPTS

Dudley M. Jensen, Registrar

EVENING COLLEGE, EXTENSION DIVISION, AND SUMMER SESSION

Donald J. Herrmann, Dean of the School of Continuing Studies

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COLLEGE CALENDAR

1972-73

1972	First Semester
September 2-5	Orientation Period (Saturday-Tuesday)
September 6	Freshman Registration (Wednesday)
September 6-7	Registration of all Other Students, including Graduate Students (Wednesday-Thursday)
September 8	Beginning of Classes: 8 a.m. (Friday)
September 16	Last Day for Course or Section Changes: 5 p.m. (Saturday)
October 14	Homecoming (Saturday)
October 28	Mid-Semester Reports (100-200 Courses) filed with Registrar: 12 noon (Saturday)
November 22	Beginning of Thanksgiving Holiday: 1 p.m. (Wednesday)
November 27	End of Thanksgiving Holiday: 8 a.m. (Monday)
December 16	End of Classes: 5 p.m. (Saturday)
December 16	Beginning of Christmas Recess: 5 p.m. (Saturday)
1973	
January 3	End of Christmas Recess: 8 a.m. (Wednesday)
January 3-6	Reading Period (Wednesday-Saturday)
January 8-19	Semester Examinations (Monday-Friday)
	Second Semester
January 26-27	Registration of all Students (Friday-Saturday)
January 29	Beginning of Classes: 8 a.m. (Monday)
February 5	Last Day for Course or Section Changes: 5 p.m. (Monday)
February 10	Charter Day: 11 a.m. (Saturday)
March 17	Mid-Semester Reports (100-200 Courses) filed with Registrar 12 noon (Saturday)
March 24	Beginning of Spring Recess: 1 p.m. (Saturday)
April 3	End of Spring Recess: 8 a.m. (Tuesday)
April 20	Spring Convocation: 11 a.m. (Friday)
May 12	End of Classes: 5 p.m. (Saturday)
May 13-16	Reading Period (Sunday-Wednesday)
May 17-29	Semester Examinations (Thursday-Tuesday)
June 3	Commencement Day (Sunday)

SUMMER SESSION 1973

June 18	Beginning of Summer Session—First Term (Monday)
July 20	End of First Term (Friday)
July 23	Beginning of Second Term (Monday)
August 24	End of Second Term (Friday)
August 25	Summer Session Commencement (Saturday)

1972

JANUARY	FEBRUARY	MARCH	APRIL
SMTWTFS	SMTWTFS	SMTWTFS	SMTWTFS
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1973

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General Statement of Policy

Within the limits of its facilities as to numbers that can be accommodated, admission to the College of William and Mary is open to all qualified students without regard to race, creed, color or national origin; the facilities and services of the College are open to all enrolled students on the same basis, and all standards and policies of the institution, including those governing employment, are applied accordingly.

I. THE COLLEGE

HISTORY

WHEN it was chartered in 1693 by the joint sovereigns whose name it bears, the College of William and Mary represented the fulfillment of a dream cherished by the Virginia colonists and the authorities in England since 1618, eleven years after the founding of Jamestown in 1607. According to its royal charter the College was established to "the end that the Church of Virginia may be furnished with a seminary of ministers of the gospel, and that the youth may be piously educated in good letters and manners, and that the Christian faith may be propagated amongst the Western Indians to the glory of Almighty God." The College was to be "a certain place of universal study, or perpetual College of Divinity, Philosophy, Languages, and other good Arts and Sciences, consisting of one President, six Masters or Professors, and an hundred scholars, more or less." The Bishop of London was named the first chancellor, and the College's first president was the Reverend James Blair, who served for fifty years.

The College's first building was constructed in 1695 from plans believed to have been supplied by Sir Christopher Wren. For many years this building, known since its restoration to its original appearance in 1928 as The Wren Building, provided living quarters and classroom facilities for the entire college.

During the greater part of the eighteenth century the College enjoyed royal patronage and the support of the General Assembly of Virginia, which granted it income from certain import and export duties. Until the American Revolution, it was, perhaps, the wealthiest college in America. It was not until 1729, however, that all six of the professorships provided for in the charter were established. These were Divinity, Philosophy, Oriental Languages, Mathematics, the Grammar School, and the Indian School, a training school for Indians in Virginia, endowed from the income of the estate of Sir Robert Boyle, the eminent English physicist. In 1776, Phi Beta Kappa, the first Greek letter fraternity in an American college, was founded by a group of students in the College, and in 1779 the first Honor System was instituted. An event of major importance that also occurred in 1779 was a drastic revision of the curriculum under the influence of Thomas Jefferson, who was then Governor of Virginia and a member of the College's Board of Visitors. The Grammar School and the two professorships of Divinity and Oriental Languages were discontinued. The professorships of Philosophy and Mathematics were enlarged to include Fine Arts and Natural Philosophy. And new professorships were established in Law and Police, and Modern Languages, the first chairs in these disciplines to be established in America. At this same time the elective system of studies was introduced.

The College took an active part in the events accompanying the Revolution and the founding of the Republic. Graduates of the College who participated in these events include Thomas Jefferson, James Monroe, Peyton Randolph, John Marshall, and Benjamin Harrison. During the Yorktown campaign in 1781, the college buildings were occupied, in turn, by the Army of Cornwallis and our French allies.

In the first half of the nineteenth century the College prospered, and during the 1836-46 period it attained the highest enrollment in its history until 1889. The College closed during the Civil War and its buildings were occupied successively by both the Confederate and Union armies. In 1862 the Wren Building was burned

by Union troops. This was the third destruction of this building by fire, the other burnings having occurred in 1705 and 1859. After the war the College stayed open with difficulties because of its lack of resources. In 1881 it was forced to close, but the charter was kept alive by Col. Ewell, who rang the college bell to mark the opening of every term.

The College was able to reopen just seven years later in 1888 when the Commonwealth of Virginia provided it with an annual grant of \$10,000. In 1906 the Commonwealth purchased the College and placed it under the control of a Board of Visitors appointed by the Governor, the form of government under which the College still operates. In 1918 the College became coeducational. Its facilities were increased tenfold and its student body grew from 130 to 1300 in the sixteen year period that followed. During this period the College established extension centers or Divisions in Richmond (1925) and Norfolk (1930), which are now the Academic Center of Virginia Commonwealth University and Old Dominion University, independent state institutions.

The three original buildings of the College, The Wren Building (1695), The Brafferton (1732), and The President's House (1732), were restored to their original appearance between 1928 and 1932 through the generosity of John D. Rockefeller, Jr.

During World War II the College provided facilities for two armed forces programs: The Army Specialized Training Program and a School for Naval Chaplains. In 1943, the Institute of Early American History and Culture was formed by the union of the historical resources of the College and Colonial Williamsburg, Inc. After the war the College enjoyed an expanded enrollment, which rose to over 2,000 students in 1946 for the first time in its history.

The College, its two divisions, Richmond Professional Institute and the Norfolk Division of the College of William and Mary, and its two branch colleges, Christopher Newport and Richard Bland, were consolidated in 1960 into The Colleges of William and Mary under the direction of a chancellor. However the consolidation was dissolved in 1962, when the two senior colleges in Richmond and Norfolk were declared independent state institutions with separate boards of visitors.

When the College was restored to the independent position that it enjoyed prior to the consolidation it was encouraged by the Commonwealth of Virginia to strengthen its program in the liberal arts and sciences, and develop the advanced professional and graduate programs appropriate to its tradition and competence. In 1967 the College was recognized by the Commonwealth as having attained university status in the modern sense, but the Board of Visitors stipulated that it should always retain its original name.

During the last decade in particular the College has increased its facilities and strengthened its academic program so that it is, in effect, a small university. It is made up of a Faculty of Arts and Sciences with twenty-four departments, and of schools of business administration, education, law, marine science, and continuing studies. It offers concentrations in twenty-five areas for the bachelors degree, seventeen areas for the masters degree, and four areas for the doctorate. The central building on its new campus is the Earl Gregg Swem Library, built in 1966 at a cost of three and a quarter million dollars to house a collection of a million volumes.

In spite of its recent growth, William and Mary has maintained a number of the features that it has long shared with liberal arts colleges of moderate size. A large number of its classes are still small and its ratio of faculty to students (approximately one to fifteen) at the undergraduate level is good. Its students are given ample op-

portunity for individual oral and written expression and may participate in a general honors program or in one of several departmental honors programs. Practically all of its classes are taught by full time, experienced members of a competent, cosmopolitan faculty. It continues to foster a personal relationship between students, faculty, and administration.

The College has the same name that it was given by royal charter in 1693, but its enrollment and facilities have increased forty-fold. In addition it has fathered four other state colleges and universities that have increased the opportunity for higher education in eastern Virginia many fold. At the same time it has maintained a standard of quality in education that has earned it an enviable reputation in the nation as well as in Virginia. It is still, as it has been for over two-hundred and seventy odd years, a place of universal study dedicated to promoting the studies of true philosophy, languages, and other good arts and sciences.

Presidents of The College

James Blair, 1693-1743	Thomas Roderick Dew, 1836-1846
William Dawson, 1743-1752	Robert Saunders, 1847-1848
William Stith, 1752-1755	Benjamin S. Ewell, 1848-1849
Thomas Dawson, 1755-1760	John Johns, 1849-1854
William Yates, 1761-1764	Benjamin S. Ewell, 1854-1888
James Horrocks, 1764-1771	Lyon G. Tyler, 1888-1919
John Camm, 1771-1777	Julian A. C. Chandler, 1919-1934
James Madison, 1777-1812	John Stewart Bryan, 1934-1942
John Bracken, 1812-1814	John Edwin Pomfret, 1942-1951
John Augustine Smith, 1814-1826	Alvin Duke Chandler, 1951-1960
William H. Wilmer, 1826-1827	Davis Young Paschall, 1960-1971
Adam Empie, 1827-1836	Thomas Ashley Graves, Jr., 1971-

Chancellors of The College

Henry Compton, Bishop of London, 1693-1700

Thomas Tenison, Archbishop of Canterbury, 1700-1707

Henry Compton, Bishop of London, 1707-1713

John Robinson, Bishop of London, 1714-1721

William Wake, Archbishop of Canterbury, 1721-1729

Edmund Gibson, Bishop of London, 1729-1736

William Wake, Archbishop of Canterbury, 1736-1737

Edmund Gibson, Bishop of London, 1737-1748

Thomas Sherlock, Bishop of London, 1749-1761

Thomas Hayter, Bishop of London, 1762

Charles Wyndham, Earl of Egremont, 1762-1763

Philip Yorke, Earl of Hardwicke, 1764

Richard Terrick, Bishop of London, 1764-1776

George Washington, First President of the United States, 1788-1799

John Tyler, Tenth President of the United States, 1859-1862

Hugh Blair Grigsby, Historian, 1871-1881

John Stewart Bryan, Twentieth President of the College of William and Mary, 1942-1944

Colgate W. Darden, Jr., Governor of Virginia, 1946-1947

Alvin Duke Chandler, Twenty-second President of the College of William and Mary, 1962-

BOARD OF VISITORS

ERNEST GOODRICH
R. HARVEY CHAPPELL, JR.
FRANK W. COX

Rector Vice Rector Secretary

TERM EXPIRES MARCH 6, 1972

WILLITS H. BOWDITCH R. HARVEY CHAPPELL, JR. FRANK W. COX ERNEST GOODRICH *WILLIAM HUBARD JOHN C. SWANSON HARRY D. WILKINS Newport News, Virginia Richmond, Virginia Virginia Beach, Virginia Surry, Virginia Roanoke, Virginia Danville, Virginia Eastville, Virginia

TERM EXPIRES MARCH 6, 1974

Garrett Dalton
Frederick Deane, Jr.
Mrs. Robert V. H. Duncan
Mrs. George Falck
Roger Hull
John R. L. Johnson, Jr.
Blake T. Newton, Jr.
George D. Sands
Harry L. Snyder
**J. E. Zollinger

Radford, Virginia
Richmond, Virginia
Alexandria, Virginia
McLean, Virginia
Charlottesville, Virginia
Chadds Ford, Pennsylvania
New York, New York
Williamsburg, Virginia
Virginia Beach, Virginia
Fort Lauderdale, Florida

Standing Committees of the Board of Visitors

EXECUTIVE COMMITTEE: MR. ERNEST GOODRICH, Chairman; MR. WILLITS H. BOWDITCH; MR. FRANK W. COX; MR. R. HARVEY CHAPPELL, JR.; MR. HARRY D. WILKINS; DR. GEORGE SANDS; Executive Vice President, ex officio.

FINANCE COMMITTEE: MR. WILLITS H. BOWDITCH, Chairman; MR. FREDERICK DEANE, JR., Vice Chairman; MR. WILLIAM HUBARD; MR. BLAKE NEWTON, JR.; MR. HARRY L. SNYDER; DR. GARRETT DALTON; MR. J. E. ZOLLINGER; Vice President for Business Affairs, ex officio.

BUILDINGS AND GROUNDS COMMITTEE: MR. FRANK W. Cox, Chairman; MRS. GEORGE FALCK; MR. HARRY L. SNYDER; MR. JOHN SWANSON; Vice President for Business Affairs, ex officio.

ACADEMIC AFFAIRS COMMITTEE: DR. GEORGE SANDS, Chairman; MRS. R. V. H. DUNCAN; MRS. GEORGE FALCK; MR. BLAKE NEWTON, JR.; MR. HARRY WILKINS; MR. WILLITS BOWDITCH; Vice President for Academic Affairs, ex officio.

^{*}Appointed to fill unexpired term of Governor Thomas B. Stanley, deceased.

^{**}Appointed to fill unexpired term of Russell B. Gill, deceased.

- HONORARY DEGREE COMMITTEE: Mr. BLAKE NEWTON, Jr., Chairman; Mr. ERNEST GOODRICH, Vice Chairman; Mr. HARRY D. WILKINS; Mr. J. R. L. JOHNSON; Mr. JOHN SWANSON; Mr. R. HARVEY CHAPPELL, Jr.; Vice President for Academic Affairs, ex officio.
- Development Committee: Mr. J. R. L. Johnson, Jr., *Chairman*; Dr. Garrett Dalton, *Vice Chairman*; Mr. William Hubard; Mr. Frederick Deane, Jr.; Mr. Harry L. Snyder; Mr. Roger Hull; Mr. J. E. Zollinger; *Director of Development*, ex officio.
- STUDENT AFFAIRS COMMITTEE: MR. R. HARVEY CHAPPELL, JR., Chairman; MRS. R. V. H. DUNCAN, Vice Chairman; MR. J. R. L. JOHNSON, JR.; MR. ROGER HULL; MRS. GEORGE FALCK; MR. HARRY WILKINS; MR. WILLITS BOWDITCH; Vice President for Student Affairs, ex officio.

DIRECTORY OF ADMINISTRATIVE OFFICES

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S. DEAN OLSON
JANE H. LATHAM
DIANA C. LOVE

President
Assistant to the President
Assistant to the President
Recording Secretary, Board of Visitors
Secretary

Office of the Executive Vice President

CARTER O. LOWANCE ROSS L. WEEKS, JR. NELL R. JONES Executive Vice President
Assistant to the Executive Vice President
Administrative Assistant to the Executive Vice President

Office of the Vice President for Academic Affairs

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JOHN H. WILLIS, JR.
HENRY ACETO
WILLIAM C. POLLARD
RAYMOND W. SOUTHWORTH
E. LEON LOONEY
DUDLEY M. JENSEN
ELIZABETH R. STEARNS
KATHERINE K. FUREY

Vice President for Academic Affairs
Assistant Vice President for Academic Affairs
Director, Virginia Associated Research Campus
Librarian
Director, Computer Center
Director of Student Aid
Registrar
Assistant Registrar
Assistant Registrar

Vice President for Business Affairs

Office of the Vice President for Business Affairs

ROBERT T. ENGLISH, JR. DENNIS K. COGLE IRVING H. ROBITSHEK

Assistant to the Vice President for Business Affairs
Personnel Supervisor and Equal Employment
Opportunities Officer
Treasurer-Auditor
Assistant Treasurer-Auditor
Internal Auditor
Supervisor of Student Accounts
Supervisor of Student Loan Accounts
Supervisor of Buildings and Grounds
Director of Purchases and Stores

FLOYD E. WHITAKER
RAYMOND A. ADAMS
WILLIAM C. STERLING, JR.
MRS. EVELYN P. KIDD
MRS. GLADYS CAMPBELL
ERVIN D. FARMER
WILLIAM T. ALLEN

Office of the Vice President for Student Affairs

J. WILFRED LAMBERT JOHN C. BRIGHT CARSON H. BARNES, JR. WILLIAM S. SADLER Vice President for Student Affairs Assistant to the Vice President for Student Affairs Dean of Students Dean of Men Wallace A. Elliott Joel C. McGurk Birdena E. Donaldson Carolyn L. Moseley Warren J. Green Kenneth E. Smith, Jr. Jay Lee Chambers Robert E. DeBord, M.D. Joseph D. Brown, III. M.D. Assistant Dean of Students
Assistant Dean of Men
Dean of Women
Assistant Dean of Women
Director of the Campus Center
Assistant Director of the Campus Center
Director of the Psychological Counseling Center
Director of Student Health Service
College Physician

Office of the Vice President for College Development

WARREN HEEMANN SAM BUCKWALTER STANLEY E. BROWN Vice President for College Development Director, Office of Grants and Research Contracts Director of Corporate Relations and Placement

Space Radiation Effects Laboratory

ROBERT T. SIEGEL

Director of SREL

Office of Admissions

ROBERT P. HUNT JUANITA WALLACE REX TILLOTSON HARRIET E. REID Dean of Admissions
Assistant to the Dean
Director of Admissions for Men
Director of Admissions for Women

Office of Information Services

Ross L. Weeks, Jr. Barbara Ball James N. Chalkley Director, Information Services
Director, News Office
Supervisor, Printing Office

Athletics

BEN L. CARNEVALE H. LESTER HOOKER, JR. EDMUND T. DERRINGE Director of Athletics
Director of William and Mary Hall
Business Manager and Assistant Director of
William and Mary Hall
Publicity Director

BARRY FRATKIN

Alumni Affairs

GORDON C. VLIET

Director of Alumni Affairs

Faculty of Arts and Sciences

HAROLD L. FOWLER ROBERT A. JOHNSTON JOHN E. SELBY Dean Associate Dean Graduate Dean

Marshall-Wythe School of Law

JAMES P. WHYTE, JR.
JOHN E. DONALDSON
J. MADISON WHITEHEAD

Dean, Associate Dean Law Librarian

School of Business Administration

CHARLES L. QUITTMEYER MARVIN M. STANLEY ANTHONY L. SANCETTA Dean
Associate Dean for Undergraduate Studies
Associate Dean for Graduate Studies

School of Education

RICHARD B. BROOKS ROBERT C. JONES

Dean
Associate Dean

School of Marine Science

WILLIAM J. HARGIS, JR.

Dean

School of Continuing Studies

Donald J. Herrmann Paul N. Clem Dean

Director of Summer Session and Evening College

Administrative Council

Established for the purpose of coordinating matters of administrative policy for the College as a whole, its membership includes: Executive Vice President, Chairman; Vice President for Academic Affairs; Vice President for Business Affairs; Vice President for Student Affairs; Vice President for College Development; Assistant Vice President for Academic Affairs; Dean of the Faculty of Arts and Sciences; Dean of the School of Business Administration; Dean of the School of Continuing Studies; Dean of the School of Education; Dean of the School of Marine Science; Dean of the Marshall-Wythe School of Law; Graduate Dean of Arts and Sciences; President of the College, ex officio.

FACULTY1

THOMAS A. GRAVES, JR., President of the College.

CARTER O. LOWANCE, Executive Vice President.

GEORGE R. HEALY, Vice President for Academic Affairs.

JOHN H. WILLIS, JR., Assistant Vice President for Academic Affairs.

HAROLD L. FOWLER, Dean of Faculty of Arts and Sciences.

RICHARD B. BROOKS, Dean of School of Education.

WILLIAM J. HARGIS, JR., Dean of School of Marine Science.

Donald J. Herrmann, Dean of School of Continuing Studies.

CHARLES L. QUITTMEYER, Dean of School of Business Administration.

JAMES P. WHYTE, JR., Dean of Marshall-Wythe School of Law.

- THOMAS CONNER ATKESON (1954, 1954), Chancellor Professor of Taxation, Emeritus. B.S., M.S. and Ph.D., Georgetown University.
- MARTHA ELIZABETH BARKSDALE (1936, 1921), Associate Professor of Physical Education for Women, Emeritus. O.D., Gymnastic Peoples College, Ollerup, Denmark; A.B. and M.A., College of William and Mary.
- EMILY ELEANOR CALKINS (1953, 1927), Associate Professor of Mathematics, Emeritus. A.B., College of William and Mary; M.A., University of Michigan.
- LESTER J. CAPPON (1946, 1946), Lecturer in History, Emeritus. A.B. and M.A., University of Wisconsin; M.A. and Ph.D., Harvard University.
- James David Carter, Jr. (1930, 1927), Associate Professor of Modern Languages, Emeritus. A.B., College of William and Mary; Docteur de l'Universite de Toulouse.
- HIBBERT DELL COREY (1943, 1929), Professor of Business Administration, Emeritus. A.B., University of Michigan; M.A., Ohio State University.
- WAYNE FULTON GIBBS (1931, 1926), Professor of Accountancy, Emeritus. B.S. and M.S., University of Illinois; C.P.A.
- Andrew C. Haigh (1958, 1944), *Professor of Music, Emeritus*. A.B., University of Michigan; M.A. and Ph.D., Harvard University.
- W. Melville Jones (1953, 1928), Chancellor Professor of English, Emeritus. A.B., Allegheny College; M.A., Ohio State University; Ph.D., Harvard University.
- LAWRENCE C. LEONARD (1957, 1955), Lecturer in Mathematics, Emeritus. B.S., U.S. Military Academy.
- JOHN H. LONG (1968, 1955), Associate Professor of Physics, Emeritus. B.S., U. S. Naval Academy; M.S., Harvard University.
- JEAN STEWART MAJOR (1928, 1928), Associate Professor of Home Economics, Emeritus. B.S. and M.A., Columbia University.

¹ The first date indicates the year when the present rank was attained; the second date the year when the individual was first appointed to the instructional staff. A third date indicates the year of reappointment. All changes in the Faculty that occurred in the session 1971-72 are included in this list.

- CARL W. McCartha (1965, 1955), Professor of Education, Emeritus. A.B., Newberry College; M.A., University of North Carolina; Ed.D., University of Florida.
- BEN CLYDE McCary (1968, 1930), Professor of Modern Languages, Emeritus. A.B., University of Richmond; Docteur de l'Université de Toulouse.
- RICHARD LEE MORTON (1921, 1919), Chancellor Professor of History, Emeritus. A.B., Hampden-Sydney College; M.A., University of Virginia and Harvard University; Ph.D., University of Virginia; Litt.D., Hampden-Sydney College; LL.D., College of William and Mary.
- DAVIS Y. PASCHALL (1960, 1960), President of the College, Emeritus. A.B., M.A., College of William and Mary; Ed.D., University of Virginia.
- MARCEL REBOUSSIN (1962, 1946), Professor of Modern Languages, Emeritus. Professorat de français, Ecole Normale Supérieure de St. Cloud; M.A., Columbia University; Agrégé des lettres, Sorbonne, Paris.
- MARION DALE REEDER (1967, 1943), Professor of Physical Education for Women, Emeritus. B.S. and M.S., University of Illinois.
- GORDON B. RINGGOLD (1963, 1946), *Professor of Modern Languages, Emeritus*. A.B., Denison University; M.A., Middlebury College; Ph.D., Georgetown University.
- GRACE M. SMITH (1966, 1966), Associate Professor of Education, Emeritus. A.B. and M.Ed., University of Virginia.
- SHIRLEY DONALD SOUTHWORTH (1928, 1927), Professor of Economics, Emeritus. A.B., M.A. and Ph.D., Princeton University.
- Albion Guilford Taylor (1928, 1927), Chancellor Professor of Political Economy, Emeritus. A.B., Des Moines University; M.A., University of Nebraska; Ph.D., University of Illinois.
- Anthony Pelzer Wagener (1929, 1929), Chancellor Professor of Classical Studies, Emeritus. A.B., College of Charleston; Ph.D., The Johns Hopkins University.
- ALMA L. WILKIN (1957, 1928), Associate Professor of Home Economics, Emeritus. B.S., Kansas State University; M.A., Teachers College, Columbia University.
- MARGARET WINDER (1959, 1948, 1959), Assistant Professor of Education, Emeritus. B.S., Madison College; M.A., College of William and Mary.
- JOHN C. ABBOTT (1971, 1971), Assistant Professor of Education. B.A., University of Maine; M.Ed. and Ph.D., Pennsylvania State University.
- HENRY ACETO, Jr. (1970, 1970), Associate Professor of Biology. B.S., State University of New York, Albany; M.S., University of California, Berkeley; Ph.D., University of Texas.
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- EDWIN C. BAXLEY, JR. (1968, 1968), Assistant Professor of Business Administration. B.B.A., Baylor University; M.B.A., Louisiana State University.
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- LAWRENCE S. BECKHOUSE (1968, 1968), Assistant Professor of Sociology. A.B., Knox College; M.A. and Ph.D., Vanderbilt University.
- MICHAEL E. BENDER (1970, 1970), Associate Professor of Marine Science. B.A., Southern Illinois University; M.S., Michigan State University; Ph.D., Rutgers University.
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- Roy E. Brinkley (1971, 1971), Assistant Professor of Education. B.A., Randolph-Macon College; B.D., Union Theological Seminary; Ed.M. and Ed.D., Temple University.
- Brian Bromberger (1971, 1971), Assistant Professor of Law. B.A., Scotch College, Melbourne; LL.B., Melbourne University; LL.M., University of Pennsylvania.
- GARNETT R. Brooks, Jr. (1967, 1962), Associate Professor of Biology, B.S. and M.S., University of Richmond; Ph.D., University of Florida.
- RICHARD B. BROOKS (1967, 1947, 1967), *Professor of Education*. B.P.E., Spring-field College (Massachusetts); M.A., University of Pennsylvania; Ed.D., University of Virginia.
- JUDY BROWN (1971, 1971), Lecturer in Education. A.B., Emory and Henry College; M.Ed., College of William and Mary.
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- RICHARD MAXWELL BROWN (1967, 1967), *Professor of History*. A.B., Reed College; A.M. and Ph.D., Harvard University.
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- ROBERT J. BYRNE (1969, 1969), Associate Professor of Marine Science. M.S., University of Chicago; Ph.D., University of Chicago.
- DALE RALPH CALDER (1969, 1969), Assistant Professor of Marine Science. B.S., Acadia University; M.A. and Ph.D., College of William and Mary.
- Jane Carson (1963, 1963), Lecturer in History. A.B., Flora Macdonald College; M.A. and Ph.D., University of Virginia.
- Dennis H. Cartwright (1970, 1970), *Instructor in Mathematics*. A.B., West Georgia College; M.S., Clemson University.

- BENJAMIN RALPH CATO, JR. (1961, 1955), Associate Professor of Mathematics. A.B. and M.A., Duke University.
- Louis E. Catron (1969, 1966), Associate Professor of Theatre and Speech. A.B., Millikin University; M.A. and Ph.D., Southern Illinois University.
- JAY LEE CHAMBERS (1970, 1970), Associate Professor of Psychology. A.B., George Washington University; M.A. and Ph.D., University of Kentucky.
- ROY L. CHAMPION (1971, 1967), Associate Professor of Physics. B.S. and M.S., North Carolina State University at Raleigh; Ph.D., University of Florida.
- MILES L. CHAPPELL (1971, 1971), Assistant Professor of Fine Arts. B.S., College of William and Mary; Ph.D., University of North Carolina, Chapel Hill.
- An-Ban Chen (1971, 1971), Research Associate in Physics. B.S., Taiwan Normal University; M.S. and Ph.D., College of William and Mary.¹
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- MARK E. CHITTENDEN (1969, 1969), Assistant Professor of Marine Science. A.B., Hobart College; M.S. and Ph.D., Rutgers University.
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- PAUL N. CLEM (1968, 1959), *Professor of Education*. A.B., Bridgewater College; M.A. and Ed.D., Michigan State University.
- STEPHEN C. CLEMENT (1969, 1964), Associate Professor of Geology. A.B., Cornell University; M.S., University of Utah; Ph.D., Cornell University.
- WILLIAM S. COBB, JR. (1969, 1967), Associate Professor of Philosophy. A.B., Wake Forest University; B.D., Union Theological Seminary, New York; Ph.D., Vanderbilt University.
- James W. Coke (1964, 1957), Associate Professor of Modern Languages. A.B., Western Kentucky University; M.A. and Ph.D., Indiana University.
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- HENRY E. COLEMAN (1968, 1964), Assistant Professor of Fine Arts. A.B., College of William and Mary; M.A., State University of Iowa.
- RANDOLPH A. COLEMAN (1970, 1970), Assistant Professor of Chemistry. A.B., Susquehanna University; Ph.D., Purdue University.
- Tom A. Collins (1970, 1970), Assistant Professor of Law. A.B., Indiana University; J.D., Indiana University-Indianapolis Law School; LL.M., University of Michigan Law School.
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- Bradner W. Coursen (1969, 1968), *Professor of Biology*. A.B., Drew University; M.S. and Ph.D., University of Maryland.
- TAYLOR K. COUSINS (1968, 1968), Assistant Professor of Economics. B.S., University of Richmond.
- James D. Cowles (1968, 1968), Assistant Professor of Education. B.S., University of Alabama; M.Ed., Rutgers University; Ph.D., University of Alabama.
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- ROBERT D. CRANE (1969, 1969) Assistant Professor of Fine Arts. A.B., University of Oklahoma; M.A. and M.F.A., University of Iowa.
- EDWARD P. CRAPOL (1971, 1967), Associate Professor of History, B.S., State University of New York at Buffalo; M.S. and Ph.D., University of Wisconsin.
- GEORGE W. CRAWFORD (1960, 1960), Associate Professor of Physics. B.S., Davidson College; M.S., University of North Carolina; Ph.D., Ohio State University.
- Patricia B. Crowe (1971, 1965), Associate Professor of Physical Education for Women. B.S., Sargent College, Boston University; M.S., University of North Carolina, Greensboro.
- Frederic R. Crownfield, Jr., (1968, 1956), *Professor of Physics*. A.B., Harvard College; M.S. and Ph.D., Lehigh University.
- CHARLES T. CULLEN (1971, 1971), Lecturer in History. A.B., University of the South; M.S., Florida State University; Ph.D., University of Virginia.
- JEROME J. CURTIS, JR. (1971, 1971), Assistant Professor of Law. B.A., and J.D., University of California, Hastings; LL.M., University of Virginia Law School.¹
- WAGIH G. DAFASHY (1969, 1965), Associate Professor of Business Administration. B.Com., Ein Shams University, Cairo; M.B.A., University of Texas; Ph.D., University of Arkansas.
- RICHARD E. DAMON (1971, 1971), Assistant Professor of Government. A.B., Swarthmore College; Ph.D., Columbia University.
- James S. Darling (1961, 1961), Lecturer in Music, A.B., Yale University; B.M., Yale University School of Music; M.M., University of Michigan.
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- CARL P. DAW, Jr., (1970, 1970), Assistant Professor of English. A.B., Rice University; M.A. and Ph.D., University of Virginia.
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- JEWELL L. DELAUNE (1971, 1966), Assistant Professor in Education. A.B., M.A. and B.S. in L.S. Louisiana State University.
- JOHN B. Delos (1971, 1971), Assistant Professor of Physics. B.S., University of Michigan; Ph.D., Massachusetts Institute of Technology.
- Peter L. Derks (1971, 1960), *Professor of Psychology*. A.B., Knox College; M.A., Harvard University; Ph.D., University of Pennsylvania.
- EDMUND T. DERRINGE (1970, 1957), Assistant Professor of Physical Education for Men. B.S., Georgetown University; M.Ed., College of William and Mary.
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- CARL R. DOLMETSCH (1967, 1959), *Professor of English*. A.B. and M.A., Drake University; Ph.D., University of Chicago.
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- LYNN D. DOVERSPIKE (1971, 1967), Associate Professor of Physics. B.S., Oklahoma State University; M.S., University of California, Los Angeles; Ph.D., University of Florida.
- DAVID D. Dow (1971, 1971), Assistant Professor of Biology, B.S., Drexel Institute of Technology; Ph.D., University of Georgia.
- JOHN H. DREW (1970, 1970), Assistant Professor of Mathematics. B.S., Case Institute of Technology; Ph.D., University of Minnesota.
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- Hugh B. Easler (1962, 1962), Assistant Professor of Mathematics. A.B., Wofford College; M.S., University of South Carolina.
- MORTON ECKHAUSE (1967, 1964), Associate Professor of Physics. A.B., New York University; M.S. and Ph.D., Carnegie Institute of Technology.
- VERNON H. EDMONDS (1971, 1967), *Professor of Sociology*. A.B., Oklahoma State University; M.S., Purdue University; Ph.D., University of Missouri.
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- JOHN HODGES, COLONEL (1969, 1969), Professor of Military Science. A.B., College of William and Mary.
- E. Lewis Hoffman (1968, 1947), Professor of Modern Languages. B.S., Roanoke College; M.A. and Ph.D., George Washington University.
- Walter J. Hogman (1971, 1971), Assistant Professor of Marine Science. B.S., Eastern Michigan University; M.S., University of Michigan; Ph.D., University of Wisconsin.
- DAVID L. HOLMES, JR. (1968, 1965), Assistant Professor of Religion. A.B., Michigan State University; M.A., Columbia University; M.A., and Ph.D., Princeton University.
- H. LESTER HOOKER, JR. (1970, 1963), Associate Professor of Physical Education for Men. A.B., M.Ed., College of William and Mary.
- WRIGHT B. HOUGHLAND (1967, 1967), Lecturer in Fine Arts. B.Arch., University of Virginia.
- STANLEY HUMMEL (1966, 1964), Research Engineer in Physics.
- James Howard Hutson (1969, 1969), Lecturer in History. A.B., M.A., and Ph.D., Yale University.
- PAUL V. HYER (1969, 1968), Assistant Professor of Marine Science. B.S., University of Notre Dame, Ph.D., University of Maryland.
- ARTHUR D. ISHAM, Captain (1971, 1971), Assistant Professor of Military Science. A.B., Stanford University.

- SATOSHI ITO (1971, 1965), Associate Professor of Sociology, A.B., California State College at Long Beach; M.A. and Ph.D., University of North Carolina, Chapel Hill.
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- DAVID CLAY JENKINS (1968, 1956), *Professor of English*. A.B. and M.A., University of Alabama; Ph.D., University of Iowa.
- JOHN E. JENKINS (1967, 1967), Assistant Professor of Education. A.B., University of Richmond; M.Ed., College of William and Mary.
- Dudley M. Jensen (1962, 1951), Associate Professor of Physical Education for Men. B.S., Springfield College; M.A., Teachers College, Columbia University.
- GERALD H. JOHNSON (1970, 1965), Associate Professor of Geology. B.S., M.A. and Ph.D., Indiana University.
- HERBERT A. JOHNSON (1967, 1967), Lecturer in History. A.B., M.A. and Ph.D., Columbia University; LL.B., New York Law School.
- LUDWELL H. JOHNSON, III (1965, 1955), *Professor of History*. A.B. and Ph.D., The Johns Hopkins University.
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- THOMAS H. Jolls (1968, 1968), *Professor of Law*. A.B. and J.D., University of Michigan.
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- DAVID H. JONES (1967, 1967), Associate Professor of Philosophy. A.B., University of Missouri; M.A. and Ph.D., Harvard University.
- EDWARD E. JONES (1971, 1963), Associate Professor of Physical Education for Men. B.S. and M.Ed., College of William and Mary.
- GILBERT C. JONES (1964, 1964), Assistant Professor of Business Administration. M.B.A., Wharton School of Finance, University of Pennsylvania; J.D., College of William and Mary.
- J. WARD JONES, JR. (1967, 1961), Chancellor Professor of Classical Studies. A.B., University of Richmond; M.A. and Ph.D., University of North Carolina.
- ROBERT C. JONES (1967, 1967), Associate Professor of Education. B.S., Oklahoma City University; M.S., Oklahoma State University; Ph.D., University of Oklahoma.
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- ALEXANDER KALLOS (1964, 1949), Professor of Modern Languages. M.A. and Ph.D., University of Pennsylvania.
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- EDWARD KATZ (1963, 1947), *Instructor in Chemistry*. B.S., College of William and Mary.
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- E. Morgan Kelley, Jr. (1968, 1968), Assistant Professor of Modern Languages. A.B., Washington and Lee University; M.A. and Ph.D., Michigan State University.
- Jon S. Kerner (1969, 1969), Assistant Professor of Sociology. B.S., Carroll College; M.A. and Ph.D., Indiana University.
- R. WAYNE KERNODLE (1953, 1945), *Professor of Sociology*. A.B., M.A. and Ph.D., University of North Carolina.
- RICHARD L. KIEFER (1968, 1965), Associate Professor of Chemistry. A.B., Drew University; Ph.D., University of California, Berkeley.
- Hamilton Killen, Jr. (1968, 1968), Assistant Professor of Modern Languages. A.B., University of Maryland; M.A. and Ph.D., Stanford University.
- Chonghan Kim (1970, 1964), *Professor of Government*. A.B., M.A. and Ph.D., Indiana University.
- ALGIN B. KING (1959, 1956), Professor of Business Administration. A.B., University of South Carolina; M.S., New York University; Ph.D., Ohio State University.
- JOHN R. KING (1971, 1971), *Lecturer in Philosophy*. A.B., University of Richmond; Th.M., Union Theological Seminary.
- Yona Z. Knorr (1971, 1971), Lecturer in Music. Teacher's Diploma in Piano and Piano Pedagogy, Rubin Academy of Music, Jerusalem, Israel; M.M., University of Texas.
- MARCIA MARIE KOLLER (1968, 1968), Lecturer in Music. A.B., University of Minnesota.
- James D. Kornwolf (1971, 1968), Associate Professor of Fine Arts. B.F.A., University of Illinois; M.A., University of Wisconsin; Ph.D., Courtauld Institute of Art, University of London.
- WILLIAM J. KOSSLER (1970, 1969), Associate Professor of Physics. B.S., Massachusetts Institute of Technology; Ph.D., Princeton University.
- DAVID E. KRANBUEHL (1970, 1970), Assistant Professor of Chemistry. A.B., DePauw University; Ph.D., University of Wisconsin.
- Bette Jo Kremer (1970, 1970), *Instructor in Theatre and Speech*. A.B., Butler University; M.A., Bowling Green State University.

- ALBERT Y. Kuo (1970, 1970), Assistant Professor of Marine Science. B.S., Taiwan University; M.S., University of Iowa, Ph.D., The Johns Hopkins University.
- ALEXANDER I. KURTZ (1967, 1962), Associate Professor of Modern Languages. Licentiate and M.A., Leopold-Francis University, Innsbruck, Austria; M.A., Rutgers University; Th.D., Leopold-Francis University.
- STEPHEN G. KURTZ (1966, 1966), Lecturer in History. A.B., Princeton University; Ph.D., University of Pennsylvania.
- ANN T. LAMBERT (1969, 1969), Assistant Professor of Physical Education for Women. B.S., Appalachian State University; M.S.P.E., University of North Carolina, Greensboro.
- J. WILFRED LAMBERT (1959, 1931), Professor of Psychology. A.B., College of William and Mary.
- JOHN F. LAVACH (1970, 1967), Associate Professor of Education. A.B., Montclair State College; M.A., Fairleigh Dickinson University; Ed.D., Duke University.
- James D. Lavin (1970, 1968), Associate Professor of Modern Languages. A.B. and Ph.D., Florida State University.
- James D. Lawrence, Jr. (1968, 1960), Adjunct Professor of Physics. B.S., Virginia Military Institute; M.A. and Ph.D., University of Virginia.
- SIDNEY H. LAWRENCE (1965, 1961), Associate Professor of Mathematics. A.B., M.A. and Ph.D., University of Virginia.
- LEWIS W. LEADBEATER (1968, 1965), Associate Professor of Classical Studies. A.B., University of Pittsburgh; M.A. and Ph.D., New York University.
- VERA ZATHURECZKY LENDVAY (1969, 1969), Lecturer in Music. Diploma, Professor of Music and Performing Artist, Franz Liszt Academy of Music.
- WILLIAM W. LIDDELL (1971, 1971), Assistant Professor of Business Administration. B.B.A., Western Michigan University; M.B.A., Wayne State University; Ph.D., Pennsylvania State University.
- VICTOR A. LIGUORI (1970, 1964), Associate Professor of Sociology. A.B., Haverford College; M.A. and Ph.D., Princeton University.
- MONT LINKENAUGER (1969, 1960), Associate Professor of Physical Education for Men. B.S. and M.Ed., College of William and Mary; R.P.T., Medical College of Virginia.
- James C. Livingston (1968, 1968), Associate Professor of Religion. A.B., Kenyon College; B.D., Union Theological Seminary, New York; Ph.D., Columbia University.
- Don W. Llewellyn (1970, 1969), Associate Professor of Law. A.B., Dickinson College; J. D., Dickinson School of Law; LL.M., New York University.¹
- JOSEPH LOESCH (1969, 1969), Assistant Professor of Marine Science. B.S., University of Rhode Island; M.S. and Ph.D., University of Connecticut.

¹ On leave of absence, 1971-72.

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- ROBERT P. MACCUBBIN (1968, 1964), Assistant Professor of English. A.B., The Johns Hopkins University; M.A. and Ph.D., University of Illinois.
- Frank A. MacDonald (1955, 1955), *Professor of Philosophy*. A.B. and M.A., College of William and Mary; M.A., Harvard University.
- WILLIAM G. MACINTYRE (1965, 1965), Assistant Professor of Marine Science, B.S., M.S. and Ph.D., Dalhousie University.
- WILLIAM J. MADDOCKS (1971; 1971), Assistant Professor of Business Administration. B.S., Naval Academy; M.S., Purdue University, M.B.A., George Washington University.
- ROBERT MAIDMENT (1970, 1970), Associate Professor of Education. B.S., M.Ed., and Ed.D., University of Virginia.
- CHARLOTTE P. MANGUM (1968, 1964), Associate Professor of Biology. A.B., Vassar College; M.S. and Ph.D., Yale University.
- KENNETH L. MARCELLUS (1970, 1970), Instructor of Marine Science. B.S., Iowa State University.
- James E. Marlow (1969, 1969), *Instructor in English*. A.B., Dartmouth College; M.A., University of California, Davis.
- CHARLES F. MARSH (1968, 1930, 1968), Lecturer in Business Administration. A.B., Lawrence College; M.A. and Ph.D., University of Illinois.
- J. LUKE MARTEL (1963, 1963), Associate Professor of Modern Languages. A.B., University of Arizona; Licence ès Lettres, Université de Montpellier; Doctorat Université d'Aix-Marseille.
- DIANA P. MARTIN (1969, 1969), *Instructor in English*. A.B. and M.A., Ohio University.
- MARTIN C. MATHES (1967, 1967), Associate Professor of Biology. A.B., Miami University; M.S. and Ph.D., University of Maryland.
- JOHN R. MATTHEWS, JR. (1963, 1961), Associate Professor of Economics. B.S. and M.A., University of Virginia.
- GILBERT H. McArthur (1971, 1966), Associate Professor of History. A.B., Friends University; Ph.D., University of Rochester.
- James N. McCord, Jr. (1969, 1965), Associate Professor of History. A.B., Emory University; M.A. and Ph.D., The Johns Hopkins University.
- WILLIAM McCormick, Jr. (1969, 1969), Associate Professor of Business Administration. B.S. and M.B.A., Indiana University; Ph.D., Case Western Reserve University; C.P.A.
- CECIL M. McCulley (1963, 1948), *Professor of English*. A.B. and M.A., Southern Methodist University; Ph.D., Columbia University.
- BRUCE T. McCully (1961, 1940), *Professor of History*. A.B., Rutgers University; M.A. and Ph.D., Columbia University.

- JOHN J. McCusker (1971, 1971), Assistant Professor of History. A.B., St. Bernard's Seminary and College; M.A., University of Rochester; Ph.D., University of Pittsburgh.¹
- VIRGIL V. MCKENNA (1967, 1962), Associate Professor of Psychology. A.B., College of William and Mary; M.A., Swarthmore College; Ph.D., Princeton University.
- JOHN L. McKnight (1968, 1957), *Professor of Physics*. A.B., University of Michigan; M.S. and Ph.D., Yale University.
- HENRY E. McLane (1967, 1965), Associate Professor of Philosophy. A.B., George Washington University; M.A. and Ph.D., Yale University.
- WILLIAM G. McNairy (1970, 1967), Lecturer in Business Administration. B.S., University of North Carolina; M.B.A., University of Virginia; C.P.A.
- WILLIAM R. MELVIN (1970, 1970), Assistant Professor of Mathematics. B.S. and Ph.D., Brown University.
- JOHN V. MERRINER (1970, 1970), Instructor in Marine Science. A.B., Rutgers University; M.S., North Carolina State University.
- TERRY L. MEYERS (1970, 1970), *Instructor in English*. A.B., Lawrence University; M.A., University of Chicago.
- PATRICK H. MICKEN (1970, 1966), Assistant Professor of Theatre and Speech. B.S. and M.S., Southern Illinois University.
- MARY S. MILLER (1971, 1971), Lecturer in English. A.B. and M.A., University of Illinois.
- ROBERT ALAN MILLER (1970, 1970), Research Associate in Physics. B.S., M.S., and Ph.D., University of Illinois.
- THELMA MILLER (1957, 1954), Assistant Professor of Home Economics. A.B., Berea College; M.S., University of Tennessee.
- ESTHER B. MILLS (1968, 1968), Associate Professor of Education. B.S., Wayne State University; M.Ed. and Ed.D., University of Maryland.
- Joseph A. Miri (1970, 1970), Assistant Professor of Government. A.B., Wesleyan University; M.A., and Ph.D., Rutgers University.
- WARREN E. MITCHELL (1966, 1966), Instructor in Physical Education for Men. A.B., University of Richmond.
- RICHARD W. MONCURE (1969, 1969), Instructor in Marine Science. B.S., Virginia Polytechnic Institute.
- CARLISLE E. Moody (1970, 1970), Visiting Assistant Professor of Economics. A.B., Colby College; M.A. and Ph.D., University of Connecticut.
- JOHN A. MOORE (1965, 1950), Professor of Modern Languages. B.S., Davidson College; M.A. and Ph.D., University of North Carolina.
- JUNE MORELAND (1970, 1970), Instructor in Modern Languages. A.B., University of Georgia; M.A., University of North Carolina, Chapel Hill.

¹ On leave of absence, 1971-72.

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- WOLF MOSER (1971, 1971), Visiting Research Professor of Chemistry. B.S., Queen Mary College, University of London.
- WILLIAM WARNER Moss, Jr. (1937, 1937), John Marshall Professor of Government and Citizenship. A.B., University of Richmond; M.A. and Ph.D., Columbia University.
- JOHN C. MUNDAY, JR. (1969, 1969), Assistant Professor of Marine Science. A.B., Cornell University; Ph.D., University of Illinois.
- JOHN A. MUSICK (1970, 1968), Assistant Professor of Marine Science. A.B., Rutgers, The State University; M.A., Harvard University.
- Fraser Neiman (1958, 1938), *Professor of English*. A.B., Amherst College; M.A. and Ph.D., Harvard University.
- Francis H. Nelson (1971, 1968), Assistant Professor of Education. A.B., Winthrop College; M.Ed., College of William and Mary.
- ANNE TYLER NETICK (1967, 1962), Assistant Professor of Modern Languages. A.B., Randolph-Macon Woman's College; M.A., Columbia University.
- ELSA NETTELS (1969, 1967), Associate Professor of English. A.B., Cornell University; M.A. and Ph.D., University of Wisconsin.
- RICHARD K. NEWMAN, JR. (1966, 1946), Professor of Fine Arts. A.B., Dartmouth College; Ph.D., Yale University.
- MAYNARD M. NICHOLS (1961, 1961), Associate Professor of Marine Science. B.S., Columbia University; M.S., Scripps Institute of Oceanography; Ph.D., University of California, Los Angeles.
- J. J. Norcross (1965, 1959), Associate Professor of Marine Science. A.B., William Jewel College; M.S., Michigan State University.
- WILLIAM E. O'CONNELL, JR. (1971, 1969), Associate Professor of Business Administration. A.B., Manhattan College; M.B.A., Columbia University; D.B.A., Indiana University.
- PETER V. O'NEIL (1969, 1967), Associate Professor of Mathematics. B.S., Fordham University; M.S. and Ph.D., Rensselaer Polytechnic Institute.
- ROBERT A. ORWOLL (1969, 1969), Assistant Professor of Chemistry. A.B., St. Olaf College; Ph.D., Stanford University.
- CURTIS H. O'SHELL (1968, 1968), Associate Professor of Education. B.A., Pennsylvania State University; M.A., Allegheny College; Ed.D., Pennsylvania State University.
- Franklyn D. Ott (1970, 1970), Assistant Professor of Marine Science. B.S., Lynchburg College; Ph.D., University of Kansas.
- PIERRE C. OUSTINOFF (1958, 1953), Professor of Modern Languages. A.B., M.A. and Ph.D., Columbia University.
- STEPHEN P. PALEDES (1968, 1954), Associate Professor of Music. Juilliard School of Music; A.B. and M.A., American University.

- Maria Robredo Palmaz (1968, 1964), Instructor in Modern Languages. A.B., National Institute of Modern Languages, Buenos Aires; M.A., University of Cordoba; Diplôme De Culture Française Contemporaine, University of Paris.
- SLOANE W. PAYNE, JR. (1970, 1970), Assistant Professor of Psychology. A.B., and Ph.D., University of North Carolina, Chapel Hill.
- Roy L. Pearson (1971, 1971), Associate Professor of Business Administration. B.S. and Ph.D., University of Virginia.
- CLIFFORD H. PENCE, JR. (1970, 1970), Instructor in Theatre and Speech. A.B., College of William and Mary; M.S., Temple University.
- CHARLES F. PERDRISAT (1969, 1966), Associate Professor of Physics. B.S., University of Geneva; D.Sc., Federal Institute of Technology, Zurich.
- Frank O. Perkins (1966, 1966), Assistant Professor of Marine Science. A.B., University of Virginia; M.S. and Ph.D., Florida State University.
- ARTHUR WARREN PHELPS (1945, 1945), *Professor of Law.* A.B., Washington and Lee University; M.A., Ohio State University; J.D., University of Cincinnati; LL.M., Columbia University.
- HELEN M. PIKE (1970, 1970), Instructor in English. A.B. and M.A., Hunter College.
- WILLIAM CARTER POLLARD (1966, 1966), Librarian. A.B., University of North Carolina; M.A., Florida State University.
- WILLIAM G. POOLE, JR. (1970, 1970), Assistant Professor of Mathematics. A.B. and M.A., University of Texas; Ph.D., University of California, Berkeley.
- Bolling Raines Powell, Jr. (1969, 1969), *Professor of Law*. A.B., Birmingham-Southern College; M.A. and LL.B., University of Virginia.
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- John S. Quinn (1959, 1949, 1956), *Professor of Business Administration*. B.S., State Teachers College, Salem, Massachusetts; M.C.S., Boston University; M.B.A., Harvard University; C.P.A.
- CHARLES L. QUITTMEYER (1962, 1948, 1962), Professor of Business Administration. A.B., College of William and Mary; M.B.A., Harvard University; Ph.D., Columbia University.
- LARRY RABINOWITZ (1968, 1968), Assistant Professor of Mathematics. A.B., M.S., and Ph.D., Rutgers University.
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- ELIZABETH S. REED (1968, 1955), Associate Professor of Philosophy. A.B., Butler University; M.A., Florida State University; Ph.D., Duke University.

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- THEODORE R. REINHART (1968, 1968), Assistant Professor of Anthropology. A.B., Pennsylvania State University; M.A., George Washington University; Ph.D., University of New Mexico.
- EDWARD A. REMLER (1970, 1967), Associate Professor of Physics. B.S., Massachusetts Institute of Technology; M.S., Columbia University; Ph.D., University of North Carolina, Chapel Hill.
- ELLIS E. REMSBERG (1971, 1971), Research Assistant Professor of Chemistry. B.S., Virginia Polytechnic Institute; M.S. and Ph.D., University of Wisconsin.
- STEPHEN P. REYNA (1971, 1971), Assistant Professor of Anthropology. A.B., Columbia College.
- THOMAS L. REYNOLDS (1960, 1960), *Professor of Mathematics*. B.S., Guilford College; M.A. and Ph.D., University of North Carolina.
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- ROGER R. RIES (1968, 1968), Assistant Professor of Education. B.S., M.Ed. and Ph.D., University of Missouri.
- EDWARD MILES RILEY (1963, 1963), Lecturer in History. A.B., Washington and Lee University; M.A. and Ph.D., University of Southern California.
- ROBIN L. ROARK (1968, 1968), Lecturer in Music. B.M., Oklahoma Baptist University; M.S., University of Southern California.
- SHIRLEY G. ROBY (1970, 1964), Associate Professor of Physical Education for Women. B.S., Longwood College; M.F.A., University of North Carolina, Greensboro.
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- GEORGE T. RUBLEIN (1966, 1966), Associate Professor of Mathematics. B.S., St. Mary's University; M.S. and Ph.D., University of Illinois.
- Evon P. Ruzecki (1965, 1965), Assistant Professor of Marine Science. A.B., Knox College; M.S., University of Wisconsin.
- RONALD R. SAINT-ONGE (1970, 1970), Assistant Professor of Modern Languages. A.B., Providence College; M.A. and Ph.D., Vanderbilt University.
- ANTHONY L. SANCETTA (1961, 1948), Professor of Business Administration. A.B., Western Reserve University; M.S. and Ph.D., Columbia University.
- Anthony J. Santoro (1970, 1970), Assistant Professor of Law. A.B., Boston College; J.D. and LL.M., Georgetown University Law Center.
- Jagdish C. Sanwal (1966, 1966), Associate Professor of Mathematics. B.S. and M.S., Lucknow University, India; Ph.D., Indiana University.

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- HOWARD M. SCAMMON, JR. (1967, 1948), Professor of Theatre and Speech. A.B., College of William and Mary; M.A., Northwestern University.
- MELVYN D. SCHIAVELLI (1971, 1968), Associate Professor of Chemistry. B.S., DePaul University; Ph.D., University of California, Berkeley.
- LEONARD G. SCHIFRIN (1970, 1965), *Professor of Economics*. A.B. and M.A., University of Texas; Ph.D., University of Michigan.
- ROBERT J. SCHOLNICK (1967, 1967), Assistant Professor of English. A.B., University of Pennsylvania; M.A. and Ph.D., Brandeis University.
- SYLVIA H. SCHOLNICK (1971, 1971), Lecturer in Religion. A.B., Wellesley College; M.A., Brandeis University.
- HARLAN E. SCHONE (1968, 1965), Associate Professor of Physics. B.S., University of Illinois; Ph.D., University of California, Berkeley.
- JOSEPH LEE SCOTT (1970, 1970), Assistant Professor of Biology. A.B. and M.A., University of California, Santa Barbara; Ph.D., University of California, Irvine.
- ROBERT E. SCOTT (1971, 1969), Associate Professor of Law, A.B. Oberlin College; J.D., College of William and Mary; LL.M., University of Michigan.
- JOHN E. SELBY (1970, 1963), *Professor of History*. A.B., Harvard College; M.A. and Ph.D., Brown University.
- Kelly G. Shaver (1968, 1968), Assistant Professor of Psychology. B.S. and M.S., University of Washington; Ph.D., Duke University.
- GLENN D. SHEAN (1970, 1966), Associate Professor of Psychology. A.B., Louisiana State University, New Orleans; M.A. and Ph.D., University of Arizona.
- THOMAS F. SHEPPARD (1971, 1969), Associate Professor of History. A.B., Vanderbilt University; M.A., University of Nebraska; Ph.D., The Johns Hopkins University.
- ARDEN SHER (1967, 1967), Associate Professor of Physics. B.S. and Ph.D., Washington University, St. Louis.
- CAROL W. SHERMAN (1970, 1963), Associate Professor of Physical Education for Women. A.B., Hollins College; M.A., Sarah Lawrence College.
- RICHARD B. SHERMAN (1970, 1960), *Professor of History*. A.B., Harvard University; M.A., University of Pennsylvania; Ph.D., Harvard University.
- ROGER SHERMAN (1966, 1946, 1966), Associate Professor of Theatre and Speech. A.B., College of William and Mary.
- ROBERT T. SIEGEL (1963, 1963), *Professor of Physics*. B.S., M.S. and D.Sc., Carnegie Institute of Technology.
- MARK N. SILBERT (1971, 1971), *Instructor in Marine Science*. B.S. and M.S., New York University.
- BRUCE LAMBERT SISCO, JR., CAPTAIN (1969, 1969), Assistant Professor of Military Science. A.B., University of Chattanooga.

- CRAIG L. SMITH (1970, 1970), Assistant Professor of Marine Science. A.B., The Johns Hopkins University; Ph.D., University of Florida.
- GARY A. SMITH (1969, 1969), Assistant Professor of Modern Languages. A.B., University of Kansas; Ph.D., University of Texas.
- HOWARD M. SMITH, Jr. (1965, 1946), Professor of Physical Education for Men. B.S., College of William and Mary; M.S., Syracuse University.
- James A. Smith, Major (1971, 1971), Assistant Professor of Military Science. B.S., Clemson University.
- James E. Smith (1970, 1970), Assistant Professor of Business Administration. A.B., Southeastern Louisiana College; M.B.A., University of Houston; Ph.D., University of Arizona; C.P.A.
- JERRY C. SMITH (1969, 1969), Assistant Professor of Modern Languages. A.B., University of Texas; M.A. and Ph.D., Cornell University.
- LEROY W. SMITH (1967, 1956), *Professor of English*. A.B., American University; M.A., George Washington University; Ph.D., Duke University.
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- MARVIN M. STANLEY (1971, 1968), Associate Professor of Business Administration. B.S., George Washington University; M.B.A., Harvard University.
- ALAN C. STEWART (1968, 1944), *Professor of Music.* A.B., Union College; M.A., Columbia University.
- PAUL K. STOCKMEYER (1971, 1971), Assistant Professor of Mathematics. A.B., Earlham College; M.A. and Ph.D., University of Michigan.
- HOWARD STONE (1963, 1948), *Professor of Modern Languages*. A.B., Pomona College; M.A., Claremont Graduate School and University Center; Ph.D., University of California, Berkeley.
- George V. Strong (1971, 1967), Associate Professor of History. A.B., M.A. and Ph.D., University of North Carolina, Chapel Hill.
- Calvin T. Swift (1971, 1971), Lecturer in Mathematics. B.S., Massachusetts Institute of Technology; M.S., Virginia Polytechnic Institute; Ph.D., College of William and Mary. ¹

¹ Second semester only, 1971-72.

- WILLIAM F. SWINDLER (1958, 1958), *Professor of Law*. A.B. and B.S., Washington University, St. Louis; M.A. and Ph.D., University of Missouri; LL.B., University of Nebraska.
- JOHN W. SYKES (1970, 1963), Associate Professor of Education. B.S., New York State College; M.Ed., University of Virginia.
- JESSE S. TARLETON (1970, 1970), Assistant Professor of Business Administration. B.S., Pennsylvania State University; M.B.A., College of William and Mary; Ph.D., Cornell University.
- THADDEUS W. TATE, JR. (1969, 1961), *Professor of History*. A.B. and M.A., University of North Carolina; Ph.D., Brown University.
- C. RICHARD TERMAN (1969, 1963), *Professor of Biology*. A.B., Albion College; M.S. and Ph.D., Michigan State University.
- ELAINE M. THEMO (1971, 1966), Associate Professor of Sociology. A.B., Mount Holyoke College; M.A., University of North Carolina; Ph.D., American University.
- JOHN B. THOMAS (1971, 1971), Assistant Professor of Geology. A.B. and M.S., Miami University, Ohio.
- DAVID W. THOMPSON (1970, 1967), Associate Professor of Chemistry. B.S., Wheaton College; Ph.D., Northwestern University.
- James J. Thompson, Jr. (1971, 1971), Assistant Professor of History. A.B., Columbia Union College; M.A. and Ph.D., University of Virginia.
- THOMAS E. THORNE (1965, 1940), Professor of Fine Arts. B.F.A., Yale University.
- Janet Tomlinson (1969, 1965), Assistant Professor of Physical Education for Women. A.B., Beloit College; M.A., University of Iowa.
- LELAND E. TRAYWICK (1967, 1967), *Professor of Business Administration*. A.B. and M.A., University of Missouri; Ph.D., University of Illinois.
- F. Donald Truesdell (1963, 1960), *Professor of Music*. B.M. and M.M., University of Michigan; A.M.D., University of Rochester.
- WILLIAM C. TURNER (1969, 1960), Associate Professor of Mathematics. B.S., Furman University; M.A., Duke University.
- J. ALLEN TYLER, (1969, 1969), Assistant Professor of Modern Languages. B.S., Virginia Polytechnic Institute; M.A., Middlebury College; Ph.D., University of Virginia.
- SHEPPARD YOUNG TYREE, JR. (1966, 1966), Professor of Chemistry. B.S. and Ph.D., Massachusetts Institute of Technology.
- HORACE UNDERWOOD (1970, 1970), Lecturer in Physical Education for Men. A.B., University of Richmond.
- PAUL UNGER (1968, 1968), *Professor of Education*. A.B., Western Michigan University; M.A. and Ph.D., University of Michigan.

- WILLARD A. VAN ENGEL (1961, 1946), *Professor of Marine Science*. Ph.B., and Ph.M., University of Wisconsin.
- MARION G. VANFOSSEN (1970, 1967), *Professor of Sociology*. A.B., Blackburn College; M.A., Pennsylvania State University; Ph.D., Emory University.
- JACK D. VAN HORN (1970, 1970), Assistant Professor of Religion. A.B., Ohio Wesleyan University; M.A. and Ph.D., Columbia University.
- RICHARD J. VARGO (1971, 1971), Associate Professor of Business Administration. B.S., Marietta College; M.B.A., Ohio University; D.B.A., University of Washington.
- CHARLES R. VARNER (1968, 1953), Professor of Music. B.M.E. and M.M., Northwestern University.
- W. LARRY VENTIS (1969, 1969), Assistant Professor of Psychology. B.S. and M.A. and Ph.D., University of Tennessee.
- CARL W. VERMEULEN (1971, 1966), Associate Professor of Biology. A.B., Hope College; M.S. and Ph.D., University of Illinois.
- HANS C. VON BAEYER (1970, 1968), Associate Professor of Physics. A.B., Columbia College; M.Sc., University of Miami; Ph.D., Vanderbilt University.
- RICHARD E. WALCK (1970, 1970), Assistant Professor of Law. A.B., Pennsylvania State University; LL.B. University of Virginia.
- HELEN C. WALKER (1969, 1969), Assistant Professor of History. A.B., College of William and Mary; M.A., Yale University.
- ALAN JOSEPH WARD (1969, 1967), Associate Professor of Government. B.Sc., University of London; M.A., University of Connecticut; Ph.D., University of London.
- STEWART A. WARE (1967, 1967), Assistant Professor of Biology. B.S., Millsaps College; Ph.D., Vanderbilt University.
- JUNIUS ERNEST WARINNER, III (1963, 1963), Instructor in Marine Science. B.S. and M.A., College of William and Mary.
- LELAND E. WARREN (1969, 1969), *Instructor in English*. A.B., Emory University; M.A., University of Georgia.
- WILLIAM H. WARREN (1970, 1970), Lecturer in Business Administration. B.S., University of Richmond; M.S. and Ph.D., Purdue University.
- MARVIN L. WASS (1960, 1960), Associate Professor of Marine Science. B.S., Winona State College; M.S., Flordia State University; Ph.D., University of Florida.
- KENNETH L. WEBB (1965, 1965), Assistant Professor of Marine Science. A.B., Antioch College; M.S. and Ph.D., Ohio State University.
- GIDEON WEISZ (1968, 1968), Assistant Professor of Physics. B.S., M.S. and Ph.D., University of Chicago.
- ROBERT H. WELCH (1970, 1970), *Instructor in Modern Languages*. A.B., Hampden-Sydney College; M.A., University of Pennsylvania.

- ROBERT E. WELSH (1968, 1963), *Professor of Physics*. B.S., Georgetown University; Ph.D., The Pennsylvania State University.
- MILDRED BARRETT WEST (1968, 1959), Associate Professor of Physical Education for Women. B.S., Georgia State College for Women; M.A., University of Maryland.
- James P. Whyte, Jr. (1958, 1958), *Professor of Law*. A.B., Bucknell University; M.A., Syracuse University; J.D., University of Colorado.
- PETER D. WIGGINS (1971, 1971), Assistant Professor of English. A.B., M.A. and Ph.D., Columbia University.
- STANLEY B. WILLIAMS (1948, 1948), *Professor of Psychology*. A.B. and M.A., University of California, Los Angeles; Ph.D., Yale University.
- RICHARD A. WILLIAMSON (1970, 1970), Assistant Professor of Law. B.B.A., Ohio University; J.D., College of Law, The Ohio State University.
- JOHN H. WILLIS, JR. (1967, 1959), Associate Professor of English. A.B., University of Virginia; M.A. and Ph.D., Columbia University.
- ROLF G. WINTER (1964, 1964), *Professor of Physics*. B.S., M.S. and D.Sc., Carnegie Institute of Technology.
- LAWRENCE L. WISEMAN (1971, 1971), Assistant Professor of Biology. A.B., Hiram College; M.A. and Ph.D., Princeton University.
- Frank J. Wojcik (1965, 1965), *Instructor in Marine Science*. B.S., University of Massachusetts; M.S., University of Alaska.
- J. L. Wood (1961, 1959), *Professor of Marine Science*. B.S., Massachusetts State College; M.S., University of Massachusetts; Ph.D., Columbia University.
- Burton M. Woodward (1969, 1969), Associate Professor of Business Administration. A.B., M.B.A., and Ph.D., University of Florida.
- YING-YEUNG YAM (1967, 1967), Assistant Professor of Physics. B.S., Trinity College, Connecticut; M.A., University of California, Berkeley; Ph.D., University of Pennsylvania.
- JOHN M. ZEIGLER (1971, 1971), *Professor of Marine Science*. B.A., University of Colorado, Boulder; Ph.D., Harvard University.
- JOSEPH R. ZEPKIN (1968, 1968), Lecturer in Law. A.B. and B.C.L., College of William and Mary.
- Walter S. Zimmermann (1966, 1966), Associate Professor of Modern Languages. B.S. and Ph.D., New York University.
- Paul Leon Zubkoff (1970, 1970), Associate Professor of Marine Science. B.S., University of Buffalo; M.S., George Washington University; Ph.D., Cornell University.
- DAVID E. ZWERNER (1968, 1968), *Instructor in Marine Science*. B.S., George Washington University; M.A., College of William and Mary.

LIBRARY AND HEALTH SERVICE STAFFS

Earl Gregg Swem Library Staff

- WILLIAM CARTER POLLARD (1966, 1966), Librarian. B.A., University of North Carolina; M.A., Florida State University.
- ALVA WARE STEWART (1971, 1971), Associate Librarian. A.B., University of North Carolina; M.A., Duke University; M.S.L.S., University of North Carolina.
- KATHRYN JOAN BLUE (1968, 1968), Assistant Catalog Librarian. B.A., Cornell College; M.A., University of Wisconsin.
- MARY LOUISE BROWN COBB (1970, 1967), Catalog Librarian. B.A., Wake Forest College; M.L.S., George Peabody College for Teachers.
- MARGARET CELESTE COOK (1966, 1966), Curator of Manuscripts. B.A., Sweet Briar College; M.A., College of William and Mary.
- SUZANNE LOUISE FOLEY (1967, 1965), Reference Librarian. A.B., College of William and Mary; M.L.S., Rutgers University.
- HERBERT LAWRENCE GANTER (1950, 1940, 1948), College Archivist. A.B. and B.C.L., College of William and Mary.
- DELORES KAYE GAPEN (1971, 1971), Assistant Catalog Librarian. A.B., University of Washington; M.L.S., University of Washington.
- SARAH VIRGINIA GRAY (1964, 1964), *Periodicals Librarian*. A.B., Duke University; M.S. in L.S., University of North Carolina.
- HENRY DALE GRUNDER (1967, 1967), Curator of Rare Books. B.A. and M.A., Miami University; A.M., University of Chicago.
- BERNA JUDITH HEYMAN (1972, 1972), Assistant Catalog Librarian. A.B., Washington University; M.S.L.S., Simmons College.
- DORTHA HENDERSON SKELTON (1971, 1971), Assistant Reference Librarian. B.A., University of Tennessee; M.S.L.S., Atlanta University.
- ROBERT C. STEVICK (1971, 1971), Assistant Reference Librarian. B.S., Washington and Jefferson College; M.L.S., University of Pittsburgh.
- GRACE SWIFT (1970, 1970), *Librarian*, Virginia Associated Research Campus. A.B., College of William and Mary; A.M.L.S., University of Michigan.
- CAROL DIANE TERRY (1970, 1969), Circulation Librarian. B.A., Gettysburg College; M.S., University of North Carolina.
- Sue Wallenius Welch (1970, 1970), Assistant Catalog Librarian. B.A., Wilson College; M.L.S., Drexel University.
- NOLAN THOMAS YELICH (1968, 1968), Head Public Services. B.S., Wisconsin State University, Oshkosh; M.S., University of Wisconsin.
- AILENE ANNE ZIRKLE (1964, 1963), *Acquisitions Librarian*. A.B., Madison College; M.L.S., George Peabody College for Teachers.

Health Service Staff

ROBERT E. DEBORD, M.D.	Director of Student Health Service
Joseph D. Brown III, M.D.	College Physician
SUE M. HARTSFIELD, R.N.	Head Nurse
Mrs. G. V. Bracey, R.N.	Nurse
Mrs. Gordon Gray, R.N.	Nurse
Mrs. William Dayton, R.N.	Nurse
Mrs. J. A. Edmunds, R.N.	Nurse
MRS. CHARLOTTE R. BATHURST, R.N.	Nurse

COMMITTEES

General College Committees

- Administrative Council: Lowance (Chairman), R. Brooks, English, Fowler, Hargis, Healy, Heemann (Secretary), Herrmann, Kelly, Lambert, Quitt-Meyer, Selby, Whyte, Willis, President Graves (ex officio).
- Admissions: Garrett (Chairman), Baxter, Bick, Clem, M. Freeman, Fuchs, A. King, O'Neil, Welsh, Hunt (ex officio).
- Concerts and Lectures: A—Green (Chairman), H. Coleman, Dolmetsch, M. Freeman, Roger Sherman, K. Smith. (B) Hearn (Chairman), Beyer, Coyner, Lavach, B. Powell, Tyree.
- Athletics: Johnston (Chairman), Barnes, Cato, Derks, N. Elliott, Linkenauger, Roseberg, Sancetta, Sykes, Tillotson, Whyte, Hooker (ex officio).
- Computer Center Advisory: Funsten (Chairman), Chambers, Dow, E. Fischer, Galfo, Garrett, Jensen, Kiefer, Norcross, Quinn, Whitaker, Southworth (ex officio).
- Discipline: MacDonald (Chairman), B. Donaldson (non-voting), Doverspike, Edwards, Flanagan, Jolls, J. W. Jones, Maddocks, Sadler (non-voting), David Thompson.
- Environment: Vermeulen (Chairman), Altshuler, Baldwin, G. Johnson, Kiefer, Miri, R. E. Scott, von Baeyer, Willis.
- Faculty Research: R. M. Brown (Chairman), Bullock, Conlee, Kornwolf, Leadbeater, Phelps, E. Rhyne, Shean, Southworth, Traywick, Tyree, Heemann, Selby (ex officio).
- Graduate Council: Healy (Chairman), Brooks, Evans, Hargis, Herrmann, Pollard, Sancetta, Selby, Whyte, Winter.
- Motor Vehicle Control Board: W. Elliott (Chairman), Cato, Clem, Collins, Farmer, Shaver, Stanley.
- Prizes and Awards: MacDonald (General Chairman). Botetourt Medal, B. Donaldson, Kallos, Lambert, Williams; Carr Cup, Armstrong, C. McCulley, Sadler and one each to be named by Senior and Junior Classes; Sullivan Award, R. Brooks, Crapol, Fischer, Kernodle, Moseley, Quittmeyer, Scammon.
- Scheduling Committee: WILLIS (Chairman), LAMBERT (Secretary and Keeper of the College Calendar), J. Donaldson, English, Herrmann, Kelly, Scammon, H. Smith, Thorne, Hooker (ex officio).
- Social Events: W. Green (Chairman), Ed Jones, Moseley, Sadler, Varner, West, English (ex officio).
- Special Events: Evans (Chief Marshal), Armstrong, Baldwin, Ball, N. Elliott, Harcum, Kernodle, Prosl, Selby. Charter Day Convocation, Lowance (General Chairman). Spring Honors Convocation, Lambert (General Chairman). Commencement, Lambert (Chairman). Homecoming, Burgesses Day, Kelly (Executive Secretary of Alumni).

Committees 39

- Student Aid and Placement: HEEMANN (Chairman), BRIGHT (Secretary), S. BROWN, CHESSER, CLEMENT, KERNODLE, REYNOLDS, STANLEY, HUNT (ex officio).
- William and Mary Hall Advisory: English (Chairman), Bledsoe, Kernodle, Johnston, H. Smith.

Committees of the Faculty of Arts And Sciences

- Academic Status: NEIMAN (Chairman), CATO, DAVIDSON, B. DONALDSON, HAUL-MAN, G. JOHNSON, JOHNSTON, SADLER, STRONG, JENSEN (Secretary).
- Athletics (Women): West (Chairman), Archer, Roby, Tomlinson. Jane Harland, Pamela Jamarik (students).
- †Degrees: Fowler (Chairman), Diduk, Friedman, Maccubbin, Schiavelli.
- *Educational Policy: L. SMITH (Chairman), BARRY, E. BAUER, BECKHOUSE, COKE, D. JONES, J. MCKNIGHT, RUBLEIN, R. W. SMITH, FOWLER (ex officio). LAURA LEIGH ADAMS, MADELINE CARNEY, ALAN WAITES (students).
- †Faculty Affairs: Fowler (Chairman), Fehrenbach, A. Freeman, Hamilton, Livingston, Newman, Winter.
- Foreign Studies: DIDUK (Chairman), DOLMETSCH, LAVIN, SAINT-ONGE, WARD, WILLIS. LINDA BOKACH, PHILIP HARWAY (Students).
- Graduate Studies: Selby (Chairman), Evans, Hargis, Mathes, Moore, Rey-Nolds, Rhyne, Roherty, Schiavelli, Sher, Williams, Winter, Fowler (ex officio).
- *Honorary Degrees: Selby (Chairman), Ballingall, Remler.
- Honors and Experimental Programs: von Baeyer (Chairman), Fowler, Grayson, Livingston, Nettels, Themo, Beyer (ex officio). Anita Coles, Steven Von Elten (students).
- Library: McCord (Chairman), Barry, Cobb, Fehrenbach, Holmes, Mangum, Reilly, Reinhart, Thompson, Pollard and Selby (ex officio). James Bigger, Barbara Britton (students).
- National Scholarships & Foreign Exchange Scholarships: BEYER (General Chairman)
 - Committee A: C. McCulley (Chairman), Beyer, Fowler, Hamilton, Healy, J. W. Lambert, Prosl, Willis.
 - Committee B: EVANS, MOORE, G. SMITH.
- *Nominating: Davis (Chairman), Crapol, Kiefer, McKenna, Nettles, Schifrin.
- Psychological Counseling Center Advisory Council: Johnston (Chairman), Altshuler, J. D. Brown, M. Freeman, J. W. Lambert, J. Smith, Williams, Chambers (ex officio).

^{*} Elected by the Faculty.

[†] Elected by the Faculty, except the Chairman, who is the Dean of the Faculty of Arts and Sciences.

40 *Committees*

Committees of the Faculty of The School of Business Administration

Academic Status, Undergraduate Committee: STANLEY (Chairman), B. DONALD-SON, McCormick, O'Connell, Sadler.

Academic Status, Graduate Committee: SANCETTA (Chairman), COLE, VARGO.

Admissions, Undergraduate Committee: STANLEY (Chairman), G. JONES, QUINN.

Admissions, Graduate Committee: SANCETTA (Chairman), DAFASHY, J. SMITH.

*Advisory Committee: KING (Chairman), McCormick, Quinn.

*Curriculum Committee: King (Chairman), Cole, McCormick, J. Smith, Stanley, Woodward.

Degrees, Undergraduate Committee: QUITTMEYER (Chairman), QUINN, STANLEY.

Degrees, Graduate Committee: Quittmeyer (Chairman), Sancetta, J. Smith.

Discipline Committee: KING (Chairman), PEARSON, J. SMITH.

Library Committee: TRAYWICK (Chairman), ELGERS, TARLETON.

Scholarships and Fellowships Committees: SANCETTA (Chairman), ELGERS, LIDDELL.

Committees of the Faculty of The School of Education

Advisory Committee: MAIDMENT (Chairman), O'SHELL, RIES.

Admissions Committee: RIES (Chairman), GULESIAN, UNGER.

Curriculum Committee: O'SHELL (Chairman), FLANAGAN, HANNY.

Faculty Affairs Committee: Bullock (Chairman), Adair, Maidment.

Financial Aid Committee: LAVACH (Chairman), GALFO, NELSON.

Committees of the Faculty of Marshall-Wythe School of Law

Academic Status Committee: J. Donaldson (Chairman), T. Collins, J. Curtis, R. E. Scott.

Admissions Committee: R. A. WILLIAMSON (Chairman), BROMBERGER, BAHR.

Bulletin Committee: W. SWINDLER (Chairman), J. CURTIS, A. SANTORO.

Disciplinary Committee: B. R. POWELL (Chairman), R. E. SCOTT, R. WALCK.

^{*} Elected by the Faculty.

Committees 41

- Faculty Screening Committee: B. R. POWELL (Chairman), R. E. SCOTT, R. WALCK, R. WILLIAMSON.
- Library Committee: G. Bahr (Chairman), E. Fischer, A. Phelps, J. White-Head (ex officio).
- Placement Committee: T. Jolls (Chairman), R. C. Brown, A. Santoro.
- Scholarships and Prize Committee: E. FISCHER (Chairman), R. C. BROWN, A. PHELPS.
- Special Events Committee: J. Donaldson (Chairman), T. Jolls, W. Swindler.

Committees of the Faculty of The School of Marine Science

Academic Advisory Committee: Perkins (Chairman), Van Engel, Nichols, Norcross, Grant.

Selection Committee: Zeigler (Chairman), Bender, Davis.

COLLEGE CAMPUS AND BUILDINGS

THE COLLEGE CAMPUS, comprising approximately 1,200 acres of land, extends from the western edge of the restored area of Colonial Williamsburg to picturesque Lake Matoaka and an extensive stretch of beautifully wooded land known as the College Woods. Within its boundaries are three sections known as *The Old Campus*, *The Main Campus*, and *The New Campus*.

In the front of a triangle formed by Jamestown and Richmond Roads, and facing the Duke of Gloucester Street, lies the elm-shaded Old Campus with its three original buildings. The Sir Christopher Wren Building (1695 restored 1928-31) has persisted despite damage by fires in 1705, 1859, and 1862. Its Great Hall contains portraits of Queen Anne (Kneller School) and other seventeenth and eighteenth century figures. The Chapel crypt contains, among others, the graves of Lord Botetourt, three Randolphs and Bishop James Madison. Still in daily classroom use, it is the oldest academic building in the United States and designated a National Historic Landmark by the Department of the Interior. The Brafferton (1723 restored 1932) was erected and maintained as an Indian School until the Revolution by income derived from Brafferton Manor, Yorkshire, England, purchased by the executors of Robert Boyle, the noted English Physicist, to carry out his bequest to promote Christianizing the Indians. At present it houses several administrative offices of the College. The President's House (1732 restored 1931) has served as a home for each of the twenty-three presidents of the College. It was damaged by fire in 1781, while occupied as a hospital by French Army officers after Yorktown, King Louis XVI later contributed to its repair. These three prerevolutionary masterpieces were restored through the generosity of John D. Rockefeller, Jr.

Behind the Wren Building, extending to the College Woods and flanking the Old Campus is the *Main Campus*. Through its center runs a wide sunken garden, lined on two sides by a boxwood hedge. On the north side of the sunken garden is the Old Library (1908, 1923, 1929), originally constructed with Carnegie Foundation aid. The Old Library now houses the Marshall-Wythe School of Law, its library and related academic and public affairs activities. West of the Old Library is *Rogers Hall* (1927), named for William Barton Rogers, student (1819-21), professor of natural philosophy and chemistry (1828-35), and founder and first president of Massachusetts Institute of Technology (1861-70). It contains classrooms and laboratories for chemistry and other studies. West of Rogers Hall is *James Blair Hall*. It is used for both administrative offices and classrooms.

On the east end, south side, of the sunken garden is *Ewell Hall* (1926 rebuilt 1958). Originally built by Phi Beta Kappa, it burned in 1953, and when rebuilt was named in honor of Benjamin Stoddert Ewell, fifteenth President of the College. It now houses the offices of the College President and Dean of Admissions as well as providing space for classrooms. West of Ewell Hall is *Washington Hall* (1928), named for the first President of the United States who also served as Chancellor of the College (1788-99), which is devoted to general classroom use. Farther west of the sunken garden, on the edge of the College Woods, are eleven lodges presently being used for classrooms and faculty offices.

On the northern edge of the Main Campus, north of Richmond Road, is *Brown Hall* (1926), a women's dormitory. It is named for the home of Dudley Digges, Revolutionary patriot whose home stood on its site. Close by are nine college-

owned residences occupied by sororities. In a westerly direction, south of Richmond Road, is Blow Gymnasium (1924 enlarged 1941), given by Mrs. George Preston Blow and family in memory of George Preston Blow, Captain, USN. His father, George Blow II, attended the college (1829-31), as did his grandfather, Col. William Blow (1804). It is used for men's physical education and R.O.T.C. To the southeast of Blow Gymnasium is Monroe Hall (1924), a men's dormitory. named for the fifth President of the United States and student at William and Mary (1774-76), Southwest of Blow Gymnasium is Old Dominion Hall (1927), a men's residence, named in honor of Virginians who played a prominent part in the making of the country. Bryan Hall (1953), north of Old Dominion, a men's dormitory, was named for John Stewart Bryan, twentieth President of William and Mary (1934-42) and Chancellor of the College (1942-44). Adjacent to Bryan, and forming a complex of dormitories are Dawson (1953), named for the second and fourth College presidents. William (1743-52) and Thomas (1755-60); Stith (1953), named for the third President of the College, William Stith (1752-55); Camm (1959), named for the seventh College President, John Camm (1771-77); and Madison (1959), named for the eighth College President, James Madison (1777-1812). West of Bryan complex is Cary Field Park (1935), consisting of a 15,000 seat stadium surrounded by men's athletic fields and parking areas. It was named for T. Archibald Cary, member of the College's Board of Visitors (1901-06), who gave funds for the first athletic field (1910) where Old Dominion and Bryan Halls now stand.

On the southern side of the Campus, south of Jamestown Road, is Tyler Hall (1916 renovated 1951), a men's residence, named for John Tyler, alumnus of the College (1806), and tenth President of the United States (1841-45). South of Tyler Hall is the King Infirmary (1930), named for Dr. David J. King, College physician (1919-34). This building is also used as a men's dormitory. The Campus Center (1960) is directly west of Tyler Hall and is the meeting place on Campus. It provides offices for student activities and publications and contains recreation rooms, a theater, and meeting and dining rooms in addition to "The Wigwam" which features a grill for light dining. West of the Campus Center is Trinkle Hall (1926), the main dining hall named in honor of E. Lee Trinkle, Governor of Virginia (1922-26), who was instrumental in restoring this building promptly after a fire had destroyed an earlier dining hall on the same site. South of Trinkle Hall are located the College Laundry and Power Plant. Directly west is Taliaferro Hall (1935), a men's residence, named for William Booth Taliaferro, alumnus of the College (1842), who was active in the reopening of the College in 1888 and a member of its Board of Visitors (1870-98).

Farther west, on the north side of Jamestown Road, are four residence halls for women. *Jefferson Hall* (1920) is named for Thomas Jefferson, student at the College (1760-62), reorganizer of the College curriculum (1779), member of the Board of Visitors (1779), and third President of the United States (1801-09). West of Jefferson is *Barrett Hall* (1927), named for Kate Waller Barrett, M.D., prominent Virginia civic leader, advocate of higher education for women and member of the Board of Visitors (1921-25). *Chandler Hall* (1931) is west of Barrett and is named for Julian Alvin Carroll Chandler, alumnus (1891), and President of the College (1919-34). *Landrum Hall* (1958) is still farther west. It is named for Grace Warren Landrum, Dean of Women and Professor of English (1927-47).

On the extreme southwest edge of the Main Campus is the newly developing

Campus. Here, facing Jamestown Road, is Phi Beta Kappa Memorial Hall (1957) which contains an 805-seat theater, dressing rooms, scene building shops, classrooms, offices, a conference center and television and radio broadcasting facilities. A Fine Arts Wing, Robert Andrews Hall, to house the Fine Arts Department has recently been added to Phi Beta Kappa. To the right of Andrews Hall are women's playing fields. Adjacent to the fields is the recently completed Millington Hall of Life Sciences named for John Millington, Professor of Natural Philosophy (1836-1848) housing the Departments of Biology and Psychology. Northwest of Phi Beta Kappa is the William Small Physical Laboratory (1964) named for William Small, Professor of Natural Philosophy (1758-64). Here are to be found modern and elaborate classrooms, laboratories and equipment for teaching and research in physics. West of Phi Beta Kappa Hall is Hugh Jones Hall which houses the Computer Center and the mathematics department and serves as the location of the School of Business Administration and other departments. It is named for a distinguished professor of mathematics. Next to Jones Hall is the new Social Sciences Building (1972) which contains general classrooms and offices for the Social Science Departments. Farther to the northwest is Adair Gymnasium for women (1963), named for Cornelia Storrs Adair, student (1921-23), and distinguished Virginia educational leader. Beyond Adair Gymnasium in the same direction is Jessie Ball duPont Hall (1964) bearing the name of a gracious benefactor of the College. North beyond duPont Hall are five new Residence Halls (1972) for men and women, one of which is used for the Sophomore Academic and Residence Program designated as Project Plus. Directly north of the Swem Library is Yates Hall (1962), a men's residence hall, named for the Rev. William Yates, fifth president of the College (1761-64). Across the campus road, to the west of Yates dormitory, is the Commons (1967), a new dining hall. North of the Commons is the newly completed William and Mary Hall, a men's physical education-convocation building (1970), containing a gymnasium-auditorium seating 10,-000, various sports rooms, an auxiliary gym, a medical suite, offices and classrooms. This multi-purpose building is used for all large gatherings, such as convocations, and will also provide facilities for physical education, intercollegiate sports, and intramural programs. North of Yates dormitory and The Commons is located the new men's dormitory, Fraternity Circle (1967). This dormitory consists of twelve units, each occupied by a fraternity.

Far to the west of Phi Beta Kappa and on the shores of Lake Matoaka is the Lake Matoaka Drama Amphitheatre (1947), scene for annual outdoor summer historical dramas.

The Library

The library, named in honor of the late Dr. Earl Gregg Swem (Librarian, 1920-1945; Librarian Emeritus, 1945-1965), was opened to the public early in 1966. As of July 1, 1971, it contained half a million volumes classified according to the Dewey Decimal System and the Library of Congress classification with variations in special classes. Since 1936, Swem Library has been a selective depository receiving publications of many agencies of the United States government; it also maintains files of Virginia and United Nations documents. More than 3,000 periodicals, including popular magazines, scholarly journals and technical serials, are received regularly by the library.

The Special Collections Division on the ground floor of the Earl Gregg Swem

Library—including the Botetourt Gallery and Museum, College Archives, Rare Book Room, Virginia Room, Tucker-Coleman Room, and Manuscripts Department—is of particular interest. The College of William and Mary archives and collections of historic manuscripts touch Virginia life of four centuries. Worthy of special mention are representative letters of such distinguished Virginians as George Washington, John Marshall, St. George Tucker, Thomas Jefferson, James Monroe, John Tyler, James Madison, George Mason, William B. Taliaferro, and Joseph E. Johnston. The papers of three contemporary political figures are a part of the manuscripts collection: Governor William M. Tuck, Governor John Garland Pollard and U. S. Senator Willis Robertson. Notable in the Rare Book Department are the James Branch Cabell collection, the Hetty Cary Harrison collection on eighteenth century gardening and horticulture, the Peter Chapin collection of books on dogs and hunting, the Ralph Green collection of books, notes, and printing equipment relating to the development of the art of printing in the United States, and the collection of classical writings presented by the late Dr. Earl Gregg Swem.

The Tucker-Coleman Room houses one of the few colonial libraries left intact in this country. The collection contains 400 books with St. George Tucker's signature and 800 volumes belonging to his sons and descendants. The manuscript portion of the collection consists of over 30,000 pieces relating to St. George Tucker, his contemporaries, and his descendants.

The figurehead of the Special Collections Division of the Swem Library is the original statue of Norborne Berkeley, Baron de Botetourt, Colonial Governor of Virginia, 1768-1770, and rector of the College Board of Visitors. One of the oldest surviving examples of colonial statuary in America, the Botetourt statue was originally acquired by the College in 1801 and until 1958 stood in the college yard in front of the historic Sir Christopher Wren Building.

With the exception of materials in the Special Collections Division, the volumes in the library are on open shelves and are easily accessible to all students and members of the faculty. Borrowers are permitted to go freely into the stacks and reading areas to select the books they need and to browse at leisure. The privilege of borrowing is extended to adult residents of Williamsburg and the adjoining counties, to military personnel stationed on the peninsula, to the members of the staff of Colonial National Historical Park at Jamestown and Yorktown, and to the staff of Colonial Williamsburg, Incorporated. Photocopy facilities are available at a modest cost to all users of the library.

Elsewhere on campus there are several departmental libraries: the Biology Library in Millington Hall, the Chemistry Library in Rogers Hall, the Physics Library in the William Small Physical Laboratory, the Geology Library in Bryan Hall, and the Mathematics Library in Jones Hall.

When classes are in session, the Earl Gregg Swem Library is open Monday through Friday: 8:00 a.m. to midnight; Saturday: 9:00 a.m. to 6:00 p.m.; Sunday: 1:00 p.m. to midnight.

The Computer Center

The Computer Center is housed on the ground floor of Hugh Jones Hall. Equipment includes an IBM System/360 Model 50 computer with 524,288 bytes of high speed storage, an IBM 2314 disk system, magnetic tape units, a Calcomp plotter, and interactive terminals.

The facilities of the Center are used in undergraduate and graduate instruction

and research. In addition to several regularly scheduled courses in programming and numerical analysis, short non-credit courses are given in Fortran, PL/I, and APL. A staff of experienced programmers is on hand to assist faculty and graduate students.

The Center also serves as the Regional Center for the eastern part of Virginia, under the statewide plan for educational data processing developed by the State Council of Higher Education for Virginia. At present, fourteen other colleges and state agencies, as well as a number of secondary schools, are included in the computer network.

II. STUDENT AFFAIRS

STUDENT LIFE

GENERAL STATEMENT

ACHIEVEMENT of its educational purposes requires that the College maintain standards of scholarly achievement and an environment conducive to learning, and that to this end it adopt necessary regulations governing both academic performance and student life. Under the laws of the Commonwealth and the Royal Charter of the College the Board of Visitors is the governing authority charged with the responsibility for internal order and discipline. Obligation to its mission conveys to the College the right and responsibility, subject to the employment of fair procedures, to suspend, dismiss, or deny continuance of a student whose academic achievement, or whose conduct does not meet established College standards, or, in less serious matters, to impose lesser penalties.

Regulations governing conduct and student life, therefore, have been promulgated and published in the Student Handbook, copies of which are made available to all applicants for admission to the College and which are incorporated by reference as an integral part of this catalogue.

RESIDENCE

All undergraduate students must live in the College residence halls, except that (1) all students twenty-one years old and over, and juniors and seniors under twenty-one having parental approval, are permitted to live off campus at a place of their choice and (2) students who commute daily from their homes are not required to live in the residence halls.

A sophomore academic and residential program is available to a limited number of sophomores, juniors, and seniors. (See page 78).

Students carrying a part-time program of studies are not permitted to reside in the College dormitories.

The College dormitories are not open for occupancy during the Thanksgiving, Christmas, and Spring Recess periods.

All resident undergraduate students who are classified as freshmen, unless they have attended college for two semesters, are required to board in the College dining halls. For all other students boarding in the dining halls is optional.

By the current regulations governing residence halls, students may not receive or visit persons of the opposite sex in residential rooms except during stated hours at approved open houses, and women residents are required to abide by stated curfew hours and regulations regarding absences from their residence halls.

Public Performances and Parties

No person or group of persons associated with the College of William and Mary shall give either in Williamsburg or elsewhere as a representative of the College a public performance of any kind unless prior to the first rehearsal the said person or group of persons shall have obtained from the office of the Vice-President for Student Affairs permission to present the entertainment. In order to secure per-

mission, those in charge of the performance must make written application to the Vice President for Student Affairs.

AUTOMOBILE REGULATIONS

Students who have not completed the equivalent of four full semesters may not maintain automobiles on the College campus or in Williamsburg. This regulation does not apply to graduate or day students commuting from their homes, or to students age 21 or over. Exceptions to the regulation may be made only for essential employment, physical disability or for other essential college related needs. This special permission is to be secured from the Dean of Students. A student who brings an automobile to the campus without prior written approval, in anticipation of obtaining special permission, is in violation of this regulation.

The penalty for a first violation of the automobile regulation will be not less than reprimand nor greater than suspension for one semester. The penalty for a subsequent violation will not be less than reprimand nor greater than dismissal.

College regulations require that all motor vehicles operated on the campus, including motor scooters, be registered by the third day of classes.

The Motor Vehicle Control Board administers regulations governing registration of vehicles and parking and traffic on the College campus. The regulations, procedures and penalties of the Board are set forth in the Motor Vehicle Regulations pamphlet available at the Office of the Dean of Students and the Campus Security Office.

EXTRACURRICULAR ACTIVITIES

There are several broad areas of student life and activities outside the formal academic program which, together with that program, comprise the whole educational experience of a student at the College of William and Mary. These general areas are the cultural, the social, the spiritual, and the athletic, ranging in specific activities from student government, publications, theatre, and musical groups, to participation in intercollegiate and intramural athletics. The College recognizes and encourages these many activities as valuable elements in the student's life. As a result, the student is able to participate in an unusually varied number of activities as his time, talents, and interests dispose him. He has the possibility for a rich and meaningful life to be coupled with that of the demanding, yet exciting, experiences of classroom and laboratory.

Since William and Mary is chiefly a resident college, students and faculty compose a closely knit community in which extracurricular and social activities play a considerable role in the cultural and intellectual development of the individual. An informal relationship between teacher and student is encouraged, both in and out of the classroom, thereby fostering the process of living and learning together. The College is concerned to keep classes small, and to ensure the possibilities of both a friendly, informal faculty-student association, and a rewarding, non-academic life whereby the individual's needs, interests, and identity are honored in a democratic way. The College believes that one of the major purposes is to inculcate by means of the several phases of college life the ideals of self-responsibility and good campus citizenship.

The new student at William and Mary is introduced to the College life and atmosphere during the orientation period which takes place immediately before the beginning of classes in September. During this period, the Honor System is ex-

plained to the entering student and he is made familiar with the College facilities, and the complete range of extracurricular activities. He is also introduced to student leaders, and to key members of the administrative staff who will assist him through their experience and human understanding. Perhaps most important of all, the entering student will meet in personal consultation his faculty adviser who will work closely with him before registration and occasionally during the school year to assist him to engage successfully in an academic program suitable to him.

The new student thus becomes an integral part of William and Mary, making new friends among members of his own and other college classes, among the faculty, and administrative officers.

Community life is important at William and Mary, since the majority of students live in residence halls. The twelve fraternities and the nine sororities provide housing for part of their membership. While these organizations make prominent contributions to the life of the College, an adequate social life is available to non-members in many functions and activities sponsored at the College. The use of leisure is provided for in the Residence Halls by recreation rooms, study rooms, and lounges, which are appropriately furnished. As the meeting place of students on the campus, the Campus Center offers an educational and recreational program of events for the College family as well as opportunities for student participation in the presentation of that program. The facilities of the Center include lounges for informal gatherings, a television room, music listening rooms with high fidelity equipment, a reading room, and a cafeteria and refreshment bar, called "The Wigwam." Billiards, tabletennis, and shuffleboard comprise the games activity. In addition, there are meeting rooms to house various interest groups and clubs, as well as a ballroom for dancing. The offices of the various student publications and Student Government are located in the Center. A film series, a lecture series, art and craft exhibits, and concerts are presented as a part of the regular Center program.

Informal College dances take place occasionally on Saturday nights throughout the session, and formal dances are held at intervals. In addition, dances and other social functions are held by fraternities, sororities, dormitories and other organizations.

The Honor System

Of primary importance to the life of the students is the College's student administered plan of discipline known as the Honor System. The Honor System is concerned with individual responsibility in all matters involving the student's honor, and the System assumes that every student is concerned with the strict observance of the principles of honorable conduct which he upon matriculation pledges to uphold, for his own sake, for the sake of his fellow students, and for the College. Administered through an elected council of student members, the Honor System applies to the specific areas of lying, stealing, and cheating.

Student Government

The constitution of the Student Association of the College of William and Mary provides for an Executive Council and Senate whose powers extend to all student activities common to both men and women. A separate organization, the Women's Dormitory Association, deals with the dormitory activities and regulations which concern the women solely. Similarly, each men's residence hall elects a Dormitory Council from among its students.

The Board of Student Affairs

The Board of Student Affairs was established by action of the Board of Visitors for the 1968-69 academic session. It has replaced and assumed the functions of the previously existing Student Activities Fee Committee, the General Cooperative Committee, and the Publications Committee. In addition, the Board will serve as a forum for the exchange of views and the formulation of recommendations for policy changes on matters pertinent to the College and student life in particular.

The Board is composed of members of the student body, the faculty, and the administration appointed by the President of the College.

Phi Beta Kappa Society

Alpha of Virginia: The Phi Beta Kappa Society, the oldest Greek-letter fraternity in the United States, was founded by a small group of students at the College of William and Mary on December 5, 1776. During the succeeding four years, the number of members increased to a total of fifty, including Captain John Marshall, who subsequently became Chief Justice of the United States, and Elisha Parmele, a graduate of Harvard University. The faith of these youthful scholars in the permanence and future greatness of their society was shown by their preparation of charters for branches in other colleges. Two such charters were entrusted to Elisha Parmele, who brought about the establishment of chapters at Yale in 1780 and at Harvard in 1781.

The original society at the College became inactive in 1781, with the closing of the College because of the approach of the army of Cornwallis. It was revived in 1851 with the blessings of an aged founder, William Short, and continued until early in the War Between the States. In 1893 the Alpha of Virginia Chapter was revived once again, and it has continued since that time as an active and significant element in the educational program of the College.

At present there are approximately 170 chapters of Phi Beta Kappa located at the leading educational institutions of the United States, with a membership in excess of 120,000. Members of the local chapter number more than 1,000 persons; in addition, a number of faculty members who were elected to Phi Beta Kappa at other institutions serve actively as affiliated members of Alpha of Virginia. Senior students up to 10 per cent of the total number in the class are elected each year, largely on the basis of scholarship, as members in course. From the alumni of the College of at least ten years' standing who have attained distinction in their professions, Alumni members are elected from time to time. Less frequently, honorary members and faculty members who are not graduates of the College are elected to membership.

Honor Societies and Special Interest Groups

Omicron Delta Kappa is an honorary society whose membership is elected annually from the junior and senior men on the basis of eminence in the fields of scholarship; athletics; social and religious activities; publications; forensic, dramatic, musical, and other cultural activities.

Mortar Board is a woman's honorary society whose members are elected in their junior year on the three-fold basis of service, scholarship, and leadership. It endeavors to serve the College each year by fostering scholarship, by rendering its services whenever requested, and by encouraging a wholesome college atmosphere.

Two national honor societies, Phi Eta Sigma for men and Alpha Lambda Delta

for women, annually select for membership those freshmen who have attained academic distinction.

There are eight honorary societies devoted to furthering interest in special fields of learning. Members of these groups are elected on the basis of scholastic proficiency in the departments concerned. In addition, many students find opportunities for friendly and stimulating associations in the various special interest groups and departmental clubs devoted to such fields of endeavor as literature, philosophy, drama, debating and the several fields of science.

Fraternities

Since the first Greek letter fraternity was founded at William and Mary in 1776, the College has had an unparalleled heritage as a background for its fraternity life. The passage of time, with its accompanying changes in customs, and the opening of the College to women students, has changed and expanded the fraternity sphere of influence. Today the fraternity provides not only a source of good fellowship, but also fills many other needs in the college community.

The fraternities at William and Mary have implied standards of social deportment which are instilled into each fraternity man, and which help to prepare him for his post-college relations with others in his community. Fraternity intramural athletics allow a much wider participation in competitive sports than can be permitted by varsity competition. A definite criterion of scholarship is established which all men must meet before they are allowed to join any fraternity.

Self-government within the fraternity system is encouraged through the efforts of an Interfraternity Council. There are chapters of twelve social fraternities on the campus: Theta Delta Chi, Sigma Alpha Epsilon, Pi Kappa Alpha, Kappa Alpha, Kappa Sigma, Phi Kappa Tau, Lambda Chi Alpha, Pi Lambda Phi, Sigma Pi, Sigma Nu, Sigma Phi Epsilon and Sigma Chi. An Alumni Interfraternity Council, composed of graduate representatives of the several fraternities, acts in an advisory capacity.

Sororities

There are nine chapters of national sororities at the College. In 1921 Chi Omega was founded followed by Kappa Alpha Theta, Kappa Kappa Gamma, Pi Beta Phi, Alpha Chi Omega, Phi Mu, Kappa Delta, Delta Delta Delta, and Gamma Phi Beta. The affairs of the sororities are administered and regulated by a chapter of The National Pan Hellenic Council.

Each sorority carries out its respective national principles in the general realms of social congeniality, moral and mental standards, development of leadership, co-operation and service, and in stimulating interest in vocations as an outlet for creative abilities. Each sorority has local as well as national philanthropies to which it contributes. Each semester the President of the College awards a cup to the sorority which has achieved the highest scholastic standing for the preceding semester.

The sorority houses, owned by the College, each accommodate between 15 and 20 women, usually juniors and seniors, under the College status of a "small residence hall."

Publications

The *Flat Hat* is a weekly paper published and edited by the students. It is a chronicle of student life and daily affairs of the College.

The William and Mary Review, published at least twice a year by a body of student editors, is the College literary publication. It contains short stories, essays, poems, and reviews. Contributions are welcome from all members of the student body.

The *Colonial Echo* is published annually by a staff comprised entirely of students. This well-illustrated volume is a treasury of current campus life.

The financial administration of all student publications is supervised by the Board of Student Affairs. The selection of the major editorial and managerial positions of the publications is also under the jurisdiction of the Board of Student Affairs.

The William and Mary Theatre

Now in its forty-fifth year, the William and Mary Theatre is a significant contribution to students as members of the audience or as the participants. The staff is composed of five professionally trained members of the faculty of Theatre and Speech. Participation in all forms of dramatic work is provided to students through courses in the Department of Theatre and Speech and through extra-curricular activity. Tryouts for parts in plays are open to all students, and casting is based on a competitive process with the intent to assemble the best qualified people for public performances. The production crews are basically composed of members of the classes in stagecraft, lighting, and design and costume, but emphasis is also placed on the opportunity for all students to volunteer to serve on committees of set construction, painting, sewing, making of properties, publicity, ushering, and box office management. Every production is a learning process for everyone participating.

Annually four full-length plays are presented in public performances. The plays are carefully chosen to provide a variety of entertainment, dramatic experience, and cultural value. Among the plays recently produced are: The Unknown Soldier and His Wife, Mandragola, Of Thee I Sing, Phaedra, Twelfth Night, Dark Mirrors and Bright Windows, Man of la Mancha, The Rainbow Sign, You Can't Take It With You, The Trial of the Catonsville Nine, Ernest in Love and The Miser.

Production methods and styles vary from the proscenium and picture-frame stage to open staging and theatres-in-the-round.

A chapter of a national honorary fraternity is made up of members elected from students who became eligible through successful work in the College theatre.

The William and Mary Debaters

The Intercollegiate Debate Council is an organization training students for participation in college debate tournaments. Any student interested in debate is welcome to join the Council.

Under the guidance of the faculty Director of Forensics and the Department of Theatre and Speech, an extensive program of tournament participation is carried on. Each year debaters from the College enter about thirty debate tournaments. Debaters in recent years have traveled to tournaments at New York University, Dartmouth College, Georgetown University, University of Georgia, Kansas State University, Northwestern University, Illinois State University, and many other eastern colleges.

The College of William and Mary is affiliated with Delta Sigma Rho-Tau Kappa Alpha national honorary forensic fraternity. Outstanding college debaters may qualify for membership.

Locally, the College Debaters endeavor to present programs of interest to the college community. In recent years debaters from England, Ireland and other American universities have appeared before audiences. William and Mary debaters are frequently invited to appear similarly at other universities. William and Mary debaters 'have frequently hosted high school debaters and are often asked to help judge Virginia High School League debate tournaments. William and Mary is also a member of the Virginia Forensic Association, an organization of Virginia colleges and universities.

The Marshall-Wythe Debate Tournament is in its second decade. This event, held in late January, brings to the campus teams from fifty colleges and universities from all parts of the United States. The tournament is recognized as one of the outstanding meets in the nation, offering both a unique setting and high quality debating. It has been selected as one of twenty qualifying events for the annual Tournament of Champions.

The debate program is coordinated with the Department of Theatre and Speech, making use of course offerings and faculty aid. Its goal is to provide means for honest, intelligent and competitive advocacy. The activity is open to any student interested in the knowledge, skills and pleasures that come from intecollegiate debate.

Lectures, Concerts, and Exhibitions

The cultural life at William and Mary is rich and varied. Under the auspices of the Committee on Arts and Lectures, the College seeks to provide its students opportunities for enjoying a wide range of public lectures, concerts, and films.

As a charter member of The University Center in Virginia, Inc., the College participates in a cooperative Visiting Scholars Program which annually brings to the campus for public lectures, readings and seminars, a great many distinguished scholars in all fields of learning, renowned authors and artists, and leading figures in public life. Additional public lectures are sponsored by the Committee in cooperation with various departments of the College and the Student Committee on Concerts and Lectures. Prominent guests are also brought to the college by the College-wide Reading Program.

The William and Mary Concert Series annually offers to students, faculty, and area residents, on a voluntary subscription basis, four or five performances by outstanding artists of the professional concert stage. In recent years College audiences have enjoyed performances by Abraham Kaplan and the Camerata Singers; The Orchestra de Paris; Julian Bream, guitarist and lutenist; Raymond Lewenthal, eminent pianist; Pennsylvania Ballet Company; and the Guarneri String Quartet.

Under the sponsorship of the Fine Arts Department, traveling and purchasing exhibits in painting, sculpture, architectural design, theatre and industrial arts are shown throughout each year. The final exhibition annually is devoted to the work of students in the Fine Arts classes. Twice each year the Virginia Museum of Fine Arts presents a showing of original art on the campus by means of an artmobile.

Musical Activities

The College offers many musical opportunities to the student for pleasure, participation, and cultural enrichment. The student may choose to attend a wide variety of performances of unusual interest selected from the William and Mary Concert Series, faculty and student recitals, and the Collegium Musicum Series. Participation in the College Choir, Chorus, Band, Orchestra, and small vocal and

instrumental ensembles is possible for interested and qualified students. The Campus Center and College Library provide facilities for record listening. Faculty and students of the Music Department participate in the William and Mary Theatre presentations of musical productions. Each year the men's and women's music fraternities, Phi Mu Alpha Sinfonia and Delta Omicron form an opera company and mount a production of a Gilbert and Sullivan operetta.

The Collegium Musicum Series, sponsored by the Department of Music and open to the College and community without charge, presents programs of special interest. Included in past seasons have been English Consort of Viols; Harold Schonberg, Music Critic of *The New York Times;* Kimio Eto, Koto; Grainne Yeats, Irish Harpist and Singer; Gerald Moore, world reknown Accompanist; Vladimir Ussachevsky, Composer of Electronic Music; Karl Wolfram, Lutenist-Singer; Carl Dolmetsch, Recorder; Edward Kilenyi, Piano; Takako Nishizaki, Violin.

The William and Mary Choir, a select and mixed group, sings choral literature carefully chosen from among the best available sources. Formal concerts on campus, in the community, and on tour are part of the annual Choir agenda. The William and Mary Chorus, which is a group of women students of the College, provides music for various events on the campus and also appears in formal concerts.

The College Band serves as a dual organization during the academic year. For the football season, the Band performs as a marching unit, and is highlighted in pre-game and half-time shows, pep rallies, and parades, appearing at both home and away games. After the football season, the Band functions as a concert organization, presenting formal and informal concerts on campus and on tour.

The William and Mary College-Community Orchestra is an organization devoted to the study and performance of the best in orchestral music. The organization consists of a Chamber Orchestra, and smaller ensembles made up from the more advanced players of the orchestra. In addition to the annual spring concert the members are active in many special performances in the community.

Private instruction is available for interested and qualified students in piano, organ, voice, strings, and winds. The Music Department sponsors student recitals each year in which advanced students are afforded the opportunity and experience of public performance.

Television and Radio

The College operates a campus-limited, closed-circuit television facility and a non-commercial, FM radio station, WCWM. Radio and Television have a two-fold purpose at William and Mary: the presentation of formal instruction and general information through these media, and curricular instruction of students in the practical application of broadcast principles.

All students are eligible for participation in the activities of WCWM, which is operated by student volunteers on an extracurricular basis. Opportunities are available in all phases of radio programming. Students also serve as crew for closed-circuit television productions through the Work-Study Program.

Religious Life

The College of William and Mary, though a Church of England foundation, has been since 1799 entirely nonsectarian. It avails itself fully of the cordial spirit of pastoral concern which marks the various churches in the small and friendly city of Williamsburg. Many of the students participate in young people's organizations,

among which are Balfour-Hillel, the Baptist Student Union, the Canterbury Association, the Channing Forum, the Christian Science Organization, the Lutheran Student Association, the Newman Club, the Wesley Foundation, and the Westminster Fellowship. Representatives of these organizations assist in the College chapel services and sponsor Religion-in-Life events throughout the year.

Men's Athletics

In the George Preston Blow Gymnasium, the men's gymnasium, are two basket-ball courts, a swimming pool, two handball courts, volleyball courts, showers, lockers, athletic administrative offices, a trophy room, and a social room. Cary Field provides for the following facilities: tennis courts, baseball field, stadium for football, track, and field athletics (seating capacity 15,000), practice fields for varsity and freshmen football, and space for softball and intramural games.

The intramural sports program which is under the direct auspices of the Men's Department of Physical Education is designed to meet the needs and desires of all students as far as it is financially and educationally possible. The program evolves from the expressed desires of the students. The intramural director and other staff members of the Physical Education Department act primarily in organizational and advisory capacities.

Provision is made for participation in the following individual and team activities: badminton, basketball, bowling, free throws, golf, handball, horseshoes, softball, swimming, tennis, touch football, track and field, volleyball, and wrestling. League schedules and individual tournaments are arranged for dormitory, fraternity, and independent competition.

The general supervision of intercollegiate athletics for men has been delegated by the President to a faculty committee. The College is a member of the Southern Conference. H. Lester Hooker, Jr., is the Director of Men's Athletics, and Edmund T. Derringe is the Business Manager.

Varsity intercollegiate teams, under the supervision of a competent staff of coaches who are appointed for the full academic year, are offered the following sports: baseball, basketball, cross country, fencing, lacrosse, football, golf, gymnastics, soccer, indoor track, swimming, tennis, wrestling and track and field. Freshmen are eligible for varsity competition in all sports except football and basketball.

In addition to the above sports, the College offers National Rifle Association-affiliated Varsity and freshmen rifle teams. All required equipment, including arms and ammunition, is provided by the ROTC Department. Participants are eligible for varsity letters.

Women's Athletics

Sports are conducted and supervised by a joint committee of faculty and students. The program of physical education activities for women provides opportunity for intramural competition, interest groups, and participation in intercollegiate activities in archery, hockey, golf, swimming, fencing, basketball, tennis, volleyball, and lacrosse.

Provision is made for intramural participation in the following activities: badminton, basketball, bowling, bridge, hockey, softball, swimming, tennis, and volleyball. Schedules are arranged for dormitory, sorority, and individual competition in groups or teams according to the ability of the participant. Tryouts are held each year for membership in Mermettes, the synchronized swimming club, and Orchesis, the dance club.

The Cornelia Storrs Adair Gymnasium provides facilities for fencing, badminton, gymnastics, volleyball, and basketball. The swimming pool and dance studio are located in this building.

The women's athletic fields provide ample space for outdoor activities including archery, golf, hockey, lacrosse, softball and tennis.

STUDENT PERSONNEL SERVICES

HEALTH SERVICE

THE PURPOSE of the Health Service is fourfold: (1) improvement of the health of the students; (2) prevention of diseases; (3) supervision of campus sanitation, which includes inspection of sanitary conditions of cafeterias, dining halls, dormitories, and swimming pools; and (4) instruction of students in matters essential to healthful living.

The Health Service is housed in the David King Infirmary, a modern, fireproof building containing out-patient clinic, dispensary and waiting room, diet kitchen, and eighteen-bed infirmary.

A health certificate is required of all entering students. During each semester, each student is entitled to the use of the Medical Services. The medical services are as follows:

- 1. Medical care in the Health Service clinic for minor and incipient illness and accidents. Necessary staple drugs and dressings are included.
- 2. Health consultation service with the medical staff.
- 3. Special medical examinations for certification of students which is required for participation in intercollegiate athletics and other forms of strenuous activity.
- 4. Hospitalization in the Health Service infirmary for a limited period, for minor and incipient illness when bed care is advised by the College physician. The College does not, however, assume the cost of special nurses, consulting physicians, surgical operations, X-rays or laboratory tests, care in other hospitals, or special medications. Meals are charged the student at the prevailing dining hall rate.

The College Health Service provides the services listed above, but it lacks facilities for prolonged hospitalization, post-operative care and special diets. Students who require these facilities will be permitted to withdraw from the College for medical reasons without prejudice to their academic records.

OFFICE OF STUDENT AND ALUMNI PLACEMENT

The College maintains a Placement Office for students and alumni through which non-teaching placement and career planning information may be obtained. Seniors are assisted in obtaining employment with business and industrial organizations and with governmental agencies. These same services are extended to alumni who are seeking to secure new employment.

Placement files are developed for seniors and are maintained for several years after graduation. Alumni may refer employers to these files at any time. Company representatives are invited to the campus to confer with seniors and to discuss not only the qualifications necessary for success in their special fields, but to explain business opportunities and to make job offers to graduates.

The Placement Office maintains cordial relationships with many employers. Representatives of these employers are given every assistance in their recruiting programs.

THE CENTER FOR PSYCHOLOGICAL SERVICES

The Center for Psychological Services, located in the basement of Rogers Hall offers professional assistance to students in two areas.

The major function of the Center is to provide personal counseling and help in solving problems of social relationships and the understanding of oneself and others. These services are free of charge, and are provided by experienced clinical psychologists who are members of the faculty. All relationships between clients and counselors are confidential, and at no time do the results of counseling become part of a student's permanent college record. No information concerning an individual's contact with the Center will be released without his written permission.

The second function of the Center is to provide vocational and educational counseling which generally involves aid in the selection of a major course of study or the planning of a career. Psychological services include the administration of vocational and psychological tests, when, in the judgment of the counselor, such instruments can make a meaningful contribution to the understanding or resolution of a student's concerns. In addition to testing that is part of the counseling process, the Center serves as a regional testing center for certain nationally administered examinations. Among these are the Graduate Record Examinations, the Law School Admission Test, the Medical College Admission Test, the Miller Analogies Test, and the Graduate School Foreign Language Test. Application forms and additional information concerning these examinations can be obtained in Rogers 110.

In addition to counseling and testing activities, staff members of the Center for Psychological Services are available for consultation with faculty, administration, dormitory personnel, and students, either individually or in groups. Appointments for individual counseling or for consultation can be made in person or by telephone.

FINANCIAL ASSISTANCE AND ACADEMIC SCHOLARSHIPS FOR STUDENTS

FINANCIAL AWARDS FOR STUDENTS

The Office of Student Financial Aid administers two types of financial awards to students matriculating at the College of William and Mary: (a) financial assistance and, (b) academic scholarships. Complete information concerning financial aid is contained in the pamphlet, "How to Apply for Financial Aid." Requests for this information and all correspondence regarding financial awards should be addressed to:

Director Office of Student Financial Aid College of William and Mary Williamsburg, Virginia 23185

FINANCIAL ASSISTANCE

Financial assistance is available to students who cannot otherwise meet the cost of an education at the College. Such assistance, when added to the contributions that can reasonably be expected from the student, his family, and any available outside sources, will enable him to meet the costs of attending William and Mary.

This assistance is awarded for one year only, but may be renewed annually if need continues and the student otherwise qualifies. Undergraduates qualify for financial aid on the basis of academic ability, willingness to obey the rules and regulations of the College, and demonstrated financial need.

Three forms of financial assistance are "packaged" to meet the need of a student—assistance grants (scholarships), loans, and part-time employment.

Transfer Students should adhere to the same application procedures as entering students.

Graduate Students may apply for assistance in the form of loans and part-time work through the Student Aid Office. Scholarships, assistantships, and fellowships are awarded through the Office of the Dean of the School or Chairman of the Department in which the student intends to enroll.

Employment for Spouses of regularly enrolled students is also available as part of the College's overall financial assistance program. Inquiries concerning this type of employment should be directed to the College's Director of Personnel, rather than the Student Aid Office.

Demonstrated financial need is established through analysis of the applicant's "Parents' Confidential Statement" by the College Scholarship Service. Filing the PCS is the only action an entering student must take. The PCS may be obtained from high school guidance office, CSS, or the Student Aid Office. Resident Students may secure applications from the Student Aid Office.

Deadlines for filing PCS with CSS for "Early Decision" applicants is November 1. For "Regular Admissions" applicants the deadline is February 15. For students in residence the deadline is April 15.

A brief description of the forms of financial assistance is presented below. Additional information may be found in the "Register of Scholarships and Fellowships

of the College of William and Mary," copies of which may be consulted at the Student Aid Office and the Library.

Assistance Grants and scholarships are made possible through the generosity of friends and alumni of the College. A list of the benefactors of William and Mary who have established scholarships, assistance grants, loan funds, and awards is included at the end of this section.

Other assistance grant funds are made available through the Legislature to residents of the Commonwealth of Virginia.

Federal Funded Programs include the Educational Opportunity Grant, the National Defense Student Loan, State-Guaranteed Loan, and the College Work-Study Program.

Part-Time Employment includes jobs at the College and in the city of Williamsburg. Colonial Williamsburg makes possible much part-time employment through the Student Aid Office. In order to maintain proper balance between hours of employment and academic loads, the College requires that all student employment on the campus or in the city be assigned by the Director of Student Aid. The normal work load is fifteen hours per week, with no student working more than twenty hours per week without permission from the Director.

ACADEMIC SCHOLARSHIPS

Merit Scholarships are awarded solely on the basis of academic achievement to the nineteen ranking scholars of the College and are not available to entering students.

Teacher Training Scholarships are available to students who are residents of Virginia and plan to teach in the Virginia public schools. These scholarships are valued at \$350 per academic year. Address all inquiries on this program to Dean, School of Education, College of William and Mary, Williamsburg, Virginia 23185.

Foreign Exchange Scholarships include the University of Exeter and University of St. Andrews and the Drapers' Company awards. Each year two outstanding graduates of William and Mary will be selected by the College for a two-year period of study at Oxford, Cambridge, or another British university. This opportunity is made available by agreement between William and Mary and the Drapers' Company of London. In exchange one or two British students will be selected by the Drapers' Company for undergraduate study toward a bachelor's degree at the College of William and Mary. The cost of tuition and living expenses is provided for each student.

The College of William and Mary also has an agreement with Exeter University in England and the University of St. Andrews in Scotland for an annual exchange of students. Under this plan an outstanding William and Mary student is given the opportunity to study at one of the universities for one year. One student will be selected for each university. The Exeter scholarship is open to students who are rising juniors or who are members of the graduating class; the St. Andrews is available only to rising juniors. All college fees (tuition, registrations, room and board) will be waived for these exchange students. They will live in one of the Residence Halls of Exeter or St. Andrews. One student from Exeter and one from St. Andrews will come to the College of William and Mary for the same period.

Special Scholarships are awards made by various departments within the College to students who demonstrate outstanding academic achievement during the year. These scholarships are not usually available to entering students.

Programs for Federal Beneficiaries are administered by the College for certain eligible students. These programs include Veterans' Educational Assistance, Children's Educational Assistance, Social Security Benefits for school children, and others. Persons who are qualified for such programs should work out the details with the appropriate federal agency prior to registration at the College.

III. ACADEMIC REGULATIONS AND REQUIREMENTS

ADMISSION TO THE COLLEGE

Within the limits of its facilities as to numbers that can be accommodated, admission to the College of William and Mary is open to all qualified students without regard to race, creed, color or national origin.

UNDERGRADUATE ADMISSION

BY ACT OF THE General Assembly of Virginia, men and women are admitted to the College on the same conditions. Applicants for admission must present their applications on printed forms obtained from the Office of Admissions. Applicants who will be dormitory residents during the fall semester should apply no later than February 15. Candidates for dormitory space for the semester beginning in February should apply no later than December 1. All applications received by these dates will be accorded equal consideration for admission. However, assignments to individual rooms are made after selection for admission, in the order of date of application for admission and, therefore, early applications are desirable.

Applicants for admission who will be day students are considered without regard to the above deadlines. However, no undergraduate day students who will be degree candidates will be admitted later than one week prior to the beginning of registration.

The College is primarily a residential institution; as such it requires that all full-time, undergraduate candidates live in the College residence halls unless 1) they are married, or 2) are living with members of their immediate families, or 3) are at least twenty-one years of age, or 4) are juniors or seniors under twenty-one having parental approval to reside in private accommodations. Moreover, because of limitations of space, unclassified students and students given permission by the Committee on Academic Status to become part-time degree candidates are not permitted to live in College residence halls. The number of students admitted as dormitory residents is dependent on the number of spaces created by the loss by graduation or withdrawal of students previously enrolled. Students who are eligible to attend the College as day students are considered on an individual basis. It is expected that all entering students should possess the necessary academic credentials to ensure academic success, provided the proper application to their work is demonstrated.

ADMISSION TO THE COLLEGE

Freshman Admission

The essential requirement for admission to the College of William and Mary is graduation in the upper half of the class from an accredited secondary school. Since the number of applicants who meet the essential requirements is considerably in excess of the number that can be admitted, the College selects those who present the strongest qualifications. The high school record, College Entrance Examination Board test scores, recommendations by secondary school officials and information from other such sources as may be available will be utilized in selection.

The College has no rigid subject matter unit requirements for entrance. It is recognized that secondary school offerings as well as the individual's abilities and interests must be considered in developing a program. However, it is considered important that entering students have pursued an academic program which will prepare them for the degree requirements at William and Mary. It is suggested, when possible, that prospective students include in their secondary program (9th through 12th grades) the following units: four of English, three or more of mathematics, three or more of one foreign language (see section regarding requirements for degrees), two or more in science, and two or more in the social sciences. This suggested program is not intended as a requirement, and the fact that students do not present the units listed will in no way bar their applications from consideration and acceptance.

Tests of the College Entrance Examination Board

Freshmen applicants must take the Scholastic Aptitude Test and three Achievement Tests of the College Entrance Examination Board, one of which must be the test in English Composition. Those applicants who intend to continue the foreign language begun in secondary school are required to take the reading Achievement Test in foreign language. Applicants who score 600 or above on the Achievement Test in a modern foreign language or have completed four years of one foreign language in secondary school are considered to have fulfilled the foreign language requirement at William and Mary. Students who have completed secondary school courses in Chemistry or Physics and wish to be placed in advanced sections of these courses are requested to take the Achievement Tests in these areas. These tests should be taken no later than January of the final year in secondary school.

There are no minimum scores required, since the results of these tests are used with other information in determining the student's academic potential and for counseling and placement. Information regarding these tests may be obtained from secondary schools or by writing to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, or Box 1025, Berkeley, California 94701, and the applicant must request that his scores be reported directly to the College from that agency.

Interviews

Interviews are not generally required as a means of evaluating a candidate's qualifications for admission and, unless an interview is specifically requested by the Office of Admissions, the fact that the applicant is unable to talk with a member of the Admissions Staff will have no bearing on his application. Students who find it convenient to visit the campus are invited to participate in one of the group orientation programs which the Office of Admissions presents in order to provide candidates and their parents with as much information about the College as possible. Orientation programs are normally held at 10:00 a.m. and 2:30 p.m. on weekdays and 10:00 a.m. on Saturday mornings. During the period between October 15 and November 15 and January 15 through April 1, these sessions are usually not held on weekday mornings, since members of the Admissions Staff are very much involved with reviewing applications. The Office of Admissions is closed on Saturdays during June, July and August and, therefore, orientation programs are not conducted on Saturday mornings during these months. Students who would like to

attend one of these orientation sessions should contact the Office of Admissions in advance of their visit so that a specific time and date may be arranged.

Early Decision Plan

The College admits a limited number of freshmen students under the Early Decision Plan. This is a special plan designed to reduce the burden of the admissions process for those applicants who are considered highly desirable for admission by the College and who fully intend to matriculate. Students applying for early decision should possess high academic qualifications and have decided that William and Mary is their first choice of colleges. Early decision applicants who are not selected under this plan will be considered along with other applicants for available spaces under the regular admission process.

Procedure to Be Used in Applying for Early Decision

- 1. Submit preliminary application card and application fee. Beginning in August preceding the final year in secondary school, all applicants who have submitted a preliminary application card with fee will be sent a personal application form with complete instructions and a letter of intent to be submitted in applying for admission under the Early Decision Plan.
- 2. Applicants applying for admission under the Early Decision Plan are required to take the Scholastic Aptitude Test before the beginning of the senior year and the Achievement Tests no later than January of their final year in secondary school.
- 3. Submit personal application, letter of intent, secondary school record, and Scholastic Aptitude Test scores before November 1 of the senior year.
- 4. The Office of Admissions will notify the candidate of the action taken on his application for early decision by November 15.
- 5. The applicant who has been notified of his acceptance by the Office of Admissions must signify his final intention to enroll in the College by paying a non-refundable deposit by December 15.

Admission of Undergraduate Transfer Students

Transfer students from other institutions are admitted for the semesters beginning in September and February.

To be considered for admission, the applicant must have maintained at least a 1.5 grade point average on a 3.0 scale (2.5 on a 4.0 scale) in courses taken for credit in other institutions.

No student may be considered for admission to the College (undergraduate, graduate, or law) unless he is, or at the time of departure was, in academic and social good standing at his previous institution or institutions. An official transcript or other communication from said institution must indicate this fact and that he is entitled to honorable dismissal.

Transfer students who possess the minimum qualifications are considered in relationship to the other applicants for the available spaces in an attempt to admit those students who present the strongest overall qualifications.

Students who have completed fifteen or more semester hours of work at an accredited institution are normally not required to take the Scholastic Aptitude and Achievement Tests of the College Entrance Examination Board.

Since Christopher Newport and Richard Bland Colleges are affiliated with the

College of William and Mary, special consideration is given to applicants desiring to transfer from these institutions. Students attending Christopher Newport and Richard Bland Colleges who are desirous of attending William and Mary should contact the Registrar's Office at each institution, in order to secure the appropriate application forms and instructions.

Admission to Unclassified Status

Students who do not intend to pursue a degree but wish to take courses for credit during the day session may apply for admission as an Unclassified student. The minimum requirement for admission to Unclassified status is the same as for those seeking degree status. Students who desire Unclassified status should specify this in requesting application forms from the Office of Admissions.

Readmission

Students who are in good standing with the College but have not been in attendance in the day session for one or more semesters must submit an application for readmission and be readmitted by the Office of Admissions before they are permitted to register for classes in the day session.

Reinstatement

Students who are not in good standing with the College but who wish to seek readmission to the College of William and Mary or to transfer to another institution must submit a petition for reinstatement in good standing to the Chairman of the Committee on Academic Status.

Reinstatement in good standing and readmission are not automatic, but at the end of certain specified periods the student is eligible to seek these considerations from the Committee on Academic Status and the Office of Admissions respectively. A student who is asked to withdraw in February for academic deficiency may apply no earlier than April of the same year for reinstatement and for readmission to be effective in September. A student who is asked to withdraw in June or during the Summer Session may apply no earlier than November for reinstatement and for readmission effective in February. Applications should be made well in advance of registration for the fall and spring terms. For further information write to the Chairman of the Committee on Academic Status.

Notification of Decision

Since qualifications of applicants must be considered relative to one another, decisions on individual candidates are delayed until other applications are examined. Candidates for admission under the Early Decision Plan can expect to receive notice of the action on their application around November 15. Students who are applying for regular admission will be notified around April 1. Applicants for the semester beginning in February will be notified of the decision on their applications as soon as feasible after December 1.

Delayed Enrollment for Admitted Freshmen

Students who are offered admission to the freshman class may postpone their enrollment for one year. Admitted freshmen who elect this opportunity must submit

a form requesting that their application be reopened by February 15 (December 1 for spring term), prior to the fall semester that they desire to enter. Students who follow this procedure will be guaranteed space if they satisfy previous requirements which were conditions of their original admission. They must have an honorable record in the intervening year. Assurance of future admission does not apply to students who enroll in a college or university during the intervening period; in such cases, it will be necessary for the individual to be considered as a transfer applicant.

Admission to Audit Status

Students who wish to audit courses in the day session with no credit should contact the Office of the Dean of the Faculty of Arts and Sciences in order to obtain the appropriate forms to request permission to audit courses.

Admission to School of Continuing Studies

The School of Continuing Studies operates the Summer Session, Evening College, and Extension Division. The primary prerequisites for admission to these divisions of the College are that the student be a high school graduate and be in good standing and eligible to return to the last college attended. The admission to one of these divisions of the College does not entitle the student to admission to the regular day session or degree status unless an application is submitted and approved by the Office of Admissions. Application forms to one of these divisions may be obtained from the Dean of the School of Continuing Studies.

The Advanced Placement Program

The College participates in the Advanced Placement Program of the College Entrance Examination Board. This program offers to able and ambitious students, who have a strong preparation, the opportunity to qualify for advanced placement and credit in Biology, Chemistry, English, History, Latin, Mathematics, Modern Languages and Physics.

Successful candidates for admission who wish to be considered for advanced placement and credit should take the Advanced Placement Test of the College Entrance Examination Board and have these scores reported to the College. After consideration of the test papers and other evidence concerning proficiency in the subject area, the student will be informed of the decision of the department concerned regarding advanced placement and credit. A student who is successful in gaining advanced placement and credit will be provided with more time than normal to pursue courses in areas related to his field of concentration or in other areas of interest, rather than the repetition of courses in which proficiency has been established by work on the secondary school level.

UNDERGRADUATE ADMISSION TO THE SCHOOL OF BUSINESS ADMINISTRATION

Applicants must be admitted to the College prior to admission to the School of Business Administration. Application for admission to the School and its B.B.A. degree program is accepted the semester prior to the time the student expects to enroll in the School of Business Administration as a candidate for the B.B.A. degree but full admission will not occur until all requirements for admission are met.

UNDERGRADUATE ADMISSION TO THE SCHOOL OF EDUCATION

Applicants must be admitted to the College prior to admission to the School of Education. Applications for undergraduate concentration are accepted the semester prior to the time the student expects to enroll in the School of Education as a concentrator. Final approval for admission will not be given until the student has attained junior standing in the College.

ADMISSION TO GRADUATE STUDY

For admission requirements for graduate and professional study consult the Graduate Catalog of the Faculty of Arts and Sciences and the School of Marine Science, and the Catalogs of the School of Business Administration, the School of Education, and the Marshall-Wythe School of Law.

Application forms for admission to graduate study under the Faculty of Arts and Sciences should be requested from the chairman of the department in which the applicant intends to do his major work. Forms for admission to graduate study in the School of Education should be requested from the dean of the school; to the Master of Business Administration program from the Associate Dean for Graduate Studies, School of Business Administration; to the Master in Teaching of Science program from the Director of the National Science Foundation Summer Institute; and to the applied science program from the Director of the Graduate Program in Applied Science. All of the above may be addressed at the College of William and Mary, Williamsburg, Virginia 23185.

Inquiries regarding the graduate program in marine science should be directed to the Dean of the School of Marine Science, Virginia Institute of Marine Science, Gloucester Point, Virginia 23062.

TUITION AND EXPENSES

THE COLLEGE RESERVES THE RIGHT TO MAKE, WITH THE APPROVAL OF THE PROPER AUTHORITIES, CHANGES IN TUITION AT ANY TIME

Payment of Accounts

Tuition, and room and board fees, and laundry are payable in advance by the semester, remittance being made by check drawn to the College of William and Mary.

Students will not be allowed to complete registration unless their registration cards have first been approved by the Treasurer-Auditor's Office. This preliminary procedure can be accomplished by mail and should be completed upon receipt of student's statement of account.

First semester accounts are due on or before September 5, or within 10 days after receipt of bill, if same is received after August 27. Second semester accounts are due on or before January 15.

Refunds to Students Withdrawing

Subject to the following regulations and exceptions, all charges made by the College for room, board and fees are considered to be fully earned upon the completion of registration by the student.

- 1. A student withdrawing within a period of five days after the scheduled registration period is entitled to a refund on charges except that \$25.00 shall be retained by the College to cover the expense of registration. (These refunds shall not include any deposits or advance payments that may have been required by the College as evidence of the student's intention to enroll.)
- 2. A student withdrawing at any time within the first 30 days after the scheduled period of registration shall be charged 25 per cent of all these charges: the semester's room rent, or the required deposit, whichever is greater, and laundry and tuition.
- 3. A student withdrawing at any time within the second 30 day period after the scheduled registration shall be charged 50 per cent of all of these charges: the semester's room rent, laundry and tuition.
- 4. A student withdrawing at any time after 60 days following the date of registration shall be charged the full semester's board, room rent, laundry and tuition.
- 5. No refunds of board, room, laundry and tuition will be made to a student who has been required to withdraw by the College regardless of the date of withdrawal.
- 6. Tuition, room rent, board and laundry are earned in full for unofficial withdrawals.
 - 7. No refunds will be made on tuition for part-time students.
- 8. In cases of withdrawal during the first 60 days from College, charges for board will be calculated on a pro-rated basis determined by the date of official withdrawal provided the dining hall card is surrendered to the Treasurer-Auditor on this date.

Credits on Accounts of Scholarships Holders

Students holding scholarships are required to pay all fees less the value of the scholarship which they hold.

Withholding of Transcripts and Degrees in Case of Unpaid Accounts

Transcripts or any other information concerning scholastic records will not be released until college accounts are paid in full. Degrees will not be awarded to persons whose college accounts are not paid in full.

Cashing of Student Checks

The College does not have facilities for handling deposits for students' personal expenses but the Treasurer-Auditor's Office is prepared to cash checks up to \$25.00. All such checks should be made payable to the student or to cash. Under our regulations as a State institution, we are not permitted to cash checks made payable to the College of William and Mary.

TUITION AND OTHER EXPENSES

Tuition (\$330.00 per semester for State Students and \$797.00 for Out-of-State Students) is a payment towards the general maintenance and operating costs of the College including recreational and health facilities. (Board, room and laundry are additional.)

The Act affecting residency is as follows:

"Be it enacted by the General Assembly of Virginia, That no person shall be entitled to the admission privileges, or the reduced tuition charges, or any other privileges accorded by law only to residents or citizens of Virginia, in the State institutions of higher learning unless such person has been domiciled in and is and has been an actual bona fide resident of Virginia for a period of at least one year prior to the commencement of the term, semester, or quarter for which any such privilege or reduced tuition charge is sought, provided that the governing boards of such institutions may require longer periods of residence and may set up additional requirements for admitting students."

Laundry

The fee (\$20.00 per semester) covers the laundry requirements of the average student and is required of all students living in dormitories, sorority houses and fraternity houses.

Board

The College operates two large cafeterias and a snack bar, together seating over 1,600 persons. The dining halls are not operated for profit.

All students who are officially classified as freshmen¹ and who are dormitory residents (including residents of the College-owned sorority and fraternity houses) will be charged for board at the rate of \$275.00 per student per semester. (Students entering for orientation, will be charged an additional \$12.00.)

Each student will be issued a Dining Hall Card which entitles that student to three meals daily for a period of approximately 120 days during the semester. The Christmas and Thanksgiving recesses during the first semester and the spring recess in the second semester are not included in the 120 days for which board is charged.

¹ For boarding purposes "Freshmen" is interpreted to mean those students in their first year of residence in College.

The Dining Hall Card will not be usable in the Wigwam (Coffee Shop).

It shall be optional with students not living in dormitories and students other than freshmen and sophomores whether they board in the College Dining Hall. They may elect to board by the semester in the Dining Hall in which case the charge for board will be \$275.00 per student per semester.

In cases of withdrawal during the first 60 days from the College, the student will be given a refund calculated on a pro-rata basis determined by the date of official withdrawal, provided the Dining Hall Card is surrendered to the Treasurer-Auditor on this date.

Owing to uncertain conditions prevailing with respect to the cost of food supplies and of food service, the College reserves the right to change its rates for board at any time throughout the year to meet such additional costs.

Room Rent

Men: Room rent in the men's dormitories varies from \$100.00 to \$230.00 per semester depending on the size of the room, location, bath, etc.

Women: Room rent in the women's dormitories varies from \$155.00 to \$245.00 per semester depending on the size of the room, location, bath, etc.

The College dormitories are not open for occupancy during the Thanksgiving, Christmas, and Spring Recess periods.

Students Withdrawing from College Facilities: A student who continues enrollment in College, but who withdraws from College facilities at any time following the date of the semester registration, will receive no refund for the semester's room rent. This regulation will apply to all students regardless of the reasons for their withdrawal from College dormitory facilities.

ESTIMATE OF SEMESTER EXPENSES

	Low	Medium	High
Board	\$275.00	\$275.00	\$275.00
Tuition and General Fee (State Student)	330.00	330.00	330.00^{1}
Room Rent	100.00	175.00	245.00
Laundry	20.00	22.00^{2}	24.00^{2}
Totals	\$725.00	\$802.00	\$874.00

INCIDENTAL EXPENSES

It is impossible to estimate the exact cost to students of clothing, travel and incidental expenses. These are governed largely by the habits of the individual. The College endeavors to minimize temptation to extravagance. The size of Williamsburg aids materially in this matter by not subjecting the students to the diversions of a larger city. As the demands for extra money are small, parents are advised to furnish only a small sum.

The cost of books depends somewhat on the courses taken, but will seldom be less than \$125.00 a year and does not usually exceed \$175.00 a year.

¹ For out-of-State students add \$467.00.

² For excess over and above normal requirement.

Money for books cannot be included in checks covering college expenses; books should be paid for in cash or by separate check when purchased. Checks for books should be made payable to the William and Mary Bookstore.

NON-RECURRING FEES

Application fee	\$15.00
Room deposit	50.00
Room change fee	10.00
Diploma fee	10.00
Cap and gown rent to Seniors and Graduate students	5.00
Academic hood rent to Seniors and Graduate students	1.00

Application Fee—A non-refundable processing fee of \$15.00 is required with undergraduate freshmen and transfer applications for admission to the College. This fee is not credited to the student's account. Students applying for admission from Christopher Newport and Richard Bland Colleges are excluded from payment of this fee.

Room Deposit—A deposit of \$50.00 is required by the College for a student to reserve a room. This payment is made to the Treasurer-Auditor and is applied on the student's regular college account.

This deposit may be made by students already enrolled at any time after the beginning of the second semester, but *must* be paid before March 15. No rooms will be reserved for students who have not paid their room deposit by the specified date.

Students enrolling for the first time may not make a room reservation deposit until they have been notified of their admission to the College. The room deposit for entering students is not refundable.

Room assignments for women will be made by the Assistant Dean of Women. Room assignments for men will be made by the Assistant Dean of Men. Assignments will be made in order of priority of application.

Room Change Fee—Students are given two weeks to become settled in their rooms. Changes after this period will only be permitted after the payment of \$10.00.

Diplomas—The charge for diplomas for all degrees is \$10.00. This is payable one week or more before graduation.

Academic Costumes—Senior and Graduate students may procure caps and gowns from the College rental supplier just prior to graduation. Rental fee, payable to the supplier, is \$5.00 for these items. Academic hoods will be provided to all degree recipients by the College just prior to graduation at a rental fee of \$1.00. All fees are payable upon receipt of the items mentioned.

REQUIREMENTS FOR DEGREES AND ACADEMIC REGULATIONS

THE College of William and Mary confers in course the following degrees, each under the jurisdiction of the Faculty or School indicated:

Faculty of Arts and Sciences: Bachelor of Arts (A.B.), Bachelor of Science (B.S.), Master of Arts (M.A.), Master of Science (M.S.), Master in Teaching of Science (M.T.S.), and Doctor of Philosophy (Ph.D.).

School of Business Administration: Bachelor of Business Administration (B.B.A.), and Master of Business Administration (M.B.A.).

School of Education: Master of Arts in Education (M.A.), Master of Education (M.Ed.), and Doctor of Education (Ed.D.).

School of Law: Juris Doctor (J.D.), and Master of Law and Taxation (L. & T.M.).

School of Marine Science: Master of Arts (M.A.), and Doctor of Philosophy (Ph.D.).

The requirements for the baccalaureate degree of Bachelor of Business Administration will be found on pages 187-189 of this catalog. The requirements for the post-graduate degrees are stated in the Graduate Catalog of the Faculty of Arts and Sciences or the Catalogs of the individual Schools.

DEGREES OF BACHELOR OF ARTS AND BACHELOR OF SCIENCE

The undergraduate degrees of Bachelor of Arts and Bachelor of Science are liberal arts degrees. A liberal education, although it has no single fixed definition, is more than a haphazard accumulation of courses. Its essential purpose is to liberate and broaden the mind, to produce men and women with vision and perspective as well as specific practical skills and knowledge. The major foundations on which a liberal education must be built are well-recognized. For these reasons, the College requires each undergraduate to plan, with the help of a faculty advisor and within the framework of broad general degree requirements, a total program of liberal education suited to his particular needs and interests.

The general degree requirements set forth below are designed to permit a high degree of flexibility for each student in planning his particular program of liberal education within broad basic limits. In this planning, a student and his advisor should build upon his previous preparation. A freshman should pursue at least one study in which he has interest and competence at the highest level his preparation allows. As early as possible he should explore some studies with which he is unfamiliar, in order to open up new interests and opportunities. Finally, he should take care to lay the foundations for his future specialization, in college or beyond in graduate or professional school, by anticipating specific prerequisites.

A liberal education presupposes certain *proficiencies*. Foremost among these is the ability to express one's self clearly both in speech and writing, for clear expression goes hand in hand with clear thinking. Another invaluable foundation of a liberal education is some experience with a foreign language, at least to the point

where a student begins to see for himself the cultural as well as practical values of foreign language study. Since students entering college differ widely in their previous preparation in these respects, the proficiency requirements of the College establish only basic minimums; but each student is encouraged to proceed beyond these minimums to whatever extent his interests and abilities suggest.

In the *Freshman Seminar*, the College offers every entering student an opportunity, in the context of a small class situation, to explore a challenging topic of special interest to him. He may choose a Seminar in a field in which he has already developed an interest and competence, or in an unfamiliar field about which he is curious. In either case he will participate closely in an exciting intellectual endeavor with his fellow students and a member of the faculty, who will probably also be his academic adviser.

The Area Requirements are designed to ensure that every student will explore at least on an introductory level each of the broad areas of arts and sciences: the humanities, the social sciences, and the natural sciences and mathematics. In one of these areas every student will continue this exploration through the required sequence of two advanced courses building upon the two introductory ones.

Finally, in the area of his *Concentration*, every student is required to pursue in depth the exploration of a specific academic discipline or two or more related ones through an interdisciplinary concentration. Here he has the fullest possible opportunities for both independent study and work in a Departmental Honors program, as well as for regular course work.

Achievement of its educational purposes requires that the College maintain standards of scholarly achievement and an environment conducive to learning and that to this end it adopt necessary regulations governing academic performance. The Faculty of Arts and Sciences of the College determines the degree requirements for the A.B. and B.S. degrees, including the determination of the regulations governing academic standards, grading, and class attendance. Obligation to its educational mission gives to the College the right and responsibility, subject to the employment of fair procedures, to suspend, dismiss or deny continuance of a student whose academic achievement does not meet established College standards.

Requirements for degrees are stated in terms of "semester credits" which are based upon the satisfactory completion of courses of instruction. One semester credit is given for each class hour a week through a semester. Not less than two hours of laboratory work a week through a semester will be required for a semester credit. A semester is a term of approximately eighteen weeks or one-half of the college session.

Courses of the 100 series are primarily for freshmen, 200 for sophomores, 300 and 400 for juniors and seniors. Courses of the 500 and 600 series are intended for graduate students only. Odd numbered courses are ordinarily offered in the first semester but may be offered in the second semester also; even numbered courses are ordinarily offered in the second semester but may also be offered in the first semester.

A continuous course covers a field of closely related material and may not be entered at the beginning of the second semester without approval of the instructor.

No credit will be counted toward a degree for the first semester of an elementary foreign language unless followed by the successful completion of the second semester of that language.

REQUIREMENTS FOR THE DEGREES OF A.B. AND B.S.

A. GENERAL REQUIREMENTS

One hundred and twenty-four semester credits are required for graduation. Of these one hundred and twenty-four semester credits, one hundred and twenty must be in academic subjects and four in a program of activities in Physical Education. A minimum of 120 quality points in academic subjects is required.

The student must make a minimum quality point average of 1.0 for all courses in the field of concentration for which he receives an official grade.

No degree will be granted by the College until the applicant has been in residence at least one college year and made a minimum of thirty semester credits at the College in Williamsburg. This period must include the last year of the work required for the completion of the degree.

A student must fulfill the general degree requirements set forth in the catalog at the date of entrance to the College, and he must fulfill the concentration requirements in effect when the choice of concentration is declared. A student who fails to graduate within six calendar years of the date of entrance to the College relinquishes the right to graduate under the requirements set forth in the catalog at the time of entrance, and must fulfill the requirements in effect during the final session of his attendance at the College.

A student must complete the requirements for a degree within ten semesters of residence in College provided, however, that when a student has been permitted to reduce his schedule below that normally required, the total period of residence permitted for the completion of the degree requirements shall be extended in proportion to the reduction permitted. In the application of this requirement, attendance in Summer Session will be included. Such attendance will be counted on the basis of the ratio of the Summer Session course load to the normal program of the regular session. Students transferring from other institutions should expect to spend at least two years in residence at the College.¹

B. PROFICIENCIES. AREA REOUIREMENTS, CONCENTRATION

The credits for a degree must be completed in accordance with the following specific requirements.²

¹ An entering freshman may receive a limited amount of credit or advanced placement in certain fields through satisfactory achievement on the Advanced Placement Tests of the College Entrance Examination Board or, in some instances, on other evidence of superior preparation in secondary school. These fields are Biology, Chemistry, English Composition, English Literature, American History, European History, Latin, Mathematics, French, German, Spanish, and Physics. Further information can be obtained from the Dean of Admissions.

² These requirements represent the normal path to a degree from the College of William and Mary. However, in exceptional cases, a student by petition to the Committee on Degrees may be released from normal requirements and permitted to devise his own program in consultation with his advisor and subject to the approval of the Committee. In addition, a student may petition the Committee on Degrees to receive credit for any course in the curriculum by examination. Upon granting such a petition, the Committee shall request the department in which the course is normally offered to set an appropriate examination and to certify the results thereof to the College Registrar and to the Committee.

1. Proficiencies

- A. Foreign Language: Unless a student presents at least four entrance credits in a single ancient or modern foreign language, or demonstrates equivalent proficiency by examination, he must satisfactorily complete a fourth semester course (or above) in a language in college.
- B. Writing: A student whose combined SAT Verbal and English Achievement scores fall below 1300 must satisfactorily complete a one-semester course in writing, normally during his freshman year, unless he applies to take and demonstrates satisfactory performance on a writing test administered during orientation week. A student whose combined scores are 1300 or better may take a course in writing but is not required to do so.
- C. Physical Education: A student must acquire four semester credits in a physical education program. Each of the four requirements may be satisfied by electing a semester course in an activity offered by the Departments of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. A student must begin this program in his first semester of residence and continue in the program until the requirements have been satisfied.

2. Area Requirements

A student must satisfactorily complete eight courses distributed among the following areas:

- Area I. Classical Studies, English, Fine Arts, Humanities, Modern Languages, Music, Philosophy, Religion, Theatre and Speech.
- Area II. Anthropology, Economics, Government, History, Psychology, Sociology.
- Area III. Biology, Chemistry, Geology, Mathematics, Physics.

The eight area courses must be chosen according to the following rules:

- (1) Each student must take a minimum of two semester courses within each area, not including courses in the department of his concentration.
- (2) Each student must take two additional courses outside the area of his concentration. At least four courses outside the area of concentration must form a logical sequence of introductory and advanced courses or a logical combination of courses on an interdisciplinary topic.
- (3) Each student must complete at least six of these eight required courses before he will be permitted to register for his fourth academic year.
- (4) Certain courses offered by a department assigned to one area may be designated by the Curriculum Committee as suitable for meeting these requirements in another area; but no student may fulfill the area requirements in more than one area with courses offered by the same department.
- (5) The semester courses in writing and foreign language courses which are not primarily concerned with the study of the literature or culture in the language do not count toward meeting the area requirements.
- (6) In addition to satisfying the Area III requirement by two semester courses in a science, a candidate for the B.S. degree must take two additional semester courses in a different science, selected in accordance with the requirements of the department in which the student is concentrating.

3. Concentration

Before the end of the sophomore year each student shall select either a departmental or an interdisciplinary concentration. A student cannot change his concentration after registration for the second semester of the senior year.

A. Departmental concentrations are offered (for the Bachelor of Arts degree) in Anthropology, Classical Studies, Economics, Education, English Language and Literature, Fine Arts, Geology, Government, History, Mathematics, Modern Languages¹, Music, Philosophy, Physical Education for Men, Psychology, Sociology, Theatre and Speech, and (for the Bachelor of Science degree) in Biology, Chemistry, Geology, Mathematics, Physical Education for Men, Physics, and Psychology.

The student in consultation with the chairman of his major department shall select the courses for concentration. A department must require at least twenty-seven semester credits in a single subject field for a concentration but may not require more than forty-two semester credits in all.

When a student decides to concentrate in a subject field in which he has already received credit for an area requirement, that credit shall be counted as part of his concentration and he will have to fulfill the area requirement in another subject field.

No student shall be permitted to apply toward a degree more than forty-eight semester credits in a subject field. The subject fields include: Anthropology, Biology, Business Administration,² Chemistry, Economics, Education, English, Fine Arts, French, Geology, German, Government, Greek, History, Latin, Mathematics, Music, Philosophy, Physical Education for Men, Physics, Psychology, Sociology, Spanish, and Theatre and Speech.

Students in Elementary and Secondary Education may apply twenty-seven semester credits and twenty-four semester credits respectively in Education toward the A.B. degree.

B. Interdisciplinary concentrations are supervised by a Committee On Interdisciplinary Studies. Any student may submit a plan for an interdisciplinary concentration for the approval of this committee.

SPECIAL PROGRAMS

DEPARTMENTAL HONORS PROGRAM

The Departmental Honors Program provides special opportunities for the intellectual stimulation and development of superior students in certain departments through independent study. Departments participating in the program during the 1971-72 academic session are Anthropology, Biology, Classical Studies, Economics, English, Fine Arts, Government, History, Modern Languages, Philosophy, Physics, Psychology, and Sociology.³ Students in this program may, as the result of distinguished work, be awarded a degree with "Honors," "High Honors," or "Highest Honors."

¹ The Department of Modern Languages offers concentration in French, German and Spanish.

² This regulation applies only to students who declared concentration in Business Administration under the A. B. degree prior to the inauguration of the B.B.A. degree.

³ See the descriptions under these departments for specific requirements.

I. Eligibility, Admission and Continuance in the Program

- A. Eligibility is contingent upon the student's achieving a minimum quality point average of either (1) 2.0 on a cumulative basis by the end of the junior year, or (2) 2.0 for the junior year alone.
- B. A student who wishes to pursue honors work and who has good reason to believe that he will qualify under paragraph "A" above should declare his interest as early as possible to the Chairman of his Department. Such declaration should be made in the spring of his sophomore year when he declares his field of concentration but may be made as late as the spring of his junior year. Application for admission to honors must be made in the spring of the junior year. The student who is acceptable to the Chairman of the Department and whose eligibility has been certified by the Dean of the Faculty of Arts and Sciences will be admitted to candidacy (subject to considerations of teaching staff availability) prior to registration in the fall of the student's senior year.
- C. The continuance of a student in the Honors Program is contingent on his maintaining what his major department judges to be a sufficiently high standard of work.

II. Minimum Requirements for a Degree with Honors

- A. Satisfactory completion of a program of reading and research supervised by a faculty member designated by the head of the student's major department. Six hours of credit in a course designated 495-496 in each department offering Honors shall be awarded each student satisfactorily completing the program.
- B. Satisfactory completion of the general requirements for the degree of A.B. or B.S.
- C. Presentation of an Honors Essay or completion of an Honors Project acceptable to the major department. This requirement must be met by May 1 of the student's senior year.
- D. Satisfactory performance in a comprehensive examination in the field of the student's major interest.

III. Examining Committee

- A. Each comprehensive examination shall be set and judged and each Honors Essay or Project shall be judged by an examining committee of not less than three members, including at least one member of the faculty of the candidate's major department and at least one faculty member from another department.
- B. Examining committees shall be appointed by the Dean of the Faculty of Arts and Sciences.

IV. Standards

A. Final determination of a student's standing with respect to honors shall rest with his examining committee. The committee shall take into account (1)

- the recommendation of the major department, (2) the recommendation of the major adviser, and principally (3) its own judgment of the comprehensive examination and essay or project.
- B. A minimum grade of "B" on both the comprehensive examination and the essay or project is required for "Honors." The award of "Honors," "High Honors," or "Highest Honors" shall be determined by the student's examining committee.
- C. When a student's work does not, in the opinion of the Committee, meet the minimum requirements for honors, the faculty members supervising the student's Honors work will determine what grade should be granted. A student may be dropped from honors work at the end of the first semester.

SOPHOMORE ACADEMIC AND RESIDENTIAL PROGRAM

From 1965 through the spring of 1972, the College offered a General Honors Program which operated with a dual purpose: (1) to provide special challenge to a group of freshmen and sophomores of outstanding ability, motivation, and capacity for involvement, and (2) to develop experimental activities in learning. Beginning in the fall of 1972 this program is being replaced in part with a new program—a Sophomore Academic and Residential Program called Project PLUS. The honors colloquia, courses which were the central experimental feature of the General Honors Program, are no longer offered in view of the fact that this kind of course has now been adopted into the general undergraduate curriculum as the freshman seminar and is being offered to all freshmen. Special honors sections of introductory departmental courses continue, however, to be offered.

Project PLUS combines a program of study with special living arrangements. It is made up of 84 students (72 sophomores and 12 upperclassmen) who live in a residence hall and take part of their academic work together under faculty who teach in the residence itself. Objectives of the Project are: (1) to integrate in-class and out-of-class activity, (2) to offer more opportunity for experimentation in teaching and course design, (3) to encourage interdisciplinary study. Criteria for admission are commitment and ability to contribute to the program as well as good academic standing.*

ACADEMIC REGULATIONS

STUDENT'S PROGRAM

All students in a degree program, other than freshmen, graduate and part-time students, are required to carry the normal program of at least fifteen and no more than seventeen semester hours (counting courses in Physical Education), with the exception that any student may, with the consent of his adviser, carry eighteen semester hours (counting courses in required Physical Education). Freshmen may carry a minimum of fourteen semester hours counting courses in required Physical Education. Non-credit courses may be carried in addition to the normal load and will be listed on the student's transcript with the notation "Pass" or "Fail," but will in no way count toward a degree.

^{*} A detailed description of the Project is available on request from the Office of the Director of Honors and Experimental Programs.

Petitions for underloads, when warranted by special circumstances, may be granted by the Committee on Academic Status; these petitions should be made in writing to the Dean of Men or the Dean of Women, preferably within a period of five days before the first day of registration for the semester in question, but not later than two days before the close of the period allowed for course changes without penalty. Only to exceptionally able students, however will the Committee on Academic Status grant permission to carry more than eighteen semester hours.

CLASSIFICATION OF STUDENTS

A sophomore student must have completed at least twenty-four (24) credits in academic subjects, with at least twenty-four (24) quality points. A junior student must have completed at least fifty-four (54) credits in academic subjects, with at least fifty-four (54) quality points. A senior student expecting to graduate in June must have completed eighty-five (85) credits in academic subjects, with at least eighty-five (85) quality points. The social standing of every student is identical with the academic.

CONTINUANCE IN COLLEGE

A student must accomplish in each semester of attendance after the first semester of the freshman year a minimum of 8 semester credits in academic subjects and earn at least 5 quality points.

A student in his freshman year must acquire at least 18 semester credits and earn 14 quality points. In his sophomore year a student must earn 24 semester credits and 24 quality points. Moreover, a student who has completed two years may not continue in College unless he has accumulated 48 semester credits with 48 quality points including satisfactory completion of 12 distribution courses.* He must also have declared his field of concentration. A student who has met these requirements except for certain distribution courses may be permitted to attend the summer session of this College in order to complete the distribution requirements, but this permission does not extend to satisfaction of the credit and quality point requirement.

In his third and fourth years of attendance a student must accomplish a minimum of 27 semester credits with 27 quality points in each year.

WITHDRAWAL FROM COLLEGE

Students who desire to withdraw from College should apply to the Dean of Men or the Dean of Women for permission to withdraw. The permanent record card of any student who withdraws from College without permission from the proper dean will carry the notation "Withdrew unofficially."

When students withdraw after the date on which midsemester grades are reported and before the beginning of the examination period in the semester, their records bear a notation indicating for each course whether the student was passing or failing. The symbols used for this purpose are WP (withdrew, passing) and WF (withdrew, failing).

^{*} The requirement of 12 distribution courses will not be applied to students who are successfully pursuing one of the College's pre-professional programs.

The Committee on Academic Status will determine the status of students who have withdrawn from the College after mid-semester when there is evidence of unsatisfactory academic performance. Faculty reports of WP and WF will be considered by the Committee in this determination.

It is the policy of the College to allow appropriate credit to students who are required by the Selective Service System or other military organization to withdraw from college during the course of a semester to enter military service. The regulations defining this policy are available on request.

CLASS ATTENDANCE

An educational system centered upon classroom instruction is obviously predicated on the concept of regular class attendance. In support of this concept, the following principles are to be observed:

- 1. Except for reasonable cause, students are expected to be present at all regularly scheduled class meetings, particularly their last scheduled class in each of their courses preceding and their first scheduled class in each of their courses following the Thanksgiving, Christmas, and Spring holidays.
- 2. Students whose attendance becomes unsatisfactory to the extent that their course performance is affected adversely should be so informed by their instructor and the same reported to the Dean of Men or Dean of Women.

CHANGES IN REGISTRATION

In order to add a course to or drop a course from the program of courses for which they originally registered, men students must make application for such a change to the Dean of Men, and women students, to the Dean of Women. If the application is granted, the dean will then notify the Registrar of the change. The Registrar, in turn, records the change on the student's registration card and informs the instructor or instructors concerned. Unless a course change has been made in that manner it has no official standing and will not be recognized as valid by the College. After the first week of classes in a semester, the only course changes which are permitted by the deans are those which, in the opinion of the Committee on Academic Status, warrant such action. Petitions for exceptions must be presented in writing to the Committee through the offices of the Dean of Men or the Dean of Women.

EVALUATION OF CREDITS FROM OTHER INSTITUTIONS

The credits of students transferring from other institutions will be evaluated only tentatively upon matriculation. The final evaluation of credits earned at any time elsewhere than at this institution will be determined by the quality of work completed at this college. Evaluations of records are not made by the Committee on Degrees until after students have been selected for admission. In general, credits from accredited institutions are accepted provided they carry a grade of "C" or better and are comparable to courses offered at the College. No student may assume that credit will be given for work at other institutions until he has a written statement as to what credit will be accepted. In particular, any student of the College in Williamsburg who proposes to attend a summer session elsewhere must have written

permission in advance from the Chairman of the Committee on Degrees in order to insure that the credit may be transferred to the College in Williamsburg. Credits carrying a grade of "D" will not be accepted for transfer to the College of William and Mary. In determining the number of quality points on credits accepted from other institutions which may be counted toward the minimum of one hundred twenty required for graduation, credits of grade "C" or higher will be considered as having a value of "C." Credit for extension courses in the field of concentration or for the requirements for the baccalaureate degree shall be limited to one-fourth of the total credit hours required. Normally, no more than sixty-two academic credits will be transferred from colleges accredited to offer only two years of academic work on the college level. It is the policy of the College not to grant credit for attendance in service schools or training programs in the Armed Forces unless it can be demonstrated that such attendance is the equivalent of a course or courses offered at William and Mary. Academic credit for courses taken while on military service at accredited colleges, universities or language institutes may be transferred in the normal manner. No credit will be granted for general military training.

SYSTEM OF GRADING AND QUALITY POINTS

The work of each student in each course in an academic subject is graded A, B, C, or F. These grades have the following meanings: A, excellent; B, good; C, satisfactory; and F, failure. For each semester credit in a course in which a student is graded A he receives 3 quality points; B, 2; C, 1. F carries no credit and no quality points. Courses taken on a pass-fail basis and work in required Physical Education are graded P (pass) or F (failure).

In addition to the grades A, B, C, and F, the symbols "G," "I," "X," "WP," and "WF" are used on grade reports and in the College records. "G" indicates that the instructor has deferred reporting the student's grade. "I" indicates that the student has postponed, with the consent of the instructor, the completion of certain required work other than the final examination. "X" indicates absence from the final examination. "I" automatically becomes F at the end of the next semester if the postponed work has not been completed. "X" automatically becomes F at the end of the next semester unless a deferred examination is permitted by the Dean of the Faculty of Arts and Sciences. "WP" (withdrew, passing) and "WF" (withdrew, failing) indicate the standing of a student who withdrew from the College between midsemester and the end of the semester.

Reports showing the standing of students in their classes are sent to parents or guardians at the middle and the end of each semester. Students who in any semester accomplish a normal program of studies with a quality point average of 2.20 and no grade below "C" will be placed on the Dean's List of Distinction for the following semester.

EXAMINATIONS

The examinations, given at the end of each semester, take place at the times announced on the examination schedule, which is coordinated by the Dean of the Faculty of Arts and Sciences and posted at least two weeks before the beginning of the examination period. Students are required to take all of their examinations at

the time scheduled, unless excused on account of illness or other sufficient reason by the Dean of Men or the Dean of Women. Students should present their reasons for an expected absence to the proper dean in advance of the examination. No excuse on the ground of illness will be accepted unless it is approved by the College physician.

Deferred examinations are provided for students who have been excused by the Dean of Men or the Dean of Women from taking their examinations at the regular time. The deferred examinations for courses in the first semester are given in the fourth week of the second semester; the deferred examinations for courses in the second semester are given during the orientation period in September. Except under very exceptional circumstances students are not permitted to postpone the taking of a deferred examination beyond the first occasion thus regularly provided; and in no case will permission to take a deferred examination be extended beyond a year from the time of the original examination from which the student was absent. The schedule of the deferred examinations, coordinated by the Dean of the Faculty of Arts and Sciences, will be posted several days in advance of the time at which they are given, and a copy of it will be mailed to each student who is entitled to take a deferred examination.

The College does not authorize re-examinations.

GRADUATE STUDY

The College offers the degrees of Master of Arts in Biology, Chemistry, Education, English, Government, History, Marine Science, Mathematics, Physics, Psychology and Sociology; Master of Science in Applied Science, Mathematics, and Physics; Master in Teaching of Science through the National Science Foundation Summer Institute; Master of Education; Master of Law and Taxation; Master of Business Administration; Juris Doctor; Doctor of Education; and Doctor of Philosophy in History, Marine Science, Physics, and Psychology.

For degree requirements consult the Graduate Catalog of the Faculty of Arts and Sciences and the School of Marine Science, or the catalogs of the School of Business Administration, the School of Education, and the Marshall-Wythe School of Law. For the administration offices to which to direct inquiries see p. iii.

IV. FIELDS OF CONCENTRATION AND COURSE DESCRIPTIONS

THE chapters in this section describe, in alphabetical order, the requirements for concentration in the various fields offered by the College according to the departments and schools offering them. The chapters also include the undergraduate course offerings of the departments and schools listed according to course number. Courses that satisfy proficiency requirements are so designated and Freshman Seminars are indicated. Courses that can be taken to fulfill area and sequence requirements are indicated in the schedules of classes published prior to the registration periods for the fall and spring semesters.

Also described in the chapters are the requirements for departmental honors study, when that is provided. The last three chapters explain the programs of the School of Continuing Studies and the Virginia Associated Research Campus, and the pre-professional programs that the College offers.

EXPLANATION OF COURSE DESCRIPTIONS

- (*) Starred courses may be taken only with the consent of the instructor.
- (†) Daggered courses may be taken only with the consent of the head of the department or dean of the school concerned.
- Pairs of numbers (201, 202) indicate continuous courses. A hyphen between numbers (101-102) indicates that the courses *must* be taken in the succession stated.
- Courses involving laboratory or studio activity are so labeled. All others are class-room courses.

Semester hour credit for each course is indicated by numbers in parentheses.

FACULTY OF ARTS AND SCIENCES

DEPARTMENTS OF INSTRUCTION

Anthropology

PROFESSOR ALTSHULER (Chairman of the Department). Associate Professors Ballingall and Barka. Assistant Professors Reinhart and Reyna. Lecturers Emenyonu¹ and Fama.

REQUIREMENTS FOR CONCENTRATION

Concentration in Anthropology requires 33 semester credits in anthropology, including Anthropology 201, 202, 301, 302, 400 and 401-402. Honors candidates will take 495 and 496 in place of 401-402.

DESCRIPTION OF COURSES

150. The Anthropological Perspective. Fall (3) Mr. Altshuler.

An introduction to the ways in which the anthropologist views the relationship of man, nature, and culture.

201. Introductory Anthropology. Fall (3) Staff.

A general introduction to the field of anthropology. Particular attention will be given to recent archaeological discoveries concerning the origins of man, the development of agriculture, and the beginnings of urbanization.

202. Cultural Anthropology. Spring (3) Staff.

The application of the concept of culture to the study of contemporary societies, both primitive and modern. Such institutional areas as magic and ritual; crime, custom, and law; economy; and courtship, marriage and childrearing will be analyzed cross-culturally.

301. Methods in Archaeology. Fall (3) Mr. Barka.

A general introduction to field and laboratory techniques of prehistoric and historic archaeological research.

302. Methods in Ethnography. Spring (3) Miss Ballingall.

An introduction to field study including the collection and interpretation of data. The course will also include a review of techniques developed by ethnographers for the study of living communities.

304. Primitive Economic Systems. Fall (3) Mr. Reinhart.

A study of representative economic systems of both prehistoric and modern non-industrial cultures. The course explores the evolution of technology and sub-

¹ Visiting Lecturer, first semester 1971-72.

sistence techniques, the development of the market system, and the interrelationship of economic organization and other aspects of culture. (Not offered 1971-72.)

307. Social Anthropology. Spring (3) Mr. Reyna.

An introduction to the study of the major social features of non-industrial peoples from a functional point of view. Topics considered are: incest and exogamy, marriage, the family, kinship, descent and descent groups, age and sex associations, stratification.

309. Physical Anthropology. Spring (3) Miss Ballingall.

An examination of the evolution of the hominids and of the relations between them and the forms closest to them, the Primates. Attention will be given to fossil forms, and to fossil and living populations.

311. Archaeology of North America. Fall (3) Mr. Reinhart.

An introduction to the prehistory of North America north of Mexico from the earliest peopling to the historic period. The dynamics of culture development and the relation of prehistoric cultures to historic tribes will be analyzed.

314. Indians of North America. Spring (3) Mr. Reinhart.

A survey of the major culture areas of aboriginal North America north of Mexico at the time of European contact. The post-contact relations between the Native Americans and the dominant White culture and the present-day situation and problems of Native Americans will be examined.

316. The Virginia Indians. Spring (3) Staff.

A study of the origins and culture growths of the Virginia Indians from 15,000 B.C. to A.D. 1960. Careful attention will be given to the classification of artifacts associated with the various culture periods. (Not offered 1971-72.)

321. Archaeology of Middle and South America. Spring (3) Mr. Reinhart.

An introduction to the prehistory of Middle and South America with special attention to the development of Aztec, Maya, and Inca civilizations.

323. Peoples and Cultures of South America. Spring (3) Staff.

A descriptive survey of the major culture areas of South America, analyzed in terms of such variables as race, language, ecology, dominant values, and culture contacts. (Not offered 1971-72.)

331. Peoples and Cultures of Africa. Fall (3) Mr. Reyna.

An introduction to peoples and cultures of Africa. The ideological, social, political and economic aspects of representative cultures are examined. Emphasis is placed on learning how to apply information gathered from particular African peoples to problems of general interest in the social sciences.

342. Peoples and Cultures of Southeast Asia. Fall (3) Miss Ballingall.

A descriptive survey of the major ethnic groups of Southeast Asia, analyzed in terms of such variables as ecology, physical type, language, dominant values,

and social structure. The course will also touch upon contemporary problems in Southeast Asia. (Not offered 1971-72.)

344. Peoples and Cultures of Oceania. Fall (3) Miss Ballingall.

A descriptive survey of the Pacific Island World, including Aboriginal Australia, analyzed in terms of such variables as social organization, cultural pattern, and culture contact.

352. Archaeology of Europe. Spring (3) Mr. Barka.

A survey of the prehistoric and early historic cultures of Europe, covering the Paleolithic, Neolithic, Bronze, and early Iron Ages. Comparisons will be made with the cultural development of Asia, the Middle East, and Africa.

400. Anthropological Theory. Fall (3) Mr. Altshuler.

An analysis of the development of anthropological theory focusing upon key problems, concepts, and hypotheses as presented by such "schools" as the evolutionists, diffusionists, and functionalists.

401-402. Anthropological Research. Fall and Spring (3) Staff.

Independent study which will culminate in a senior essay. Required of all concentrators. (Honors candidates will take 495 and 496 in place of 401-402.)

408. Culture and Tradition in Pre-Colonial Africa. Fall (3) Mr. Noisin.

A survey of the development of African culture from the rise of the great Sudanic Kingdoms until the partition of Africa by the European powers following the Berlin conference of 1884-5.

411. Cultural Patterns and Technological Change. Fall (3) Miss Ballingall.

An examination of the role of cultural practices and interdependent cognitive frameworks which facilitate or impede modernization of societies now encompassed within so called underdeveloped areas. Case studies by anthropologists from a variety of cultures will be presented.

417. Special Topics in Anthropology: The Literature of West Africa. Fall (3) Mr. Emenyonu.

Designed primarily for anthropology concentrators this course will explore in depth some particular topic in anthropology.

422. Personality in Culture. Spring (3) Mr. Altshuler.

The relationship of personality type to cultural factors such as myth and ritual, subsistence patterns, language, and child rearing will be considered utilizing data from a variety of cultures. Special attention will be given to differing concepts of identity, and mental illness and health.

430. Descriptive Linguistics. *Fall* (3) Mr. Fama. Same as English 403.

A study of contemporary linguistic theory and some practical methods of language analysis, including a comparison of the structures of diverse languages.

432. Historical Archaeology. Spring (3) Mr. Barka.

The archaeology of the era since the beginning of the exploration of Europeans of the non-European world, with major emphasis upon North America. Artifacts of the period will be examined with a view toward reconstructing the daily life of the people.

440. Introduction to Historical Linguistics. *Spring* (3) Mr. Fama. Same as English 404.

This course surveys the major results of Indo-European Historical Reconstruction. Some consideration is given to the contributions of recent Generative Phonology and Indo-European. The course also includes some investigations into non-Indo-European Reconstruction.

450. Anthropology and Medicine. *Spring* (3) Mr. Altshuler.

The medical system of the United States will provide the basic unit of comparison for a review of the ways in which different societies cope with problems of ill-health. The focus will be upon cultural variation in definitions of "illness" and "therapy" and the manner in which such definitions and practices are interrelated with other aspects of culture.

HONORS STUDY

495-496. Honors. *Fall and Spring.* (3,3) Staff.

Students admitted to Honors Study in Anthropology will be enrolled in this course during both semesters of their senior year. The course comprises: (a) supervised research in the student's special area of interest; (b) the preparation and presentation by May 1 of an Honors Essay; and (c) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

PROFESSORS BYRD (Chairman of the Department), Baldwin, Black, Coursen, and Terman. Associate Professors Aceto, Brooks, Hall, Mangum, Mathes, Speese, and Vermeulen. Assistant Professors Bradley, Dow, Grant, Scott, Ware, and Wiseman. Instructor Beck.

REQUIREMENTS FOR CONCENTRATION

A minimum of 38 credits is required for concentration in Biology. A maximum of 8 of these credits (which may include Chemistry 201, 202) may be approved in other departments for courses above the 100 level completed with a minimum grade of "C". In addition to Biology 101, 102, a concentrator must take one course from each of the following five groups of courses. Some courses (marked with an asterisk)) occur in two groups, but in such cases a single course may satisfy the requirement in only one group, and another course must be chosen from the second group. At least one course must be primarily zoological and at least one must be primarily botanical (those marked Z and B respectively). At least four courses above the 100 level must include laboratory work in addition to the lecture-discussion periods.

- A. (Biology of Organisms): 201 (Z); 206 (B); 208 (B); 209 (B); 215 (Z); *216 (Z); *305 (B); 412 (B); *416 (Z).
- B. (Environmental Biology): *216 (Z); *305 (B); *314; 407; 410 (Z); *416 (Z).
- C. (Genetics and Evolution): 302; *314.
- D. (Developmental and Cell Biology): 202 (Z); 203 (B); 301; 320 (B); *405; 422.
- E. (Physiology and Biochemistry): *405; 408 (Z); 414; 419 (B).

Chemistry 201 and 202 are required for concentration in Biology and are included in the calculation of the quality point average in the concentration. It is strongly recommended that Biology concentrators complete two semesters in both mathematics and physics. Students who intend to pursue graduate work in Biology should take a modern foreign language (German, French, or Russian) through 202.

DESCRIPTION OF COURSES

101-102. Introductory Biology. *Fall and Spring* (4,4) Mr. Coursen and Staff, Fall semester. Mr. Brooks and Staff, Spring semester.

Concepts of modern biology based on molecular and cellular structure; a brief survey of the plant and animal kingdoms relating morphology to physiology; discussions on ecology, organic evolution, and the relation between biological problems and human society. *Three Class Hours, Three Laboratory Hours*.

150. Freshman Seminar. Fall and Spring (Credit and Hours to be arranged). Various special topics in Biology, depending on the instructor and the semester.

This course does not count toward concentration, area, or sequence requirements. Staff.

201. Comparative Anatomy of Vertebrates. Fall (4) Mr. Byrd. Prerequisite: Biology 102.

Consideration of the evolution of the larger taxonomic groups of chordates with a comparative study of their gross morphology. Three Class Hours, Six Laboratory Hours.

- **202.** Principles of Animal Development. Spring (4) Mr. Wiseman. Prerequisite: Biology 102. An investigation of major events and processes of animal development. Topics include fertilization and early development, nuclear-cytoplasmic interaction, cell determination and differentiation, morphogenetic processes, growth, developmental neurobioloby, neoplasia, aging, and genetic control of development. Three Class Hours, Three Laboratory Hours.
- **203.** Principles of Plant Development. Fall (3 or 4) Mr. Mathes. Prerequisite: Biology 101, 102. Discussion of cell growth, auxin balance, nutrition, and cell division as factors which contribute to the determination of developmental pathways in plants. The optional laboratory is highly recommended as a supplement to lectures for students interested in developmental biology or general botany. Three Class Hours (3 credits) or Three Class Hours, Three Laboratory Hours (4 credits). (Alternate years; not offered 1971-72).
 - 206. Plant Taxonomy. Spring (4) Mr. Baldwin. Prerequisite: Biology 101.

Phyletic relationships of flowering plants and ferns; principles of classification; collection and identification of representative native and cultivated plants. Two Class Hours, Six Laboratory Hours.

208. Morphology and Phylogeny of Plants. Fall (4) Miss Speese. Prerequisite: Biology 101.

The morphology of representative lower plants is studied in the laboratory and in the field. Some experiments are performed. Two Class Hours, Six Laboratory Hours.

209. Anatomy of Land Plants. Fall (4) Mr. Hall. Prerequisite: Biology 101.

A systematic survey of the major cell, tissue and organ types of the bryophytes, pteridophytes, gymnosperms and angiosperms. Taxonomy, life-cycles, paleobotany and evolutionary history of each group are discussed. *Three Class Hours, Six Laboratory Hours*. (Alternate years; not offered 1970-71).

215. Vertebrate Biology. Fall (4) Mr. Brooks.

A study of the ecology, taxonomy, behavior and physiological ecology of vertebrates, with special emphasis on the lower vertebrates. *Three Class Hours, Six Laboratory Hours*. (Alternate years, not offered 1971-1972).

216. Invertebrate Biology. Fall (4) Miss Mangum.

Ecology, taxonomy, morphology, physiology and behavior of invertebrate organisms. Phylogenetic relationships are emphasized. *Three Class Hours, Six Laboratory Hours*.

301. Microbiology. Fall (4) Mr. Vermeulen. Prerequisite: Biology 101.

Homologies are stressed in the study of life using the elementary systems of selected bacteria and other microorganisms. With the ultimate goal of an understanding of current research, the areas covered include classical and modern techniques, biochemistry, sexual and asexual genetics. Three Class Hours, Six Laboratory Hours.

302. Genetics. Fall and Spring (3 or 4). Mr. Baldwin and Miss Speese, Fall semester. Mr. Grant, Spring semester. Prerequisite: Biology 101, 102; Introductory Chemistry and Mathematics are recommended. This course is intended to be a comprehensive survey of genetics as a field. It includes three broad areas: classical mendelism; gene structure and function; and population genetics. Students may elect to take laboratory, consisting of either traditional class experiments or independent projects, and designed for students intending to pursue advanced studies in biology. Three Class Hours (3 credits) or Three Class Hours, Six Laboratory Hours (4 credits).

305. Phycology. Fall (4) Mr. Scott.

Structure, reproduction, life histories, ecology and cytology of marine and freshwater algae. *Three Class Hours, Three Laboratory Hours*. (Alternate years; not offered in 1971-72).

307. Human Physiology. Spring (3) Staff. Prerequisites: Biology 102, 102 are suggested.

Detailed study of the manner in which different organ systems of the human body function.

An elective course not applicable towards the minimum requirements for concentration in Biology. Two Class Hours, Three Laboratory Hours.

308. Human Anatomy. Fall (3) Staff.

Gross and histological study of the human organism with particular emphasis on the neuro-muscular systems as related to physical and health education.

An elective course not applicable towards the minimum requirements for concentration in Biology. Two Class Hours, Three Laboratory Hours.

314. Biological Evolution. Fall (3) Mr. Brooks. Prerequisites: Biology 101, 102, one other biology course. Introductory Chemistry and Mathematics are recommended.

Principles of biological evolution: detailed discussion of natural selection, sources of variation, population genetics, isolating mechanisms, speciation and human evolution.

320. Fundamental of Mycology. Spring (3) Mr. Coursen. Prerequisites: Biology 101; knowledge of chemistry recommended.

Designed to consider the general features common to most fungi by expounding on the broad trends in structure, function, and behavior which can be discerned in the group. Selected model systems which illustrate these features at the subcellular, cellular, and organismal level are examined. (Alternate years; not offered 1972-73).

402. Cytogenetics. Spring (4) Miss Speese. Prerequisite: Biology 401.

Components of cells as related to genetics. Preparation and study of chromosomes. Two Class Hours, Six Laboratory Hours.

- *403. Problems in Biology. Fall and Spring (Credit to be arranged). Staff. Supervised projects selected to suit the needs of the individual student. Students may not apply more than three hours of Biology 403 toward a concentration in Biology. Hours to be arranged.
- **404.** Topics in Biology. Fall and Spring (2-4 credits arranged) Staff. Prerequisites: Biology 101, 102.

Areas of special current research interest presented by resident and visiting faculty members as opportunity and demand arise. *Hours arranged*.

405. Cellular Physiology. Fall (4) Mr. Black. Prerequisites: Biology 101, 102; Chemistry 201, 202.

The relationships between submicroscopic anatomy and chemistry of the cells are explored. Experiments dealing with cell-chemistry, permeability, metabolism, and growth are performed. *Three Class Hours, Six Laboratory Hours*.

406. Experimental Embryology. Spring (4) Mr. Black. Prerequisites: Biology 101, 202; Chemistry 201, 202.

Lectures and experiments dealing with the mechanisms of fertilization, cleavage, gastrulation, and organ-differentiation in both invertebrates and vertebrates are given. Three Class Hours, Six Laboratory Hours.

407. General Ecology. Fall (4) Mr. Ware. Prerequisites: Biology 101, 102; a course in plant taxonomy, vertebrate zoology, or invertebrate zoology recommended.

Discussion of interactions between organisms and their environment; factors controlling structure, function, and distribution of populations, communities, and ecosystems; survey of major biotic communities. Three Class Hours, Three Laboratory Hours.

408. Mammalian Physiology. Spring (4) Mr. Bradley. Prerequisites: Biology 101, 102 and Chemistry 201, 202; Physics 101, 102 recommended.

The function of the animal as a whole as indicated by the physiology and interrelationships of different organs and organ systems. Three Class Hours, Four Laboratory Hours.

410. Animal Behavior. Fall (3) Mr. Terman. Prerequisites: Biology 101, 102; Psychology 201, 202 recommended. (Alternate years; not offered in 1971-1972.)

Description of the known behavior patterns of selected invertebrate and vertebrate groups with emphasis on adaptive significance. The genetics, ontogeny and ecological significance of behavior patterns will be presented where known.

412. Biology of the Vascular Plants. Spring (4) Mr. Hall.

A study of the major families of vascular plants, emphasizing comparative

morphology and evolutionary trends, ecological relationships, economic importance, classification, and research methods,

414. Biochemistry. Spring (3) Mr. Vermeulen. Prerequisites: Mathematics 103; Chemistry 201, 202 or permission of instructor.

A study of the molecular bases of living processes: The chemistry of the important constituents of living matter; energy metabolism; enzyme kinetics; thermodynamics; biosynthesis; metabolic control.

415. General Endocrinology. Fall (4) Mr. Bradley. Prerequisites: Biology 101, 102 and 408; Biology 201 is recommended.

The role of hormones in the maintenance of homeostasis, control of metabolic processes, and reproduction as exemplified by mammals. This course is intended as an introductory course and is a prerequisite for Comparative Endocrinology. Three Class Hours, Three Laboratory Hours.

416. Introduction to Ornithology. Spring (4) Mr. Byrd. Prerequisite: Biology 102.

Introduction to the biology of birds; lecture and laboratory work on morphology, classification, migration, distribution, and breeding biology; field work on identification and general ecology. *Three Class Hours, Six Laboratory Hours*.

417. Biostatistics. Fall (4) Mr. Dow. Prerequisites: Mathematics 201-202 and at least two courses at the 300 level or above in Biology.

An introduction to the mathematical and statistical techniques available to analyze and to interpret the results of experiments in both a qualitative and quantitative manner. The emphasis will be placed on the applications of quantitative techniques in biological research. Three Class Hours, Three Laboratory Hours.

418. Experimental Biochemistry I. Spring (2) Mr. Vermeulen. Prerequisite or co-requisite: Biology 414 or Biology 405 or consent of the instructor.

An introduction to experimentation with biochemical systems, processes, and compounds of biochemical importance; identification and quantitative measurements of such constituents and of biological transformations. *Six Laboratory Hours*. (Not offered 1969-70).

419. Plant Physiology. Spring (4) Mr. Mathes. Prerequisites: Biology 101, 102; recommend Chemistry 201, 202.

Mechanisms of absorption, translocation, synthesis and utilization of materials. The role of internal and external factors in plant growth. *Three Class Hours, Four Laboratory Hours*.

420. Senior Seminar. *Fall and Spring* (1,1) Staff.

Discussions by the faculty and advanced students of contemporary problems in biology. Seniors will be required to prepare and to present papers. Guest lecturers will present occasional seminars.

422. Cell Structure and Function. Spring (4) Mr. Scott. Prerequisites: Biology 101, 102; Chemistry 201 recommended.

Lectures and laboratories deal principally with the morphology of the cell and the preparation of materials for cytological study. An introduction to submicroscopic anatomy, chemistry, and the physiology of the cell is given. *Three Class Hours, Three Laboratory Hours*.

424. Introduction to Radiation Biology. Spring (3) Mr. Aceto.

A study of the biological effects of radiation. Interaction of radiation with matter, basic mechanisms of radiation injury, biological manifestations of radiation damage.

426. Aquatic Ecology. Spring (4) Mr. Dow. Prerequisites: Biology 407 or equivalent; and Biology 216 or Marine Science 410.

Introduction to the application of ecological principles to aquatic environments; discussion of the structure and function of selected communities; consideration of current areas of active research interest such as ecological succession, mathematical modeling, ecosystem theory, and biological competition. *Three Class Hours, Three Laboratory Hours.*

495-496. Honors. *Fall and Spring* (3,3) Staff.

Honors is independent study for superior students in Biology. It consists of readings in the field of the student's interest with emphasis on the original literature, the preparation and presentation of an Honors Essay based on the student's own research, and satisfactory completion of a comprehensive examination in the subject area of the research. *Hours to be arranged*.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in biology, write to the department chairman for a Graduate Catalog.

Chemistry

PROFESSORS TYREE (Chairman of the Department), ARMSTRONG, HILL, AND MOSER. ASSOCIATE PROFESSORS DJORDJEVIC, KIEFER, SCHIAVELLI, AND THOMPSON. ASSISTANT PROFESSORS COLEMAN, KRANBUEHL, AND ORWOLL. INSTRUCTOR KATZ.

REQUIREMENTS FOR CONCENTRATION

The minimum number of semester credits required for concentration in chemistry is 36 and must include Chemistry (101, 102) or Freshman Seminar in Chemistry; 201, 202; 301, 302, 303, 304. German, French or Russian is to be taken in satisfaction of college foreign language requirement. A reading knowledge of German is highly desirable. Chemistry 201, 202 should be taken in the sophomore year.

It is the intention of the Department to offer seminar sections of elementary chemistry starting during the 1972-73 session. Such seminar courses will be limited to 15 students each and will be designed for those students expressing an especial interest in chemistry.

The Department is listed among those approved by the Committee on Professional Training of the American Chemical Society and those graduates who have met certain minimum standards established by said Committee may be certified for recognition by the Society as having an ACS Certified BS in Chemistry. To meet such standards, a reading knowledge of scientific German is required. Certain advanced courses in Chemistry are also required which are chosen in consultation with the Chairman of the Department.

DESCRIPTION OF COURSES

101-102. Elementary General Chemistry. Fall and Spring (4,4) Messrs. Coleman, Tyree, and Staff.

An introduction to the study of the common non-metallic and metallic elements with emphasis upon chemical laws and the development and application of chemical principles. Three Class Hours, Two and One-Half Laboratory Hours.

101S. Freshman Seminar. Fall (4) Messrs. Hill, Kiefer, and Thompson.

For students with special interest in chemistry. A general introduction to chemical laws and principles. Three Class Hours, Two and One-Half Laboratory Hours.

102S. Freshman Seminar. Spring (4) Messrs. Hill, Thompson, and Tyree. Prerequisite: Chemistry 101 or 101S.

For students with special interest in chemistry. An introduction to quantitative chemical analysis and the synthesis of inorganic substances. *Three Class Hours, Four Laboratory Hours*.

¹ Visiting Professor, 1971-72.

Chemistry 95

201-202. Organic Chemistry. *Fall and Spring* (4,4) Messrs. Coleman, Hill and Schiavelli. *Prerequisite: Chemistry 102 or 102S.*

Chemistry of the various organic compounds. Reactivity is correlated with electronic and three-dimensional aspects of compounds of carbon. *Three Class Hours, Two and One-Half Laboratory Hours*.

206. Introduction to Analytical Chemistry. Spring (4) Mr. Armstrong.

For students who are not concentrators in chemistry, e.g., Biology and Geology concentrators. Volumetric, gravimetric, and instrumental analysis. Two Class Hours, Six Laboratory Hours.

301-302. Introductory Physical Chemistry. Fall and Spring (3,3) Messrs. Kranbuehl and Orwoll. Prerequisite: Math 202. Prerequisites or Corequisites: Chemistry 303-304 and Physics 101-102.

The states of matter, thermodynamics, chemical equilibrium, electrochemistry, chemical kinetics, quantum chemistry, and photochemistry. Three Class Hours.

303. Quantitative Analysis. Fall (4) Mr. Armstrong and Mrs. Djordjevic. Prerequisite: Chemistry 102 or 102S.

Volumetric and Gravimetric analysis. Two Class Hours, Eight Laboratory Hours.

304. Instrumental Analysis. Spring (4) Mrs. Djordjevic and Mr. Thompson. Prerequisite: Chemistry 303.

Principles and applications of instruments to chemical analysis. Two Class Hours, Eight Laboratory Hours.

305. Inorganic Chemistry. Fall (3) Mrs. Djordjevic. Prerequisite: Chemistry 102 or 102S.

Systematic study of the properties and reactions of chemical elements and their inorganic compounds.

401. Advanced Physical Chemistry. *Fall* (3) Mr. Kranbuehl. *Prerequisite: Chemistry 302*.

Introduction to theoretical chemistry, quantum mechanics, molecular spectroscopy, and statistical mechanics.

402. Advanced Inorganic Chemistry. Spring (3) Mr. Thompson. Prerequisite or Corequisite: Chemistry 302.

Principles of physical chemistry and quantum mechanics applied to the study of the structures and reactions of inorganic substances.

403. Advanced Organic Chemistry. Fall (3) Mr. Coleman. Prerequisite: Chemistry 202. Prerequisite or Corequisite: Chemistry 302.

A structure-reactivity approach to reaction mechanisms, applications of spectroscopic methods to structural analysis and modern synthetic chemistry.

405. Modern Laboratory Techniques. Fall (3) Messrs. Schiavelli and Thompson. Prerequisite: Chemistry 304 or equivalent.

A laboratory course providing exposure to modern experimental techniques in all areas of chemistry. One Class Hour, Six Laboratory Hours.

406. Radiochemistry. Spring (3) Mr. Kiefer. Prerequisite or Corequisite: Chemistry 302.

A study of radioactive decay; interaction of radiation with matter; nuclear structure; nuclear reactions; radiochemical techniques.

409. Introduction to Chemical Research. *Fall and Spring* (hours to be arranged; credits according to the work accomplished). Staff.

A course for the advanced student affording an opportunity for individual work on a problem under the supervision of an individual faculty member.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in chemistry, write to the department chairman for a graduate catalog. Attention is also called to the Graduate Program in Applied Science on p. 186.

Classical Studies

PROFESSOR JONES (Chairman of the Department). Associate Professor Lead-BEATER. ASSISTANT PROFESSORS BARON AND REILLY.

REQUIREMENTS FOR CONCENTRATION

A candidate for the A.B. degree with concentration in Classical Studies will be expected to take at least 30 credits in Greek and Latin courses, with the majority of these credits in one of the two languages. If the major emphasis is on Greek, at least 6 credits of Latin should be taken; if the major emphasis is on Latin, at least 6 credits of Greek should be taken. Normally the student will be expected to take at least one course in the language of concentration during each semester of the junior and senior years. All concentrators in Classical Studies are also advised to pursue over a period of years the study of a modern foreign language.

The Department of Classical Studies offers freshman seminars, conducted in English, in the general area of Classical Civilization (See below, p. 99).

DESCRIPTION OF COURSES

101-102. Elementary Greek. Fall and Spring (4,4) Mr. Leadbeater.

The elements of the Greek language with translation of stories and poems from selected readers. Parallel study of aspects of Greek civilization and of the legacy left by Greek culture and thought to the modern world.

201. Introduction to Greek Literature: Prose. Fall (3) Mrs. Reilly. Prerequisite: Greek 102.

A course designed to introduce the student to the basic syntactical and stylistic elements of 5th-4th cent. B.C. Attic prose through an intensive examination of selected works of Plato, Lysias, and Thucydides. Emphasis will be placed on literary techniques and the comprehension and appreciation of Greek in Greek rather than in English.

202. The Literature of Greece: Prose and Poetry. Spring (3) Mrs. Reilly. Prerequisite: Greek 201.

Continued analysis of the style, compositional techniques and content of representative prose writers, such as Plato, Aristotle, Herodotus, and Xenophon. In the second half of the semester the student will be introduced to the form and content of dramatic poetry through the reading of one of the tragedies of Sophocles or Euripides.

*Greek Literature Cycle. Fall or Spring (3) Mr. Leadbeater. Prerequisite: Greek 202 or permission of the instructor.

Courses in the 400 group when supplemented by additional parallel reading may be counted toward the M.A. degree.

- 301. Philosophy—Plato.
- 302. New Testament—The Gospels, Acts and Epistles.

- 303. Homer—Selections from *Iliad* and *Odyssey*.
- 304. Philosophy-Aristotle.
- 403. Historians—Herodotus, Thucydides.
- 404. Lyric Poetry.
- 405. Greek Tragedy—Aeschylus, Sophocles, Euripides.
- 406. Greek Comedy—Aristophanes and Menander.

Latin

101-102. Elementary Latin. Fall and Spring (4,4) Mr. Baron. Students who have acquired two high school units in Latin may not take Latin 101, 102 for credit.

This course is designed to equip the student with a mastery of the structure of the Latin language and with a knowledge of basic vocabulary. There are translations from appropriate Latin texts and parallel study of pertinent aspects of Roman life and history.

201, 202. Introduction to Latin Prose and Poetry. Fall and Spring (3,3) Mrs. Reilly and Mr. Baron. Prerequisite: at least two units of high school Latin or Latin 101, 102.

Note: A student who has had three years of Latin in high school and read Latin prose in the third year may not take Latin 201 for credit, but may take Latin 202. A student who has had three years of Latin in high school and read Latin poetry in the third year may not take Latin 202 for credit, but may take Latin 201. A student who has had four years of Latin in high school may take neither Latin 201 nor Latin 202 for credit.

In the first semester (201) there is a review of the elements of the language and the reading of passages from selected authors with emphasis upon Cicero, with parallel study of the history and institutions of Republican Rome. In the second semester (202) there is reading of selected books of Vergil's *Aeneid* with parallel study of the history and institutions of the Empire and of the epic and its influence upon subsequent literature.

249, 250. Literature of the Republic and the Empire. Fall and Spring (3,3) Mr. Jones. Prerequisite: three or four units of high school Latin or Latin 201, 202.

The reading of selections representative of the works of the important writers in the periods of the Republic and Empire. The aim of the course is to help the student comprehend the total Roman achievement over a long span of time in the literary field.

*Latin Literature Cycle. Fall or Spring (3) Mr. Jones and Staff. Prerequisite: Latin 249, 250 or equivalent.

Courses in the 400 group may be counted toward the M.A. degree when supplemented by additional parallel reading.

- 301. Cicero's and Pliny's Letters.
- 302. Catullus and the Elegiac Poets.
- 303. Cicero's Orations.
- 304. Horace's Odes and Martial's Epigrams.
- 305. Roman Comedy: Plautus and Terence.
- 307. Roman Private Life.
- 308. Critical Studies in Caesar.
- 310. Medieval Latin. Selections from prose and poetry.
- 401. Horace's Satires and Epistles.
- 402. The Latin Historians.
- 403. Cicero's Philosophical Works.
- 404. The Latin Epic: Vergil, or Lucretius.
- **405.** The Teaching of High School Latin. Same as Education S305. Development of the Latin curriculum, methods of presentation, audio-visual aids, materials.
 - 406. Silver Latin Satire: Juvenal or Petronius.
 - **500.** Special Topics. Fall or Spring (3) Staff.

Courses of distinctly graduate character. Open from time to time to such candidates for the M.A. degree as are prepared to carry on individual study and research.

- A. Seminar in Greek Literature. Intensive study of individual Greek authors or genres, varying from year to year in accordance with the students' needs;
- B. Seminar in Latin Literature. Intensive study of individual Latin authors or genres, varying from year to year in accordance with the students' needs;
 - C. Satire and the Novel:
 - D. Palaeography;
 - E. Problems of Textual Criticism.

CLASSICAL CIVILIZATION

The following courses are offered as being of general cultural value and valuable contributions to the Humanities program of the College. A knowledge of Latin and Greek is not required. Some of these courses may be counted to the extent of six semester credits on a concentration in Latin or Greek, but will not absolve the language requirements for a degree. Courses numbered in the 200's are open to all students of the College. Courses numbered in the 300's and 400's are open to sophomores, juniors, and seniors.

Greek-Latin 150. Freshman Seminar. Fall and Spring (3) Mr. Jones and Mrs. Reilly.

Greek-Latin 205. Greek and Roman Mythology. Fall or Spring (3) Mr. Baron.

The Greeks and the Irrational. Study of the common heroic and divine myths, with reference to the social matrix, various interpretations, and parallel developments in other societies. No previous knowledge of ancient civilization is required.

Greek-Latin 207. Greek Literature. Fall (3) Mr. Baron.

From Hero to Citizen. Reading and analysis of literature down to Alexander, with emphasis on the change from heroic and anthropomorphic ideals to the antiheroism and submergence of the individual into the world-empire.

Greek-Latin 208. Latin Literature. Spring (3) Mr. Baron.

From homestead to court. Reading and analysis with emphasis on the transition from republic to empire, and the consequent change from practical oratory to propaganda or to the artificialities of literary escapism.

Greek-Latin 217. Greek Archaeology and Art. Fall (3) Mrs. Reilly.

An archaeological consideration of the Minoan, Mycenaean, Archaic and Classical periods of Greek civilization. Architecture, sculpture, painting and the minor arts are included.

Greek-Latin 218. Roman Archaeology and Art. Spring (3) Mrs. Reilly.

The architecture, painting and sculpture of Hellenistic Greece and of Rome until the 4th c. AD. from the archaeological viewpoint. Byzantine art as found in Greece and Italy will also be included.

Greek 311, Latin 312. Fall and Spring (3,3) Mr. Jones.

Ancient Civilization from prehistoric times to the downfall of the Roman Empire. The first semester deals with the ancient Orient and Greece; the second semester with Rome. This course is the same as History 301, 302.

Greek-Latin 401. Greek and Latin Epic. Fall or Spring (3) Staff.

Careful reading, in English, of Homer's *Iliad and Odyssey*, Vergil's *Aeneid*, Lucan's *Pharsalia*. Discussion of the character and structure of the Classical epic and its influence on European epic and novel.

Greek-Latin 402. Greek and Latin Lyric Poetry. Fall or Spring (3) Staff.

Devoted to the study, in translation, of the major Classical lyric poets who have influenced the development of this genre in subsequent literary history. Parallel readings in theories of lyric poetry and of selected poems showing the influence of Classical lyric forms.

Greek-Latin 403. Classical Tragedy and Its Influences. Fall or Spring (3) Mr. Leadbeater.

Readings, in English, and discussion of the major works of Aeschylus, Sophocles, Euripides, and Seneca. Parallel readings in the theories of tragedy and of representative works, illustrating the influence of Classical Tragedy on subsequent literary history.

Greek-Latin 404. Ancient Comedy and Its Influences. Fall or Spring (3) Mr. Leadbeater.

A study, in translation, of representative works of Aristophanes, Menander, Plautus, and Terence. Parallel readings in the theories of comedy and of representative works illustrating the influence of Ancient Comedy on subsequent literary history.

Greek-Latin 405. Later Greek Philosophy. Fall or Spring (3) Mr. Leadbeater.

A study of the later aspects of Greek philosophy as they took form in Neo-Platonism and the Second Sophistic Movement. The course is intended to be an examination of Platonism as it developed in the philosophies of Plotinus, Iamblichus, Julian, and others. Emphasis will be placed on the mysticism of the age and the reaction of and influence on Christian thought as revealed in selected readings from the Church Fathers.

HONORS STUDY

495, 496. Honors. Fall and Spring (3,3) Mr. Leadbeater.

Students admitted to Honors Study in Classical Studies will be enrolled in this course during both semesters of their senior year. The course comprises: (a) reading and discussion of selected authors in the language of the student's emphasis, Greek or Latin; (b) supervised reading of a special bibliography in the field of the student's major interests; (c) satisfactory completion by May 1, of a scholarly essay; and (d) a satisfactory completion of a comprehensive oral examination in the field of Greek and Latin Literature.

PROFESSOR SCHIFRIN (Chairman of the Department). Associate Professors Garrett and Matthews. Assistant Professors Baker, Barry, Bunce, Cousins, Haulman, and Moody.

REQUIREMENTS FOR CONCENTRATORS

Concentration in Economics requires a minimum of thirty semester hours of courses in Economics beyond Economics 201, 202. All concentrators are required to take the following courses:

- 303 Intermediate Economic Theory: Microeconomics
- 304 Intermediate Economic Theory: Macroeconomics
- 307 Principles and Methods of Statistics

Special programs may be arranged in which these required courses can be waived by permission of the Department.

The Department offers as Freshman Seminars introductory courses on contemporary economic issues and problems.

DESCRIPTION OF COURSES

101, 102. Principles of Economics. Fall and Spring (3,3). This course is a prerequisite to all courses in Economics except 307. Staff.

An introduction to the analytical tools commonly employed by economists in the study of the determination of the composition of output, prices, and the aggregate level of economic activity. Problems related to these subjects are considered, and alternative courses of public policy are evaluated.

150. Freshman Seminar. Fall and Spring (3) Staff.

A survey of selected contemporary economic issues and problems, with an introduction to the methods of economic analysis useful in understanding them.

303, 304. Intermediate Economic Theory. *Fall and Spring* (3,3) Mr. Barry, Mr. Bunce, and Mr. Haulman. *Prerequisite: Econ. 101, 102*.

The first semester is devoted to the theory of resource allocation in a market economy. The second semester is devoted to the theory of national income determination.

307. Principles and Methods of Statistics. Fall and Spring (3) Mr. Moody.

A study of the principles and uses of frequency distribution, measures of central tendency and dispersion, statistical inference, sampling, correlation and regression analysis. Two Class Hours, Two Laboratory Hours.

¹ On leave of absence second semester 1972.

² On leave of absence first semester 1971.

³ Visiting Assistant Professor, 1971-72.

311. Money and Banking. Fall (3) Mr. Matthews and Mr. Haulman. Prerequisite: Econ. 101, 102.

An analysis of the monetary system with emphasis upon determinates of the money supply and the relationship between money and economic activity.

412. Stabilization Policy. *Spring* (3) Mr. Haulman and Mr. Barry. *Prerequisites: Econ.* 101, 102, 304 or 311.

Analysis of stabilization policy with emphasis on the joint impact of monetary and fiscal policies with respect to the objectives of full employment, economic growth, and price stability.

421. Public Finance. Fall (3) Mr. Baker. Prerequisites: Econ. 101, 102, 303.

Theory and principles of public finance, with emphasis on federal, state, and local taxes and expenditures, the fiscal decision process, intergovernmental fiscal relations, and public debt.

431. Introduction to Mathematical Economics I. Fall (3) Mr. Moody. Prerequisites: Econ. 101, 102.

A survey of mathematical techniques widely used in economics including topics in set theory, linear algebra, linear programming and game theory. Emphasis will be on the economic applications of these methods.

432. Introduction to Mathematical Economics II. Spring (3) Mr. Moody. Prerequisites: Econ. 101, 102, 431.

The topics covered in this course are selected from among differential and integral calculus, optimization techniques and differential equations, with emphasis on the economic content and application of the techniques.

440. Economic History of the Western World. Fall (3) Mr. Cousins. Prerequisites: Econ. 101, 102, or permission of instructor.

A study of the development of the market and semi-market economies of the western world from preindustrial times through the early industrial periods. Also included is a comparative study of the growth of these economies through the nineteenth and twentieth centuries.

441. American Economic History. Spring (3) Mr. Cousins. Prerequisites: Econ. 101, 102, or permission of instructor.

A study of the growth of the American economy from the colonial period to the present. Special emphasis is placed on the use of quantitative methods in the study of economic history.

444. Regional Economic Growth and Planning: Emphasis on the South. Spring (3) Mr. Garrett. Prerequisites: Econ. 101, 102.

A study of regional economic development with emphasis on the South. The course includes an analysis of systems of cities, metropolitan areas and small urban areas as separate subregions and their role in the contemporary growth of larger

regions. Models of regional growth and institutionalism are combined to provide a better prespective for regional planning.

Economics 445—Urban Analysis. Fall (3) Mr. Garrett. Prerequisites: Econ. 101, 102 and permission of instructor.

The course incorporates an interdisciplinary approach in analyzing contemporary urban problems. A model simulating the growth of an urban area is utilized throughout the course.

446. History of Economic Thought. Fall (3) Mr. Haulman. Prerequisites: Econ. 101, 102.

The development of economic analysis with emphasis upon Classical and Marxian economics.

451. Labor Economics. Fall (3) Mr. Schifrin. Prerequisite: Econ. 101, 102.

A study of public policy in labor-management relations, with special emphasis upon contemporary problems such as: emergency dispute settlements, automation; union growth; and wage-price guide-lines.

452. Labor Movements. Spring (3) Mr. Schifrin. Prerequisites: Econ. 101, 102, or permission of instructor.

An analysis of the origins, characteristics, and ideologies of the labor movements of the United States, Great Britain, and other industrialized countries, stressing comparisons and contrasts among them.

455. Population Economics. Spring (3) Mr. Haulman. Prerequisites: Econ. 101, 102.

The study of the relationship of economics and population with a view toward analyzing the role of population change in models of economic growth and development and discussing the economic determinants of demographic behavior using models of economic decision-making.

461. Government and Business: The Enforcement of Competition. Fall (3) Mr. Baker. Prerequisites: Econ. 101, 102.

An analysis of the factors that influence and determine business conduct and market performance. Special emphasis is given to the philosophy and features of the anti-trust laws and to the enforcement of market competition through their application.

462. Government Regulation of Business. Spring (3) Mr. Baker. Prerequisites: Econ. 101, 102.

An analysis of the principles and purposes of government regulation of business in certain sectors of the economy where competition may not be workable, including public utilities, transportation, agriculture, defense procurement, and scientific research and development.

471. International Economics. Fall (3) Mr. Matthews. Prerequisites: Econ. 101, 102.

This course develops the theory of international trade from the Mercantilists to

the modern economists. The objective is to give the student basic knowledge of analytical tools used by economists in the study of international economic problems.

472. International Trade and Policies. Spring (3) Mr. Matthews. Prerequisites: Econ. 101, 102.

This course analyzes historically problems in tariffs and other protectionist devices, the effect of economic development on the pattern of world trade, and problems in balance of payments equilibrium, foreign exchange, and international finance. Particular attention is focused on international economic developments since World War II.

473. Economic Development in Latin America. Fall and Spring (3) Mr. Bunce. Prerequisites: Econ. 101, 102, or permission of instructor.

A study of economic development focusing on the diverse experience and problems of Latin American countries. Consideration will be given to the cultural and other "non-economic" factors in economic development, including population growth, education, the Church, and community development, as well as to theories of inflation and to numerous aspects of international trade mechanisms.

482. Comparative Economic Systems. Fall (3) Mr. Matthews. Prerequisites: Econ. 101, 102.

Primarily a study of the development and present structure of the Soviet economy, with comparative analysis of the Soviet and Western experiences.

490. Topics in Economic Policy. Fall and Spring (3) Staff. Prerequisites: Concentration in Economics, Senior standing and permission of instructor.

A directed readings course conducted on an individual or group basis on various topics in economic policy.

Topics in Government and Economic policy may be same as Government 490.

495, 496. Honors. *Fall and Spring* (3) Staff.

Advanced study on a tutorial basis the first semester. In the second semester each student undertakes independent research on a selected topic and presents an Honors Essay. Each Honors student is responsible for (a) the supervised reading of a selected list of books in economics; (b) satisfactory completion by May 1 of an original essay, or other scholarly projects in the field of economics; and (c) satisfactory performance on a comprehensive oral examination. A student who completes the Honors Essay but does not achieve Honors may be given credit for Economics 490.

English Language and Literature

Professors Dolmetsch (Chairman of the Department), Davidson, Evans, Jenkins, McCulley, Neiman, and Smith. Associate Professors Ball, Davis, Donaldson, Elliott, Fehrenbach, Nettels, and Willis. Assistant Professors Conlee, Daw, Fama, Freeman, Maccubbin, Savage, Scholnick, and Wiggins. Instructors Bauer, Cornette, Heacox, Marlow, Martin, Meyers, Pike, and Warren. Lecturer Miller.

REQUIREMENTS FOR CONCENTRATION

A concentration in English requires 36 credits in departmental courses, at least 30 of which must be in courses numbered above 300. The first 36 credits counted toward concentration must include at least one English course numbered 201-300 and may not include more than two courses from among those numbered 150-300.

To ensure a balanced and representative program a concentrator must include, in his total of 36 credits, courses in designated areas, periods and types of literary study. Specifically his program must contain:

- I. A minimum of five courses (15 credits) in English or American Literature (408 to 463), of which at least three courses (9 credits) must be in English literature (409 to 452). These five courses shall include:
 - a. Two courses (6 credits) in one of the following combinations, representing the study at length of the literature of a period or genre: 409-410, 412-413, 423-424, 429-430, 431-432, 439-440, 441-442, 461-462, 462-463.
 - b. Two courses (6 credits) in English literature before 1660 (409 to 429). Only one course (3 credits) in Shakespeare (421 or 422) may be counted for this requirement. The combinations 409-410 or 423-424 will satisfy requirements (a) and (b) simultaneously.
 - c. One course (3 credits) in Chaucer, Shakespeare, or Milton (413, 421, 422, or 426). Any one of these courses will satisfy half of requirements (b) simultaneously.
- II. One course (3 credits) in a seminar taken during the senior year. (Candidates for departmental honors, who must in addition take English 495, 496, will normally meet their seminar requirement in the second half of their junior year by enrolling in English 396.)
- III. Remaining courses (for a minimum of 36 credits) selected from the department's offering above 300 in accord with the concentrator's interest and vocational expectations.

DESCRIPTION OF COURSES

SERVICE COURSES

001, 002. A Study of English as a Second Language. Fall and Spring (0,0) Mrs. Miller.

Designed for foreign students who have difficulty with oral and written expression. This course is intended to improve the student's pronunciation, understanding of grammar and syntax, and reading comprehension.

101. Writing. Fall and Spring (3) Staff.

Practice in writing under supervision, with frequent conferences. Required of freshmen who are not exempted by test scores or special examination and recommended for all. Sections limited to fifteen students each.

INTRODUCTORY COURSES

(N.B. The following courses are especially designed for freshmen and sophomores. Upperclassmen may be admitted to them only by consent of the Department Chairman.)

150. Freshman Seminar. Fall and Spring (3) Staff.

Exploration of a limited topic in literature or in the relationship of literature to other fields. Sections limited to fifteen students each, with emphasis upon oral participation and critical writing. Seminar topics are announced in advance of each semester so that the student may choose his section on the basis of his interests, background and academic goals.

201. Critical Approaches to Literature. Fall and Spring (3) Staff.

Close study of selected literary works in more than one genre. Introduction to contemporary critical approaches to literature. The writing of critical papers.

203. English Literary Traditions: Medieval and Renaissance. Fall and Spring (3) Staff.

A study of works representing various traditions of English literature from the Middle Ages to 1700.

204. English Literary Traditions: The Eighteenth and Nineteenth Centuries. Fall and Spring (3) Staff.

A study of works representing various traditions of English literature from the Augustan through the Victorian Ages (1700-1900).

207. Major American Writers. Fall and Spring (3) Staff.

Study of five or six American authors, emphasizing each writers's conception of his situation and role in American society. One or more continuing themes may also be emphasized.

208. Contemporary Literature. Fall and Spring (3) Staff.

Reading and interpretation of selected contemporary works in more than one genre.

(Advanced standing or at least six credits in English above 101 is a prerequisite to all of the following courses.)

ADVANCED COURSES

301. Advanced Writing. Fall and Spring (3) Staff.

This course provides practice in writing different kinds of papers under supervision. Expository writing is stressed but there is opportunity for creative writing. Enrollment is limited and frequent individual conferences are provided.

303. History of the English Language. Fall (3) Mr. Ball.

A study of the history of the English language from Anglo-Saxon to the present. Some attention is given to American English and English linguistics.

304. Modern Grammar. Fall and Spring (3) Mr. Ball, Mr. Conlee, and Mr. Fama.

An examination of structural grammar and transformational grammar. An introduction to the development of English grammar and language is provided.

*305, 306. Creative Writing. Fall and Spring (3,3) Mr. Jenkins.

The course is intended for the student who has demonstrated some talent for creative writing. He is encouraged to develop his individual interests and creative capacities. Extensive practice in the several types of writing. The course is conducted as a seminar; manuscripts are read and criticized informally by members of the class.

381. Epic and Romance. Fall (3) Mr. Wiggins.

Classical, medieval, and renaissance epic and romance with special emphasis on Vergil and Dante, as well as those English and continental figures who share or serve to illuminate their tradition.

382. Aspects of the European Novel. Spring (3) Mr. Meyers.

Extensive readings in major French, German and Russian fiction of the nine-teenth and twentieth centuries, with some Scandanavian material.

396. Junior Honors Seminar. Spring (3) Miss Nettels.

A study in depth of a limited literary topic, emphasizing student discussion and the preparation of critical papers. This course is restricted to concentrators planning to enroll in Senior Honors, and is a substitute for the required senior seminar.

403. Introduction to Descriptive Linguistics. Fall (3) Mr. Fama.

A study of contemporary linguistic theory and methods of language analysis. Same as Anthropology 430.

*English 404. Introduction to Historical Linguistics. Spring (3) Mr. Fama.

Survey of principles, methods and major results of Indo-European historical reconstruction. Consideration is given to the contributions of recent generative phonology to Indo-European. Some investigations into non-Indo-European reconstruction are also included. Same as Anthropology 440. (Prerequisite: 403 or consent of instructor.)

408. Literary Criticism. Spring (3) Mr. Neiman.

Major texts in the tradition of literary criticism from Aristotle to modern times, tracing the history of critical concerns in relation to the history of ideas. Not offered 1970-71.)

409. Old English. Fall (3) Mr. Davidson.

An introduction to Old English, including elementary grammar and phonology and the reading of prose and short poems; collateral readings in the history and culture of the period.

410. Beowulf. Spring (3) Mr. Davidson. Prerequisite: English 409 or the permission of the instructor.

Reading of Beowulf in Old English; collateral readings in criticism of the poem.

412. Medieval Literature. Spring (3) Mr. Davidson.

A survey of Old and Middle English literature exclusive of Chaucer.

413. Chaucer. Fall (3) Mr. Davidson and Mr. Conlee.

A study of Chaucer's Canterbury Tales and Troilus and Criseyde.

421. Shakespeare. *Fall* (3) Mr. Fehrenbach, and Mr. Savage.

An intensive study of selected histories and comedies.

422. Shakespeare. *Spring* (3) Mr. Fehrenbach.

An intensive study of the major tragedies and the "problem" comedies.

423. The English Renaissance. Fall (3) Mr. Evans.

Sixteenth-century English literature, excluding the drama, with emphasis on Sir Philip Sidney and Edmund Spenser.

424. The Seventeenth Century. *Spring* (3) Mr. Evans.

Poetic traditions from Jonson and Donne to Marvell.

426. Milton. Spring (3) Mr. Savage.

An intensive study of Milton's poetry and prose, with due attention to the religious, political, and literary milieu in which Milton wrote.

429. English Drama to 1642. Fall (3) Mr. McCulley.

A study of drama in England, including conventions and currents of ideas, from the origins to the closing of the theatres in 1642, with emphasis on the works of Christopher Marlowe, Ben Jonson and John Webster.

430. English Drama since 1660. Spring (3) Mr. McCulley.

A study of English drama from 1660 to the present, with emphasis on Restoration comedy and dramatists from Shaw to the present; related continental plays, particularly those of Ibsen, will be studied. Intellectual implications and critical analysis of texts will be stressed.

431. English Literature, 1670-1744. Fall (3) Mr. Maccubbin.

Poetry, prose, and drama of Wycherley, Congreve, Dryden, Pope, Swift, Gay, and Fielding, with emphasis on satire and the cultural milieu.

432. English Literature, 1744-1798. Spring (3) Mr. Maccubbin.

Poetry of Thomson, Collins, Gray, Smart, and Cowper, with emphasis on the history of ideas; and the works of Dr. Johnson and his circle, especially Goldsmith, Reynolds, Gibbon, and Boswell.

439. English Novel to 1832. *Fall* (3) Mr. Smith.

Survey of the development of English prose fiction from its beginnings in the Elizabethan period through the novels of Austen.

440. English Novel, 1832-1900. Spring (3) Mr. Ball.

Survey of the English novel from Dickens to the early twentieth century.

441. The Romantic Period, 1798-1832. Fall (3) Mr. Bauer and Mr. Neiman.

Dominant ideas and conventions of English romanticism as expressed through major poets and critics of the period, especially Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

442. The Victorian Age. Spring (3) Mr. Elliott.

Emphasis is on the intellectual crises of the age as expressed primarily by leading poets and essayists from Carlyle to Hardy.

451. Modern Poetry. Fall and Spring (3) Mr. Jenkins.

Modern English and American poetry and its development, with reading, interpretation and discussion of the verse of Yeats, Pound, Eliot, Auden, Stevens, Thomas, and others.

452. Modern Fiction. Fall and Spring (3) Mr. Jenkins and Miss Nettels.

Reading, analysis and discussion of the principal American and British fiction writers from 1890 to the present, chosen to illustrate contemporary tendencies in matter and technique.

461. American Literature to 1850. Fall (3) Miss Nettels.

The development of the American literary tradition from 1607 to 1850, emphasizing the works of such writers as Edward Taylor, William Byrd of Westover, Benjamin Franklin, Washington Irving, James Fenimore Cooper, and E. A. Poe.

462. American Literature, 1850 to 1900. Fall and Spring (3) Mr. Davis and Mr. Scholnick.

A continuation of English 461, with emphasis upon the works of the Transcendentalists, Hawthorne, Melville, Whitman, "Mark Twain," Emily Dickinson, Henry James, and the Regionalists and realists of the post-Civil War era.

463. American Literature since 1900. Fall and Spring (3) Mr. Davis and Mr. Donaldson.

A continuation of English 462, with considerable attention to the development of American drama from O'Neill to the present and to such other twentieth century authors as Dreiser, Hemingway, Faulkner, and Frost.

†475. Senior Seminar in English. Fall and Spring (3) Staff.

A study in depth of a limited literary topic. Students will write and present papers for critical discussion. Open only to seniors.

HONORS STUDY

†495-496. Honors. Fall and Spring (3,3) Staff.

Students admitted to Honors Study in English will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading in the field of the student's major interest; (b) the preparation and presentation by May 1 of an Honors Essay based on the student's own research; and (c) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in English, write to the Director, Graduate Study in English for a Graduate Catalog.

Professors Newman (Chairman of the Department), Roseberg, and Thorne. Associate Professor Kornwolf. Assistant Professors Chappell, Coleman, and Crane. Instructor Helfrich. Lecturer Houghland.

REQUIREMENTS FOR CONCENTRATION

Students concentrating in Fine Arts should choose between a concentration in History of Art or in Art.

Students concentrating in the History of Art are required to take F.A. 111, F.A. 112, F.A. 201, F.A. 202, F.A. 401 and fifteen additional credits in the History of Art.

Students concentrating in Art are required to take F.A. 111, F.A. 112, F.A. 201, F.A. 202, and eighteen additional studio credits at least six of which must be at the 400 level, and six additional credits in History of Art.

DESCRIPTION OF COURSES

HISTORY OF ART COURSES

150. Freshman Seminar. Spring (3) Mr. Chappell.

An introduction to the History of Art.

201. Survey of History of Art. Fall (3) Mr. Newman.

The study of Ancient and Medieval Art. Illustrated lectures, readings, and papers.

202. Survey of the History of Art. Spring (3) Mr. Newman.

The study of Western Art from the Renaissance to the Present. Illustrated lectures, readings, and papers.

201 H-202 H. Fall and Spring (3,3) Mr. Chappell.

Survey of the History of Art. Honors section of 201 and 202.

307. Modern Art. Fall (3) Mr. Kornwolf.

History of Modern Architecture, Sculpture and Painting from circa 1780-1880.

308. Modern Art. Spring (3) Mr. Kornwolf.

History of Modern Architecture, Sculpture and Painting from circa 1880 to World War II.

401. Problems in Twentieth Century Art. *Fall* (3) Mr. Kornwolf.

A study of contemporary problems in planning, architecture, painting, and sculpture. Required of all History of Art Majors.

402. Seminar in Twentieth Century Art. Spring (3) Mr. Kornwolf.

Special topics in Modern Art, with a major research paper.

403. Early Medieval Art. Fall (3) Mr. Newman.

A study of certain aspects of Medieval Architecture, Sculpture, and Painting in Early Christian, Byzantine, Barbarian, Carolingian, and Romanesque Art.

404. Late Medieval Art. Spring (3) Mr. Newman.

Primary attention is devoted to the development of High Gothic Art and to Late Medieval Painting.

405. Renaissance and Mannerist Architecture. Fall (3) Mr. Kornwolf.

A study in depth of the major developments in European Architecture of the 15th and 16th centuries.

406. Renaissance Painting in Italy. Fall (3) Mr. Chappell.

A study in depth of the Painting of Italy from the 14th to the 16th century.

407. Renaissance Sculpture in Italy. Fall (3).

A study of Italian Sculpture from circa 1200 to 1700. (To alternate with 409).

408. Primitive Art. Spring (3) Mr. Roseberg.

Study of Art of Primitive People: Pre-Columbian American Art, Northwest American Indian Art, Melanesian and Polysesian Art, African Art, and the Art of Pre-Classical civilizations. (To alternate with 410).

409. Indian Art. Fall (3) Mr. Roseberg.

A study of the art, culture, and religious background of India, including the influences of Indian culture on other Asian countries such as Cambodia, Thailand, Java, and Tibet.

410. Chinese and Japanese Art. Spring (3) Mr. Roseberg.

A study of the art and architecture of China and Japan.

- **451.** Colonial American Architecture. Fall (3) Mr. Thorne. Prerequisites: 201, 202, or 405.
- **452.** Colonial American Painting. Spring (3) Mr. Thorne. Prerequisite: 202, 406, or 454.
- **453.** Northern Renaissance Art. Fall (3) Mr. Chappell. Prerequisite: 201, 202, or 2 upper level History of Art courses.
- **454.** Baroque Painting. Spring (3) Mr. Chappell. Prerequisite: 201, 202, or 2 upper level History of Art courses.
 - 455. Baroque Architecture. Spring (3) Mr. Kornwolf.

A study in depth of the Baroque movement in architecture and the reactions to it in the 17th and 18th centuries.

460. Research Problems in the History of Art. (3) Staff.

Individual study on selected problems. Prerequisite: 201, 202, and four additional courses in the History of Art.

495-496. Senior Honors in Fine Arts. Fall and Spring (3,3) Staff.

STUDIO ART COURSES

111. Basic Design I. Fall and Spring (3) Staff.

Fundamentals of Two Dimensional Design. A series of lectures and studio problems on the elements of two dimensional design, including the illusion of three dimensions on the picture plane, line, shape, texture and color. Six Studio Hours.

112. Basic Design II. Fall and Spring (3) Staff.

Fundamentals of Three Dimensional Design. A series of lectures and studio problems dealing with the elements of three dimensional design, including compositions in relief and in the round. Six Studio Hours.

311. Drawing (3).

A semester course in the problems of drawing. Prerequisite: 111 or consent of the instructor. (To alternate with F.A. 323). Six Studio Hours.

312. Watercolor (3).

A course exploring the varied possibilities of watercolor as expressive medium. Six Studio Hours. (To alternate with F.A. 324).

313. Architectural Design I. Fall (3) Mr. Houghland.

The Discovery of Architecture through Design, with emphasis on basic design vocabulary: Drafting, Perspective, Shades and Shadows, Scale, and Proportion. Prerequisite: 111, 112, or consent of the instructor. Six Studio Hours.

314. Architectural Design II. Spring (3) Mr. Houghland.

The investigation of the role of an architect with specific design problems, and the development of presentation techniques. *Prerequisite: 313. Six Studio Hours.*

315. Painting I. Fall (3) Mr. Thorne.

The production of original work in oil, acrylic, and mixed media. *Prerequisite:* 111, 112 or consent of the instructor. Six Studio Hours.

316. Painting II. Spring (3) Mr. Thorne.

A continuation of 315. Prerequisite: 315 or consent of the instructor. Six Studio Hours.

317. Sculpture II. Fall (3) Mr. Roseberg.

A course in the use of the sculptor's tools and materials in the production of original work, including modelling in clay, plaster casting, direct building in plaster. Five specific sculpture problems are to be completed during the course or during both semesters. *Prerequisite: 111, 112 or consent of the instructor.* Six Studio Hours.

318. Sculpture II. Spring (3) Mr. Roseberg.

Continuation of 317. Development of original designs from preliminary sketch

to completed work. Prerequisite: 317 or consent of the instructor. Six Studio Hours.

321. Ceramics I. Fall (3) Mr. Crane.

Studio problems in ceramic art, including hand building, wheel work, glazes, and kiln firing. Prerequisite: 111, 112 or consent of the instructor. Six Studio Hours.

322. Ceramics II. Spring (3) Mr. Crane.

Original work in clay, the making of glazes, various kiln firing procedures. Prerequisite: 321 or consent of the instructor. Six Studio Hours.

323. Graphics I. Fall (3) Mr. Coleman.

After the student experiences relief, intaglio and serigraph printing he will choose one of the methods for extended exploration. Prerequisite: 111, 112 or consent of the instructor. Six studio hours.

324. Graphics II. Spring (3) Mr. Coleman.

Within one of the following areas, relief, intaglio, or serigraph the student will explore the multiple potential of an area as a means of original visual expression. *Prerequisite: 323 or consent of the instructor. Six Studio Hours.*

441. Advanced Studio I. (3) Staff.

Advanced work in all media. May be repeated. Prerequisite: Two 300 courses in one media. Six Studio Hours.

442. Advanced Studio II. (3) Staff.

Advanced work in all media. Prerequisite: 441 or consent of the instructor. May be repeated. Six Studio Hours.

All work produced by the students of the studio classes remains the property of the College of William and Mary until released by the appropriate faculty member in charge. The College will not be responsible for theft or damage to such works.

Geology

Professors Goodwin (Chairman of the Department), and Bick. Associate Professors Clement and Johnson. Assistant Professor Thomas.

REQUIREMENTS FOR CONCENTRATION

- 1. For those students desiring an A.B. degree with a concentration in geology as preparation for law, business, government, or other nonprofessional application of geology (35-36 credits):
 - a. Geology 101, 102, 201, 202, 303, 401 or 402, 403, 404
 - b. Two of the following courses:
 Geology 301, 302, 304, 401 or 402, 405, 406 (one of these courses must be Geology 301, or 302, or 406)

The student is expected to select electives in such fashion as to present a strong background in a subject area other than geology.

- 2. For those students desiring a B.S. degree who intend to continue geological studies or to engage in professional geological work upon graduation (37 credits):
 - a. Geology 101, 102, 201, 202, 301, 302, 303, 304, 406, 408, 411, 412.

DESCRIPTION OF COURSES

101-102. Earth Processes. Fall and Spring (4,4) Mr. Goodwin, Mr. Thomas and Staff.

Processes of the hydrologic and rock cycles, and their influence on the composition, structure, and evolution of the earth. Voluntary field trips. *Three Class Hours, Three Laboratory Hours*. (This course is also offered as a seminar for freshmen—see below.)

101 (Freshman Seminar)—102 (Freshman Seminar). Earth Processes. Fall and Spring (4,4) Staff.

Processes of the hydrologic and rock cycles, and their influence on the composition, structure, and evolution of the earth. Fewer topics are covered in greater depth as compared to Geology 101, 102. Satisfies area requirements. *Three Class Hours, Three Laboratory Hours*.

105. Physical Geography. Fall (3) Mr. Bick.

An introduction to physical geography encompassing descriptive climatology and descriptive geomorphology.

201-202. Mineralogy—Petrology. Fall and Spring (4,4) Mr. Clement. Prerequisite or corequisite: Chemistry 101-102 or Chemistry 115 or permission of the instructor.

Crystallography, mineralogy, and petrology. Fall: crystal chemistry, structure, and symmetry; mineral and rock genesis in the igneous environment. Spring:

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mineral and rock genesis in sedimentary and metamorphic environments. Field trips. Three Class Hours, Three Laboratory Hours.

301. Sedimentation and stratigraphy. *Fall* (4) Mr. Thomas. *Prerequisite: Geology* 202, *or permission of the instructor.*

The principles of formation, transport, and deposition of sediment and the interpretation of sedimentary rocks. Field trips. *Three Class Hours, Three Laboratory Hours*. (Not offered in 1972-73.)

302. Structural Geology. Spring (4) Mr. Goodwin, Prerequisite: Physics 101, or permission of the instructor.

Theoretical, experimental, and field study of deforming forces and their effects on earth materials. Field trips. *Three Class Hours, Three Laboratory Hours*. (Not offered 1972-73.)

303. Historical Geology. Fall (3) Mr. Johnson. Prerequisite: Geology 102.

The origin, distribution, production, and economics of the ores of major metals. inhabited it, through geologic time. North America is emphasized.

304. Quantitative Geologic Models. Spring (3) Mr. Bick. Prerequisite or corequisite: Mathematics 112, or permission of the instructor.

The probabilistic basis of geologic processes and its application to geologic hypotheses through quantitative testing of conceptual models.

305. Environmental Geology. Spring (3) Mr. Johnson. Prerequisite: The basic two courses in any one of the sciences.

An introduction to the causes and extent of air and water pollution, and to methods of preventing, reducing, or eliminating problems relating to ground and surface water, air, and solid waste.

401. Economic Geology of Nonmetals. Fall (3) Mr. Goodwin.

The origin, distribution, production, and economics of fossil fuels and major industrial minerals and rocks. The relationship of non-metallic resources to the national interest and economy and to various aspects of national and international politics is emphasized.

402. Economic Geology of the Metals. Spring (3) Mr. Clement.

The origin, distribution, production, and economics of the ores of major metals. The relationship of ores and metals to the national interest and economy and to various aspects of national and international politics is emphasized.

403. History of Geology. Fall (3) Mr. Bick.

The development of modern geologic thought, emphasizing the conceptual contributions of geology to Western thought, such as those giving rise to conflict over the origin and age of the earth, rather than technical contributions. (Not offered 1972-73.)

404. Geology of the United States. Spring (3) Mr. Johnson.

Descriptive stratigraphy, structure, physiography, and economic geology of the

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United States. Two weekends will be devoted to field trips. (Not offered 1972-73.)

405. Optical Petrography. Fall (3) Mr. Clement. Prerequisite: Geology 202.

An introduction to the theory and use of the polarizing microscope. Two Class Hours, Three Laboratory Hours.

406. Paleontology. Spring (4) Mr. Johnson.

The role of fossils in the study of organic evolution, ancient environments, and time relations of rock sequences. The laboratory stresses invertebrate morphology, quantitative measurement, and interpretation of local fossiliferous rock units. Field trips. *Three Class Hours, Three Laboratory Hours*.

408. Geologic Field Methods. Fall (1) Staff.

Description and sampling of sediments and rocks, and geologic mapping utilizing topographic maps, aerial photographs, and surveying instruments. *Three Laboratory Hours*.

411, 412. Problems in Geology. Fall and Spring (1,1) Staff. Prerequisite: Senior standing.

An exploration of geologic problems, either through a reading program and one class discussion each week or through a research project.

Geography

Those interested in geography can prepare themselves for further study in the field by selecting suitable courses from among the following while concentrating in a discipline allied to geography:

Physical Geography

Geology 105—Physical Geography

Economic Geography

Business Administration 309—World Resources Geology 401—Economic Geology of Non-metals Geology 402—Economic Geology of Metals

Human Geography

Anthropology 202—Cultural Anthropology Sociology 349—Human Geography

Regional Geography

Anthropology 323—Peoples and Cultures of South America Anthropology 331—Peoples and Cultures of Africa Anthropology 342—Peoples and Cultures of Southeast Asia Anthropology 344—Peoples and Cultures of Oceania

Government

PROFESSORS ROHERTY¹ (Chairman of the Department), Hamilton, Kim, Morrow, and Moss. Associate Professors Edwards, Grayson, and Ward. Assistant Professors Baxter,² Damon, DeWeydenthal, Miri and Smith.

REQUIREMENTS FOR CONCENTRATION

The Government concentration consists of forty-two (42) credits of coherently related work selected by the student in consultation with his departmental advisor. Thirty-three (33) credits must be taken in the Department of Government. Each concentrator must take Government 201 and 202 and do a minimum of three (3) hours or course work in each Core Area of the concentration. The four Core Areas are (I) Political Philosophy, (II) Comparative Government and Politics, (III) International Politics, and (IV) American Government, Politics, and Administration. At least three (3) hours of course work must be done at the 400 level. Concentrators are admitted to Honors in Government with the permission of the Department.

Nine (9) credits in related courses are required. With the exception of History 201, 202 all related work must be at the 300 or 400 level and have the approval of one's advisor. It is recommended that concentrators carry their foreign language study beyond the minimum requirement for distribution.

DESCRIPTION OF COURSES

150. Freshman Seminar. Fall and Spring (3) Staff.

201, 202. Introduction to Government and Politics. Fall and Spring (3,3) Staff.

Core Area I: Political Philosophy

303, 304. Survey of Political Philosophy. Fall and Spring (3,3) Mr. Roherty and Mr. Smith.

The course is developed around two themes, the *classical tradition* and the *modern tradition* in political philosophy. In the first semester the political works of Plato and Aristotle are taken as the standards of the classical tradition. Selected works of medieval Christian writers are also included. Machiavelli and Hobbes define the *modern tradition* as this is taken up in the second semester. The works of Locke, Rousseau, and Burke complete the course.

305. Contemporary Political Philosophy. *Fall or Spring* (3) Mr. Roherty, Mr. Smith, and Mr. DeWeydenthal.

An examination of the revival of political philosophy from the late nineteenth century to the present. Writers to be studied will include Nietzsche, Sorel, Freud, Weber, Lenin, Camus, Jaspers, Barker, Arendt, Tillich, Oakeshott, De Jouvenel, Dahl, Strauss, Voegelin.

¹ On leave of absence first semester, 1971.

² On leave of absence second semester, 1972.

401. American Political Thought. Fall (3) Mr. Smith.

Basic problems of political theory will be viewed from the perspective of the American experience.

405. Studies in Political Philosophy. *Fall or Spring* (3) Mr. Moss, Mr. Roherty, Mr. Smith.

This course will examine a particular theme or problem such as the following: political development and political community, authority and freedom, utopia and anti-statism.

412. Philosophical Problems in the Study of Politics. *Spring* (3) Mr. Baxter. Same as Philosophy 412.

Basic concepts to be examined in this course include science, theory, explanation, causation, testing, predicting, facts and values. Attention will be given to theory formulation based on quantitative data.

Core Area II: Comparative Government and Politics

311, 312. Comparative Government. *Fall and Spring* (3,3) Miss Hamilton and Mr. Grayson.

A comparative study of institutions and processes of government. Historical, cultural, social and economic factors will be given considerable attention. In the first semester, countries of western Europe will be considered with emphasis on England and France. In the second semester, selected governments of non-western nations will be analyzed.

334. Soviet Political System. Fall (3) Mr. DeWeydenthal.

A study of contemporary political system of the Soviet Union with emphasis on the potentially dynamic aspects of its socio-economic development as contrasted with stability of the historically determined structural patterns of political control. Attention will be given to the international position of the Soviet Union and a comparison with selected Western political systems will be attempted.

336. The Far East. Fall (3) Mr. Kim.

A survey of the national and international politics of China, Japan and Korea. After a preliminary view of Far Eastern political and social traditions, this survey examines the manner in which these countries responded to the Western impact. Major attention will be given to the government and politics of Communist China and post-war Japan.

338. Latin American Politics and Government. Spring (3) Mr. Grayson.

A comparative analysis of the types of government of selected Latin American nations. Appropriate consideration will be given to current conditions and to such problems of general political development as recruitment and socialization, communication and articulation, interest aggression and decision-making.

381. Political Leadership. Spring (3) Staff.

A study of the nature of leadership in the context of different political environments. Attention will be given to the problems of identifying and defining political Government 121

leaders, recruitment and performance, the personality orientations of political leaders, and to public images of leaders and leader roles.

410. British Government and Politics. Spring (3) Mr. Ward.

A study of political institutions and political behavior in the United Kingdom and Eire. Special attention is given comparisons with the United States and the parliamentary democracies of the Commonwealth.

411. Problems in Comparative Politics. *Fall* (3) Miss Hamilton. *Prerequisite: Consent of the instructor.*

A study of political institutions and political behavior in France. Emphasis will be placed on the fifth Republic and problems related to political and economic modernization.

416. Revolution and Politics. Fall and Spring (3) Mr. Grayson.

Recent social science theories dealing with motivation of mass leaders, economic and social conditions underlying mass behavior, and use of propaganda, violence and symbols to recruit followers. The Russian, Mexican, Bolivian and Cuban revolutions will be studied along with Fascism, Peronism, and contemporary urban terrorist movements.

431, 432. Comparative Political Systems. Fall and Spring (3,3) Mr. Baxter. Prerequisite: Government 311, 312 or consent of the instructor.

A comparative approach to the study of politics. First Semester: Scope and methods of comparative political analysis, individual students prepare and present research roposals. Second Semester: students execute research roposals, present intermediate and final reports.

Core Area III: International Politics

323, 324. International Relations. Fall and Spring (3,3) Mr. Ward and Mr. Kim.

The theory and practice of International Politics. During the first semester the course will consider the international system of states and the bases of national power. The second semester will be a study of American foreign policy with an emphasis of the process of policy formulation. Selected foreign policy problems will be considered.

325. International Organization. Spring (3) Mr. Kim.

A study of the development of the structures and procedures of international organization, and of the methods for pacific settlement of international disputes. Special attention will be given the League of Nations and the United Nations and the gains and failures of these organizations.

403. National Security Policy. Fall (3) Mr. Roherty.

This course is an appraisal of such problems as aggression, "just war," the use of nuclear weapons, ideological and psychological conflict, and the role of the military in national policy. The effort is made through studies of these problems to develop a body of theory around the theme of national security.

436. Contemporary International Relations of East Asia. Spring (3) Mr. Kim.

Analysis of postwar problems in international relations of the Far East. Topics include: US-Soviet rivalry in East Asia; US role in the democratization of Japan and Korea; Soviet influence on China and North Korea; the emergence of China and its impact on the international relations of Asia; recent problems in US relations with East Asia; and problems of divided Korea.

Core Area IV: American Government, Politics, and Administration

306. Political Parties. Spring (3) Mr. Moss, Mr. Edwards.

An analysis of the nature, sources, and organization of political power, and of the factors governing its conquest and surrender. The course deals chiefly with American politics but makes comparisons with politics of other countries. Special attention is given the problem of analyzing and reporting political situations.

351. Introduction to Public Administration. Fall (3) Mr. Morrow.

Policy-making and administration in government agencies. This course analyzes comparative administrative systems in the United States with emphasis on decsion-making structures, constituency groups, and policy outputs.

353. The Politics of States and Localities. Spring (3) Mr. Miri.

An examination of the institutions and processes of government and politics in American states and localities. Relationships among national, state, and local governments will be analyzed in the context of a federal system.

371, 372. American Politics. Fall and Spring (3,3) Mr. Damon, Mr. Edwards.

The political process at the national level, including such topics as organization and recruitment, governmental decision-making, relationships among departments, and political parties and leadership. The first semester is concerned with the executive and legislative branches; the Supreme Court is considered in the second semester.

373. American Civil Liberties. Spring (3) Staff.

This course is an intensive study of the rights of Americans as guaranteed by the Constitution. The changing character of civil liberties problems in the United States will be stressed with attention given to the legal, historical and political context of the cases studied. Class discussion and reports will be emphasized.

408. The Politics of the South. Fall (3) Mr. Moss.

This course is a study of political transition in the South. The nature and variety of traditional Southern politics will be discussed and the impact of the forces of change will be analyzed.

454. The Politics of Metropolitan Areas. Fall (3) Mr. Miri. Prerequisite: Government 351, or 353, or Consent of Instructor.

An examination of the American political system's capacity to confront and solve problems of the nation's urban areas. Historical, economic, and sociological factors affecting the political process in "metro areas" will be considered.

Government 123

456. The Development of Public Policy. Fall or Spring (3) Mr. Morrow.

A multi-dimensional examination of the salient factors which interact in the development of public policy in the United States. Emphasis is placed on how policy solutions to public problems are defined, represented, legitimized, administered and evaluated.

465. Public Opinion and Voting Behavior. Fall (3) Mr. Edwards.

The relationship between opinions and political policymaking, including the characteristics of political opinions, patterns of voting behavior, and the importance of leadership.

491. Topics in Government. Fall or Spring (3) Staff.

Selected topics in Government. The topic to be considered will be announced prior to the beginning of the semester.

494. Independent Study. Fall or Spring (3) Staff.

A program of independent study, usually involving extensive reading and the writing of an essay, arranged by the student in consultation with the Department.

HONORS STUDY

495, 496. Senior Honors. Fall and Spring (3,3) Staff.

Students admitted to Senior Honors in Government will be responsible for (a) reading and discussion of selected materials; (b) satisfactory completion by May 1 of an original scholarly essay; (c) satisfactory performance in a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in government, write to the department chairman for a Graduate Catalog. The department conducts a program of internships in politics in conjunction with the degree program. Candidates whose academic and career interests are directed toward national or local government and political parties are invited to apply.

RICHARD LEE MORTON, CHANCELLOR PROFESSOR OF HISTORY, EMERITUS. PROFESSORS SHERMAN (Acting Chairman of the Department), BEYER, BROWN, FOWLER, FREEMAN, HEALY, L. JOHNSON, McCully, Selby, and Tate. Associate Professors Coyner, Crapol, Donaldson, Esler, Funigiello, McArthur, McCord, Sheppard and Strong. Assistant Professors Ewell, Fiering, McCusker, Thompson, and Walker. Lecturers Cappon (Emeritus), Carson, Cullen, Hutson, H. Johnson, Kurtz, and Riley.

REQUIREMENTS FOR CONCENTRATION

Concentration in History requires 30 semester credits in history, including History 101, 102, 201 and 202, except that: (1) appropriate freshman seminars in history may, with the approval of the department chairman, be substituted for one or more semesters of the preceding courses; (2) one or more semesters of the preceding courses may be waived by the department chairman upon demonstrated proficiency in European or American history. Students are advised not to limit their junior and senior year courses to those dealing with the history of any one nation. Foreign languages are recommended for students planning to concentrate in history.

AREA REQUIREMENTS

History 101, 102, or two semesters of freshman seminars in history, or any two-semester combination of both, are the courses that normally should be taken to meet the requirement for Area 2. Students choosing history to fulfill the requirement for a logical sequence of four courses outside their area of concentration should consult their faculty advisor before selecting their additional two courses.

DESCRIPTION OF COURSES

European History

101, 102. History of Europe. Fall and Spring (3,3) Staff.

A general introduction to the history of European civilization from classical times to the present. The first semester goes to 1715; the second, from 1715 to the present day.

*101H, 102H. History of Europe. (Honors course.) Fall and Spring (3,3,) Staff.

A general introduction to the history of Europe. The first semester examines classical and medieval influences on the modern world, and traces the development of modern civilization through the Renaissance and Reformation. The second semester will cover the period from the seventeenth century to the present. The

¹ Visiting Assistant Professor, 1971-72.

course will seek particularly to develop understanding of the historical process and historical imagination. (Not offered 1971-72.)

150, 151. Freshman Seminar. Fall and Spring (3,3) Staff.

Topics to be announced.

301, 302. The Ancient World. Fall and Spring (3,3) Mr. Jones.¹

Ancient civilization from prehistoric times to the downfall of the Roman Empire. The first semester deals with the ancient Orient and Greece, up to B.C. 338; the second semester deals with Alexander, the Hellenistic World, and Rome. (Same as Greek 311-Latin 312. The course cannot be counted for concentration in history.)

311, 312. Europe in the Middle Ages. Fall and Spring (3,3) Mr. Freeman.

The origins and nature of Medieval civilization. First semester; the newly forming West and the Roman, German, Byzantine, and Arab influences which worked to create it. Second semester: the aggressive expansion of government, the church, business, and city life along with the counter-development of restrictive forces that limited their free expansion. (Not offered 1971-72.)

313, 314. Renaissance and Reformation. Fall and Spring (3,3) Staff. Prequisite: History 101, 102.

This course in the cultural history of Europe from the fourteenth through the seventeenth centuries will seek to probe the origins of the modern Western mind. Sympathetic attention will be given to artistic and ethical values; to religious, philosophical, and scientific world views; and to exploration, war, politics, and socio-economic circumstances. (Not offered 1971-72.)

315, 316. The Age of Absolutism and Revolution in Europe, 1648-1871. Fall and Spring (3,3) Mr. Sheppard.

An intensive survey of Europe in transition: Absolutism, Enlightenment, Democratic Revolution and the emergence of the modern state. (Not offered 1971-72.)

317, 318. Recent Europe, 1871 to the Present. Fall and Spring (3,3) Mr. Strong. Prerequisite: History 101, 102.

First semester: the background to World War I, the course of the war, the Versailles settlement. The second semester: 1918 to the present, with emphasis on the failure of the Versailles settlement, World War II, and the emergence of contemporary Europe. (Not offered 1971-72.)

319, 320. History of England. Fall and Spring (3,3) Mr. McCord.

An introduction to English history from 1066 to the present; the first semester ends with the Glorious Revolution of 1688. (Not offered 1971-72.)

321, 322. The History of Russia. Fall and Spring (3,3) Mr. McArthur.

The political, economic, social and intellectual development of Russia. First semester to 1855. Second semester 1855 to the present.

¹ Chancellor Professor of Classical Studies.

323, 324. Intellectual History of Modern Europe. Fall and Spring (3,3) Mr. Esler.

Cultural and intellectual development of the western world from the end of the middle ages to the present. First semester: from the renaissance to the enlightenment. Second semester: the nineteenth and twentieth centuries.

409, 410. England Under the Tudors and Stuarts. Fall and Spring (3,3) Mr. Fowler. Prerequisites: History 101, 102.

The first semester, 1485-1603; the second semester, 1603-1714.

412. Constitutional History of Modern England. Spring (3) Mr. McCully.

Constitutional development from 1485 to the present, with major emphasis on the Tudor regime, the breakdown of conciliar government under the Stuarts, the establishment of limited monarchy, the rise of cabinet government and growth of democracy. (See Marshall-Wythe School of Law.) (Not offered 1971-72.)

413, 414. The Making of Modern England. Fall and Spring (3,3) Mr. McCord.

An examination of the political, economic, social, and intellectual changes which explain England's transition from an aristocratic to a democratic society. The course divides in the mid-Victorian period. (Not offered 1971-72.)

417, 418. The British Empire. Fall and Spring (3,3) Mr. McCully.

First semester: the formation and development of the old Colonial Empire through the American Revolution. Second semester: the rise of the new Empire through the nineteenth and twentieth centuries to the establishment of the British Commonwealth of Nations.

433, 434. Modern Germany. Fall and Spring (3,3) Mr. Strong.

First semester: origins and establishment of the Second Reich. Second semester: establishment of the Third Reich.

437, 438. History of France, 1715 to the Present. Fall and Spring (3,3) Mr. Sheppard.

First semester, 1715-1815. Intensive examination of a pre-industrial society with special emphasis on social, economic and intellectual problems during the ancient regime, Revolution and Napoleon. Second semester, 1815-present. Special attention to social and economic problems as well as to the politics of twentieth-century France.

471. The Russian Intelligentsia: Selected Problems. Fall (3) Mr. McArthur. Prerequisite: History of Russia, or consent of instructor.

Selected aspects of the nature and role of the Russian intelligentsia. Considerable use will be made of primary materials, including literature. A knowledge of the Russian language is not required, but will be utilized when available. (Not offered 1971-72.)

472. The Russian Revolution. Spring (3) Mr. McArthur. Prerequisite: History of Russia, or consent of instructor.

The origins, course, and impact of the Bolshevik Revolution. Considerable use will be made of primary materials. A knowledge of the Russian language is not required, but will be utilized when available. (Not offered 1971-72.)

474. Medieval England. Spring (3) Mr. Freeman.

Special emphasis will be placed on the period from the Norman Conquest through the fourteenth century, when the English were aggressive abroad and creative at home. The social, economic, political, and military explanations for this expansive period will be examined.

American History

201, 202. American History. Fall and Spring (3,3) Staff.

The development of the United States. Special emphasis is placed on the period since 1776. The course divides at the year 1877.

*201H, 202H. American History. (Honors course.) Fall and Spring (3,3) Miss Walker.

Designed to give the student insight into problems of interpretation and methodology, and to acquaint him with the literature of American history.

309, 310. Survey of Latin American History. Fall and Spring. (3,3) Miss Ewell.

The development of Latin America from Pre-Columbian times to the present. Emphasis is on the inter-action of European, Indian, and African elements in colonial society, the growth of national consciousness, and the related phenomena of political instability and economic underdevelopment.

†401, 402. Topics in Modern History. Fall and Spring (3,3) Staff.

A tutorial and seminar at the junior-senior level designed for outstanding history concentrators. Recommended for students intending to pursue graduate study.

*403. Colonial and Revolutionary Virginia. Spring (3) Mr. Tate.

A specialized study of the founding and development of the Virginia colony with special emphasis on the evolution of its social and political structure. (Not offered 1971-72.)

405, 406. Early American History. Fall and Spring (3,3) Mr. Selby.

Special stress is laid on the ideas and institutions which developed in British North America and which, in the course of the struggle for independence and the formation of the union of states, emerged as a distinctive national culture. The course divides at the year 1763 and concludes with the adoption of the Constitution.

421, 422. The United States, 1815-1877. Fall and Spring (3,3) Mr. L. Johnson.

The origins, development, and outcome of the struggle between the North and South.

423, 424. The United States Since 1877. Fall and Spring (3,3) Mr. Sherman.

The emergence of modern America. Primary emphasis is on domestic developments. Major topics include: the rise of industry, political trends, economic and social reform movements, and the role of ethnic and racial minorities. The course divides around 1920.

429. American Constitutional History to 1877. Fall or Spring (3) Mr. Cullen.

The evolution of the federal constitution from national supremacy and dual sovereignty, with special emphasis upon the constitutional significance of the post-Civil War amendments.

430. American Constitutional History **1878-Present.** Fall or Spring (3) Mr. H. Johnson.

Federal constitutional development in the fields of business regulation, federalstate relations, civil liberties and civil rights.

441. The Caribbean. Fall (3) Mr. Beyer.

Deals particularly with the Spanish, English, and French West Indies. A sequential treatment of the eras of exploration and colonization; plantation prosperity and international rivalry; post emancipation problems; and incipient nationalism.

442. Brazil. Spring (3) Mr. Beyer.

Antecedents of modern Brazil, 1500-present, with accent on economic, social, and cultural factors as well as on political growth in the Portuguese colony, the Empire, and the Republic.

443, 444. History of American Foreign Policy. Fall and Spring (3,3) Mr. Crapol.

The formulation and development of American foreign policy from 1775 to the present. The emphasis is on the domestic and international forces which have shaped American foreign policy. Special attention is given to the problems involved in the planning and execution of foreign policy. First semester: 1775 to 1899. Second semester: 1899 to 1945.

445. History of American Foreign Policy in the Cold War Area. Fall or Spring (3) Mr. Crapol.

An intensive analysis of the origins of the cold war, the policy of containment, global conflict since 1945, the strategy of foreign aid, and the ideological contest in the underdeveloped world.

446. America in the Early National Period, 1789-1815. Fall (3) Mr. Tate.

The course emphasizes the position of the United States as a new nation and traces the developing character of American political culture in the Federalist and Jeffersonian periods. (Not offered 1971-72.)

453, 454. American Intellectual History. Fall and Spring (3,3) Staff.

A study of the relation between ideas and events from Colonial times through the present. Included are investigations of philosophical, religious, political, and

economic ideas as they relate to the Reformation, the Enlightenment, Transcendentalism, slavery, Darwinism, Pragmatism, and other categories. A familiarity with philosophy is strongly recommended. (Not offered 1971-72.) (Formerly 425, 426.)

459. Problems in Modern History. *Fall or Spring* (3) James Pinckney Harrison Professor of History.

(Not offered 1971-72.)

461, 462. American Social History. Fall and Spring (3,3) Mr. Brown.

The origins of American society in Europe and Africa, and the transition from deferential, rural, agrarian America to democratic, urban, industrial America.

463. The Old South. Fall (3) Mr. Coyner.

Social and Institutional history of the South from its colonial origins to secession, including, as major topics, the structure of society, the economy, slavery, and the Southern mind.

464. The Emergence of the New South, 1865-1965. Spring (3) Miss Walker.

A survey of the political, economic, and social developments in the South since the Civil War. The course will examine Reconstruction, the Bourbon regimes, Populism, racism, progressivism, the depression, the New Deal, and post World War II conditions. (Not offered 1971-72.)

466. The Negro in the United States Since 1861. Fall or Spring (3) Miss Walker.

An examination of the role of the black man in American society from the Civil War to the present. The course will consider political, economic, and social developments within the black community, as well as problems of black-white relations.

476. The Rise of Urban America. Fall (3) Mr. Funigiello.

The American city from the colonial period to the present; political and economic institutions, social change, technological innovations, planning theories, and the reactions of sensitive observers to the process of urbanization as expressed in imaginative literature and scholarly studies.

477. History of Mexico. Fall or Spring (3) Miss Ewell.

Development of the Mexican nation from the Spanish conquest to the present. Sequential treatment of the interaction of Spanish and Indian cultures, expansion of the frontier, independence, 19th century liberalism and caudillism, the Mexican Revolution of 1910 and its institutionalization.

HONORS STUDY

†495, 496. Honors. Fall and Spring (3,3) Staff.

Students admitted to Honors Study in History will be enrolled in this course during both semesters of their senior year. Each candidate will be responsible for

(a) reading and discussion of a selected list of books in some specific area of historical literature; (b) a scholarly essay by May 1; (c) a comprehensive oral examination.

THE JAMES PINCKNEY HARRISON CHAIR OF HISTORY

The generosity of Mrs. James Pinckney Harrison and her son, Mr. James Pinckney Harrison, Jr., has enabled the College to establish an endowed chair in History in honor of James Pinckney Harrison, Sr. The purposes of this endowment are explained by the donors as follows:

The James Pinckney Harrison Chair of History is established to encourage the study of history as a guide for the future, as a field of absorbing interest and pleasure, and as a source of the wisdom, charm and gentility exemplified by James Pinckney Harrison. Born in Danville in 1896, he spent much of his life until his death in 1968 in Charles City County, not far from "Berkeley," his ancestral home. Far-ranging travels for business and country led him to an appreciation of many cultures of the world, but also strengthened his love and commitment to Virginia. As Chairman of the Board of Universal Leaf Tobacco Company of Richmond for many years, James Pinckney Harrison served in many civic, philanthropic and business affairs, ever enriching the life of those around him.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts and Doctor of Philosophy. For degree requirements, and a full description of graduate courses in history, write to the department chairman for a Graduate Catalog.

The History Department in cooperation with the Institute of Early American History and Culture, the Earl Gregg Swem Library, and Colonial Williamsburg offers fourteen-month programs combining nine months of academic study leading to the degree of Master of Arts with practical experience in the editing of historical books and magazines and in the operations of a historical library. The programs commence on July 1 of each year and continue until August 31 of the succeeding year with breaks of approximately two weeks each before and after the intervening academic session in addition to the usual college holidays.

Home Economics

Assistant Professor T. Miller (Chairman of the Department).

The purpose of the Home Economics Department is to offer courses that will be useful to the students in their own home and daily living at school. Attention will be directed as much as possible toward individual or group needs and interests. Classes will be conducted in the form of discussions, lectures, demonstrations and laboratory work. Textbooks may be purchased but are not necessary.

Credit is not given for these courses.

209. Foods: Principles of Preparation. Fall and Spring Mrs. Miller.

A study is made of selection, cost and the fundamental scientific principles of food preparation and conservation of nutritive values. Aesthetic factors in family meals are presented. Two laboratory hours.

210. Foods: Meal Planning and Dining Customs. Fall and Spring Mrs. Miller.

This course includes the serving of nutritious family meals and special meals, menu planning at different levels of cost, marketing, organizing and preparations. Attention is given to the cultural and social values in family dining. Two laboratory hours.

301. Nutrition and Physical Fitness. Spring Mrs. Miller.

Basic nutritional knowledge applicable to achieving optimal health is stressed. Malnutrition in the United States and the world, and national and international activities for improving the nutrition of entire populations are studied. (Not offered Spring 1971-72.)

329. Home Management and Family Living. Fall and Spring Mrs. Miller.

A study is made of organizing the household and planning the daily activities to conserve material and human resources and to provide a satisfying background for pleasant family living in the home and community. (Not offered 1971-72.)

431. Consumer Education. Fall and Spring Mrs. Miller.

Problems of the consumer as a buyer in the contemporary economic order are studied. Standards, grades, labels, food buying, budgeting, owning versus renting a home, aids from Federal bureaus and certificating agencies are discussed. Comparative surveys are made. Family financial problems are stressed.

Humanities

201, 202. Man's Image in Literature. Fall and Spring (3,3) Mr. Leadbeater, Mr. J. Smith, and Mr. Wiggins.

A study of the art of literature as it embodies man's hopes, fears, ideas, and values. The readings selected are significant works ranging from contemporary to ancient. The emphasis in the first semester is on dramatic literature, in the second on epic and narrative.

Law

301. Introduction to Law. Fall or Spring (2) Mr. Zepkin.

The nature and functions of law in society as processes resolving civil and criminal disputes, maintaining historical continuity and doctrinal consistency, protecting voluntary agreements and resolving acute social conflicts. Illustrated by examples from criminal, tort, contract and labor law.

Mathematics

Professors Reynolds (Chairman of the Department) and Southworth. Assosociate Professors Bynum, Cato, Lawrence, O'Neil, Prosl, Rublein, Sanwal and Turner. Assistant Professors Bangs, Conner, Drew, Easler, Gibbs, Jordan, Melvin, Poole, Rabinowitz, Stanford and Stockmeyer. Instructor Cartwright.

REQUIREMENTS FOR CONCENTRATION

Concentration in mathematics requires 33 semester credits in mathematics courses including Math 111, 112, 211, 212, 311, 312, and 407. Six semester credits must be obtained from the courses Mathematics 403, 404, 405, 406, 408 and six more semester credits must be obtained from mathematics courses numbered above 300.

AREA AND SEQUENCE REQUIREMENTS

The basic college requirement concerning Area 3 may be satisfied in Mathematics by taking any two of the courses

Mathematics 105, 106, 111, 112

The in-depth or sequence requirement may be satisfied by taking any two other Mathematics courses numbered 211 or above. A student who has successfully completed Math 211 or any higher numbered course will not be allowed to enroll in Math 105 or Math 106.

DESCRIPTION OF COURSES

103. Algebra-Trigonometry. Fall and Spring (3,3) Staff.

A study of the real number system, sets, functions, graphs, equations and inequalities, systems of equations, matrices and determinants, followed by a study of the trigonometric functions and their properties. Recommended only for science majors who have a deficiency in their training. This course may not be applied either towards concentration in mathematics or towards satisfaction of college area requirements.

105, 106. Fundamental Concepts of Mathematics. Fall and Spring (3,3) Staff.

These courses are designed to provide the non-science student with an insight into the nature and scope of modern mathematics.

- **105.** A study of set theory and cardinality, number theory and abstract algebra and topics from topology and matrix theory.
- **106.** A study of computer programming, probability and topics from analysis, game theory and linear programming.
 - **111-112.** Calculus. *Fall, Spring* (3,3) Staff.

Inequalities, absolute value; the concept of a function, limits and derivatives of functions, the Mean Value Theorem; applications to maxima and minima, related rates, and linear motion; the definite integral and the Fundamental Theorem of Integral Calculus; techniques of integration; improper integrals; applications to areas, volumes, work and moments.

211. Linear Algebra. Fall, Spring (3) Staff.

An introduction to vector spaces, linear transformations, matrices and determinants; applications to systems of ordinary differential equations.

212. Introduction to Multivariable Calculus. Fall, Spring (3) Staff.

Functions of several variables, surfaces in three-space, vectors, techniques of partial differentiation and multiple integration with applications.

302. Ordinary Differential Equations. Fall and Spring (3) Staff. Prerequisite: Math 212 or the consent of the head of the department.

First order differential equations, initial value problems, second order linear differential equations, systems of linear differential equations and Laplace transforms.

*308. Geometry. Spring (3) Mr. Reynolds. Prerequisite: Consent of the Instructor.

Axioms and deductive reasoning; some advanced Euclidean geometry including cross ratio and axiomatic systems; synthetic and coordinate projective geometry; duality; perspectivity; conics. Recommended for prospective teachers.

311-312. Advanced Calculus. Fall and Spring (3,3) Staff. Prerequisite: Math 212.

Functions of several variables, directional derivative, operations with Taylor's series, uniform convergence, Green's and Stokes' Theorems and other topics chosen from classical analysis.

†401-402. Probability and Statistics. Fall and Spring (3,3) Mr. Rabinowitz. Prerequisite: Math 212.

First semester topics include: combinatorial analysis, Bayes's Theorem, discrete and continuous probability distributions and characteristics of distributions. The second semester deals with satisfical inference theory and applications including sampling from probability distributions, estimation, hypothesis testing, confidence methods, regression analysis, sequential analysis, and non-parametric statistics.

†403-404. Intermediate Analysis. Fall and Spring (3,3) Mr. Stanford. Pre-requisite: 312.

Set theory; the real number system; analysis in metric spaces including continuity and convergence; normed linear spaces; integration and differentiation theory.

†405-406. Complex Analysis. Fall and Spring (3,3) Mr. Rublein. Prerequisite: Math 312.

The complex plane, analytic functions, Cauchy integral theory and the calculus

of residues, Taylor and Laurent series; analytic continuation; conformal mapping and boundary value problems.

†407-408. Abstract Algebra. Fall and Spring (3,3) Mr. Stockmeyer. Prerequisites: Math 212.

Groups, rings, isomorphism theorems, polynomials, modules, vector spaces; linear transformations, matrices, Jordan and other canonical forms, quadratic forms.

†410. Special Topics. Fall or Spring (1, 2 or 3 depending upon material covered.) Staff.

Topics selected from Theory of Equation, Projective Geometry, Linear Algebra, Intermediate Analysis, Applied Mathematics, etc.

†412. Introduction to Number Theory. Fall (3) Mr. Reynolds. Prerequisite: Math 407.

An elementary course in the theory of integers, divisibility and prime numbers; a study of Diophantine equations, congruences, number theoretical functions, decimal expansion of rational numbers and quadratic residues. Recommended for prospective secondary teachers of mathematics.

†413-414. Topics in Numerical Analysis. Fall and Spring (3,3) Mr. Southworth. Prerequisites: Math 212 and computer programming.

The topics to be discussed the first semester are roots of equations, solutions of systems of linear equations by matrix methods, eigenvalues and eigenvectors of matrices, interpolation, numerical evaluation of integrals, and numerical differentiation.

The second semester topics include empirical data curve fitting, integration of systems of ordinary differential equations of both the initial value and boundary value type.

431. Mathematical Theory of Finite Automata. Fall (3) Mr. Bangs. Prerequisite: A course in abstract algebra.

An introduction to APL, logical functions and Boolean algebra; the theory of sequential machines and neural nets; the concepts of state- and machine-equivalence; deterministic and non-deterministic finite automata and regular expressions; semigroups and abstract machines.

432. Introduction to the Theory of Computability. Spring (3) Mr. Bangs. Prerequisite: Math 431.

The notions of effective procedure, algorithm and Turing machine; modifications of Turing machines; Church's Thesis and computability; recursive functions and LISP; other models for general computability and their equivalence; Post's symbol manipulation systems and the normal form theorem.

Engineering Graphics 201-202. Engineering Drawing and Descriptive Geometry. Fall and Spring (3,3) Mr. Smith.

Fundamentals of Engineering Drawing and Descriptive Geometry. Orthographic projection, auxiliary views. Isometric, oblique projection and drawing; prospective; machine parts such as screws, gears, valves, cams. Lettering. Graphic and analytic

solutions of engineering and geometric problems. Intersection and development of surfaces. Six class and laboratory hours.

COMPUTER SCIENCE

Credit will not be allowed for both C.S. 130 and C.S. 141.

C.S. 130. Elementary Computer Programming. *Fall and Spring* (2,2) Mr. Smith. (Formerly C.S. 230.)

Introduction to computer languages, including Fortran and assembly language with emphasis on the former. Open to all students.

C.S. 141. Computer Programming and Problem Solving. Fall and Spring (3,3) Mr. Poole. (Formerly C.S. 240.)

The solution of computational problems by use of digital computers. Subjects covered are the development of mathematical models, the concept of algorithms, the use of flow charts in describing computational processes, and the concept and use of programming languages, including FORTRAN and an algorithmic language such as ALGOL.

C.S. 241. Advanced Programming. Spring (3) Mr. Gibbs. Prerequisite: C.S. 141.

An introduction to advanced features of modern programming languages with the purpose of abstracting the underlying concepts from these languages. Topics include machine language programming, assembler language programming, and organization of digital computer. Students will be required to write several programs.

C.S. 242. Computer Software. Fall (3) Mr. Gibbs. Prerequisite: C.S. 241.

The organization of computer software and related problems Topics include microprogramming, Input-Output facilities, and operating systems. Students will complete several programming assignments which will include the design and implementation of a simulator, an assembler, and elementary loader, and a simple batch processing monitor for a hypothetical digital computer.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts and Master of Science. For degree requirements, and a full description of graduate courses in mathematics, write to the department chairman for a Graduate Catalog. Attention is also called to the Graduate Program in Applied Science on p. 186.

Military Science (Army)

PROFESSOR COLONEL HODGES (Chairman of the Department) Assistant Professors LTC Fogler, Major Smith, Captain Sisco, and Captain Isham.

A unit of the Reserve Officers' Training Corps was established at the College of William and Mary on July 1, 1947, with an assigned mission to qualify students for positions of leadership and management in the Armed Forces in time of national emergency.

The courses are designed specifically to educate students in General Military Science. The GMS course gives the student a college level program of general military subjects, teaches him the fundamentals of leadership, and provides him an opportunity to perfect his leadership and management techniques by practical application.

Any male student who is a citizen of the United States, physically qualified, and not already holding a commission in any of the Armed Forces may, when he matriculates, enroll in Military Science 101.¹ Those meeting the above qualifications but who have had prior military experience, whether in the Armed Forces or in another college, may, commensurate with the degree of such experience, enroll in Military Science at a higher level. Transfer students desiring to take advantage of previous military courses should consult the Professor of Military Science when they matriculate.

Those who complete this program may, upon graduation from the College, be commissioned as Second Lieutenants, United States Army Reserve. Outstanding ROTC cadets will be offered a commission in the Regular Army under the provisions of the Distinguished Military Graduate Program.

Freshmen and sophomore students are furnished standard government issue uniforms. Those who enroll in the advanced course receive tailored officer-type uniforms. Students enrolled in the advanced course become members of the Enlisted Reserve and receive an allowance of \$100.00 per month. Advanced course students are required to attend summer camp for a period of six weeks, normally between their third and fourth years at college, and are paid one half of a second lieutenant's salary during that period. They also receive travel pay to and from camp, and while there, are rationed and quartered at government expense.

The Professor of Military Science may grant a draft deferment to any student enrolled in ROTC. Current regulations also permit a delay in the active duty training of newly commissioned students who have been accepted for graduate work in a recognized field and who have applied for such delay. Another option, subject to the needs of the service, permits the newly commissioned officer to serve 12 weeks on active duty and fulfill his remaining obligation in a reserve status.

Army ROTC Scholarship Program. This program offers free tuition, textbooks and fees in addition to paying an allowance of \$100.00 per month. Scholarships are provided under provisions of Public Law 88-647, The ROTC Vitalization Act of 1964. Four year scholarships are awarded to outstanding high school seniors and interested students are encouraged to write the Army Headquarters in their

¹ For those students desiring to participate, there is a 2 year program available beginning with the summer prior to the junior year and extending through completion of the senior year. Details available at the office of the Department of Military Science.

area if high school counselors do not have information on the program. One, two and three year scholarships may be applied for through the Professor of Military Science.

DESCRIPTION OF COURSES

101-102. Military Science I. *Fall and Spring* (0,0) CPT Isham.

Introduction and orientation to military terminology, concepts, leadership and management principles.

**200. American Military Development. Spring (3) CPT Sisco.

An analysis of American Military History. The course begins with the Seven-Years War and traces American military history to the present. Emphasis is given to the principles of war and to the development of tactics.¹

201-202. Military Science II. Fall and Spring (0,0) CPT Sisco. Prerequisites: MS 101-102.

A study of map and aerial photograph interpretation with primary attention given to the principles of military terrain evaluation and land navigation; the basic concepts of military operations and tactics.

**300. American Civil-Military Relations. Spring (3) LTC Fogler.

Theory of civil-military relations and their impact on the contemporary world scene. Emphasis is placed on the extent to which these relations tend to affect the military security of society. Case studies of historical and contemporary military leadership and management are examined.¹

301-302. Military Science III. Fall and Spring (0,0) CPT Isham.

A study of management and control of small unit operations under field conditions with special emphasis given to offensive/defensive tactics, communications, and internal defense and development. Fundamentals of military instruction are taught with emphasis on practical application. Physical fitness and review of previous subjects are stressed in preparation for summer camp.

401-402. Military Science IV. Fall and Spring (0,0) Major Smith.

Analysis of selected leadership and management problems involved in administration, military justice, and tactics; leadership and management problems in the military services.

¹ MS 200 and MS 300 courses are open to all students at the College for credit with the permission of the Professor of Military Science.

Modern Languages¹

Professors Banner (Chairman of the Department), Hoffman, Kallos, Moore, Oustinoff, Stone. Associate Professors Coke, Kurtz, Lavin, Martel, Zimmerman. Assistant Professors Backhaus, Diduk, Goff, Hallett, Kelley, Killen, Netick, Saint-Onge, G. Smith, J. Smith, Tyler. Instructors Basso, Cooke, Floyd, Moreland, Palmaz, Welch.

Courses in the 100² and 200 groups are designed to give a well-rounded linguistic experience, including the spoken as well as the written language, and to develop an awareness and appreciation of other cultures. Supervised language laboratory is an integral part of courses 101 and 102; three class meetings and two hours in the language laboratory.

Courses in the 300 and 400 groups are designed to give further experience in the principal facets of language study, a reasonable knowledge of the literature, some experience in literary criticism, to the end that the student may experience in some degree the humanizing process which derives from the study and understanding of foreign languages and cultures. Courses in general are conducted in the foreign language.

Students concentrating within the area of Modern Languages are required to take at least two semester courses in a second foreign language, either ancient or modern.

FRENCH

Requirements for Concentration

The following courses are required for concentration in French, and should be taken in this order: French 301, 304, 305 and 312; also, either 401 or 402 and either 411 or 412; a minimum of nine additional hours will be chosen from among the 300 and 400 courses.

Description of Courses

101-102. Elementary French. Fall and Spring (4,4) Staff.

Students who have acquired 2 high school credits in French may not take French 101-102 for credit. *Three Class Hours, Two Laboratory Hours.*

201, 202. Intermediate Level. Fall and Spring (3,3) Staff. Prerequisite: two high school units for 201, three high school units for 202 or the equivalent. Students who have acquired three high school units in French may not take 201 for credit.

A review and continuation of the study of French grammar, incorporated with the continued development of reading, writing, speaking and comprehension skills.

¹ The distribution requirements for foreign languages are indicated on page 75. All language requirements for a degree should be begun in the freshman year.

² No credit will be counted toward a degree for the first semester of an elementary foreign language unless followed by the successful completion of the second semester of that language.

205. Intermediate Composition and Conversation. Fall and Spring (3) Staff. Prerequisite: French 202 or the equivalent.

Review of main principles of syntax. Composition.

206. Intermediate Conversation. Fall and Spring (3) Staff. Prerequisite: French 205 or the equivalent.

Phonetics; intensive oral-aural training.

207. Readings in French Literature. Fall (3) Staff. Prerequisite: four high school units or 202 or the equivalent.

Selected readings from the Renaissance to modern times. A reading course designed as an introductory step to the 300 courses in literature.

208. The French Heritage. Spring (3) Staff. Prerequisite: four high school units or 202 or the equivalent.

A course embodying the most important elements of French culture from early times to the present.

*209. Introduction to French Literature I. Fall (3) Mr. Oustinoff. Prerequisite: four high school units or 202 or the equivalent.

Study of the historical development of the literary genres from the Middle Ages to the 18th century.

*210. Introduction to French Literature II. Spring (3) Mr. Oustinoff. Pre-requisite: French 209 or the equivalent.

Study of the historical development of the literary genres from the 18th century to modern times.

297. Contemporary French Theatre in English Translation. Fall (3) Staff. Not open to concentrators in French.

A study of trends in the Modern French Theatre with special reference to significant dramatists such as Giraudoux, Anouilh, and Sartre.

298. Contemporary French Novel in English Translation. Spring (3) Staff. Not open to concentrators in French.

A study of trends in the Modern French Novel with special reference to significant authors such as Gide, Saint Exupéry and Camus.

301. Seventeenth-Century French Literature I. Fall (3) Mr. Killen and Mr. Tyler. Prerequisite: French 207 or 209 or 210 or the equivalent. Required of all concentrators.

Dramatic literature of the seventeenth century, emphasizing the major works of Corneille, Moliere, and Racine.

302. Seventeenth-Century French Literature II. Spring (3) Mr. Tyler. Prerequisite: French 207 or 209 or 210 or the equivalent.

Non-dramatic literature of the seventeenth century: the baroque poets, Malherbe, Pascal, La Fontaine, Boileau and other major writers of the period.

304. Advanced Grammar and Composition. Spring (3) Mr. St.-Onge. Prerequisite: French 205 and another 200 course or the equivalent. Required of all concentrators.

Advanced syntax and intensive written work.

305. Advanced Conversation I. Fall (3) Mr. St.-Onge. Prerequisite: French 206 or another 200 course or the equivalent. Required of all concentrators.

Advanced intensive oral-aural training.

306. Advanced Conversation II. Spring (3) Mr. St.-Onge. Prerequisite: French 305 or the equivalent.

Advanced intensive oral-aural training.

307. French Phonetics and Diction. Fall (3) Mr. Oustinoff. Prerequisite: French 206 and another 200 course or the equivalent. This course may be taken concurrently with French 305. Recommended for students who expect to teach French in high school.

Intensive study of phonetics, with particular attention given to the exceptions to the "rules" of French pronunciation and to individual problems.

311. Eighteenth-Century French Literature I. Fall (3) Staff. Prerequisite: French 207 or 209 or 210 or the equivalent.

The novel and the theatre of the eighteenth century.

312. Eighteenth-Century French Literature II. Spring (3) Mr. Coke. Prerequisite: French 207 or 209 or 210 or the equivalent. Required of all concentrators.

Study of the major writers of the French Enlightenment: Montesquieu, Voltaire, Diderot, Rousseau and others.

401. Nineteenth-Century French Literature I. Fall (3) Mr. St.-Onge. Prerequisite: French 209 or 210 or the equivalent. Concentrators must take either French 401 or 402.

Study of the major romantic writers in French.

402. Nineteenth-Century French Literature II. Spring (3) Mr. Oustinoff. Prerequisite: French 209 or 210 or the equivalent. Concentrators must take either 401 or 402.

The novel of the nineteenth century with special emphasis on Balzac, Stendhal, Flaubert and Zola.

404. Modern French Poetry. Spring (3) Mr. St.-Onge. Prerequisite: French 401 or at least nine hours of 300 literature courses or the equivalent.

From the post-romantic poets to the present with special emphasis on Baudelaire, the Symbolists, and the Surrealists.

*405. Advanced Writing in French. Fall (3) Staff. Prerequisite: French 304 or the equivalent.

An intensive course in writing and language analysis.

411. Twentieth-Century French Literature I. Fall (3) Mr. Oustinoff. Prerequisite: French 209 or 210 or the equivalent. Concentrators must take either 411 or 412.

Study of representative writers and works up to 1939.

412. Twentieth-Century French Literature II. Spring (3) Mr. Killen. Prerequisite: French 209 or 210 or the equivalent. Concentrators must take either 411 or 412.

Study of representative writers and works since 1939; existential literature, the new novel, the theatre of the absurd.

422. Literature of the Middle Ages. Spring (3) Staff. Prerequisite: French 209 or 210 or the equivalent.

Study of French literature up to 1500; representative works. (Most texts are read in modern French translation.)

423. Renaissance Literature. Fall (3) Staff. Prerequisite: French 209 or 210 or the equivalent.

Study of the major writers of the French Renaissance.

431. The French Theatre. Fall (3) Staff. Prerequisite: Concentrators must have completed nine hours of 300 or 400 literature courses; non-concentrators must have the consent of the instructor.

A critical study of the development of the theatre in France from the Renaissance to modern times.

432. The Novel in France. Spring (3) Staff. Prerequisite: Concentrators must have completed at least nine hours of 300 or 400 literature courses; non-concentrators must have the consent of the instructor.

A critical study of the development of the novel in France.

450. Seminar in French Literature. Fall and Spring (3) Staff. Prerequisite: at least nine hours of 300 or 400 literature courses and Senior standing.

Recommended for concentrators who expects to continue with graduate study. A study in depth of a limited literary topic. Students will write and present papers for critical discussion.

GERMAN

Requirements for Concentration

Twenty-seven semester credits are required for concentration in German including German 207, 301, 302, 303, 305 and at least three courses from the 400 level. These courses are also open to qualified students who are not concentrating in German.

Description of Courses

101-102. Elementary German. Fall and Spring (4,4) Staff. Students who have acquired two high school units in German may not take German 101-102 for credit.

Training in pronunciation, aural-oral comprehension with the use of audio-visual techniques. Three Class Hours, Two Laboratory Hours.

201. Graded Readings in German Prose. Fall (3) Staff. Prerequisites: German 101 and 102 or the equivalent.

A grammar review with prose readings.

202. Readings in Masterpieces of German Literature. Fall and Spring (3) Staff. Prerequisite: three high school units or 201 or the equivalent.

Selected readings from the masterpieces of German literature.

204. Scientific German. Fall and Spring (3) Mr. G. Smith. Prerequisite: German 201 or the equivalent.

Reading of scientific texts in chemistry, physics, biology, and general science.

205. Intermediate Grammar and Composition. Fall and Spring (3) Miss Backhaus, Mr. Kallos. Prerequisite: four high school units or 202 or the equivalent.

Review of main principles of syntax; composition.

206. Intermediate Conversation. Fall and Spring (3) Mrs. Diduk. Prerequisite: German 205 or the equivalent.

Phonetics; intensive oral-aural training.

207. The German-Speaking Peoples and Their Civilization. Fall and Spring (3) Mrs. Diduk. Prerequisite: four high school units or 202 or the equivalent.

Reading course embodying the most important elements of Germanic Civilization, designed as an introductory step to the 300 courses.

208. Introduction to German Literature. Fall and Spring (3) Mr. J. Smith. Prerequisite: German 207 or the equivalent.

A study and discussion of the representative genres of German literature, designed as an introductory step to the 300 courses.

297, 298. Survey of Twentieth Century German Literature in English. Fall and Spring (3,3) Mr. Kallos. Not open to concentrators in German.

A survey of twentieth-century masterpieces of German literature. First semester: the novel and novelle; second semester: drama and poetry.

301. German Literature from the Beginning to 1700. Fall (3) Mr. Kurtz. Prerequisite: German 207 or the equivalent.

A survey of German Literature from its beginnings to the end of the Baroque.

302. German Literature from 1700 to 1830. Spring (3) Miss Backhaus. Pre-requisite: German 207 or the equivalent.

A survey of German Literature covering the periods of Enlightenment, Classicism and Romanticism.

303. German Literature from 1830 to the Present. Fall (3) Mr. G. Smith. Prerequisite: German 207 or the equivalent.

A survey of German Literature covering the periods of Poetic Realism, Naturalism and the Modern Age.

305. Advanced Grammar and Composition. Fall (3) Miss Backhaus. Pre-requisite: German 205 or the equivalent.

Advanced syntax and intensive written work.

306. Advanced Conversation. Spring (3) Mrs. Diduk. Prerequisite: German 206 or the equivalent.

Advanced intensive oral-aural training.

397, 398. Contemporary German Authors in English Translation. Fall and Spring (3,3) Staff. Not open to concentrators in German.

The study in depth of a significant German writer of modern times. First semester: Bertolt Brecht; second semester: Thomas Mann.

401. The Romantic Age. Fall (3) Mr. Zimmerman. Prerequisite: German 302 or the equivalent.

An intensive study of the literary masterpieces of the period between 1790 and 1830.

402. Twentieth Century German Literature. Spring (3) Mr. Kallos. Pre-requisite: German 303 or the equivalent.

An intensive study of the literature of our own age, with emphasis on the drama and the novel.

403. German Poetry. Fall (3) Mr. Kelley. Prerequisite: One of the 300-level survey courses or the equivalent.

Reading and interpretation of outstanding poetic works from the seventeenth century to the present.

404. Goethe. Spring (3) Mr. Zimmerman. Prerequisite: 302 or the equivalent.

Reading and interpretation of Goethe's works with emphasis on the pedagogical aspects of the novel and the philosophical aspects of Faust.

405. Nineteenth Century German Drama. Fall (3) Mr. Kurtz. Prerequisite: German 303 or the equivalent.

An intensive study of German Drama of the period from 1830 to 1900. (Not offered 1972-73).

406. History of the German Language. Spring (3) Miss Backhaus. Prerequisite: German 207 or the equivalent.

A study of the history of the German Language from its origins to the present. (Not offered 1972-73).

ITALIAN

101-102. Elementary Italian. Fall and Spring (4,4) Staff. Students who have acquired two high school units of Italian may not take Italian 101-102 for credit.

Training in pronunciation, aural-oral comprehension with use of audio-visual techniques. Three Class Hours, Two Laboratory Hours.

201. Intermediate Italian. Fall (3) Miss Basso. Prerequisites: Italian 101 and 102 or the equivalent.

A reading course which includes composition and oral practice.

202. Readings in Italian Literature. Spring (3) Miss Basso. Prerequisite: Italian 201 or the equivalent.

Selected readings from the literature of the eighteenth, nineteenth and twentieth centuries.

301. Masterpieces of Italian Literature Since the 17th Century. Fall (3) Mr. Coke. Prerequisite: four high school units or 202 or the equivalent.

Survey of Italian Literature. Study of representative works.

302. Masterpieces of Italian Literature from the Beginnings to the 17th Century. Spring (3) Mr. Coke. Prerequisite: Italian 301 or the equivalent.

Survey of Italian Literature. Study of representative works.

RUSSIAN

101-102. Elementary Russian. Fall and Spring (4,4) Mrs. Netick. Students who have acquired two high school units of Russian may not take Russian 101-102 for credit.

Training in pronunciation, aural-oral comprehension with use of audio-visual techniques.

201. Intermediate Russian. Fall (3) Mrs. Netick. Prerequisites: Russian 101 and 102 or the equivalent.

Review of the fundamentals of grammar and pronunciation and reading of moderately difficult texts.

202. Readings in Masterpieces of Russian Literature. Spring (3) Mrs. Netick. Prerequisite: Russian 201 or the equivalent.

Selected readings from Russian literature of the 19th century.

297, 298. Survey of Russian Literature in English. Fall and Spring (3,3) Netick.

A chronological survey of Russian literature from its beginning to the Soviet Period, with emphasis given to the major writers of the 19th century.

301. Survey of Russian Literature from the Beginning to 1850. Fall (3) Mrs. Netick. Prerequisite: four high school units or 202 or the equivalent.

Survey of literature up to 1850. Study of representative works.

302. Survey of Russian Literature from 1850 to the Present. Spring (3) Mrs. Netick. Prerequisite. Russian 301 or the equivalent.

Survey of Russian literature from 1850 to the present. Study of representative works.

SPANISH

Requirements for Concentration

The following courses are required for concentration in Spanish; and should be taken in this order: 301, 302, 303, 305, 306 and four of the following courses: 401, 402, 403, 404, 405, 406.

Description of Courses

101-102. Elementary Spanish. Fall and Spring (4,4) Staff. Students who have acquired two high school units in Spanish may not take Spanish 101-102 for credit.

Training in pronunciation, aural-oral comprehension with the use of audiovisual techniques. Three Class Hours, Two Laboratory Hours.

201. Intermediate Spanish Reading. Fall and Spring (3) Staff. Prerequisite: two high school units or the equivalent. Students who have acquired three high school units in Spanish may not take 201 for credit.

A reading course which includes a grammar review.

202. Readings in Modern Literature. Fall and Spring (3) Staff. Prerequisite: three high school units or Spanish 201 or the equivalent.

Selected readings from the literature of the nineteenth and twentieth centuries.

205. Intermediate Grammar and Composition. Fall and Spring (3) Mr. Banner. Prerequisite: Spanish 202 or the equivalent.

Review of main principles of syntax; composition.

206. Intermediate Conversation. Fall and Spring (3) Mr. Lavin. Prerequisite: Spanish 205 or the equivalent.

Phonetics; intensive oral-aural training.

207. The Spanish Heritage. Fall (3) Staff. Prerequisite: four high school units or 202 or the equivalent.

Reading course embodying the most important elements of Hispanic civilization, designed as an introductory step to the 300 courses in literature.

208. Readings in Masterpieces of Spanish Literature. Spring (3) Staff. Prerequisite: four high school units or 202 or the equivalent.

Selected reading from Spanish literature from the beginning to the present. A reading course designed as an introductory step to 300 courses in literature.

297. Cervantes in English Translation. Fall (3) Mr. Moore. Not open to concentrators in Spanish.

A study of the life and works of Cervantes. The main focus will be on the interpretation of *Don Quixote*.

298. Selected Spanish Authors in English Translation: Federico García Lorca. Spring (3) Mr. Goff. Not open to concentrators in Spanish.

An intensive study of the drama and poetry of Federico García Lorca.

301. Spanish Literature from the Beginning to 1700. Fall (3) Mr. Moore. Prerequisite: Spanish 207 or 208 or the equivalent.

Survey of Spanish literature from its beginning to the end of the Golden Age. Study of representative works.

302. Spanish Literature from 1700 to the Present Time. *Spring* (3) Mr. Banner. *Prerequisite: Spanish 301 or the equivalent.*

Survey of Spanish literature from 1700 to the present. Study of representative works.

303. Advanced Grammar and Composition. Spring (3) Mr. Stone. Prerequisite: Spanish 205 and another 200 course or the equivalent.

Advanced syntax and intensive written work.

305, 306. Advanced Conversation. Fall and Spring (3,3) Mr. Stone. Prerequisite: Spanish 206 and another 200 course or the equivalent.

Advanced intensive oral-aural training.

401. The Novel. Fall (3) Mr. Stone. Prerequisite: Spanish 301 and 302 or the equivalent.

Survey of the early novel with detailed study of the modern novel since Romanticism. Study of representative works.

402. Drama of the Golden Age. Fall (3) Mr. Lavin. Prerequisite: Spanish 301 and 302 or the equivalent.

Survey of the drama from its beginning. Detailed study of the drama of the Golden Age. Study of representative works.

403. Cervantes. *Spring* (3) Mr. Moore. *Prerequisite: Spanish 301 and 302 or the equivalent.*

The life and works of Cervantes with particular emphasis on the Quijote and the Novelas Ejemplares.

404. Drama of the 19th and 20th Centuries. Spring (3) Mr. Banner. Prequisite: Spanish 301 and 302 or the equivalent.

Principal movements and authors in the drama of the 19th and 20th centuries. Study of representative works.

405. Directed Reading in Spanish Literature. Fall (3) Mr. Banner. Prerequisite: Spanish 301 and 302 or the equivalent.

This course is designed to permit the student to pursue in depth an area of literature in which he has a major interest.

406. Survey of Spanish American Literature. Spring (3) Mr. Hoffman. Pre-requisite: Spanish 301 and 302 or the equivalent.

Principal literary movements in Spanish America. Study of representative works.

495-496. Honors. *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in Modern Languages will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading of a general bibliography in the language and literature of the student's field of concentration; (b) supervised reading of a special bibliography in the field of the student's major interest; (c) presentation by May 1 of a satisfactory Honors Essay in the field of the student's major interest; and (d) satisfactory performance in a comprehensive oral examination in the field of the student's major interest.

Professors Truesdell (Chairman of the Department), Fehr, Stewart, and Varner. Associate Professor Paledes. Lecturers Darling, Koller, Knorr, Lendvay, Loyd, and Roark.

The Department of Music offers concentration in music appropriate for (1) prospective school music teachers; (2) students who desire a broad liberal arts program as cultural enrichment with the emphasis on music in combination with the other arts and humanities; and (3) students who desire a liberal arts base for later advanced specialization; *i.e.*, musicologist, composer, music librarian and college music teacher.

REQUIREMENTS FOR CONCENTRATION

The basic requirements for concentration in Music include 12 credits in Music Theory (Music 201, 202, 301, and 302); 6 credits in Music History (Music 311 and 312); 8 credits in Applied Music Instruction, in one field; and 10 more credits in music as indicated in the special concentration programs or in consultation with the Head of the Department. Proficiency at the Elementary Piano level is considered basic to all programs and is a requirement for graduation. All concentrators in Music are expected to participate in a senior recital, in lieu of which a term paper, an instrumental or choral arranging project, or an original musical composition may be accepted with Departmental approval.

Concentrators in Music are required to complete Senior level Applied Music Instruction courses in their major applied music field for graduation. In addition, they should complete courses in both instrumental and vocal techniques if their emphasis is in Music education.

Students preparing for the Virginia State College Professional Certificate are required by the Virginia Board of Education to qualify in general as indicated in the Education section of this catalog. Upgraded secondary specific endorsement requirements effective July 1, 1968 may be met if Theory 201 is begun in the sophomore year and Applied Music Instruction is begun in the Freshman year.

SPECIAL CONCENTRATION PROGRAMS IN PREPARATION FOR THE VIRGINIA COLLEGIATE PROFESSIONAL CERTIFICATE IN MUSIC

Applied Music Ensemble)	2-3
Music 327—Choral Conducting			
or			1-2
Music 328—Instrumental Conducting			j
Music 321—Music in the Elementary School			
or			} 3
Music 322—Music in the Secondary School			j
Music 323, 324, 325—Instrumental Techniques			
or			
2 Semesters of Instrumental Techniques			6-7
and			
Music 326—Choral Material and Procedures			
			17-18

RECOMMENDED PROGRAMS FOR THE FIRST TWO YEARS

FRESHMAN YEAR

English	6
Foreign Language	6-8
Physics 103, 104 is recommended	8
Music 201, 202—Theory I	6
Applied Music Instruction	_
Physical Education	
	30-32
SOPHOMORE YEAR	
English 203, 204	6
Foreign Language	
History 101, 102	_
Music 301, 302—Theory II	
Music 323, 324—Instrumental Techniques	
Applied Music Instruction (Piano)	_
Physical Education	
Applied Music Ensemble	•
	34

Special concentration programs are available in Theory and Music History and Literature.

DESCRIPTION OF COURSES

THEORY

101. Introduction to Theory. Fall and Spring (2) Mr. Stewart.

Fundamental terms and concepts of music, the elements of notation, scales and tone systems. May not be included in music concentration. This course does not automatically enroll a student in Applied Music Ensemble; i.e., band, choir, et cetera. Students will be placed in sections according to their background.

102. Introduction to Form and Style. Spring (2) Mr. Stewart.

The underlying principles of musical structure. May not be included in music concentration.

*201-202. Theory I. Fall and Spring (3,3) Mr. Stewart.

Review of theory fundamentals; elementary harmony; the uses of triads, seventh chords and non-chord tones are learned through exercises, diction, ear training and keyboard harmony.

301-302. Theory II. Fall and Spring (3,3) Mr. Stewart. Prerequisite: Music 201-202.

Advanced harmony, dealing with simple and extended alteration, secondary dominants, and advanced modulation. Second semester, application of harmonic techniques to elementary composition.

401-402. Form and Analysis. Fall and Spring (2,2). Prerequisite: Music 301-302.

The structural processes and forms of music, studied through analysis of examples of various periods and styles.

403, 404. Orchestration and Choral Arranging. Fall and Spring (2,2) Mr. Stewart and Mr. Truesdell. Prerequisite: Music 301.

Fall, orchestration; Spring, choral arranging. (Not offered 1972-73.)

405, 406. Counterpoint. *Fall and Spring* (2,2) Mr. Truesdell and Mr. Stewart. *Prerequisite: Music 301.*

Fall, counterpoint in the 16th century style of the motet, the madrigal and the Mass. Spring, counterpoint in the style of J. S. Bach. (Not offered 1972-73.)

150. Freshman Seminar. Fall and Spring (3,3) Staff.

This course will vary from semester to semester. It may satisfy an Area I requirement, but may not be counted toward an Area I sequence, nor a concentration in Music.

211, 212. Introduction to Music. *Fall and Spring* (3,3) Mr. Paledes. A section of this course will be offered as a Freshman Seminar.

This course is designed to meet the needs of students interested in music, without regard to previous training and experience. It is not open to juniors or seniors concentrating in Music. The course traces the development of the art of music through the various historical periods, and familiarizes the student with the more important composers and their works. A synopsis of style, form, and theory is included.

*311, 312. History. Fall and Spring (3,3) Mr. Truesdell. Prerequisite: Music 201-202.

Fall, Ancient Greeks to 1800; Spring, 1800 to present. Includes readings, reports, notated and recorded examples of all periods of western cultures.

313. Great Composers. Fall (2) Mr. Truesdell.

Major composers and works representative of various styles will be studied. The course is conducted on an intermediate level, and is not open to Music concentrators.

314. The Symphony. *Spring* (2) Mr. Truesdell.

A study of representative symphonic works of various points; their style, form and orchestral setting. The course is conducted on an intermediate level, and is not open to Music concentrators.

315, 316. Opera. Fall and Spring (2,2) Mr. Truesdell.

Plots, music, background of selected masterpieces from the standard operatic repetoire. Fall: Italian *bel canto* and French Grand Opera. Spring: German Romantic Opera, Wagner, Strauss, Nationaists, and Modern developments. Not open to Music concentrators. (Not offered 1972-73.)

*318. American Musical Theatre. Spring (3) Messrs. Paledes and Scammon.

A study of American operetta and musical comedy from the Colonial period to the present. Representative works from various periods will be studied with respect to their musical and dramatic styles. Students will be required to prepare excerpts for class performance and analysis. Same as Theatre 330.

†413, 414. Problems in Music. Fall or Spring (2-3,2-3) Mr. Truesdell and staff. For seniors only.

Directed independent study resulting in a thesis.

MUSIC EDUCATION

320. Music for Elementary School Teachers. Fall and Spring (3,3) Mr. Varner.

A course designed for prospective general teachers in the elementary grades. Not open to Music concentrators.

*321. Music in the Elementary School. Fall (3) Mr. Varner.

Problems confronting the teacher of music in the elementary schools, and methods of instruction appropriate to the several grades. Primarily for Music concentrators.

*322. Music in the Secondary School. Spring (3) Mr. Varner.

Materials and methods of instruction on the secondary school level.

*323, 324, 325. Instrumental Techniques, Materials and Methods. Fall or Spring (2,2,2) Mr. Varner.

Three courses are assigned, one each to woodwinds, brass, and strings; the development of performance skills and a study of the materials and methods of teaching. Percussion is correlated throughout.

*326. Choral Materials and Procedures. Fall (3) Mr. Fehr. Prerequisite: Music 201-202.

A study of vocal and choral techniques and teaching methods. (Not offered 1972-73.)

*327, 328. Choral and Instrumental Conducting. Fall and Spring (1-2,1-2) Mr. Fehr and Mr. Varner. Prerequisite: Music 201-202.

Study and practice in the techniques of the baton; problems of organizing musical groups. (Not offered 1972-73.)

†521, 522. Graduate Seminar in Music. Fall or Spring (2-3,2-3) Staff.

Directed independent study resulting in a thesis.

APPLIED MUSIC

The College offers individual and group instruction in Voice, and individual instruction in Piano, Organ, Strings, Woodwinds, and Brass.

A maximum of 10 credits may be earned through instruction courses, and a maximum of four credits may be earned through participation in musical organizations. Prerequisite or corequisite for credit in Applied Music is Music 101 or 201-202, etc. No credit in Applied Music is given until this requirement is met. Approval of the Head of the Department is required for all courses and ensembles in Applied Music except auditors in band, orchestra and choral organizations.

Applied Music as an elective earns one credit. Advanced students meeting exceptional standards and requirements may earn two credits.

Individual instruction in Applied Music is given on the basis of 30-minute private lessons once or twice weekly. Minimum preparation for each 30-minute lesson per week is one hour of daily practice.

Schedule of Fees Per Semester

One hour of group instruction per week	\$ 38.00
One 30-minute lesson per week	94.00
Two 30-minute individual lessons per week	135.00

Ensemble

*131.	Band	Fall	and	Spring	(1,1)	Mr.	Varner
*132.	Choir	Fall	and	Spring	(1,1)	Mr.	Fehr
*133.	Chorus	Fall	and	Spring	(1,1)	Mr.	Fehr
*134.	Orchestra	Fall	and.	Spring	(1.1)	Mr.	Stewar

CLASS INSTRUCTION

†*Voice Class. Mr. Fehr.

141. I, II. Elementary Voice Class. Fall and Spring (1,1)

241. I, II. Intermediate Voice Class. Fall and Spring (1,1)

INDIVIDUAL INSTRUCTION

†*Voice 051-451. Mr. Roark.

151. I, II. Elementary Voice. Fall and Spring (1,1)

251. I, II, III, IV. Intermediate Voice. Fall and Spring (1,1,1,1)

351. I, II, III, IV. Senior Voice. Fall and Spring (1,1,1,1)

451. I, II, III, IV. Advanced Voice. Fall and Spring (1-2, 1-2, 1-2, 1-2)

†*Piano 052-452. Mrs. Knorr, Mrs. Lendvay, Mr. Paledes and Mr. Truesdell.

152. I, II. Elementary Piano. Fall and Spring (1,1)

252. I, II, III, IV. Intermediate Piano. Fall and Spring (1,1,1,1)

352. I, II. Senior Piano. Fall and Spring (1,1)

452. I, II, III, IV. Advanced Piano. Fall and Spring (1-2,1-2,1-2,1-2)

- †*Organ 153-453. Mr. Darling and Mrs. Koller.
 - 153. I, II. Elementary Organ. Fall and Spring (1,1)
 - 253. I, II, III, IV. Intermediate Organ. Fall and Spring (1,1,1,1)
 - 353. I, II. Senior Organ. Fall and Spring (1,1)
 - 453. I, II, III, IV. Advanced Organ. Fall and Spring (1-2,1-2,1-2,1-2)
- †*Strings 154-454. Mr. Stewart.
 - 154. I, II. Elementary Strings. Fall and Spring (1,1)
 - 254. I, II, III, IV. Intermediate Strings. Fall and Spring (1,1,1,1)
 - 354. I, II. Senior Strings. Fall and Spring (1,1)
 - 454. I, II, III, IV. Advanced Strings. Fall and Spring (1-2,1-2,1-2)
- †*Woodwinds 155-455. Mr. Varner.
 - 155. I, II. Elementary Woodwinds. Fall and Spring (1,1)
 - 255. I, II, III, IV. Intermediate Woodwinds. Fall and Spring (1,1,1,1)
 - 355. I, II. Senior Woodwinds. Fall and Spring (1,1)
 - 455. I, II, III, IV. Advanced Woodwinds. Fall and Spring (1-2,1-2,1-2,1-2)
- †*Brass 156-456. Staff.
 - 156. I, II. Elementary Brass. Fall and Spring (1,1)
 - 256. I, II, III, IV. Intermediate Brass. Fall and Spring (1,1,1,1)
 - 356. I, II. Senior Brass. Fall and Spring (1,1)
 - 456. I, II, III, IV. Advanced Brass. Fall and Spring (1-2,1-2,1-2,1-2)
- †*Percussion 157-457. Staff.
 - 157. I, II. Elementary Percussion. Fall and Spring (1,1)
 - 257. I, II, III, IV. Intermediate Percussion. Fall and Spring (1,1,1,1)
 - 357. I, II. Senior Percussion. Fall and Spring (1,1)
 - 457. I, II, III, IV. Advanced Percussion. Fall and Spring (1,1,1,1)

Philosophy

PROFESSOR MACDONALD (Chairman of the Department). Associate Professors Cobb, Foster, Hearn, Jones, McLane, and Reed. Assistant Professor Fuchs. Lecturer King.

REQUIREMENTS FOR CONCENTRATION

A student whose aim is to use a concentration in Philosophy as a basis for a liberal education may take the minimum concentration requirement of twenty-seven hours in the Department. Those who wish to prepare for graduate study in philosophy or a related discipline will normally take more than this required minimum. No specific set of courses is prescribed for all concentrators. However, every concentrator should have some acquaintance with the history of philosophy, various types of philosophy, alternative philosophical methodologies, and with advanced analysis of particular philosophers and contemporary philosophical issues. A program for each concentrator will be developed through consultation with members of the philosophy faculty.

AREA REQUIREMENTS

Students satisfying area requirements in Philosophy normally take either 101-102 or 201-202. Upon the approval of the department, other courses may be substituted when appropriate to the background and interests of particular students. Logic may not be taken to satisfy area requirements.

Those students electing Philosophy to satisfy the area requirement of two additional courses beyond the introductory level will select appropriate advanced courses approved by the department.

FRESHMAN SEMINARS

The Department of Philosophy offers Freshman Seminars on a variety of topics.

DESCRIPTION OF COURSES

101-102. Introduction to Philosophy. Fall and Spring (3,3) Staff. One may not receive credit for both Philosophy 101-102 and 201-202.

An introduction to the problems, methods and scope of philosophical enquiry. Topics to be studied are selected on the basis of the relevance to other aspects of liberal education as well as for their intrinsic philosophical interest. Examples of such topics are free will and scientific determinism, moral relativism and skepticism, the question of God's existence, the nature and aims of education, and problems of man and society such as civil disobedience and violence.

150. Freshman Seminar. Fall and Spring (3) Staff.

201-202. The History of Philosophy. Fall and Spring (3,3) Mr. MacDonald and Staff. One may not receive credit for both Philosophy 101-102 and 201-202.

An historical introduction to philosophy based on readings from the works of various philosophers such as Plato, Aristotle, Lucretius, and Aquinas during the first semester; Descartes, Hume, Kant, Mill, and Russell during the second semester.

301. Introduction to Logic. Fall and Spring (3) Mr. Foster, Mr. McLane, and Mrs. Reed.

An introduction to principles of valid reasoning with special emphasis on modern symbolic techniques and their uses.

303. Ethics. Fall and Spring (3) Mr. Fuchs and Mr. Jones.

A philosophical examination of problems and theories about such topics as good and evil, right and wrong, pleasure, choice, duty, happiness, and the good life.

304. Aesthetics. Spring (3) Mr. Foster.

A philosophical analysis of the nature of aesthetic experience and its objects. Special attention will be given to apprehension and judgment, concepts and criteria, and meaning and truth in the arts.

305. Social and Political Ideologies. Spring (3) Mr. Jones.

A critical examination of the ideologies of democracy, capitalism, communism, socialism, and fascism, with some attention given to both the history of their development and their function in contemporary domestic and international affairs.

306. Philosophical Problems. Fall (3) Staff. Prerequisites: Two courses in Philosophy.

A study of such major philosophical problems as those concerning knowledge and reality, morality and conduct, and art and beauty. Special attention will be devoted to philosophical method. (Not offered 1971-72.)

311. Philosophy of Religion. Spring (3) Mr. Cobb.

A philosophical investigation of the nature of religious experience, activity, and belief. The course will also include an examination of such concepts as those of God, freedom, and immortality.

313. Introduction to the Philosophy of Science. Fall (3) Mr. McLane.

A philosophical examination of the nature, validity, and significance of scientific inquiry. Special attention will be given to the descriptive, explanatory, and predictive aspects of scientific theories. (Not offered 1971-72.)

321. Existentialism. Fall (3) Mr. Cobb.

An examination of important aspects of existentialism with readings in such philosophers as Kierkegaard, Nietzsche, Jaspers, and Sartre. Some attention will also be given to the impact of these philosophical movements upon contemporary literature, religious thought, and psychology.

322. American Philosophy. Fall (3) Mrs. Reed. Prerequisites: Two courses in Philosophy or consent of the instructor.

A study of readings selected from the works of such philosophers as Edwards, Jefferson, Peirce, Royce, James, Dewey, Santayana, and Whitehead.

323. Eastern Philosophy. Spring (3) Mr. Foster. Prerequisites: Two courses in Philosophy or consent of the instructor.

An introduction to the major systems of thought of India, China, and Japan through examination of some of the fundamental philosophical concepts of Hinduism, Jainism, Buddhism, Confucianism, and Taoism.

331. Greek Philosophy. Fall (3) Mr. Fuchs. Prerequisites: Two courses in Philosophy or consent of the instructor.

A critical examination of representative Greek philosophers with special emphasis on Plato and Aristotle.

332. Medieval Philosophy. Fall (3) Mrs. Reed. Prerequisites: Two courses in Philosophy or consent of the instructor.

Analysis of selected writings of major medieval philosophers such as Augustine, Erigena, Anselm, Maimonides, Bonaventure, Aquinas, Scotus, and Occam.

333. Continental Rationalism. Fall (3) Mr. Foster. Prerequisites: Two courses in Philosophy or consent of the instructor.

A critical examination of representative rationalist systems with special emphasis on Descartes, Spinoza, and Leibniz. (Not offered 1971-72.)

334. British Empiricism. Spring (3) Mr. MacDonald. Prerequisites: Two courses in Philosophy or consent of the instructor.

A critical examination of representative theories of empiricism with special emphasis on Locke, Berkeley, and Hume.

335. Early Twentieth Century Philosophy. Fall (3) Mrs. Reed. Prerequisites: Two courses in Philosophy or consent of the instructor.

An examination of the developments of philosophical thought from approximately 1900 to 1930 (e.g. idealism, realism, pragmatism, voluntarism, logical atomism) with selected readings from the works of representative philosophers of the period. (Not offered 1971-72.)

336. Contemporary Philosophy. Spring (3) Mrs. Reed. Prerequisites: Two courses in Philosophy or consent of the instructor.

An examination of major philosophical writing since 1930.

*401. Theory of Knowledge. Fall (3) Mrs. Reed.

An examination of philosophical theories about such topics as the nature and criteria of truth, perception and cognition, meaning, knowledge, and the validation of belief.

*402. Metaphysics. Spring (3) Mrs. Reed.

The study of such concepts as those of substance and essence, time and eternity, matter and consciousness, truth, cause, and being. Critical examination of theories

about such topics as mechanism and teleology, man and his place in nature, and the relation of the mind to the body.

*403. Advanced Ethics. Spring (3) Mr. Fuchs.

A study of selected normative and critical problems in moral philosophy.

404. Advanced Logic. Spring (3) Mr. McLane. Prerequisite: Philosophy 301 or consent of the instructor.

Systematic investigation of topics in logic drawn from such areas as system construction, proof theory, modal and deontic logic, and abstract set theory.

405. Phenomenology. *Spring* (3) Mr. Cobb. *Prerequisite: Philosophy 321* and three other courses in philosophy.

A study of phenomenology as a philosophical method. Some attention will be given to the historical development of the method but the emphasis will be on dealing with particular philosophical problems. Readings will include some literary and psychological materials as well as philosophical writings by Husserl, Heidegger, and Merleau-Ponty, especially the latter.

*413 Philosophy of Mind. Fall (3) Mr. McLane.

Critical analysis of theories concerning the nature of consciousness, the concept of person and personal identity, and some theories of the relation of the mind to the body. Attention will be devoted to the philosophical relevance of such sciences as psychology, physiology, and cybernetics.

*414. Philosophy of Social Science. Spring (3) Mr. Jones.

An examination of theories and methods in the social sciences. A comparison with the natural sciences through consideration of such philosophical topics as the nature of explanation, concept formation, confirmation of theories, the relation of facts to values, the nature of human action, freedom and determinism, and moral issues involved in applied social science.

416. Philosophical Problems in Physical Science. Spring (3) Mr. McKnight.¹ Prerequisite: Either Philosophy 301 and Physics 101, 102 or consent of the instructor.

A study of philosophical problems arising in classical physics and relativity and quantum theory. Special attention will be given to such topics as the status of observables, measurement, time, and elementary particles. The philosophical implications of contemporary physics will be discussed. (Same as Physics 416.)

*421. The Philosophy of Kant. Fall (3) Mr. MacDonald.

Intensive study of *The Critique of Pure Reason* and selections from other writings of Kant.

*422. Great Philosophers. Fall or Spring (3) Mr. Cobb and Mr. Hearn.

A systematic study of the thought of a great philosopher such as Plato, Aris-

¹ Professor of Physics.

totle, Spinoza, Hume, or Wittgenstein. The particular philosopher to be studied is designated each time the course is offered.

†431, 432. Senior Seminar in Philosophy. Fall and Spring (3,3) Staff.

A meeting of the Faculty of the Department with advanced students for the purpose of philosophical investigation. An important modern philosophical work is examined each semester and students are required to write and present papers for critical discussion.

441, 442. Advanced Reading in Philosophy. Fall and Spring (3,3) Staff. Prerequisites: Eight courses in philosophy and consent of the Department.

Individually supervised readings on special topics for advanced students.

HONORS STUDY

†495, 496. Honors. Fall and Spring (3,3) Staff.

Students admitted to Honors Study in Philosophy will be enrolled in this course during both semesters of their senior year. The course comprises (a) supervised reading in the field of the student's major interest; (b) supervised reading of works selected from a general bibliography of philosophy; (c) satisfactory completion of a comprehensive examination covering Logic, History of Philosophy, Ethics or Aesthetics, and Metaphysics or Theory of Knowledge; (d) the preparation and presentation by May 1 of an Honors Essay.

Physical Education for Men

PROFESSOR H. SMITH (Chairman of the Department), Associate Professors Agee, Hooker, Jensen, Jones and Linkenauger. Assistant Professor Derringe. Instructors Albert, Berryhill, Besnier, Haynie, Randolph, and Underwood. College Physicians DeBord and Brown.

REQUIREMENTS FOR CONCENTRATION

The minimum number of semester credits required for concentration in Physical Education is 34 and must include Physical Education 203, 308, 310, 313, 408, 411, 413, 494, Biology 307 and 308 and any two of the following 316, 317, 412. All courses except Physical Education 203 and 208 of the concentration program should be taken during the student's junior and senior years.

Students may elect to take either the B.S. degree or the A.B. degree.

Those students desiring to meet the professional requirements for certification in the State of Virginia should plan their programs with the head of the Department of Physical Education. Students enrolling in professional courses to meet certification requirements in other states should first consult a member of the faculty of the School of Education.

Students who meet professional requirements for certification in the State of Virginia are qualified for a number of positions: teaching Physical Education in a consolidated school or a large secondary school; teaching Physical Education and a second subject in a small secondary school; coaching and directing athletics combined with the teaching of another subject or subjects; supervising physical education and recreation programs; summer camp work; and preparation for graduate study in Physical Education, Physical Therapy or Corrective Therapy.

PROGRAM FOR ADVANCED STUDY

Students who are qualified for advanced study and who have satisfied admission requirements may register for the Master of Arts Degree with concentration in Physical Education or for the degree of Master of Education with emphasis in Education and Physical Education as a related field. A minimum residence period of one regular session or of four summer sessions of nine weeks is required.

In addition to the general requirements for admission established by the College, students desiring to enter upon graduate study in Physical Education should present satisfactory undergraduate work in Physical Education or related fields, from a recognized institution.

A minimum of 15 credits of the total 24 submitted for the Master of Arts degree must be in the department of concentration. Other courses should be selected from related departments such as Education, Sociology and Biology, or selected from additional courses in Physical Education. For special requirements of the M.Ed. degree, and write to the Dean of the School of Education.

DESCRIPTION OF COURSES

Students concentrating in other departments may elect physical education courses according to interest or to prepare for teaching combinations, recreation work, or other related fields.

101, 102, 201, 202. Required Physical Education. *Fall and Spring* (1,1) Staff.

There shall be no physical education requirement for students who demonstrate skills in four activities, one of which must be swimming. Other students are to complete as many as four semesters in a program of physical activity, depending on the number of skills on which they have earned exemptions. These requirements may be satisfied by electing an activity course offered by the Men's Department of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. Before completing four semesters, students are to demonstrate survival swimming skills unless medically excused.

Students with physical disabilities will be assigned to a special adapted sports class on the recommendation of the College physician. Instruction is given in the following individual and group activities: advanced swimming and life saving, beginning swimming, badminton, basketball, fencing, golf, gymnastics, handball. lacrosse, soccer, scuba diving, tennis, track and field, volleyball, and wrestling.

203. Physical Education and Recreation for the Classroom Teacher. Fall (3) Mr. Agee.

Special emphasis given the role of motivation, skill transfer and retention as applied to physical education. Course primarily designed to emphasize fundamentals of basic skills, physical fitness testing, and individual and team activities on the elementary school level.

208. First Aid and Safety. Spring (3) Mr. Jensen.

Instruction focuses on the Standard and Advanced Red Cross First Aid. Safety projects, problems, and the organization of materials, methods and techniques are developed. *Lectures and laboratories four hours*.

308. Applied Anatomy and Kinesiology. Fall (3) Mr. Linkenauger. Prerequisite: Biol. 308.

A study of the principles of human motion. Anatomical and mechanical analysis of individual skills in physical education activities is stressed.

309. Driver Education. Fall or Spring (3) Mr. Jones.

Critical analysis of traffic accidents attitude factors, and essential knowledges are developed. The laboratory phase will include the use of psychophysical and psychological tests and actual practice-teaching behind the wheel. *Lectures and laboratories four hours*.

310. History and Principles of Physical Education. Fall (3) Mr. Jensen.

¹ While this course may be taken to fulfill the requirement for Virginia State certification in Driver Education, it may not be counted toward meeting requirements for the A.B. or B.S. degree.

This course is an orientation in the history and principles of physical education, health, and recreation. Lectures and laboratories four hours.

313. Advanced Gymnastics and Wrestling. Spring (2) Mr. Haynie and Mr. Besnier.

A detailed study and development of demonstrable skills with considerable emphasis on exhibition planning and coaching techniques in the course design. Lectures and laboratories four hours.

316. Advanced Baseball, Track and Field. Spring (2) Mr. Jones and Mr. Randolph.

This course is structured so as to give special attention to the approved scientific techniques of coaching and the students' acquisition of advanced demonstrable skills. Lectures and laboratories four hours.

317. Theory and Practice of Coaching Soccer and Lacrosse. Fall (2) Mr. Albert.

A detailed study of the advanced basic skill techniques and coaching methods utilized in Soccer and Lacrosse.

318. Sports Officiating. Fall and Spring (2) Mr. Jones.

A survey and critical analysis of the rules and officiating techniques of team and individual events. A minimum of twelve contact hours of supervised intramural officiating is required. Lectures and laboratories four hours.

321. Foundations of Health Education. Fall and Spring (3) Mr. Smith.

An advanced course which develops instructional competencies with special emphasis on the historical as well as the most recent health facts, principles and concepts. A survey is made of the many Virginia State Dept. publications and other resource materials.

400. Senior Seminar. As required (3) Staff.

Discussion by the faculty and advanced students of contemporary problems in physical education. Students will write and present papers for critical discussion. Guest lecturers will occasionally present seminars.

408. Organization and Administration of Health and Physical Education Programs. Spring (3) Mr. Smith.

This course provides counsel on organizational and administrative policies and procedures for physical education, health, and intramural programs in the public schools.

409. Organization and Administration of Community Recreation Programs, *Fall* (2) Mr. Haynie.

This course is concerned with the administrative and legal aspects of local, state and federal recreation programs.

411. Therapeutic Physical Education. *Fall* (3) Mr. Smith and Mr. Linkenauger. *Prerequisite: Biology 308*.

Basic concepts examined in this course include physical examination procedures with an emphasis on normal and faulty postural conditions. Special attention is give to remedial and adaptive exercises and activities. Physical and corrective therapy techniques and procedures are studied.

412. Advanced Football and Basketball. Fall or Spring (2) Mr. Agee.

A detailed study and development of advanced demonstrable skills with special emphasis on coaching techniques is the purpose of this course. Lecture and laboratories four hours.

413. Advanced Tennis and Golf. Fall or Spring (2) Mr. Agee.

This is a course to further develop the students' competencies and demonstrable skills with emphasis on coaching procedures and tournament management. Lecture and laboratories four hours.

414. Advanced Swimming and Rhythmics. As Required (2) Mr. Haynie.

This course is an intensive study of the coaching methods and teaching techniques plus the acquisition of advanced demonstrable skills in both areas of activity. Lectures and laboratories four hours.

415, 416. Student Teaching. Fall and Spring (3) Mr. Smith. Prerequisites: Senior Standing, twenty-four credits in Education and Physical Education.

This course involves daily observation and teaching in a public school system with weekly conferences, special assignments and reports. Lectures and laboratory five hours.

492. Physiology Activity. Spring (3) Mr. Linkenauger. Prerequisite: Biol. 307, 308.

An in depth study is made of the physiological aspects of exercise, fatigue, coordination, training and growth; functional tests with normal and abnormal subjects; investigations and independent readings.

493. Philosophy and Literature in Health, Physical Education and Recreation. As Required (3) Mr. Jones.

Extensive readings, discussions and evaluations of historical and current philosophies and practices are made. Educational implications of problems facing the separate fields are analyzed.

494. Test and Measurements in Health, Physical Education and Recreation. Fall (3) Mr. Jones.

Evaluation techniques are studied with emphasis placed on tests of physical fitness, sports ability, body mechanics, growth, and written health tests. Statistical informance theories are analyzed.

502. Problems and Research in Health, Physical Education and Recreation. As required (3) Mr. Smith. Prerequisite: Physical Education 494 or the equivalent.

This course includes the application of various methods and statistics as most

commonly used in physical education research. Limited research studies and problems are conducted in the three areas.

503. Seminar in Advanced Techniques in Sports. As Required (3) Staff.

Seminar is devoted to the designing of offensive and defensive plays, types of strategy, instruction of players, and crowd control problems.

506. Administration and Supervision in Physical Education, Health and Recreation. As Required (3) Mr. Smith.

Study is given to administrative management and supervision in all three areas, modification of programs to fit the facilities available, curriculum planning, grading procedures and techniques of instruction.

508. Health Coordination. As Required (3) Staff.

A comprehensive study is made of the factors of school and community activities related to health. Relationships of the service, instructional, protective, and guidance phases in the health program are identified.

Physical Education for Women

Associate Professors West (Chairman of the Department), Crowe, Roby and Sherman. Assistant Professors Archer, Jackson, Lambert, and Tomlinson. College Physicians DeBord and Brown.

The physical education requirement will be waived for students who demonstrate advanced skills in four activities, one of which must be swimming. Opportunities to demonstrate advanced ability are offered in the fall and spring of each academic year. Other students are to complete as many as four semesters in a program of physical activity, depending on the number of skills on which they have earned exemptions. These requirements may be satisfied by electing an activity course offered by the Department of Physical Education, by participating for a season in a varsity sport, or by passing one of the skills tests offered. Before completing four semesters, students are to demonstrate survival swimming skills unless medically excused.

DESCRIPTION OF COURSES

101. Team Sports. Fall and Spring (1) Miss Archer, Miss Crowe, Mrs. Jackson.

Seasonal activities: hockey, basketball, volleyball, and lacrosse. Two double periods weekly.

102. Dance. Fall and Spring (1) Miss Roby, and Mrs. Sherman.

Fundamentals of modern dance. Two double periods.

†145, 146. Adapted Activities. Fall and Spring (1) Mrs. West.

Upon recommendation of the head of the Department and the College physicians, these courses may be substituted for regular classes.

†195, 196. Selected Sports and Dance Activities. Fall and Spring (1) Mrs. West.

Upon recommendation of the head of the Department, these courses (designed for proficient students) may be substituted for regular classes.

201. Swimming. Fall and Spring (1) Miss Crowe, Mrs. Jackson, Miss Lambert, Miss Tomlinson, and Mrs. West.

Safety skills, standard swimming strokes, diving, and life saving techniques are offered. Two double periods.

202. Individual Sports. Fall and Spring (1) Miss Archer, Miss Crowe, Mrs. Jackson, Miss Lambert, Miss Tomlinson, and Mrs. West.

Seasonal activities: archery, badminton, body mechanics, bowling,¹ canoeing, fencing, golf, gymnastics, riding,¹ techniques of self defense,¹ and tennis. *Two double periods*.

¹ Fees are charged for these courses.

ELECTIVE COURSES IN PHYSICAL EDUCATION FOR WOMEN

The following courses are intended to supplement the four semesters of required physical education and may be elected for academic credit. These courses are open to juniors and seniors, and may be elected concurrently with a required class by sophomores. Freshmen may elect these courses in addition to required work with permission of the head of the Department.

302. Waterfront Leadership. Spring (2) Mrs. West and Miss Lambert. Prerequisite: Senior Life Saving.

Especially designed for students who wish to do camp and playground work and includes Instructor's courses of the American Red Cross. Four class and laboratory hours.

303, 304. Coaching and Officiating of Selected Sports. Fall and Spring (2) Staff. Prerequisite: Proficiency in two of the following sports: hockey, basketball, tennis, swimming, lacrosse, and volleyball.

Theory and practice in the coaching and officiating of two seasonal sports each semester. Women's National Officials Rating Tests will be given. *Four class and laboratory hours*.

307. Physical Education for the Elementary Classroom Teacher, K-6. *Spring* (2) Crowe.

Includes methods and materials for teaching Physical Education to elementary school children. Emphasis is on basic understanding of movement patterns which underlie all skills, body awareness, and motor development. Laboratory hours include teaching physical education classes in elementary schools. *Four class and laboratory hours*.

ELECTIVE COURSES IN DANCE

These courses supplement the required courses in Physical Education and may be elected for academic credit by men and women with the consent of the instructor.

DESCRIPTION OF COURSES

TECHNIQUE. These courses are designed to develop an understanding of movement as an art form and means of expression, beginning with movement fundamentals and continuing through longer and more complex phases with emphasis on performance. Students will be assigned to the course for which they are qualified on the basis of previous background and demonstrated ability. A maximum of 12 credit hours may be earned in Technique.

- 111, 112. Elementary Modern Dance Technique. Fall and Spring (2,2) Staff. Four studio hours.
- **211, 212. Intermediate Modern Dance Technique.** *Fall and Spring* (2,2) Staff. *Four studio hours.*

- **311, 312.** Advanced Modern Dance Technique. Fall and Spring (2,2) Staff. Four studio hours.
- 220. Introduction to Contemporary Dance. Fall (2) Mrs. Sherman.

An introduction to the field of Modern Dance with emphasis on the stylistic approach and aesthetic of the artists who have contributed to its development in the twentieth century. Two class hours.

305, 306. Dance Composition. *Fall and Spring* (2,2) Miss Roby. *Prerequisite: Physical Education 102.*

First Semester: An introduction to the elements, materials and structure of a dance composition. Four class and laboratory hours.

Second Semester: Composition of dance etudes; form and style related to other modern arts. Four class and laboratory hours.

406. Problems in Dance. *Spring* (3) Miss Roby and Mrs. Sherman.

Directed study in a special area for the advanced student arranged on an individual basis. The course would include a substantial choreographic project or a research project for a student with special interest and ability in a related field, such as music, theatre, or fine arts.

WOMEN'S SPORTS

Recreational activities are conducted under the auspices of the Women's Recreation Association, with executive power assigned to a committee of faculty and students. (See page 55.)

Physics

Professors Winter (Chairman of the Department), Crownfield, Funsten, McKnight, Siegel, and Welsh. Adjunct Professor Lawrence. Associate Professors Champion, Crawford, Doverspike, Eckhause, Gross, Kane, Kossler, Perdrisat, Remler, Schone, Sher, Smith and von Baeyer. Assistant Professors Andersen, Bloomberg, Delos, Gary, Soest, Weisz, and Yam. Lecturer Jolly. Research Associates Amato, Chen, Heiman, Lunke, and Miller. Research Engineer Hummel.

REQUIREMENTS FOR CONCENTRATION

A minimum of 30 credits, including not more than eight of 100-level courses, is required for concentration in physics. Either Physics 451-452 or Physics 495-496 must be completed.

Since a physics concentration is used as preparation for a variety of activities, the only requirements are those listed above. The following statements are advice appropriate to the typical student:

Physics 101-102 and calculus should be taken during the freshman year. Physics 201-202 and 251-252 should be included in the sophomore year. Those planning graduate work or employment in physics and related areas should take 301-302, 311, 312, 401, and selections from 351-352, 402, 411-412, 475, 481, and 482. Those seeking a less detailed preparation should include 301 but consider taking 206 rather than 401, and 304 rather than 311.

Introductory courses and courses on special topics are offered as Freshman Seminars.

DESCRIPTION OF COURSES

101-102. General Physics. *Fall and Spring* (4,4) Mr. Doverspike, Mr. Gary, and Staff.

This course is designed to develop an understanding of the fundamental concepts of physics. Emphasis is placed upon Newtonian mechanics, electricity and magnetism and modern physics; current research and applications are discussed. Designed for students who are considering concentrating in one of the sciences or mathematics. Concurrent registration in calculus is recommended. Some sections are available as Freshman Seminars. Honors sections are open to students that have a good preparation for and a strong interest in physics. Lectures, discussions, and laboratory six and one-half hours.

103-104. Elementary Physics. Fall and Spring (4,4) Mr. von Baeyer and Staff.

A beginning course of college physics satisfying the area requirements in the field of science. Designed for the non-science concentrator, this course examines how science shapes the world and our vision of the world. Mechanics, light, and electricity, including lasers, electronic instruments, and other devices in the first semester. Introduction to relativity, quantum phenomena, and new ideas about

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atoms and particles in the second semester. Lectures, discussions, and laboratory six and one-half hours.

150. Freshman Seminar.

165. Topics in Physics Relating to Environmental Problems. Fall (3). Mr. Champion. Prerequisite: Physics 101-102 or 103-104.

An investigation of the physical phenomena associated with current environmental problems; descriptive and quantitative analyses of such problems as energy generation and usage, atmospheric pollution, water pollution and transportation.

175. Development of Physics and Cosmology. Fall (3). Mr. Gross.

The evolution of ideas on the structure of the universe with particular attention to the scientific revolutions from the time of the Renaissance to Einstein. Critical study of the role of imagination, observation, and prediction in the development of physical theories. Examination of the interplay between physical theories and contemporary society.

176. Descriptive Astronomy. Spring (3) Mr. Bloomberg and Mr. Smith.

Descriptive study of the solar system; theories of the origin of the solar system. Star classification; descriptive studies of star clusters and galaxies. Recent developments such as quasars, pulsars, neutrino astronomy and radio astronomy. Current theories of the origin of the universe.

201-202. Intermediate Physics. *Fall and Spring* (3,3) Mr. Schone and Mr. Winter. *Prerequisite: two semesters each in physics and calculus. Corequisite: Physics* 251-252.

Waves and optics first semester. Relativity and the development of quantum ideas second semester.

203. Modern Physics. Fall (4) Mr. Crawford. Prerequisite: two semesters of physics and one semester of calculus.

Review of classical physics; relativity, introduction to quantum physics, recent developments in physics. This course is designed for prospective secondary school teachers and may not count for concentration in physics. Lectures and laboratory six hours.

204. Optics and Other Wave Phenomena. Fall (4) Mr. Crawford. Prerequisite: two semesters of physics and one semester of calculus.

Applications of Snell's law; optical instruments, photography, interference phenomena, lasers. This course is designed for prospective secondary school teachers and may not count for concentration in physics. Lectures and laboratory six hours.

205. Intermediate Mechanics. Fall (4) Mr. Crawford. Prerequisite: two semesters of physics and one semester of calculus.

Includes a study of kinematics, dynamics, central forces and planetary motion, linear harmonic oscillator, conservation principles of energy and momentum at an intermediate level. The laboratory which accompanies this course stresses

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basic principles of mechanics including linear and angular motion and the harmonic oscillator. Meets certification requirements for prospective teachers. Satisfies area sequential course requirements. May not be counted for concentration in physics by students who have had physics 301. Lectures and laboratory six hours.

206. Electricity and Electrical Circuits. Spring (4) Mr. Crawford. Prerequisite: two semesters of physics and one semester of calculus.

Principles of electricity and magnetism, circuits, electronics and transistors. The laboratory stresses applications of fundamental principles of electricity and electronics. Emphasis is given to the proper use of electrical instruments. Meets certification requirements for prospective teachers. Satisfies area sequential course requirements. May not be counted for concentration in physics by students who have had Physics 401. Lectures and laboratory six hours.

251-252. Intermediate Experimental Physics. *Fall and Spring* (1,1) Mr. Kossler and Staff. *Corequisite: Physics* 201-202.

Experiments in atomic, nuclear and solid state physics, geometrical and physical optics, interference and diffraction phenomena and atomic spectra. *Laboratory three hours*.

301-302. Classical Mechanics. Fall and Spring (3,3) Mr. Bloomberg. Prerequisite: Physics 201-202.

Plane mechanics, mechanics in three dimensions, Lagrangian and Hamiltonian mechanics, special relativity and the mechanics of continuous media.

304. Contemporary Physics. Spring (3). Mr. Kane. Prerequisite: Physics 201-202 or consent of instructor.

A study of the principles and concepts relevant to problems selected from the fields of solid state, atomic physics, nuclear, elementary particle and plasma physics.

311. Introductory Quantum Physics. Fall (3) Mr. Eckhause. Prerequisite: Physics 201-202.

Atomic, nuclear and solid state physics.

312. Thermodynamics and Introduction to Statistical Mechanics. *Spring* (3) Mr. Doverspike. *Prerequisite: Physics* 201-202.

The principles of thermodynamics, kinetic theory of gases, and elementary statistical mechanics.

351-352. Experimental Physics. Fall and Spring (1,1) Mr. Funsten and Staff.

Introduction to the techniques of experimental research. Circuit theory, electronics, thermometry, vacuum techniques and photon and particle detection. Design and construction of experiments. Evaluation and analysis of experimental results. *Laboratory three hours*.

401-402. Electricity and Magnetism. Fall and Spring (3,3) Mr. Soest. Prerequisite: Physics 301.

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Development of the theory of electricity and magnetism from fundamental principles. Maxwell's equation, electromagnetic waves and radiation.

411-412. Quantum Physics. Fall and Spring (3,3) Mr. Welsh. Prerequisite: Physics 301, 302 and 312.

The quantum theory in its application to atomic, solid state and nuclear physics.

416. Philosophical Problems in Physical Science. Spring (3) Mr. McKnight. Prerequisites: Two courses in physics or philosophy.

A study of philosophical problems arising in experiment and theory in classical physics, quantum theory and relativity as the status of observables, measurements, time and elementary particles. Philosophical implications of contemporary physics. (Same as Philosophy 416.)

451-452. Physics Research. *Fall and Spring* (1-3, 1-3) Mr. Schone and Staff.

Independent study consisting of both bibliographic and experimental research.

475. Introduction to Mathematical Physics. Fall (3) Mr. McKnight.

Vector analysis, complex variables, matrices, series solutions of differential equations, orthogonal functions and partial differential equations. This course does not carry undergraduate credit in Physics.

481, 482. Topics in Physics. Fall and Spring (to be arranged) Staff.

495-496. Honors. *Fall and Spring* (3,3) Staff.

Students admitted to Honors Study in Physics will be enrolled in this course during both semesters of their senior year. Each candidate will be responsible for (a) reading and discussion of a selected list of books in some specific area of the literature of physics; (b) the preparation and presentation by May 1 of an Honors Essay based on his own research or his part of a major research project; (c) satisfactory completion of a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. For degree requirements, and a full description of graduate courses in physics, write to the department chairman for a Graduate Catalog. Attention is also called to the Graduate Program in Applied Science on p. 186.

Psychology

Professors Williams (Chairman of the Department), Harcum, Johnston, Derks and Lambert. Associate Professors Friedman, McKenna, Chambers, Bauer and Shean. Assistant Professors Shaver, Ventis, and Payne. Lecturers Ashbury, Hammack, and Cilluffo. Lab Technician Daw.

REQUIREMENTS FOR CONCENTRATION

Degree of Bachelor of Arts: 30 credits in Psychology including 301 and 331.

Degree of Bachelor of Science: Concentration requirements for the B.S. are those listed above for the A.B. but in addition the student must meet the distribution requirements for the B.S. degree (pages 74-76). The preferred science is Biology.

Normal Program Recommended for Concentration: Psychology 201 and/or 202, 331, 301, 302.

DESCRIPTION OF COURSES

The Department of Psychology offers Freshman Seminars each semester on special topics on psychology.

- **150.** Freshman Seminar. Fall and Spring (3,3) Staff.
- **201, 202. Principles of Psychology.** Fall and Spring (3,3) Mr. Derks, Mr. McKenna, and staff.
- 201 is a study of basic principles of behavior: sensation and perception, conditioning and learning, drives and motivation, response mechanisms and cognitive processes.
- 202 is an examination of basic concepts in abnormal, developmental, personality and social psychology: normality and deviation, behavior modification, identification, stages of development, personality traits, motives, attitudes and social perceptions. Two class hours, two laboratory-discussion hours, or three hours lecture.
- *211, 212. Sophomore Research Seminar. Fall and Spring (1,1) Mr. Shaver, Mr. Bauer.

Taken with 201, 202 by selected students interested in extra study and independent scholarship. Enrollment by invitation only. Hours to be arranged.

301. Experimental Psychology: Methods. Fall and Spring (4,4) Mr. Friedman, Mr. Harcum, and staff. Prerequisite: Psychology 331.

An introduction to experimental research with emphasis upon the methods by which psychological data are obtained. Three class hours, three laboratory hours.

302. Experimental Psychology: Topics. Fall and Spring (4,4) Staff. Prerequisite: Psychology 301.

Application of the experimental methods in the various topical areas of psychology, depending on the semester, such topics as behavior modification, child

development, cognition, learning, perception, personality, and social psychology will be offered. Three class hours, three laboratory hours.

303. Industrial and Applied Psychology. Fall (3) Mr. Williams.

Psychology applied to industrial and military organizations. Uses of psychological tests in selecting and classifying personnel; methods of efficient work; the design of machines and communication systems for human use; industrial training.

310. History of Psychology. Spring (3) Mr. Williams.

From Aristotle to 1940 with special emphasis on the 19th and early 20th century. The rise of the major schools of thought: Structuralism, Functionalism, Gestalt psychology, Psychoanalysis and Behaviorism.

331. Statistics, Measurement, and Testing. Fall and Spring (3) Mr. Williams, Mr. Friedman.

An introduction to statistics, both descriptive and inferential, including non-parametric tests of significance and simple correlation. Basic principles of psychophysics, psychometric functions and test theory. A brief introduction to hypothesis testing and decision theory. Two class hours, two laboratory hours.

ADVANCED COURSES

Prerequisites: 201 and/or permission of instructor.

403. Systematic Psychology: Theories of Learning and Perception. Spring (3) Mr. Derks.

A survey of contemporary theory in the field with emphasis on its empirical foundations and future possibilities.

404. Physiological Psychology. Fall (3) Mrs. Bauer.

Physiological basis of behavior with emphasis on mechanisms in perception, learning, emotion and motivation. Two class hours, two laboratory hours.

405. Abnormal Psychology. Fall, Spring (3) Mr. Payne.

A survey of behavior pathology including the neuroses and psychoses and their relationship to current conceptions of normal personality.

407. Motivation and Emotion. Spring (3) Mr. Johnston.

Theories and facts of motivation and emotion and consideration of their differences, if any.

410. Systematic Psychology: Theories of Personality. Fall (3) Mr. McKenna.

A survey of contemporary theory in the field with emphasis on its empirical foundations and future possibilities.

412, 413. Advanced General Psychology. *Fall and Spring* (3,3) Mr. McKenna, Mr. Derks.

An intensive review of the general principles of psychology as taught in 201, 202. Two class hours, two laboratory hours.

414. Educational Psychology. Fall (3) Mr. Ventis.

Individual differences in learning, growth and development in the context of psychological methods and educational aims.

416. Social Psychology. Fall (3) Mr. Shaver.

The effect of social context on the behavior of the individual, with emphasis on prominent theories and research. Topics include social perception, attitude organization and change, social comparison, the social consequences of individual motives, interpersonal influence, and the application of social psychology to contemporary social issues.

417. Developmental Psychology. Spring (3) Mr. Ventis.

A study of human development from birth to maturity, with emphasis on physiological, social, emotional and intellectual processes. Both factual and theoretical approaches are considered.

- *419. Topics in Psychology. Fall and Spring (TBA)¹ Staff.
- *420. Seminar. Fall and Spring (2) Staff.
- †421. Research. Fall and Spring (TBA) Staff.
- **431. Quantitative Methods.** *Spring* (3) Mrs. Bauer.

An advanced course in statistics and experimental design. Two class hours, two laboratory hours. (Same as Psychology 531.)

†495-496. Honors. Fall and Spring (3,3) Staff.

A student admitted to Honors Study is eligible for an award of Honors in Psychology on graduation.

Honors is independent study comprising (a) supervised reading in the field of the student's major interest, primarily in the original literature; (b) the preparation and presentation by May 1 of an Honors Essay based on the student's own research; and (c) satisfactory completion of a comprehensive examination in the field of the student's major interest.

GRADUATE PROGRAM

The department offers the degrees of Master of Arts and Doctor of Philosophy. For degree requirements, and a full description of graduate courses in psychology, write to the department chairman.

¹ To be arranged.

Religion

Associate Professor Livingston (Chairman of the Department), Assistant Professors Holmes and Van Horn, Lecturer Scholnick, ¹

DESCRIPTION OF COURSES

201. Introduction to Religion. Fall or Spring (3) Mr. Livingston.

Religion as a dimension of human experience and culture. The beginnings of religion. Theories of the nature and function of religion. Types of religious phenomena: the sacred or holy; deity; myth, ritual and sacrament; law, faith and mystical insight. Relationship of religion to philosophy, science and art.

211. History of Religion in South Asia. Fall (3) Mr. Van Horn.

Introduction to the religious factors in the civilizations of the South Asian subcontinent from the earliest times to the present. The history, literature, and practices of the Indus Valley Civilization, Vedism, Brahmanism, Jainism, Buddhism, Hinduism, Islam, and the current Hindu Renaissance.

212. History of Religion in East Asia. Spring (3) Mr. Van Horn.

Introduction to the religious systems of China and Japan, including the literatures, histories, thought patterns, and practices of the major schools of Confucianism, Taoism, Buddhism, and Shintoism.

219. History and Religion of Ancient Israel. Fall (3) Mr. Holmes, Mrs. Scholnick.

A literary and historical study of the major features of Hebrew-Jewish religion in the Hebrew scriptures and intertestamental periods, with special attention to Israel's relation to the cultures and religions of the Ancient Near East.

220. Christian Origins. Spring (3) Mr. Holmes.

A study of the beginnings of Christianity in the New Testament. Includes analysis of the relation of primitive Christianity to Judaism and Hellenistic culture, the formation of the Gospels, the life and teachings of Jesus, the Pauline writings, and the emergence of post-apostolic Christianity.

305. History of Christianity: The Classical Period. Fall (3) Mr. Holmes.

A history of Christian thought and institutions from the second through the sixteenth century, with emphasis on the beginnings of Catholic doctrine, the Christological and Trinitarian controversies, Monasticism, Augustine, Early and High Scholasticism, and the beginnings of the Reformation.

306. History of Christianity: The Modern Period. Spring (3) Mr. Livingston.

A study of the influence of secular ideas and events on Christian thought and institutions since the seventeenth century. Special attention is given to such movements as the rise of modern science, Rationalism, Romanticism, Liberalism, Darwinism, Totalitarianism, Existentialism and Ecumenism.

¹ On The Jewish Community Council of Newport News Lectureship in Religion.

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309, 310. History of Religion in America. Fall and Spring (3) Mr. Holmes.

A study of religion in the United States from the age of discovery to the present, with attention not only to the development and beliefs of Christian churches and sects but also to the interaction between religion and American social, intellectual, and cultural history. First semester: colonial period to Civil War. Second semester: 1865 to present.

312. Judaism in America. Spring (3) Mrs. Scholnick.

A study of the arrival of the Jews in America, the development of the religion in the new world, and the contemporary Jewish experience in America. The course will include a study of leading Jewish thinkers and writers.

315. The Protestant and Catholic Reformations. Fall (3) Mr. Holmes.

A study of the personalities, movements, teachings, and religious consequences of the Protestant and Catholic Reformations of the sixteenth century. Includes Luther, Calvin, Zwingli, the Protestant Radicals, Erasmus, Loyola, the Council of Trent, and the English Reformation. (Not offered 1972-73.)

319. Buddhism in South Asia. Fall (3) Mr. Van Horn.

An intensive study of the Buddhist origins and development in India and the history of the South Asian schools. The classical literature, practices, and beliefs of Buddhism in South Asia, with emphasis on the Theravada school of present Ceylon, Burma, Thailand, etc.

320. Buddhism in East Asia. Spring (3) Mr. Van Horn.

A study of the assimilation of Buddhism in China and Japan. Emphasis upon the literatures, practices, and philosophical statements of Mahayana Buddhism in its various Chinese and Japanese forms.

340. Modern Hinduism. Spring (3) Mr. Van Horn.

A brief survey of the essentials of classical Hindu traditions, followed by an extensive examination of the interactions between these traditions and "Westernization" or "Modernization." Emphasis will be placed upon Ram Mohan Roy, Dayananda, Ramakrishna, Tagore, Gandhi, Radhakrishnan, and to "Universal Hinduism." (Not offered 1972-73.)

425. Contemporary Religious Thought. Fall (3) Mr. Livingston.

Central themes in twentieth century religious thought examined through the works of several significant thinkers, such as Buber, Tillich, Marcel, Niebuhr, Teilhard de Chardin, Bultmann, D. T. Suzuki.

Sociology

PROFESSORS RHYNE (Chairman of the Department), EDMONDS, KERNODLE AND VANFOSSEN. ASSOCIATE PROFESSORS FAIA, ITO, LIGUORI, AND THEMO. ASSISTANT PROFESSORS BECKHOUSE, CHRIST, GUENTHER, AND KERNER.

REQUIREMENTS FOR CONCENTRATION

Concentration in Sociology requires a minimum of thirty semester credits, of which at least twenty-four credits must be in courses numbered above 300, and must include: 201, 303, 307, and 401-402 or 495-496.

DESCRIPTION OF COURSES

201. Principles of Sociology. Fall and Spring (3) Staff.

An introduction to the study of human society with emphasis on the basic principles of sociology. Principal concepts developed include society, culture, status and role, socialization and personality, stratification, social organization and institutions, and social change. This course, in providing an integrated set of general principles, is the appropriate introduction to further study in sociology.

201H. Principles of Sociology. Fall and Spring (3) Staff.

This is a special section of Principles of Sociology 201 designed for Honors students.

211. Continuity and Change in Modern Society. Spring (3) Staff.

An examination of modern institutions with emphasis on continuity, conflict, and change. Focus will be on basic patterns of social structure principal points of stress and conflict within and between institutions, and major social and ideological forces making for change. (Not offered in 1971-72.)

220. Social Problems. Fall or Spring (3) Staff.

A survey of social problems such as poverty, urban conditions, race relations, delinquency and crime, and other recurring problems of major concern to contemporary society. The analytic perspective is sociological, stressing concepts drawn from substantive sub-fields of the discipline.

303. Sociological Theory. Fall (3) Mr. Kerner.

Examination of the historical foundations of sociological theory and the establishment of a basis for rational, objective analysis of recent social phenomena. The contributions of 19th century theorists are traced to provide a framework for the study of contemporary concepts in the field.

307. Introduction to Social Statistics. Fall or Spring (3) Mr. Faia.

The applications and limitations of statistics are presented as means of providing tools whereby statistical methods may be recognized, interpreted, and applied in sociological research. Included are considerations of averages, measures of dispersion and variance, simple linear correlation and sampling theory. Emphasis

on the logic of procedures, not on mathematical derivations. Three class hours, two laboratory hours.

311. Values and Social Control. Fall (3) Mr. Vanfossen. Prerequisite: Sociology 201 or consent of instructor.

An analysis of the nature and types of human values and the universal techniques of social control as these relate to individual and group conformity and deviation, and social stability and change. (Not offered 1971-72.)

313. Social Stratification. Fall (3) Miss Themo.

Examination of the principal structural units of society. Central focus is on the concepts of differentiation, hierarchy, class, caste, and economic, prestige, and power orders. Comparative analysis, historical and cross-cultural, is followed by consideration of class structure in the United States.

319. Population Problems. Spring (3) Staff.

A consideration of the manner in which populations grow and decline and the effects of such change on society. Emphasis is on theories of population growth, distribution, births, deaths, internal and international migration, bio-social and sociological composition. Included are discussions of the sources of data and techniques and methods of analysis, as well as contemporary population problems. (Not offered 1971-72.)

321. Sociology of Social Welfare. Fall (3) Staff.

A study of the history and problems of welfare institutions and their functions in human society. Attention is given to contemporary welfare institutions as they relate to social structure and the other major institutions within it. The place of contemporary social work practice will be considered in this context. (Not offered 1971-72.)

322. Criminology. Fall (3) Mr. Guenther.

An analysis of trends in criminal behavior; emphasis is on theory and research in causation and treatment. Attention is given to criminal careers, to police and correctional systems as control agencies, and to criminal law as an instrument of moral condemnation, retribution and deterrence.

326. Racial and Cultural Minorities. Fall or Spring (3) Mr. Liquori.

Distinctions of race and ethnicity in American society and their impact on intergroup relationships and public policy. Attention is given to the nature of racialist ideology, to prejudice and discrimination, and to an analysis of "the culture of poverty". Considered also are less frequently examined and non-problem minority groups.

328. Black-White Relationships in American Society. Fall or Spring (3) Mr. Ito.

Demographic and institutional variations among black and white Americans examined in a context of ideological as well as structural change; consequences of racial prejudice and discrimination for black personality and social structure. The Negro heritage in its relationship to the development of black consciousness is also analyzed.

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330. Sociology of Mental Illenss. Spring (3) Mr. Kernodle. Prerequisite: Sociology 201 or consent of instructor.

A study of sociological aspects of mental illness. The social and cultural sources of mental illness, types of mental disorders and their distribution within the social structure, and social factors in the treatment of mental illness will be scrutinized. Consideration of the mental hospital as a social system.

332. Marriage and the Family. Fall (3) Mr. Kernodle.

Analysis of the social relationships among people in courtship, marriage and family situations. Interrelations of family institutions and other parts of social structures. Intensive study of American family structure and relevant examples drawn from other cultures.

334. Sociology of Religion. Spring (3) Mr. Edmonds, Miss Themo.

Conceptions of the supernatural in examination of religious beliefs and practices; development of religious groups and institutions; relation of religion to social structure and social change.

335. Sociology of Education. Spring (3) Mr. Ito.

The school as a social institution, as a bureaucratic organization, and in a context of change. Attention is given to the differential impact of social class, family, race, and residence on educational opportunity. Current problems in higher education are considered.

349. Human Geography. Fall (3) Mr. Rhyne.

A study of the adjustment of human societies to their physical environment. Emphasis is on the spatial distribution of human population, cultural forms, and social types. Examination of social and cultural bases of environmental pollution and its control.

350. The Sociology of Small Groups. Spring (3) Mr. Beckhouse. Prerequisite: Sociology 201, or Psychology 201, or consent of instructor.

Introduction to theory and research of small group analysis. The structural properties and processes of small groups, theoretical perspectives used to explain social interaction within the small group context, interpersonal influence, role differentiation, behavioral tactics, and social control within groups are examined.

401-402. Social Research. Fall and Spring (3,3) Staff. Prerequisites: Soc. 201, 307.

404. History of Social Thought. Spring (3) Mr. Christ.

A survey of the major strands in social thought in the West and the influence of these on the founding and development of sociology as a separate discipline.

406. Socialization and Society. Spring (3) Mr. Beckhouse.

Analysis of theoretical and empirical issues relevant to socialization. Emphasis is upon the generic process by which individuals become members of society, with special consideration on the impact of socio-economic class, race, and family structure on socialization. Specific examination of socialization beyond childhood is also offered.

408. Intermediate Social Statistics. Spring (3) Mr. Ito. Prerequisite: Soc. 307 or equivalent. Sociology 401 recommended.

A brief review of the logic underlying inductive statistics and tests of significance of single variables followed by tests of significance involving two or more variables. Parametric and non-parametric measures of relationship between two or more variables will also be considered. (Not offered in 1971-72.)

410. Deviant Behavior. Spring (3) Mr. Guenther.

Analysis of behavior which violates institutionalized expectations, yet is not necessarily "pathological" or illegal: college cheating, homosexuality, nudism, drug and alcohol abuse, and suicide, for example. Focus is on the internalization of norms and values, sanctioning and stigmatization, and the development of deviant careers.

411. Mass Society and Commitment. Fall (3) Mr. Vanfossen.

A study of communication, the mass media, and popular culture as these relate to the overall style of life and the structure of modern society. Attention is given to public opinion and changing social values; factors of power, authority, and dissent; personal and social freedom, commitment, and responsibility; and the broader issue of social cohesion and conflict in a heterogeneous society.

413. Urban Sociology. Fall (3) Staff.

The emergence and structure of the city in historical and cross cultural perspective, with special attention to the phenomena of urbanization and urbanism in the United States. Consideration of urban structure from both ecological and social perspectives; analysis of change in urban structure; selected problems associated with urban growth and life. (Not offered in 1971-72.)

416. Social Movements. Spring (3) Mr. Rhyne.

A study of the social and cultural characteristics of contemporary social movements such as liberalism, democracy, socialism, communism, fascism. A critical evaluation is made of the philosophies, social foundations, and organizations of important movements. Emphasis on the interplay of these three factors.

431. Industrial Sociology. Spring (3) Mr. Kerner. Prerequisite: nine hours of sociology courses including Soc. 201.

A sociological and social psychological assessment of complex industrial organizations including a survey of the development of organizational analysis. Individual, group, and system levels of analysis are presented, culminating with a consideration of organizational adaptation for effective utilization of human resources.

433. The Structure of Power. Fall (3) Mr. Rhyne.

The organization of power and authority within the social order. Comparison drawn between different power structures in terms of differences in the social order. An investigation of the writings of some of the major theorists (some combination from Marx, Mosca, Lenin, Pareto, Michels, or Sorel and contemporary authors) on social and political power is undertaken. (Not offered in 1971-72.)

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438. Social Psychology of Human Groups. Spring (3) Mr. Edmonds.

Examination of the social sources of individual experience and behavior with particular emphasis upon relations within and between human groups. Among the topics considered are human learning, human thought and language, personality development, socialization, social persuasion, crowd behavior, fads, fashions, and social movements.

†440. Special Problems in Sociology. Fall or Spring (3) For sociology majors only and upon consent of the Head of the Department.

442. The Sociology of Developing Countries. Fall (3) Miss Themo.

Examination of processes inherent in cultural, political, and economic development within both emergent and established "under-developed" nations. Focus is on institutional structures and attitude systems supporting modernization of traditional social orders. Main substantive materials are drawn from contemporary Latin America.

*480. Readings in Sociology. Fall or Spring (3) Staff.

Independent readings directed toward conceptual topics in sociology such as the history of social thought, theory, social structure, stratification, power. The student will read materials in his area of interest in consultation with an appropriate member of the staff. Before registering for the course, the student must obtain written permission from the instructor who will direct the readings.

*481. Readings in Sociology. Fall or Spring (3) Staff.

Independent readings focusing on substantive areas within sociology such as crime, delinquency, racial and ethnic groups, family, mental illness, urban problems. The student will read materials in his area of interest in consultation with an appropriate member of the staff. Before registering for the course, the student must obtain written permission from the instructor who will direct the readings.

HONORS STUDY

495-496. Honors. *Fall and Spring* (3,3) Staff.

Sociology honors candidates enroll for both semesters of their senior year. Requirements include: auditing Sociology 401 with responsibility for all assignments except examinations; preparation, under supervision of a thesis advisor, and presentation by May 1 of an honors essay or project; and satisfactory performance in a comprehensive oral examination which focuses on the honors thesis or project.

GRADUATE PROGRAM

The department offers the degree of Master of Arts. For degree requirements, and a full description of graduate courses in sociology, write to the department chairman for a Graduate Catalog.

Theatre and Speech

Professors Scammon (Chairman of the Department) and Haak. Associate Professors Bledsoe Catron, and Sherman. Assistant Professors Brown and Micken. Instructors Kremer, Pence.

The Department of Theatre and Speech offers a concentration in Theatre.

REQUIREMENTS FOR CONCENTRATION IN THEATRE

A student must take Theatre 204, 205, either 305 or 306, 315, 316, 403, 404 and either 317 or 407. A student must complete six additional hours in departmental offerings in Theatre.

THEATRE

204. Introduction to Theatre Arts. Fall or Spring (3) Mr. Catron, Mr. Scammon.

A survey of the arts of the theatre, plus study of dramatic literature of major periods of theatrical history. Theories and techniques of play-writing, acting and directing will be studied then put into actual practice during laboratory sessions. Two class hours, two laboratory hours.

205. Introduction to Technical Production. Fall or Spring (3) Mr. Haak, Mr. Bledsoe, Mr. Sherman.

Study and practice of technical components of the theatre: costuming, lighting, sound, makeup, properties, stage rigging and scene design, construction, and painting. Two class hours, two laboratory hours.

†206. Makeup. Spring (3) Mr. Sherman.

Study and practice of makeup in relation to light, shade and color; character analysis study, showing the effects of heredity, temperament, environment, health and age. Students in this course assist in William and Mary Theatre productions. Six studio hours. (Not offered 1972-73.)

301, 302. Acting. Fall and Spring (3,3) Mr. Scammon.

Critical analysis and appreciation of acting developed by lectures, reading and discussion, and presentation of individual and group scenes.

305, 306. Stagecraft. Fall and Spring (3,3) Mr. Haak.

Study and practice in technical problems; working drawings, construction, scene painting, rigging, and handling of scenery, properties, backstage organization, and sound effects. Students in this course act as technicians for William and Mary Theatre productions. *Workshop six hours*.

309-310. Design for the Theatre. Fall and Spring (3,3) Mr. Bledsoe.

Basic analysis of the visual elements of theatrical production. Lectures and demonstrations on significant historical periods. Emphasis is placed on water-

color sketching, scene painting, drafting. Students act as technicians for William and Mary Theatre productions. Studio six hours.

312. History and Appreciation of the Motion Picture. Fall or Spring (2) Mr. Haak.

Survey of the historical development of the film in Europe and America, and of organization, management, and mechanical process in production. In laboratory, historic and current films illustrating lecture material are shown. Two class hours; two laboratory hours.

313. Introduction to Stage Lighting. Fall (3) Mr. Sherman.

Methods and materials of stage lighting, with emphasis on the study of the functions and qualities of light, instruments, control equipment, and procedure. Students will assist with William and Mary Theatre productions. Two class hours; two laboratory hours.

314. Stage Lighting Design. Spring (3) Mr. Sherman. Prerequisite: Theatre 313 or consent of instructor.

Theory and technique of stage lighting design, with emphasis on artistic considerations and its value to the director as an interpretative tool. Students will assist with William and Mary Theatre productions. Two class hours; two laboratory hours.

315. History of the Classical and Medieval Theatre. Fall (3) Mr. Scammon.

Study of the forms of the drama, development of the theatre and techniques of the stage of the Greek, Roman and Medieval Ages.

316. History of the Renaissance, Eighteenth and Nineteenth Century Theatre. Spring (3) Mr. Scammon.

Study of the forms of the drama, development of the theatre and techniques of the stage in the Renaissance, Eighteenth and Nineteenth centuries.

317-318. Playwriting. Fall and Spring (3,3) Mr. Catron.

For the student with interest and ability in creative writing, this course serves as an introduction to writing stage plays. During the year students are to write a number of plays which are discussed informally in class. Discussions, lectures, and readings help the student find a dramaturgical form to express his ideas. Worthy scripts often receive a Lab Theatre production.

319, 320. Theatre Administration. Fall and Spring (3,3) Mr. Sherman.

The principles of management applied to the fields of theatre operations, production and performance, with emphasis given to promotion, box-office procedures and house management.

321-322. Costume Design for the Theatre. Fall and Spring (3,3) Mr. Bledsoe.

Lectures of historic period costume. Practice in sketching, construction, form, color and detail for stage costumes. Students serve as costumers for William and Mary productions. Advanced students may serve as designers for Theatre productions.

*Theatre 330. American Music Theatre. Spring (3) Mr. Paledes, Mr. Scammon.

A study of American operetta and musical comedy from the colonial period to the present. Representative works from various periods will be studied with respect to their musical and dramatic styles. Students will be required to prepare excerpts for class performance and analysis. Same as Music 318.

403-404. Seminar in Contemporary Drama. Fall and Spring (3,3) Mr. Catron.

Analysis of late nineteenth and twentieth century drama with special emphasis on forms and styles of the "modernism" movement. Lectures, discussion and research.

*407-408. Direction. Fall and Spring (3,3) Mr. Scammon.

Study and practice in the principles of choosing the play, casting, rehearsals, and performance. Special emphasis on direction of one-act plays. Two class hours; six laboratory hours.

409. Seminar in the Modern Theatre since 1950. Fall (3) Mr. Catron.

A study of the latest trends and movements in Theatre. The course places focus upon new concepts of theatre, new styles of theatrical organizations and new playwrights.

410. History of the American Theatre. Spring (3) Mr. Catron.

The history of the theatre in America from its beginnings in Williamsburg up to more recent times. Readings of plays and texts are designed to present the more significant developments in American theatre history.

*411. Independent Studies in Theatre. Fall or Spring Staff.

Independent study on a special problem for the advanced student, arranged on an individual basis with credit according to work done.

SPEECH

201. Public Speaking. Fall or Spring (3) Miss Kremer, Mr. Micken.

Understanding and application of the principles of public speaking. Analysis of speeches based on organization, content, and delivery.

202. Voice and Diction. Fall or Spring (3) Mrs. Brown.

Study of processes of oral speech, including development of speech in young children, physics of sound, physiological, psychological and social bases of speech and phonetics. Training in voice production, articulation, pronunciation and quality.

203. Oral Interpretation. Fall (3) Mrs. Brown.

Study of basic principles in techniques of oral interpretation. Use of body, voice, analysis of materials, reading and evaluations of prose and poetry. Three class hours, one laboratory hour.

204. Advanced Oral Interpretation. Spring (3) Mrs. Brown. Prerequisite: Speech 203 or consent of the instructor.

Continuation of Speech 203 with emphasis on presentation of several forms of literature. Three class hours, one laboratory hour.

301. Foundations of Broadcasting. Fall (3) Mr. Pence.

An examination of the history and evolution of broadcasting as it exists in the United States, with consideration of business, regulatory and social aspects as they relate to the contemporary system.

302. Beginning Broadcast Production. Spring (3) Mr. Pence. Prerequisite: Speech 301 or consent of the instructor.

Fundamentals of radio program production. Emphasis on production and methods and problems at the level of the local station. Laboratory work involves the application of program and production theory. Six hours studio.

308. Speech Composition and Briefing. Spring (3) Mr. Micken.

Study of the special techniques of speech construction as applied to advanced forms of public address, emphasizing structure, arrangement, and style. Special attention given to the application of the principles to persuasion and to argumentation.

309. Argumentation and Debate. Fall (3) Mr. Micken.

Training in the techniques and practices of argumentative speaking, study and analysis of debate propositions, preparation of the brief, research and selection of evidence, and practice in rebuttal and refutation. Lectures and class debating.

310 Principles of Group Discussion. Spring (3) Mr. Micken.

Study of logical and psychological foundations of discussion as a method of dealing with public questions, considering problems of adjustment, communication and collaborative action in small groups. Emphasis on principles, types and methods of discussion. Lectures and practice participation. (Not offered 1972-73.) (Alternates with Speech 308.)

401. Studio Operations: Directing for Television. Fall (3) Mr. Pence. Prerequisite: Speech 301 or 302 or consent of the instructor.

A study of theory and methods of television production and direction. Detailed examination of cameras, lights, audio, graphics, design and reponsibilities of studio and control room personnel. Six hours studio.

402. Television Writing and Production. Spring (3) Mr. Pence. Prerequisite: Speech 401.

A study of the theory and methods of writing, producing and directing for television with emphasis on limitations and responsibilities of the medium. Opportunity to supervise all aspects of television production. Six hours studio.

Graduate Program in Applied Science

Applied Science at the College of William and Mary is an inter-disciplinary graduate program which leads to a M.S. degree. Courses will be taught on the main campus and at the Virginia Associated Research Campus (VARC) in Newport News on a rotating basis so that students can methodically pursue a degree by taking most courses at the Research Campus.

The program is offered cooperatively by participating faculty from the departments of chemistry, mathematics, and physics and is intended for students who wish an education with a focus which differs from that of traditional departments. This difference may arise from a course sequence which is interdisciplinary or one which is more specialized than usual within a department. The Applied Science program is organized as follows:

I. Applied Mathematics and Computer Science Area

- A. Applied Mathematics Division
 - 1. Probability and Statistics Specialization
 - 2. Partial Differential Equations Specialization
 - 3. Ordinary Differential Equations Specialization

B. Computer Science Division

- 1. Computer Languages and Programming Systems Specialization
- 2. Numerical Analysis Specialization
- 3. Mathematical Programming and Simulation Specialization

II. Chemical Physics Area

- A. Atmospheric and Plasma Science Division
 - 1. Atmospheric Science Specialization
 - 2. Ion-Molecule Reaction Specialization
 - 3. Plasma Specialization

B. Liquids and Solids Division

- 1. Polymers Specialization
- 2. Crystalline Materials Preparation Specialization
- 3. Physics of Electronic Devices Specialization

School of Business Administration

PROFESSORS QUITTMEYER (Dean of the School of Business Administration), KING, QUINN, SANCETTA (Associate Dean for Graduate Studies, School of Business Administration), AND TRAYWICK (Director of the Bureau of Business Research). ASSOCIATE PROFESSORS DAFASHY, McCormick (Chairman of the Department of Accounting), O'Connell (Chairman of the Department of Management), Pearson, Stanley (Associate Dean for Undergraduate Studies, School of Business Administration), Vargo, and Woodward. Assistant Professors Baxley, Cole (Director of Conferences), Elgers, Gleysteen, Jones, Liddell, Maddocks, Smith, and Tarleton. Lecturers Marsh, McNairy, and Warren.

The School of Business Administration offers both an undergraduate program and a graduate program in Business Administration.

The undergraduate degree of Bachelor of Business Administration (B.B.A.) carries a choice among three subprograms, two in Accounting (one with a Certified Public Accountant [CPA] orientation and one without) and one in Management.

The graduate program leads to the degree of Master of Business Administration (M.B.A.).

The Bureau of Business Research of the School renders a service to the Virginia business community with its monthly publication, the Virginia Business Index Report, which reflects current business and economic activity in the Commonwealth. The Bureau also publishes monthly the Williamsburg Business Index Report. In addition, the Bureau from time to time publishes special research studies.

Further service to the business community is provided by the School through sponsorship of business conferences and projects.

Established in 1970, the School of Business Administration Sponsors, Inc., a private group with a board of directors of seventeen executives, lends advice and support to the school.

CURRICULUM REQUIREMENTS

BACHELOR OF BUSINESS ADMINISTRATION DEGREE

Prior to the student's junior year, only at which time, or later, admission to the School and its B.B.A. degree program may occur, the student must follow and complete the area requirements in Arts and Sciences consisting of a minimum of two semester courses in each of the three Arts and Sciences areas and two additional semester courses outside of Area II so that at least four semester courses outside of Area II form a logical sequence of introductory and advanced courses or a logical combination of courses on an interdisciplinary topic. Also, the student must complete whatever requirements in Arts and Sciences prevail in regard to English, Foreign Language, and Physical Education. However, the student should take, during the sophomore year, Business 201-202 (Principles of Accounting). No other Business Administration course may be taken before the student's junior year.

Prerequisites to admission to the School are six semester credits in mathematics and six semester credits in economics which also satisfy the area requirements in these subjects.

Before being graduated with the B.B.A. degree, the student must have completed a minimum of sixty semester credits in Arts and Sciences academic subjects.

Application for admission to the School of Business Administration B.B.A. degree program normally is filed by the student during the second semester of the sophomore year through the Dean of Men or the Dean of Women. Such application is then acted upon by the School's Undergraduate Committee on Admissions, whereupon the student is notified directly, with the Dean of Men and the Dean of Women apprised of admission actions taken. A student who has achieved junior standing, has completed all Arts and Sciences proficiency and area requirements, and has met the School of Business Administration prerequisite requirements, as above, will be fully admitted to the undergraduate program. A student who has deficiencies in any of the above, but whose class standing is such that a Business subprogram should be selected, will be considered for admission on a provisional status. Provisionally admitted students will be required to give priority to completion of any deficiencies.

The following requirements for completion of the B.B.A. degree, subject to the aforementioned curriculum requirements, will hold for each of the school's three subprograms. A 1.0 quality point average is required, counting all courses for which quality point grades are given, and a 1.0 quality point average in all Business Administration courses taken in which quality point grades are given.

Upon admission to the School of Business Administration all candidates for the B.B.A. degree shall come under the jurisdiction of the School's administration, including its Undergraduate Committee on Academic Status and Committee on Degrees, in all matters appropriately pertaining thereto.

In addition to the general requirement of a minimum of sixty semester credits in Arts and Sciences academic subjects, the Business Administration course requirements common to all three subprograms are as follows:

Subject	Semester Credits
Business 201-202 (Principles of Accounting)	. 6
Business 311 (Principles of Marketing)	
Business 316 (Behavioral Science and the Business Organization)	
Business 323 (Financial Management)	
Business 330 (Production Management)	. 3
Business 331 (Business Statistics)	. 3
Business 341 (Business Law I)	. 3
Business 416 (Business Policy)	. 3
Total	

For the subprogram in Accounting with a Certified Public Accountant (C.P.A.) orientation the requirements remaining for the B.B.A. degree are:

Subject	Semester Credits
Business 301-302 (Intermediate Accounting)	 6
Business 303 (Cost Accounting)	
Business 318 (Quantitative Analysis for Business Decisions)	 3

Business	342	(Business Law II)	3
Business	401	(Advanced Accounting)	3
Business	402	(Specialized Accounting Systems)	3
Business	404	(Auditing)	3
Business	405	(Federal Taxation)	3
Business	407	(Seminar in Accounting)	3
Business	409	(Accounting Systems and Data Processing)	3
Total	l		33

For the subprogram in Accounting not C.P.A. oriented the remaining requirements for the B.B.A. degree are:

Subject	Semester Credits
Business 301-302 (Intermediate Accounting)	6
Business 303 (Cost Accounting)	3
Business 401 (Advanced Accounting)	3
Business 405 (Federal Taxation)	3
Business 407 (Seminar in Accounting)	3
Business 409 (Accounting Systems and Data Processing)	3
Electives	12
'Total	33

For the subprogram in Management the remaining requirements for the B.B.A. degree are:

Subject	Semester Credits
Business 315 (Industrial Relations)	3
Business 318 (Quantitative Analysis for Business Decisions)	 3
Business 327 (Principles of Management)	3
Business 334 (Decision Theory)	3
Business 430 (Project in Business Research)	 3
Electives	 18
Total	33

ELECTIVE COURSES FOR NON-BUSINESS STUDENTS

A number of undergraduate students from other disciplines choose School of Business Administration courses as electives. The School of Business Administration welcomes such students, and in the interest of providing some breadth of subject matter particularly suggests the following courses, not necessarily in sequence. (Economics 201, 202 should precede taking Business 311 and Business 327.)

Business 311 (Principles of Marketing)

Business 316 (Behavioral Science and the Business Organization)

Business 327 (Principles of Management)

Business 341 (Business Law I)

Business 410 (Survey of Accounting)

It should be noted that no Business courses may be taken before the junior year, except Business 201-202 (Principles of Accounting), which may be taken in the sophomore year or later.

DEPARTMENTS OF INSTRUCTION

ACCOUNTING

Associate Professor McCormick (Chairman of the Department).

DESCRIPTION OF COURSES

(Junior or higher standing is required before admission to any of the following courses, except that sophomore or higher standing is required for admission to Business 201-202.)

201-202. Principles of Accounting. Fall and Spring (3,3) Staff.

A study of the elementary principles and procedures of individual proprietorship, partnership, and corporation accounting.

301-302. Intermediate Accounting. Fall and Spring (3,3) Mr. Quinn. Prerequisites: Bus. 201-202.

An analysis of balance sheets and profit and loss statements, together with the theory of valuation underlying the various accounts used in these statements.

303. Cost Accounting. Fall (3) Mr. Elgers. Prerequisites: Bus. 201-202.

The fundamentals of job order, process, and standard cost accounting and cost and profit analyses for decision-making purposes. Problems are used.

401. Advanced Accounting. Fall (3) Mr. Smith. Prerequisites: Bus. 301-302, or permission of the instructor.

A study of accounting for partnerships, consignments, installments, and receivers' accounts and the use of actuarial science.

402. Specialized Accounting Problems. Spring (3) Mr. McNairy. Prerequisites: Bus. 201-202, 301-302, and 401, or permission of the instructor.

A study of consolidated statements, foreign exchange, estate and fund accounting, together with an analysis of a number of problems given on recent C.P.A. examinations.

404. Auditing. Fall (3) Mr. McCormick. Prerequisites: Bus. 301-302.

Auditing procedures through the application of auditing principles; standards and ethics; audit reports.

405. Federal Taxation. Spring (3) Mr. Smith.

Structure of the federal income, social security, estate and gift tax bases; reconciliation of tax and accounting concepts; tax credits and tax computations.

407. Seminar in Accounting. Spring (3) Mr. Vargo. Prerequisites: Bus. 301-302.

Selected topics based upon controversial issues in accounting theory and practice.

409. Accounting Systems and Data Processing. Fall (3) Mr. Elgers. Prerequisites: Bus. 301-302.

The development, organization, design, analysis, and improvement of manual and automated business information systems. Emphasis is given to preparation of systems charts, flow charts, and computer programs.

410. Survey of Accounting. Spring (3) Mr. Dafashy.

A survey of the general field of accounting. Open to students of junior or higher standing not admitted to the School of Business Administration and not having taken Bus. 201 or 202.

MANAGEMENT

ASSOCIATE PROFESSOR O'CONNELL (Chairman of the Department).

DESCRIPTION OF COURSES

(Junior or higher standing is required before admission to any of the following courses.)

311. Principles of Marketing. Fall and Spring (3) Mr. Baxley and Mr. King. Prerequisites: Econ. 201, 202, or permission of the instructor.

A study of the role of marketing in business and the economy. Emphasis is on the examination of functions, institutions, and policies.

312. Marketing Problems. Spring (3) Mr. Baxley. Prerequisites: Econ. 201, 202, or permission of the instructor.

An examination of marketing problems encountered at all levels of distribution. Cases are used to emphasize analysis and decision-making.

315. Industrial Relations. Fall and Spring (3) Mr. Liddell.

A course to provide understanding of the principles, policies, and practices used to develop a sound industrial relations program. Topics included are job analysis, the employment process, employee development, wage and salary administration, labor relations, and union negotiation.

316. Behavioral Science and the Business Organization. Fall and Spring (3) Mr. Cole.

A study of human behavior, development, and motivation in the business organization. Attention is given to behavioral science research in administration.

318. Quantitative Analysis for Business Decisions. Fall and Spring (3) Mr. Dafashy, Mr. Elgers, and Mr. Vargo. Prerequisites: Six credits in mathematics, or permission of the instructor.

A course which integrates quantitative decision methods and the team approach to research problems of interest to management. Attention is given to probability theory, linear programming, and other quantitative approaches used in the analysis of business problems.

320. Advertising. Spring (3) Mr. Gleysteen. Prerequisites: Econ. 201, 202, or permission of the instructor.

A study of the relationship of demand stimulation to business management. Analysis of cases will emphasize the management of advertising campaigns, expenditures, and the integration of advertising efforts as part of the total marketing concept.

323. Financial Management. Fall and Spring (3) Mr. O'Connell and Mr. Pearson. Prerequisites: Bus. 201-202.

An introductory course covering current and long-term financing of the firm, capital budgeting, dividend policies, and business expansion.

327. Principles of Management. Fall and Spring (3) Mr. Marsh. Prerequisites: Econ. 201, 202, or permission of the instructor.

An introduction to the principles of management and their application to business. Emphasis is given to the development of a philosophy of management.

328. Management Use of Accounting Data. Fall and Spring (3) Staff. Prerequisites: Bus. 201-202 and 327, or taking Bus. 327 concurrently. (For Management subprogram students only.)

A course to enable more comprehensive analysis of decisions through accounting information. Emphasis is upon budgeting, cost concepts and applications.

329. Management of Small Business. Fall (3) Staff.

A study of the special problems, analysis, and decision-making involved in the management of small business.

330. Production Management. Spring (3) Mr. Maddocks and Mr. Tarleton.

A course designed to familiarize the student with the production phase of business activity. Emphasis is on developing ability to use analytical methods in the design and operation of production systems.

331. Business Statistics. Fall and Spring (3) Mr. Dafashy, Mr. Traywick and Mr. Woodward. Prerequisites: Six credits in mathematics, or permission of the instructor.

A study of the basic tools of statistical analysis used by the business administrator.

334. Decision Theory. Fall and Spring (3) Mr. Woodward.

Solution of business problems under conditions of uncertainty. Computer programming is taken up and used to assist in the solution of problems.

341. Business Law I. Fall and Spring (3) Mr. Jones.

Contracts, sales, negotiable instruments and agency with emphasis on the Uniform Commercial Code.

342. Business Law II. Spring (3) Mr. Jones. Prerequisite: Bus. 341.

Bailments and carriers, partnerships, corporations, unfair competition, bank-ruptcy, secured transactions, property, trusts, mortgages, and insurances.

411. Managerial Economics. Spring (3) Staff. Prerequisites: Econ. 201, 202.

A course to provide the student with an appreciation and basic understanding of the contributions of economics applied to the decision making process.

412. Business Logistics. Spring (3) Staff. Prerequisites: Bus. 311, 327, 330, and 331.

A course to provide the student with an introduction to the total cost concept at top management level of all aspects of the physical distribution function.

414. Investments. Spring (3) Staff. Prerequisites: Bus. 201-202 and 323.

An examination of the securities markets and the characteristics of the various types of securities for institutional and personal investment. Sources of investment information, approaches to investing, personal investment planning, and elements of analysis are introduced.

416. Business Policy. Fall and Spring (3) Mr. King and Mr. Maddocks. Prerequisite: Senior standing in the School of Business Administration, or permission of the instructor.

A course which deals with the establishment of company-wide objectives and the subordinate plans and controls to accomplish them. This course integrates and builds upon the business administration body of knowledge to develop decision-making ability at the policy-making level of administration.

430. Project in Business Research. Fall and Spring (3) Mr. Quittmeyer and Mr. Stanley. Prerequisite: Senior standing in the School of Business Administration, or permission of the instructor.

Independent research culminating in the preparation of a project on a topic of business interest.

GRADUATE PROGRAM

The School of Business Administration offers the degree of Master of Business Administration. For degree requirements and a full description of graduate work in Business Administration, write to the Associate Dean for Graduate Studies, School of Business Administration, for the School's Graduate Catalog.

SCHOOL OF EDUCATION

PROFESSORS BROOKS (Dean of the School of Education), CHESSER, CLEM, GALFO, HERRMANN, AND UNGER. ASSOCIATE PROFESSORS BULLOCK, GEOFFROY, GERBER, HANNY (Director of Student Teaching), JONES (Associate Dean of the School of Education), LAVACH, MAIDMENT, MILLS, O'SHELL, PRILLAMAN, AND SYKES. ASSISTANT PROFESSORS COWLES, DELAUNE, FLANAGAN, GULESIAN, JENKINS, NELSON, AND RIES.

UNDERGRADUATE CONCENTRATION

It is the philosophy of the School of Education that sound preparation for teaching must be based upon study in the Arts and Sciences and must include a carefully planned sequence of study in professional education supplemented by a supervised teaching experience.

PROCEDURES AND REQUIREMENTS FOR ADMISSION TO UNDERGRADUATE CONCENTRATION

Admission to Baccalaureate study at the College of William and Mary does not include admission to undergraduate concentration in the School of Education. Students who wish to concentrate in Education must meet the admissions requirements of the School of Education.

Application for admission to the School of Education is made during the second semester of the sophomore year. Applications are also accepted (1) from students who wish to change their concentrations from some other field to Education provided this is done prior to the second semester of the senior year, and (2) from transfer students who have been admitted to the College.

The criteria for admission to undergraduate concentration in the School of Education include the following:

- (1) An overall quality-point average of at least 1.0 (3.0 scale) earned in work completed to date.*
- (2) Personal qualities which are necessary for successful teaching as indicated in a personal interview. (Information about the interview is given to the student after he has filed application.)

Application forms and information regarding admissions procedures may be obtained from the Office of the Dean, School of Education.

UNDERGRADUATE PROGRAMS OF STUDY

Those students who are admitted to the School of Education concentrate in either elementary education or secondary education. The successful completion of either of these programs will insure the student of receiving the Collegiate Professional Certificate from the State Board of Education of the Commonwealth of Virginia.†

^{*} In addition to the 1.0 overall quality-point average, juniors and seniors who wish to change their concentrations from some other field to Education must have at the time of application a 1.5 quality-point average in their present fields of concentration.

[†] Courses at the 300 and 400 level in the School of Education may be taken only by students who have attained junior or senior status.

ELEMENTARY EDUCATION

The program of studies which leads to the Bachelor of Arts degree in Elementary Education has been developed upon the basis of the belief that the most effective preparation of elementary school teachers is a liberal arts education augmented with intensive study of the theory of education and with continuous opportunity for its application. Actual experience in working with children of elementary school ages is begun early in the program and culminates with full-time student teaching which is undertaken during the Professional Semester.

The Professional Semester for Elementary Education concentrators is completed during the Fall or Spring Semester of the senior year and includes, in addition to student teaching, Education 304—Teaching Reading in the Elementary School, Education E305—Methods and Materials in the Elementary School, and Education 404—Cultural Foundations of Education. During the Semester, the student is afforded opportunities for classroom observation and participation while attending classes on campus. The second half of the semester is spent in full-time student teaching supplemented with flexibly scheduled professional seminars.

The suggested program of studies described below not only satisfies the area and sequence requirements for the bachelor's degree, but also leads to certification for elementary school teaching in the Commonwealth of Virginia. In addition to the area and sequence requirements, students must meet the proficiency requirements specified in the General Catalogue of the College of William and Mary in Virginia.

AREA REQUIREMENTS

		Semester Credits
Area I.	English	6
	To be selected from:	
	English 201, 207, 303, 304, 305, 306, 403, 404.	
	(Note: One course must be in composition or writing. English 101 satis-	-
	fies this requirement but does not meet area requirements.)	
Area II.	Economics 201, 202	6
Area III.	Geology 101, 102, Physics 103, 104, or Mathematics 105, 106.	6-8
		18-20

SEQUENCE REQUIREMENT

Since eighteen semester hours in English are required for State certification, it is recommended that the sequence requirement be met by taking two additional courses selected from the following:

		Sem es ter Credits
English 451, 452, 462, 463	 ()	_6
		6

(Note: Elementary Education students must complete both area and sequence requirements prior to registering for the professional semester described below.)

ADDITIONAL REQUIREMENTS IN THE ARTS AND SCIENCES

	Semester Credits
Economics 201 or 202	3
(If not met as an area requirement.)	
English	3
Fine Arts 111, 112	6
History 201 or 202	3
Mathematics 105, 106	6
(If not met as an area requirement.)	
Music 320	3
Physical Education	6
(Must include Physical Education 321E.)	
Science	8
Geology 101, 102 or Physics 103, 104	
(If not met as an area requirement.)	
Additional Courses	9
(Selected from Anthropology, Economics, Government, History, Psychology,	
and Sociology.)	
	47

PROFESSIONAL EDUCATION

	Semester
	Credits
Education 301—Educational Psychology	3
Education 302—Human Growth and Development	3
Education 307—Teaching Mathematics in the Elementary School	3
Education 321—Children's Literature	3
Professional Semester	
Education 304—Teaching Reading in the Elementary School	3
Education E305—Methods and Materials in the Elementary School	3
Education E401A—Supervised Teaching—Primary Level	
OR	
Education E401B—Supervised Teaching—Upper Level	6
Education 404—Cultural Foundations of Education	3
	27

ELECTIVES

Electives should be selected in cooperation with an advisor from the School of Education. The number of elective credits varies depending upon performance on proficiency examinations and other such factors.

			Approximately	20
TOTAL	 			120

SECONDARY EDUCATION

The student who wishes to prepare for teaching at the secondary school level is encouraged by the School of Education to concentrate, wherever possible, in the appropriate department of the Faculty of Arts and Sciences and, with the assistance of his advisor, to incorporate into his program the professional study described below.

In those cases where it is necessary to concentrate in Secondary Education, rather than in departments of the Faculty of Arts and Sciences, students must

follow the undergraduate admission procedures as outlined in The Undergraduate Catalog. Those admitted who wish to prepare to teach a single subject pursue a program which includes, in addition to the professional sequence of eighteen semester hours, at least as many semester hours of study in the subject field as would be required for concentration in the appropriate department. In addition, those admitted to concentration in Secondary Education may pursue interdisciplinary programs of study which include the preparation needed for certification to teach more than one subject, e.g., the endorsement in History and the Social Sciences. Interdisciplinary programs typically include, in addition to the eighteen semester hours in Education, from forty to fifty semester hours of study in the teaching fields.

Each student should become familiar with the certification requirements of the State Department of Education in regard to an endorsement in his chosen subject field. In some instances, courses are required which may not be required by the department for concentration. Information about endorsement requirements may be obtained from the Office of the Dean, School of Education.

The following program of professional preparation should be completed by all students preparing for secondary school teaching.

	Semester Credits
Education 301—Educational Psychology	3
Education 302—Human Growth and Development	3
Professional Semester	
Education 303—Instructional Materials and Methods	3
Education S401—Supervised Teaching	6
Education 404—Cultural Foundations of Education	3
TOTAL	18

The Professional Semester (Education 303, S401, and 404) is taken in either the Fall or Spring Semester of the senior year. It should be understood that the experiences in the subject areas indicated by the course titles are integrated to the point where the typical concept of the relatively discrete course does not apply. For this reason, each student must register for the total Professional Semester. In addition to the twelve semester hours in Education, however, the student is permitted to carry one additional three semester hour course which may be in his field of concentration. The additional course must be one that is scheduled to meet in the late afternoon or in the evening—in most cases, 3:00 p.m. or later.

ADMISSION AND PREREGISTRATION PROCEDURES FOR STUDENT TEACHING

In order to be permitted to undertake student teaching at the elementary level, concentrators must have successfully completed Education 301, Educational Psychology, Education 302, Human Growth and Development, Education 304, Teaching Reading in the Elementary School, and Education E305, Materials and Methods in the Elementary School. In addition, the Elementary Education concentrator must have the approval of his advisor to proceed with student teaching.

Those students who wish to student teach at the secondary school level, whether or not they are concentrating in the School of Education, must meet the following requirements.

- 1. May not take more than 15 credit hours or its equivalent during the semester of student teaching.
- 2. Must have the approval of the department of his concentration regarding the adequacy of his subject matter preparation.
- 3. Must have received credit for Education 301 and 302 with the grade of "C" or better in each of these courses.
- 4. Prior to enrollment in student teaching, must have completed an approved field experience or a substitute acceptable to the Director of Student Teaching.

Student teachers are placed in schools in the following school divisions: Williamsburg-James City County, Newport News, York County, and Hampton.

It is necessary that students preregister for student teaching so that sufficient time is provided for making necessary arrangements with the cooperating school divisions. Preregistration must be done individually with Dr. Robert Hanny (Secondary Education), or Professor Royce Chesser (Elementary Education). Preregistration for the subsequent Fall or Spring semester must be completed by April 15.

DESCRIPTION OF COURSES

301. Educational Psychology. Fall and Spring (3) Mr. Adair, Mr. Lavach, and Mr. Ries.

A course in which current theories of learning are analyzed with emphasis upon the basic factors of motivation, learning, retention, and transfer. Special emphasis is placed on educational implications of empirical and theoretical findings.

302. Human Growth and Development. Fall and Spring (3) Mr. Lavach.

A course in which selected theories and research findings dealing with progressive human growth and development from conception to senescence are examined. Major emphasis is placed on genetics, sensory-motor development, cognition, personality, perception, and emotion. Educational implications are explored.

303. Instructional Materials and Methods. Fall and Spring (3) Mr. Gulesian, Mr. Hanny, Mr. Jenkins. Part of the professional semester in secondary education. Prerequisites: Education 301, 302, and fifteen semester credits in the subject of teaching choice.

A basic course in instructional methodology. Students plan, teach, and evaluate simulated lessons.

304. Teaching Reading in the Elementary School. Fall and Spring (3) Mr. Brinkley, Mr. Cowles. Part of the professional semester in elementary education. *Prerequisites: Education 301, 302.*

A basic course in the fundamentals of instruction in reading. This course is concerned with the application of the principles of learning and child development to the teaching of reading and the related language arts.

E305. Materials and Methods in the Elementary School. Fall and Spring (3) Mrs. Brown, Mr. Cowles. Part of the professional semester in elementary education. Prerequisite: Education 304.

A continuation of 304 with emphasis upon the areas of social studies, science, and physical education.

- **S305.** The Teaching of High School Latin. *Fall or Spring* (3) Mr. J. W. Jones. Same as Latin 405.
- **307.** Teaching Mathematics in the Elementary School. Fall and Spring (3) Mr. Flanagan. Prerequisites: Mathematics 105, 106.

A course designed to supplement the prospective elementary school teacher's preparation in algebra and geometry while concentrating mainly on effective pedagogy and materials for the teaching of mathematics in grades K through 6.

321. Children's Literature. Fall and Spring (3) Mrs. Delaune.

A course including the study of children's reading interests, criteria for selection of materials, practice in evaluating materials, and a survey of the history and trends in publishing children's books.

400. Problems in Education. Fall and Spring (to be arranged) Staff.

A course designed for students who are capable of independent study under the direction of, and in consultation with, staff specialists. Students undertake study and research of educational problems of individual concern resulting from previous study or experience.

E401A. Supervised Teaching, Primary Grades. Fall and Spring (To be arranged) Staff. Prerequisites: Education 301, 302, 304, E305.

A student teaching experience offered as part of the professional semester for prospective elementary school teachers at the primary level.

E401B. Supervised Teaching, Upper Elementary Grades. Fall and Spring (To be arranged) Staff. Prerequisites: Education 301, 302, 304, E305.

A student teaching experience offered as part of the professional semester for prospective elementary school teachers at the upper elementary level.

S401. Supervised Teaching, Secondary Level. Fall and Spring (To be arranged) Staff. Prerequisites: Education 301, 302.

A student teaching experience offered as part of the professional semester for prospective secondary school teachers.

404. Cultural Foundations of Education. Fall and Spring (3) Mr. Hamilton, Mr. Jones, Mr. Unger. Part of the professional semester in both elementary and secondary education.

A course dealing with the development of educational traditions, philosophical constructs underlying American practices of education, and the analysis of contemporary problems in light of this historical and philosophical background.

425. Psycho-Social Considerations in Special Education. Fall and Spring (3) Mr. Abbott and Mr. Prillaman.

A course devoted to an examination of current practices and patterns in the education and life styles of children and youth with learning and behavioral problems. The course deals with various educational issues and problems of a sociological and psychological nature. Consideration is given to the development of more effective educational programs. Open to undergraduates.

426. Developmental Reading. Fall (3) Mr. Brinkley.

A course designed to help teachers understand the essentials of developmental reading instruction from the readiness period through the secondary level. Attention is given to the organization of programs of reading instruction at various levels. Also included is a study of word attack skills and of comprehension and reading in the content area. The application of research and theory in classroom practice is considered. Laboratory experiences in the teaching of reading are included when possible.

427D. Emotional Disorders of Children. Fall (3) Mr. Abbott and Mr. Prillaman.

A study of the emotional bases for disordered behavior including physiological background, the dynamics of interaction with others, and the motives, drives, and conflicts which pattern behavior. Consideration is given to procedures for coping with behavioral disorders in the public schools. Open to undergraduates.

436. The Improvement of Reading in the Junior and Senior High School. Fall and Spring (3) Mr. Brinkley.

A course intended for teachers in junior and senior high schools who desire to improve their competence in the teaching of reading. Included are an intensive study of the nature of reading problems among adolescents and young adults, the most effective techniques of improving reading abilities among this group, and appropriate materials to be used in this teaching.

459. Pre-Professional Experiences in Special Education. *Fall and Spring* **(3)** Mr. Prillaman and Mrs. Mills. *Prerequisite: Permission of instructor.*

An introductory course for students with limited experience in Special Education. The purpose of the course is to acquaint students with the role and function of public and private facilities serving the needs of exceptional individuals. Opportunities are provided for observation and participation in on-going programs.

TEACHER SCHOLARSHIPS, LOANS AND STUDENT EMPLOYMENT

Virginia Teacher's Scholarship

In addition to the financial assistance programs administered by the Director of Student Aid and Placement for the College, undergraduate students who are Virginia residents and who plan to concentrate in Education are eligible for Teacher Training Scholarships which are administered by the School of Education. These scholarships are made possible by an appropriation of the General Assembly of Virginia and are available to freshmen, sophomores, juniors, and seniors who plan to teach in the public schools of the Commonwealth. The scholarships are for \$350 per academic year and for proportionate amounts during the Summer Session. Inquiries should be addressed as follows:

The Director of Teacher Placement and Scholarships School of Education College of William and Mary Williamsburg, Virginia 23185

Kappa Delti Pi Scholarship

The Alpha Xi Chapter of Kappa Delta Pi, national honor fraternity for teachers and students in Education, annually offers a \$100 scholarship to the student displaying combined scholarship and outstanding professional qualities. Inquiries should be directed to the Dean of the School of Education.

TEACHER PLACEMENT

The School maintains a Bureau of Recommendations to assist its graduates who plan to teach or who are seeking changes in employment. No registration fee is charged, and all students enrolled in the School are urged to avail themselves of this service. If the students file complete records and cooperate with the Bureau, the faculty can be of assistance to those who go into teaching, not only at graduation, but also at later times.

STUDENT HONORS AND ACTIVITIES

Kappa Delta Pi

This honor society in Education was first organized in 1911, and Alpha Xi Chapter of the College of William and Mary was chartered in 1922. The purpose of Kappa Delta Pi is to encourage high professional, intellectual, and personal standards, and to recognize outstanding contributions to education. To this end the organization invites to membership persons who exhibit commendable personal qualities, worthy educational ideals, and sound scholarship. The organization endeavors to maintain a high degree of professional fellowship among its members and to quicken professional growth by honoring achievement in educational work. Both men and women are eligible for membership.

Student Education Association

This student organization, which complements the National Education Association and the Virginia Education Association, has been active in furthering professional competence and providing members with introductions to the national and state professional organizations. All prospective teachers are eligible for membership.

GRADUATE STUDY

Graduate study is available for those who have completed with merit an undergraduate degree program at an accredited institution. The School of Education awards the degrees of Master of Arts in Education and Master of Education in a variety of fields. In addition, the Certificate of Advanced Study (thirty semester hours beyond the Master's degree) and the Doctor of Education degree are offered in Educational Administration, Higher Educational Administration, and Counseling. For complete course descriptions and detailed information relating to the graduate program consult the *School of Education Catalog*, copies of which are available upon request from the Office of the Dean, School of Education.

MARSHALL-WYTHE SCHOOL OF LAW

PROFESSORS WHYTE (Dean), DONALDSON (Associate Dean), FISCHER, JOLLS, PHELPS, POWELL AND SWINDLER. ASSOCIATE PROFESSORS LLEWELLYN¹ AND SCOTT. ASSISTANT PROFESSORS BAHR, BROMBERGER, BROWN, COLLINS, CURTIS, SANTORO, WALCK, WHITEHEAD (Law Librarian) AND WILLIAMSON. LECTURERS ANDERSON, FRIEND AND ZEPKIN.

Law School origins date from 1779 when George Wythe was appointed professor of law, making the College of William and Mary the first to offer instruction in law. The School is named for Wythe and John Marshall, Wythe's most renowned student and later Chief Justice of the United States. Marshall-Wythe is accredited by the American Bar Association, is a member of the Association of American Law Schools and is registered by the New York State Department of Education.

BASIC PROGRAM OF STUDY AND DEGREE REQUIREMENTS

The program of study leading to the Juris Doctor degree is conducted on a semester basis. Successful completion of 90 hours of law studies and 90 weeks of residence is required. The first-year curriculum is prescribed and consists of studies in Administrative Law and Legislation, Civil Procedure, Contracts, Property and Torts. Thereafter, a varied selection of courses may be elected. In most courses instruction is based on the case method involving the critical study of judicial decisions, statutes and other legal materials.

In addition to the J.D. degree, Marshall-Wythe offers a Master of Law and Taxation degree to those holding a professional degree in law who successfully complete within one school year 24 semester hours of study in specialized and related tax subjects.

ADMISSION

Applicants are required to have achieved satisfactory scores on the Law School Admission Test and have earned a baccalaureate degree before enrolling in the Law School. In recent years more emphasis has been accorded the undergraduate grade-point average than the LSAT scores, although the two factors are balanced. Transcript evaluation by Law School Data Assembly Service is required and the standard evaluation form is utilized. While no deadline for applications has been established, those submitting applications after March preceding the June or September of desired entrance have little chance of being admitted. No specific prelaw curriculum is required. Aside from the standard evaluation form, recommendations are not required and personal interviews will be granted only for good cause.

Candidates for the Master of Law and Taxation program must have earned a professional law degree and have demonstrated a capability for graduate legal studies. Candidates with strong backgrounds in accounting, business or economics are given admission preference for this program.

¹ On leave of absence 1971-72.

EXPENSES AND FINANCIAL AID

Tuition and fees for law students are the same as for undergraduates. Total costs for law students, however, will normally exceed undergraduate costs because of the necessity of obtaining off-campus housing and the necessity of purchasing more expensive books.

BULLETIN AND CORRESPONDENCE

Full course descriptions, complete details regarding the Law School and all degree programs are contained in the *Bulletin of the Marshall-Wythe School of Law* which will be supplied, along with admission forms, upon request. Address all correspondence to: Dean's Office, School of Law, College of William and Mary, Williamsburg, Va. 23185.

Forms and information pertaining to the Law School Admission Test, the Law School Data Assembly Service, the Law School Financial Assistance Service and the Prelaw Handbook may be obtained by writing to Box 944, Princeton, N. J. 08540.

THE SCHOOL OF MARINE SCIENCE

Professors Hargis (Dean of the School of Marine Science), Andrews, Black, Brehmer, Harrison, Joseph, Van Engel, and Wood. Associate Professors Bender, Byrne, Davis, Haefner, Haven, Nichols, Norcross, Wass, and Zubkoff. Assistant Professors Bailey, Calder, Chittenden, Dupuy, Fang, Grant, Hyer, Kazama, Kuo, Loesch, MacIntyre, Munday, Musick, Ott, Perkins, Ruzecki, Smith, and Webb. Instructors Bolus, Merriner, Moncure, Warinner, Wojcik, and Zwerner.

FACILITIES

Through the offerings of the School of Marine Science, a joint venture of the College and the Institute, an unusual opportunity is afforded students of Marine Science and Marine Fisheries Biology to take advanced undergraduate and graduate training at an active, year-round center of marine research.

Because its main campus is located at Gloucester Point on the York River, an important estuary with easy access to Chesapeake Bay and the nearby Atlantic, the Institute is admirably situated to conduct research and teaching in marine, estuarine, and freshwater biology and general hydrography. The secondary campus of the Eastern Shore Branch Laboratory at Wachapreague, Virginia, offers access to the embayments, salt marshes, and barrier beaches of Virginia's Eastern Shore.

PROGRAM

The program of the School of Marine Science is primarily intended for the advanced student who wishes to specialize in Marine Science or Oceanography. The degrees offered are the Master of Arts and Doctor of Philosophy in Marine Science. Majors in Biological Oceanography (Marine Biology), General Oceanography and Marine Fisheries Biology are available at both levels. Within these general areas, study in several specialties may be undertaken—for example, Physical Oceanography, Geological Oceanography, Marine Pollution Biology, etc.

Though the courses offered by the School are primarily for graduate students, advanced undergraduates (juniors and seniors) may participate. For instance, Biology, Chemistry and Physics majors may enroll in suitable 400 level courses. An undergraduate major in Chemistry, Geology, Physics, or Psychology may work on a marine problem in his field of specialization. Consent of the Chairman of the student's major department is required to take problems courses in Marine Science.

In summer qualified undergraduate students may take advanced training in Invertebrate Ecology, Marine Science, Physiology, and other subjects as scheduled. Special summer research courses in Marine Science for qualified science teachers and undergraduate biology majors are offered as funds are available. Financial assistance is generally available to qualified graduate and undergraduate students and to participating teachers.

It is recommended that students who are seriously interested in Marine Science as a profession consult with the Dean of the School as early in their college careers as possible regarding an academic program to be followed.

DESCRIPTION OF COURSES

401. Introduction to Physical Oceanography. Fall (3) Mr. Ruzecki. Prerequisites: Physics 101-102, Math 103.

Physical properties of sea water, descriptive oceanography, air-sea interactions, heat budget, methods and measurements, dynamics of circulation, waves and tides. *Lectures and laboratory*.

402. Introduction to Chemical Oceanography. Fall (3) Mr. MacIntyre. Prerequisite: Chemistry 101-102.

Chemical properties and their distribution in the sea, nutrients, carbon dioxide system, methods of sea water analysis. *Lectures and laboratory*.

403. Introduction to Biological Oceanography. Fall (3) Staff.

Introduction to principles and concepts of marine ecology; characteristics of the oceans and estuaries as ecosystems. Occurrence and distribution of marine organisms in relation to hydrography. Lectures, laboratory and field trips.

404. Introduction to Geological Oceanography. Fall (3) Mr. Nichols.

Topography and sediments of the sea floor and coastal environments. Origin of the Geological processes. *Lectures and laboratory*.

†405. Problems in Marine Science. Fall and Spring (1-4) Staff.

Supervised projects selected to suit the needs of the advanced undergraduate student. Projects to be chosen in consultation with the head of the student's major department, the supervising professor and the Dean of the School of Marine Science. Acceptable topic outlines and terminal project reports are required.

†406. Introduction to Marine Science. Summer session and extension (5) Staff.

A general introduction to marine science including biological, chemical, geological and physical oceanography. Lectures, laboratory and field trips, twenty-six hours per week for five weeks.

*407. Biometry I. Spring (3) Mr. Chittenden.

Application of statistical methods to analysis of biological and physical data. Binomial and chi-square distributions, normal distribution. Student-Fisher test, introduction to analysis of variance and regression analysis. 3 lecture hours.

†410. Marine and Freshwater Invertebrates. Summer session (5) Staff.

Classification and identification, adaptation, ecology, life histories. Local marine, estuarine and freshwater forms emphasized. Lectures, laboratory and field trips, twenty-six hours per week for five weeks.

†412. Marine Botany. Summer session (5) Staff.

A general introduction to the ecology and systematics of algae spermatophytes encountered in the marine environment. Lectures, laboratory and field trips, twenty-six hours per week for five weeks.

†419. Computer Applications in Marine Science. As required (1) Mr. Moncure and Mr. Wojcik.

Course designed primarily for students who require special Fortran programs for analysis of their research data. Following instruction in basics of programming language, each student will develop, with guidance, one or more computer programs pertinent to his or her thesis research. *One lecture hour*.

†420. Workshop in Scientific Writing. Spring (1) Mr. Grant.

Step-by-step analysis of the preparation of a journal article; structure and content of research and thesis proposals. *One lecture hour.*

GRADUATE PROGRAM

The School of Marine Science offers the degrees of Master of Arts and Doctor of Philosophy. For graduate admission and degree requirements, and for a full description of graduate courses in marine science, write for a Graduate Catalog to the Dean of the School of Marine Science, Gloucester Point, Virginia 23062.

THE SCHOOL OF CONTINUING STUDIES

PROFESSORS HERRMANN (Dean of the School of Continuing Studies). CLEM. ASSISTANT PROFESSOR LOONEY (Associate Dean of the School of Continuing Studies). Instructors Bias and Purcell.

THE SCHOOL OF CONTINUING STUDIES was established by the Board of Visitors in 1968 as an instrument for making the educational program of the College available to part-time students, especially the adult population of Tidewater Virginia. At present, Continuing Studies serves primarily an administrative function for the courses and programs of the other schools and faculties of the College. The major activities of the School are described below.

THE EVENING COLLEGE

The College initiated a program of evening courses in 1952, to enable residents of Tidewater communities to earn credits which might be applied toward a degree at William and Mary or transferred to other institutions.

The program includes a selection of graduate and undergraduate courses from the regular curricula of the College. Instruction is provided primarily by members of the regular faculty. At present students may earn graduate degrees in Business and Education by attending evening classes.

All students or prospective students may obtain assistance with program planning and related problems by appointment with the Director. Call 229-3000, Extension 238, for an appointment.

THE EXTENSION DIVISION

The Extension Division was developed as a means of providing college level courses for Virginians, particularly the residents of Tidewater unable to avail themselves of the educational opportunities on the campus. At present most of the courses taught in Extension are selected from the general catalogue and are offered for credit. Non-credit courses and seminars may be organized upon request.

Registration for Extension courses is processed at the first class meeting unless otherwise specified in the catalog. Prospective students who have not established eligibility may be registered provisionally pending presentation of evidence of good standing. Provisional registrations are automatically cancelled if such evidence is not presented before the course is completed.

THE SUMMER SESSIONS

The Summer Sessions are an integral part of the educational program of the College of William and Mary and the opportunities for study are essentially the same as in the regular session. Courses are carefully selected from the regular curriculum. Instruction is provided by regular members of the William and Mary faculty supplemented by specialists from other institutions.

The Summer Sessions consist of two terms of five weeks each. Students may enroll for either or both terms. Courses in Law are taught on a nine-week schedule. Certain short courses for teachers are also available. Six semester hours constitutes a full course load for each five-week session.

ADMISSIONS

Prospective students who have never attended William and Mary should follow the application and registration procedures outlined in the current Evening College and Extension Division or the Summer Session Catalogues. The necessary application forms are included. Since part-time students typically do not maintain a continuous enrollment, all students are requested to submit an application form for each semester or session of Evening College and Summer Sessions which they plan to attend in order to expedite the registration process.

CATALOGS AND INFORMATIONAL MATERIALS

Catalogs which include all course offerings, class schedules and fees for Evening College and Extension are published each year in August, January and May. Copies may be obtained by contacting the Director of Evening College and Extension, College of William and Mary, Williamsburg, Virginia 23185.

A preliminary announcement of Summer Session, including a tenntative list of course offerings, is published each January followed by a complete Summer Sessions catalog in March which includes all necessary application forms. Special bulletins are available describing the Summer Band School, the Institute for Teachers of Science and other special programs. Copies may be obtained from the Director of Summer Sessions, College of William and Mary, Williamsburg, Virginia 23185.

THE VIRGINIA ASSOCIATED RESEARCH CAMPUS

THE VIRGINIA ASSOCIATED RESEARCH CAMPUS of the College of William and Mary is a graduate education and research facility located approximately twenty-five miles from the College's main campus in Williamsburg.

Advanced courses in Applied Science, Business Administration, Education, and Engineering are routinely offered at the Research Campus, all of which carry resident graduate credit. The program in Engineering is offered by Old Dominion University; all other programs by the College of William and Mary.

Inquiries and requests for bulletins and application forms should be directed as follows: for Applied Science to Director, Applied Science Program; for Business Administration to Dean, School of Business Administration; and for Education to Dean, School of Education—all at the College of William and Mary, Williamsburg, Virginia, 23185. Inquiries concerning the Engineering Program should be directed to the Dean, School of Engineering, Old Dominion University, Norfolk, Virginia 23508.

Research programs in several disciplines are being conducted at the Research Campus. The College cooperates with institutions of higher education throughout Virginia in providing office and laboratory space, laboratory animal facilities, and electronic and machine shop assistance at the site for studies being conducted at the adjacent Space Radiation Effects Laboratory.

The Space Radiation Effects Laboratory (SREL) was constructed in 1965 by the National Aeronautics and Space Administration at a cost of \$15.5 million. It houses three particle accelerators, the largest of which is a 600 million electron volt syncrocyclotron. SREL is administered through the Research Campus by the College of William and Mary under contract with NASA and is used by scientists at universities throughout the nation. Research being conducted at the site includes nuclear physics, nuclear chemistry, radiation biology, and radiation effects on materials.

PRE-PROFESSIONAL PROGRAMS

Dentistry, Engineering, Forestry, Medical Technology, Medicine, and Veterinary Medicine

Students may follow programs at William and Mary within a liberal arts framework which will prepare them for study in Dentistry, Engineering, Forestry, Medical Technology, Medicine, and Veterinary Medicine. The pre-professional programs in Engineering and Forestry are prescribed because of cooperative programs with other institutions. Students who are interested in other pre-professional programs in Dentistry, Medical Technology, Medicine, and Veterinary Medicine, should plan their programs in consultation with their advisor.

PREMEDICAL AND PREDENTAL PROGRAMS

There are no specific premedical or predental programs. Students preparing themselves for admission to medical or dental school may choose to concentrate in any department. Although medical schools in general have no preference as to major field of undergraduate study, they do believe that the student should pursue a coherent program with some depth.

A liberal education is appropriate to preparation for a career in medicine. The physician should be able to use and to understand both the written and spoken language. Moreover, those who have cultivated an interest in philosophy, history, and the arts can enrich their own lives and, in so doing, may become more effective members of their communities.

For the country at large most medical school graduates now earn their baccalaureate degree; some of these students spend only three years in the liberal arts college and receive the college degree after completing the first year in medical school or, as in the case of William and Mary, upon the completion of the medical course. Certain schools now have combined liberal arts-medical programs wherein the students spend only two years in the liberal arts college.

The foundation of medicine is the natural sciences. All medical schools include in their admission requirements four laboratory science courses: biology, inorganic chemistry, organic chemistry and general physics. The calculus is rapidly assuming the same importance. At William and Mary, the above courses are Biology 101-102, Chemistry 101-102, Chemistry 201-202, Physics 101-102, Physics 103-104 and Mathematics 201-202. Science courses in addition to these minimal requirements are required by some medical schools and viewed with favor by many others. In any case, the student's choice of courses should be balanced and should reflect his overall intellectual development.

The premedical advisors at William and Mary encourage students to complete four years before going to medical school, for a liberal arts program reaches its full meaning in the final years; to terminate such a program after three years is to lose its unique significance. Future success in medical school and in medical

practice depends in great measure on the competence and attitudes developed during the liberal arts program.

Since medical schools begin to reach decisions on applicants for admission early in the senior year on the basis of records established at that time, it is advantageous that the minimal required science courses be completed in the first three years. Every premedical student is encouraged to seek academic guidance early in his career through scheduled consultations with a premedical advisor.

Preparation for Engineering

Students may prepare in this College for entrance to the Junior class of any standard engineering school. In making this preparation students will find it necessary to make an early selection of the branch of engineering and the engineering school which they wish to enter in order that their courses may be chosen in accordance with the requirements of their engineering school. It is strongly urged that students seek advice from the Committee on Pre-Engineering Students in adapting their courses to fit the particular branch of engineering they propose to follow.

The course outlined below will be found to meet the general requirements for all branches of engineering.

		Semester Credits
English		6
Mathematics		15 (or 12)
Engineering Drawing and Descriptive Geometry		3 to 6
Physics		8
Chemistry		8

For special branches of engineering the following additional courses are recommended: two years of Physics for Nuclear, Electrical and Mechanical Engineering; an additional year of Chemistry for Chemical, Mining, and Sanitary Engineering; a year of Biology for Sanitary Engineering.

The course for engineering students may be fitted into the regular program leading to a B.S. degree and this procedure will afford the engineering student a broad training for this professional work. The completion of the program ordinarily requires four years, but engineering students who complete three years in residence and fulfill degree requirements, except the completion of a field of concentration, with a minimum quality point average of 1.2, will, upon application, be granted the B.S. degree of this College on graduation from an approved engineering school.

PROGRAM IN COOPERATION WITH LEADING ENGINEERING COLLEGES

The College has combined plan agreements with the School of Engineering, Columbia University, the School of Engineering Science, The Johns Hopkins University, and the School of Engineering, Rensselaer Polytechnic Institute. Under these arrangements, and by properly planning his studies to include the basic

sciences and humanities, a student of high standing may pursue a combined fiveyear program in which the first three years are spent at the College and the last two at the institution of his choice, leading to the bachelor's degree from each institution.

Other arrangements lead to a bachelor's degree from William and Mary and a master's degree from an engineering school after a total of five or six years of study.

The following is the program of courses to be taken at the College of William and Mary.

FIRST YEAR

	1st Sem.	2nd Sem.
Composition and Literature (Eng. 101 and a 200 level lit. course)	3	3
Freshman Mathematics (Usually Math. 111-112)	3	3
Elementary General Chemistry (Chem. 101-2)	4	4
General Physics (Phy. 101-2)	4	4
Physical Education (Required Phys. Ed.)	1	1
Total Semester Credits	15	15
Second Year		
English Literature (Eng. 203-4)	3	3
Calculus (Usually Math. 211, 212)	3	3
Foreign Language (French or German)	4	4
European History (Hist. 101, 2), Government (Govt. 201, 2)		
or Sociology (Soc. 201, 2)	3	3
Intermediate Physics (Phys. 201-2)	3	3
Intermediate Experimental Physics (Phys. 251-2)	1	1
Physical Education (Required Phys. Ed.)	1	1
Total Semester Credits	18	18
THIRD YEAR ¹		
Selections from the following:		
Foreign Language	3	3
Mathematics 311-312	3	3
Engineering Drawing and Descriptive Geometry (Engineering Graphics 201-2)	3	3
Experimental Physics (Phys. 351-2)	1	1
Classical Mechanics (Phys. 301-2)	3	3
or Analytical Chemistry (Chem. 303-4)	4	4
Introductory Quantum Physics (Phys. 311)	3	
Thermodynamics (Phys. 312)	3	3
Principles of Economics (Econ. 201, 2)	3	3
Timespies of Leonomies (Leon. 201, 2)	J	3

Students preparing for special programs not mentioned above should consult with the Chairman of the Committee on Pre-Engineering Students.

¹ Students preparing for Chemical Engineering or Metallurgy should elect Analytical Chemistry and omit Mechanics. For Civil, Mechanical, Nuclear and Electrical Engineering programs, Mechanics should be elected and Analytical Chemistry omitted. Those who elect Analytical Chemistry may find it desirable to include it in the second year program, post-poning European History to the third year.

Preparation for Forestry

Students may prepare at William and Mary for entrance into forestry schools at other institutions. Here they obtain a sound education in the humanities and other liberal arts in addition to the sciences basic to forestry.

The College offers a special program in cooperation with the School of Forestry of Duke University. Upon completion of a five-year coordinated course of study the student will have earned the Bachelor of Science degree from William and Mary and the professional degree of Master of Forestry from Duke University. The student devotes the last two years of his program to the professional forestry curriculum of his choice at Duke, where forestry courses are open only to seniors and to graduate students.

Candidates for the forestry program should indicate to the dean of Admissions of the College of William and Mary that they wish to apply for the Liberal Arts-Forestry curriculum. Admission to the College is granted under the same conditions as for other curricula. At the end of the first semester of the third year the College will recommend qualified students for admission to the Duke School of Forestry. Each recommendation will be accompanied by the student's application for admission and by transcript of his academic record at William and Mary. No application need be made to the School of Forestry prior to this time.

Pre-Forestry Curriculum at William and Mary.

FIRST YEAR

	1st Sem.	2nd Sem.
Eng. 203-204	3	3
Classical or Modern Foreign Language (1f Required)	3-4	3-4
Biol, 101, 102	4	4
Math. 103, 111 or 111, 112	3	3
Phys. Ed. 101, 102	1	1
Electives .		3
1	4-18	14-18

SECOND YEAR

	1st Sem	2nd Sem.
Govt. 201, 202	3	3
Chem. 101-102	4	4
Biol. 401; Biol. 206 or Biol. 412	4	4
Phys. Ed. 201, 202	1	1
Electives	3-6	3-6
	15-18	15-18

THIRD YEAR

	1st Sem.	2nd Sem.
Econ. 201, 202	3	3
Biol. 301 or Elective Biology	4	_
Biol. 419		4
Physics 101-102	4	4
*Electives	4–6	4–6
	15–17	15–17

^{*} Must include two courses which satisfy sequence requirements.

V. ORGANIZATIONS OF THE COLLEGE

INSTITUTE OF EARLY AMERICAN HISTORY AND CULTURE

THE INSTITUTE of Early American History and Culture was established in 1943 by the union of certain historical research and publication activities of the College of William and Mary and The Colonial Williamsburg Foundation. The College contributed *The William and Mary Quarterly*, a historical periodical published since 1892, and the use of the rich resources of its library, while Colonial Williamsburg contributed the Williamsburg Restoration Historical Studies, its program of research fellowships, and the use of its important manuscript collections. The board of editors of the *Quarterly* and the Restoration's advisory council of historians were merged to form the first Council of the Institute, an advisory board drawn from the nation at large. The membership of the present Council is given below.

By promoting the study of early American history the Institute aims, in the words of its Constitution, "to preserve and advance understanding of the enduring contributions of the colonists and the founders of the Republic." It does so by the publication of significant books and articles in the field of early American history from the beginnings through the Jeffersonian era, by teaching and consultation, and by the acquisition of research materials on microfilm. Its collection of early American newspapers on film is one of the largest extant. Its publication of the Virginia Gazette Index (1950) provides the only comprehensive index to a series of important colonial newspapers so far made available to researchers.

The Institute cooperates in many ways and to the fullest possible extent with historical activities of both the College and Colonial Williamsburg, but it is an autonomous organization with a separate and distinct program which is national rather than local. Its books and the articles appearing in *The William and Mary Quarterly* are directed to the widest possible audience. The director of the Institute is Stephen G. Kurtz. On this staff are: James H. Hutson, editor of publications in charge of the book publication program, and Joy Dickinson Barnes, assistant editor; Thad W. Tate, editor of *The William and Mary Quarterly*; Donna Sheppard, assistant editor of the *Quarterly*; Norman S. Fiering and John J. McCusker, fellows; John E. Selby, book review editor of the *Quarterly*. Herbert A. Johnson is editor, Charles T. Cullen, associate editor and Nancy Harris, assistant editor of The Papers of John Marshall. Messrs. Kurtz, Fiering, Johnson, McCusker, Selby, and Tate are members of the Department of History at the College.

The Papers of John Marshall, under a grant from the National Historical Publications Commission and an appropriation from the General Assembly of Virginia, supplemented by funds from private sources, will be a definitive edition of the works of the Chief Justice.

The offices of the Institute and of *The William and Mary Quarterly* are in the Earl Gregg Swem Library on the College campus. The postal address is Box 220, Williamsburg, Virginia 23185.

The sponsors of the Institute are Thomas A. Graves, Jr., President of the College

of William and Mary, and Carlisle H. Humelsine, President of The Colonial Williamsburg Foundation.

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THE MARSHALL-WYTHE INSTITUTE FOR RESEARCH IN THE SOCIAL SCIENCES

The Marshall-Wythe Institute for Research in the Social Sciences consists of representatives from the Departments of Economics, Government, History, Sociology, Anthropology, the School of Business Administration, and the Marshall-Wythe School of Law. The Director of the Institute is the John Marshall Professor of Government. In 1926, through the generosity of James Goold Cutler, Esq., Rochester, New York, a fund of approximately \$100,000 was established, the income to be applied toward the salary of the John Marshall Professor of Government and Citizenship and for other purposes.

The Institute conducts a symposium, known as the Marshall-Wythe Symposium during the second semester. One semester credit is given in this course, and a student may, in successive terms, receive a maximum of two credits. It will also arrange lectures on current topics relating to the social sciences, and develop research among the social science departments.

THE SOCIETY OF THE ALUMNI

The Society of the Alumni of the College of William and Mary in Virginia was founded in 1842 and incorporated on March 17, 1923. Its purpose is to organize the alumni of the College of William and Mary in one general body, in order to keep alive the memories of college life and promote the welfare of the College. Any graduate or any alumnus who has completed one regular college semester at the College in Williamsburg and has received honorable dismissal is eligible for membership in the Society. Contributors to The William and Mary Fund are accorded all membership privileges. The Alumni Gazette, the official publication of the Society, is sent to all living alumni.

The officers of the Society are C. Randolph Davis, '50, President; Chester F. Giermak, '50, Vice President; Allen Clarence Tanner, '46, Secretary-Treasurer; James Sands Kelly, '51, Executive Secretary; Gordon Cheesman Vliet, '54, is Director of Alumni Affairs.

The members of the Board of Directors of the Society are:

To December 1972—Mary Permelia Pauly (Chinnis), '46, Alexandria, Virginia; C. Randolph Davis, '50, Suffolk, Virginia; Betty Lee Hicks (Wagner), '51, Richmond, Virginia; Howard Hopkins Hyle, '48, Atlanta, Georgia; Hugh Smith Haynie, '50, Louisville, Kentucky.

To December 1973—Guy Wilson Daugherty, '34, Rochester, Minnesota; Chester F. Giermak, '50, Erie, Pennsylvania; Paul Kormick Lapolla, '41, La Jolla, California; Marjorie Jean Retzke (Gibbs), '44, Somerville, New Jersey; Allen Clarence Tanner, '46, Newport News, Virginia.

To December 1974—Dan Hutcheson Edmonson, '38, Glen Ellyn, Illinois; Jane Harden (Hanson), '42, Potomac, Maryland; Glen Edward McCaskey, '63, Hilton Head Island, South Carolina; John Flood Morton, Jr., '58, Metairie, Louisiana; William Lunsford Person, '24, Williamsburg, Virginia.

The members of the Alumni Board of Trustees of the Alumni Endowment of the College of William and Mary are: Jay Wilfred Lambert, '27, Williamsburg, Virginia; Robert A. Duncan, '24, Williamsburg, Virginia; Edward Nelson Islin, '25, Newport News, Virginia; Robert S. Hornsby, '41, Williamsburg, Virginia; ex officio the President of the Society of the Alumni.

The Alumni Office is located in the former Bright House on Richmond Road at the stadium.

THE WILLIAM AND MARY ENDOWMENT FUND

THE ENDOWMENT ASSOCIATION

The affairs of the Association, a private corporation, are conducted by a self-perpetuating elected Board of from nine to fifteen members. The present membership of the Board is as follows:

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The income from the Association's funds is used to support scholarships, Chancellor professorships, and other general College purposes. The objectives of the Endowment Association are contained in the charter and by-laws, copies of which may be obtained on request.

^{*} Trustee Emeritus

^{**} Life Trustee

THE FRIENDS OF THE COLLEGE

Annual memberships of this organization are \$150; life memberships, \$1,500. The income of the Friends is spent currently at the discretion of the President of the College for the support of concerts, lectures, the Musical Records Collection, the War Memorial Book Shelf, undergraduate activities, scholarship aid, and emergency scholarship assistance to worthy students.

VI. MISCELLANEOUS INFORMATION

GIFTS AND BEQUESTS

Although the College of William and Mary derives a considerable amount of its financial support from appropriations from public funds by the General Assembly of the Commonwealth of Virginia, the remainder of the money required for its operation—and particularly for the qualitative development of its educational, public service, and research programs—must come from endowment funds, gifts, bequests, and other types of support from a variety of nontax or nonpublic sources. In a period of steadily increasing demands for additional or enlarged services of various types, all colleges—those which are entirely privately supported, those which are entirely state-supported, and those which, like the College of William and Mary, rely on both public and private funds—must look to their friends, alumni, and others interested in the continued growth of higher learning, for the economic assistance necessary to support their educational program.

This economic assistance may take the form of single or continuing grants from individuals, corporations, or foundations. The individual gift may be either a lifetime or a testamentary gift or bequest. It may be a general gift, to be used for such purposes as the College may determine; or it may be a specific gift for a purpose proposed by the College and desired by the donor. It may be a gift large enough to cover the entire cost of establishing and maintaining a particular structure or activity, or it may be an integral part of a fund representing several gifts whose aggregate will suffice to meet the necessary cost of the total project.

A wide variety of essential activities of the College may be aided fundamentally by such gifts and bequests. Scholarships and fellowships are one of the most general categories of such private support. Similarly, grants in aid of staff salaries, including the creation of endowed chairs and of distinguished professorships, are increasingly needed by institutions such as the College of William and Mary to meet the competition of private industry and other educational agencies which are continually bidding for the services of such trained personnel. Research grants, funds to finance the purchase of rare manuscripts and related scholarly materials, exchange professorships and scholarships to permit students and faculty from the College to study abroad and to bring to this campus their counterparts from foreign universities, are other continually needed contributions. Finally, the College has occasionally benefited from gifts for a variety of major capital projects (e.g., building) for which future gifts and bequests will be welcomed.

Any kind of property, real or personal, may be the subject of a gift and only such form as is required to pass title is necessary. If the gift consists of real property, the title will be passed by deed; if it consists of cash or unregistered bonds, the gift is consummated by delivery of the property; or if stocks, by delivery of properly endorsed stock certificates. Usually the proceeds are added to the permanent endowment of the College of William and Mary. The donor may, however, restrict the use of any gift and recommend the purposes for which it shall be used. In such cases, the transfer of property would be accomplished by a letter or other documents, suggesting the purposes for which the proceeds of the gift are to be used. When accepted by The Endowment Association, the term or conditions set out therein become binding upon it.

Bequests. Testamentary gifts, or bequests, should be made to The Endowment Association of the College of William and Mary in Virginia, Inc. Bequests may be made by setting their provisions forth in a will; or, if a will has already been drawn, they may be expressed in a codicil to the will. The following forms for wills or codicils are suggested:

GENERAL

I (give, if personal property; devise, if real property) and bequeath to The Endowment Association of the College of William and Mary in Virginia, Inc., a private corporation existing under the laws of the Commonwealth of Virginia and located in the City of Williamsburg, Virginia, and to its successors forever, the sum of dollars (or otherwise describe the gifts) for the general purposes and uses of the College of William and Mary in Virginia at the discretion of the Endowment Association of the College of William and Mary in Virginia, Inc.

SPECIFIC

CODICIL

Having hereinbefore made by last Will and Testament dated, and being of sound mind, I hereby make, publish, and declare the following codicil thereto; (here insert clause in same form as if it had been included in the body of the Will). Except as hereinbefore changed, I here ratify, confirm and republish my said last Will and Testament.

Should you or your attorney wish additional information, please contact the Office of the President of the College of William and Mary and an informational booklet will be mailed to you.

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Tyler-Chandler Class of 1920

UNFUNDED The General Assembly

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CONFEDERACY United Daughters of the Confederacy

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JOHN PHILIP WAGER Board of Visitors of the College of William and

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AND/OR FELLOWSHIP

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T. C. Clarke

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College of William and Mary

MARTIN LUTHER KING, JR.

MEMORIAL SCHOLARSHIP Faculty and Student Body of the College of

William and Mary

MODERN LANGUAGE

College of William and Mary
College of William and Mary
College of William and Mary
Dow Badische Chemistry

Dow Badische Company

ROBERT L. GREENE CHEMISTRY Robert L. Greene

WILLIAM AND MARY

EDUCATIONAL FOUNDATION William and Mary Educational Foundation

NEW SCHOLARSHIPS

New scholarships are those established by donors within the past year.

Anna Belle Koenig Nimmo, Mrs. Nimmo, on December 18, 1969, converted the remaining balance of "The Prentice Hill Dramatic Scholarship" and "The Second World War Scholarship" to a fund known as the Anna Belle Koenig Nimmo Endowment Fund. She has since made additional contributions to the fund.

DAVIS Y. PASCHALL. Mr. Earle T. Hall, an alumnus of the Marshall-Wythe School of Law, created the Davis Y. Paschall Scholarship in 1970 through several significant contributions to the College. Other friends of the College have since added to the corpus.

TAZEWELL TAYLOR LAW MEMORIAL. The will of the late Tazewell Taylor, Jr. provided funds for the establishment of two fellowships of \$1,000 each for students in the Masters of Law and Taxation program. The fund also provides for other needs of the School of Law.

GRADUATE, PROFESSIONAL, AND CO-OPERATING SCHOOLS

LAW AND TAXATION J. D. Carneal, Jr. MATTHEW GAULT EMERY LAW Theodore S. Cox

KAPPA DELTA PI EDUCATION Alpha Xi Chapter of Kappa Delta Pi

WILLIAM A. R. GOODWIN

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EXETER UNIVERSITY Exeter University and the College of William and

Mary

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and Mary

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WILLIAM LAWRENCE SAUNDERS

STUDENT AID FUND William Lawrence Saunders

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can Revolution

PRIZES

The Lord Botetourt Medal. An annual award to the graduating student who has attained greatest distinction in scholarship. The medal was established in 1772, and has been revived through the generosity of Mr. Norborne Berkeley.

The Blinn History Award. Established in 1965 by Laura Maryland Carpenter Blinn. This award of \$100 is given to the highest ranking senior student in history at the College.

Nathan Burkan Memorial Competition. The American Society of Composers, Authors, and Publishers offers awards of \$250 and a second prize of \$100 for the two best papers submitted by students of the Marshall-Wythe School of Law on a subject of current significance in the field of copyright law.

James Frederick Carr Memorial Cup. A memorial to James Frederick Carr, a former student of the College, who lost his life in the World War, March, 1919. The cup is the property of the College. The student winning the award has his name engraved on the cup. Awarded on the basis of character, scholarship, and leadership. Presented by Mrs. John B. Bentley.

The Educational Foundation Awards. These awards are made annually to the outstanding intramural athlete and to the outstanding intercollegiate athlete among the senior men. In making the awards consideration is given to character, leadership, scholarship and sportsmanship, as well as to athletic prowess. These awards are supported by the College of William and Mary Educational Foundation, Inc.

The William Elbert Fraley Award. A prize of \$100 established in 1969 by the The William Elbert Fraley Memorial Trust as an annual award to a student enrolled in the undergraduate honors program who has done outstanding work in American History.

The Wayne F. Gibbs Award. A prize of \$50 annually shall be awarded to the best student in accounting who shall have successfully completed (or is about to complete) his undergraduate work.

The William A. Hamilton Prize. A prize of \$300 established in 1938 by Charles P. Sherman, D.C.L., LL.D., as a memorial to the late William A. Hamilton, D.C.L., formerly Professor of Jurisprudence and Dean of the School of Economics and Business Administration, awarded to the student graduating in Law who shall write and submit the best essay or thesis on a subject connected with Roman Law or with Comparative Roman and Modern Law, the subject to be assigned by the faculty of the Marshall-Wythe School of Law.

James Barron Hope Scholarship. Established in 1897 by Robert M. Hughes, LL.D., of Norfolk, Virginia. It is awarded for the best piece of creative writing published in the College magazine and written by a student below senior rank. The scholarship exempts Virginia students from the payment of \$75 in fees and non-Virginia students from \$100 in fees.

The L. Tucker Jones Memorial Prizes. These prizes are awarded annually to the outstanding senior students in the men's and women's intramural programs. In making the awards consideration is given to qualities of leadership, high ideals, and scholastic standing. These prizes are supported by the L. Tucker Jones Memorial Fund.

The Tiberius Gracchus Jones Literary Prize. Established by Archer G. Jones as a memorial to his father, Tiberius Gracchus Jones, who was in residence at the College in 1844-45. The income from the gift of \$1,000 supports a prize for the best English essay submitted by an undergraduate student. The word "essay" includes the poem, the short story, the play, the oration, and the literary essay.

Lawyer's Title Award. The Lawyer's Title Insurance Corporation of Richmond, Virginia, awards an annual prize of \$100 together with an appropriate certificate to the senior or graduating student of law in the Marshall-Wythe School of Law found by the faculty of the Law School to be most proficient in the law of real estate.

The Seidman & Seidman Tax Award. The firm of certified public accountants of Seidman & Seidman makes an annual award of a gold key on which the seal of the College is engraved, to the student in the Marshall-Wythe School of Law who, at graduation, has achieved the highest average in his courses on taxation, provided that his program included at least twelve semester hours in this field.

Sullivan Awards. A medallion awarded by the Southern Society of New York in recognition of influence for good, taking into consideration such characteristics of heart, mind, and conduct as evince a spirit of love and helpfulness to other men and women. Awarded each year to a man and a woman from the student body and to a third person possessing the characteristics specified by the donors.

The Wall Street Journal Achievement Award. A suitably inscribed medal and a year's subscription to the Wall Street Journal award to the outstanding senior in finance.

The William and Mary Law School Association Award. Law books to the value of \$25 are given to the student who is judged to have made the best contribution to each issue of the William and Mary Law Review.

Kays Gary-Charles McDowell Award. This award, which is supported by the Colonial Booklet Fund, is given for meritorious writing to a staff member of the Flat Hat.

PRIZE AND HONOR AWARD RECIPIENTS

AWARDS AND PRIZES, 1970-71

The Lord Botetourt Medal: Jerry Allen Coyne, Arlington, Virginia

The James Frederick Carr Memorial Cup: James Frederick Almand, Arlington, Virginia

The Algernon Sydney Sullivan Awards: Robert Charles Jolly, Clarksville, Virginia; Charlotte Webb Sandquist, Waynesboro, Virginia; Agnes Winn Paschall, Williamsburg, Virginia

The Tiberius Gracchus Jones Literary Prize: James Boyd Crawford, Fairfax, Virginia; Barbara Ruth Massie, Crozet, Virginia

The Laura Maryland Carpenter Blinn History Award: Kathleen Louise Coles, Springfield, Virginia

The William Elbert Fraley Award: Allan Spencer Hecht, East Meadow, New York

The Wayne F. Gibbs Award: Nancy Russell Trent, Frankfort, Kentucky

The James Barron Hope Scholarship: Edward Scott May, Clarksville, Maryland

The Lawyer's Title Award: Fred Kennedy Morrison, Laurel, Indiana

The Nathan Burkan Memorial Competition: No Award

The Seidman & Seidman Tax Award: Joel Harvey Shane, Baltimore, Maryland

The Wall Street Journal Achievement Award: Penelope Ann Cherry, Newport News, Virginia

Kays Gary-Charles McDowell Award: Steven Bates, Arlington, Va.

PHI BETA KAPPA ACADEMIC YEAR, 1970-71 INITIATES-IN-COURSE

Class of 1971

IVY JANE AKERS Roa	noke Rapids, North Carolina
Patsy Lee Anderson	Colonial Heights, Virginia
Leandro Crescendo Area	Arlington, Virginia
Paula Ann Barran	Warren, Ohio
REBECCA LYNN BEACH	Hopewell, Virginia
Lorraine Ann Burgio	Ramsey, New Jersey
PENELOPE ANN CHERRY	Newport News, Virginia
KATHLEEN LOUISE COLES	Springfield, Virginia
CATHERINE BLY COX	Newton, Iowa
JERRY ALLEN COYNE	Arlington, Virginia

Sandra Kay Dawson	Arlington, Virginia
Linda Arnelle Douglas	Norfolk, Virginia
James Hendrick Druff, Jr.	Williamsburg, Virginia
Norman Familant	Hampton, Virginia
Lance Maria Communica	Alexandria, Virginia
KATHI ANNE GRILLS	Oberlin, Ohio
Marie Renee Hanson	Rochester, New York
WILLIAM JOHN HAUSMAN	Fort Wayne, Indiana
	Springfield, Virginia
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VIRGINIA DARNELL HOOSE	Vienna, Virginia
MARY ANN MINNICK HOWARD	Williamsburg, Virginia
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REBECCA ANN LAWS	
GEORGE RAMSDELL LUCAS, JR.	Fort Walton Beach, Florida
JANE CAROLYN MASON	Norfolk, Virginia
GERALDINE MARY McCall	Williamsburg, Virginia
RICHARD CHARLES MOHS	Webster, South Dakota
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WILLIAM RANDOLPH MUNSEY	Council, Virginia
ALYCE ELIZABETH MUSGROVE	Petersburg, Virginia
Donald Morris Pulliam	Blacksburg, Virginia
THOMAS SINCLAIR REES	Hyattsville, Maryland
ROBIN WALLACE ROSSER	Billerica, Massachusetts
Patricia Louise Russell	Fort Worth, Texas
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BEVERLY ANN SAUER	Baltimore, Maryland
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ELIZABETH RESPESS VAIL	Alexandria, Virginia
Virginia Anne Vogel	Lakehurst, New Jersey
Ellen Louise Wagner	Arlington, Virginia
DAVID ALLEN WHIMAN	Norfolk, Virginia
	, 3

HONORARY

NATHAN ALTSHULER Williamsburg, Virginia

ENROLLMENT

Session 1971-1972

	Men	Women	Totals
Freshmen	589	441	1030
Sophomore	487	421	908
Juniors	395	408	803
Seniors	438	440	878
Law School	358	31	389
Graduate	350	147	497
Auditors	10	16	26
	2627	1904	4531

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Session 1971-1972

Alabama	9
Arizona	1
Arkansas	3
California	19
Colorado	3
Connecticut	53
Delaware	23
Florida	26
Georgia	18
Hawaii	. 1
Idaho	1
Illinois	38
Indiana	21
Iowa	7
Kansas	4
Kentucky	13
Louisiana	3
Maine	2
Maryland	128
Massachusetts	37
Michigan	12
Minnesota	1
Mississippi	1
Missouri	4
Nebraska	1
New Hampshire	7
New Jersey	214
New York	151
North Carolina	25
Ohio	56
Oklahoma	3
Oregon	2
Pennsylvania	199
Rhode Island	8
South Carolina	14
Tennessee	10
Texas	9
Vermont	3
Virginia	3329
Washington	4
West Virginia	14
Wisconsin	3
Washington, D. C.	13

Geographical Distribution of Students		
Algeria	1	
Bermuda ,	1	
Belgium	3	
British Honduras	1	
Canada	5	
France	1	
Greece	2	
Germany	2	
Hong Kong	1	
ran	1	
apan	1	
South Korea	1	
Malaysia	1	
Panama Canal Zone	1	
	_	
Taiwan	_	
South Africa	_	
United Kingdom		
Venezuela		
Virgin Islands	1	

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Summer Session 1971

	Men	Women	Totals
Alabama	5	3	8
Alaska	0	1	1
Arizona	0	1	1
Arkansas	6	1	7
California	15	2	17
Colorado	12	2	14
Connecticut	13	5	18
Delaware	9	1	10
Florida	17	14	31
Georgia	12	4	16
Idaho	0	1	1
Illinois	13	7	20
Indiana	4	3	7
Iowa	7	0	7
Kansas	5	3	8
Kentucky	7	3	10
Louisiana	0	3	3
Maine	1	1	2
Maryland .	15	6	21
Massachusetts	13	7	20
Michigan	18	6	24
Minnesota	2	3	5
Mississippi	2	1	3
Missouri	7	5	12
Montana	1	0	1
Nebraska	3	0	3
Nevada	3	0	3
New Hampshire	1	1	2
New Jersey	33	23	56
New Mexico	0	1	1
New York	24	7	31
North Carolina	11	10	21
Ohio	23	9	32
Oklahoma	4	2	6
Oregon	2	0	2
Pennsylvania	38	22	60
Rhode Island	5	1	6
South Carolina	7	2	9
Tennessee	5	4	9
Texas	12	5	17
Utah	1	2	3

	Men	Women	Totals
Vermont	1	0	1
Virginia	933	768	1701
Washington	2	0	2
West Virginia	4	4	8
Wisconsin	3	4	7
Wyoming	1	0	1
Washington, D. C.	5	5	10
Brazil	1	0	1
Canada	1	0	1
Greece	1	0	1
Iran	1	0	1
Morocco	1	0	1
Spain	1	0	1
Sweden	0	1	1
United Kingdom	1	0	1
	1312	954	2266



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