

ANNUAL REPORT OF THE COMMITTEE ON GRADUATE STUDIES
TO THE FACULTY OF ARTS AND SCIENCES

September 28, 1988

As is customary, this report is divided into three sections: I. Comments, II. Data on Students and Degrees, and III. Curriculum Changes.

I. COMMENTS

The 1987-88 academic year was one of major growth and development in graduate programs in Arts and Sciences. Planning for two new programs with great potential, in Applied Science and Public Policy Analysis, is well underway. Through the state's funding initiative for Centers of Excellence at doctoral institutions, the College secured resources to create a new institute for the study of American culture and is participating with the University of Virginia in a Center in physics. During the year, the Government and Computer Science departments completed rigorous self-assessments and are implementing plans to strengthen their curricula. Computer Science awarded its first Ph.D. and the American Studies Program was authorized by the State Council to initiate its Ph.D. program during the 1988-89 academic year. If, as we expect, the Applied Science Program is approved by the State Council for initiation in 1990, the university will have added three new doctoral programs over a six-year period.

These efforts come at a time when, after the neglect of the late 70s and 80s, the climate for graduate work nationally is improving. More and better students are applying to our programs. Increasingly, funding agencies, both private and public, recognize that the nation faces an acute shortage of qualified researchers and teachers, particularly in mathematics, computer science, and the natural sciences. With the expected increase in faculty retirements over the next several decades, the demand for doctorates in all fields will increase. Our graduate schools face the challenge of attracting greater numbers of minority scholars into the research and academic communities. And since it seems unlikely that funding for basic research in private industry will increase, we expect that universities will be called upon to assume a greater responsibility for basic and applied research, frequently in collaboration with government-supported laboratories. In this improving environment for graduate education, we expect that there will continue to be important opportunities for William and Mary to strengthen its graduate programs and expand in selected areas.

New Doctoral Programs

A. American Studies. As mentioned above, following the State Council's approval of the College's Statement of Readiness, doctoral work in American Studies was formal, initiated. Professor Robert Gross, formerly of Amherst College, was selected to serve as Director of the program, which has moved into attractive new facilities at College Apartments. The offices of the new Commonwealth Center for the Study of American Culture are contiguous to those of the American Studies program, and we expect that this physical arrangement will stimulate intellectual discourse as well.

B. Applied Science. In June the College submitted to the State Council a full proposal (Form I) for a Ph.D. in Applied Science. This program, which will include such sub-areas as materials science, polymer science, accelerator science, and surface science, is made possible by the proximity of two first-class research laboratories, NASA-Langley and CEBAF, which support the program enthusiastically. Robert Orwoll of the Chemistry Department has been appointed Director of Applied Science. If approved by the State Council, the program will begin in 1990. A national search for the position of Director of Applied Science will be undertaken following SCHEV approval.

New Master's Program

In June the College submitted to the State Council a preliminary proposal (Form II) for a program leading to the degree of Master of Public Policy Analysis. A committee chaired by David Finifter of the Department of Economics and including representatives from Law, Education, Business Administration, and Marine Science is preparing a full proposal for submission to the Departments of Economics and Government, the Committee on Graduate Studies, and the faculty, most likely during the 1989-90 academic year. If approved, the program would begin in 1992.

Program Evaluations

Program evaluations are scheduled so that each program is evaluated approximately every six years. Since the last report, the evaluation of the graduate programs in Computer Science was completed. Plans are underway for external evaluations of the graduate program in the Psychology Department in 1988-89 and of the programs in Government and Sociology in 1989-90.

The Government Department initiated an intensive internal review and now offers a program with three primary fields of study: American Government, Comparative Government, and International Relations. Included with this report is a listing of new courses in Government.

Graduate Stipends

A major constraint on our graduate programs continues to be inadequate stipends. It was not possible this year to raise the standard stipend beyond \$5,300. In such high-demand fields as computer science and physics it has been possible to offer larger awards. Nevertheless, low stipends impede our ability to compete for the best students and the lack of adequate support for students in the second year of Master's programs delays the progress of many students in completing their degrees.

Commonwealth Fellows

Again this year, two William and Mary graduate students were selected in a state-wide competition as Commonwealth Fellows. The graduate students, both from History, are Gail Terry and Holly Mayer. Selection carries with it a \$5,000 award. The College's other distinguished nominees were Beverly Peterson (American Studies), David Garren (Physics), and Laurie King (Computer Science). Thirteen awards were made.

II. DATA ON STUDENTS AND DEGREES

A. ADMISSIONS - Fall Semester 1988

DEPARTMENT	*NUMBER APPLICANTS	NUMBER ACCEPTED	NUMBER MATRICULATED
AMERICAN STUDIES	60	23	23
ANTHROPOLOGY	35	16	10
APPLIED SCIENCE	0	0	0
BIOLOGY	30	7	7
CHEMISTRY	13	8	7
COMPUTER SCIENCE	140	73	18
ENGLISH	71	41	22
GOVERNMENT	34	14	9
HISTORY	103	15	14
MATHEMATICS	26	19	5
PHYSICS	48	19	11
PSYCHOLOGY	42	11	11
SOCIOLOGY	17	9	4
TOTALS	619	255	141
PSY.D. PROGRAM**	253	28	10

*Number of graduate applications received in the graduate office and application fees paid or waived, for September admission only.

**Total in Consortium.

B. AVERAGE UNDERGRADUATE GRADE POINT
AVERAGE OF ENTERING STUDENTS (4.0 SCALE)

DEPARTMENT	FALL 1986	FALL 1987	FALL 1988
AMERICAN STUDIES	3.29	3.13	3.42 (22 of 23)
ANTHROPOLOGY	2.76 (9 of 11)	3.28 (6 of 9)	3.25 (8 of 10)
APPLIED SCIENCE	----	----	----
BIOLOGY	2.90	3.02	3.13
CHEMISTRY	2.90	3.04	2.65
COMPUTER SCIENCE	3.16 (24 of 25)	3.09	3.35
ENGLISH	3.10 (11 of 12)	3.51 (16 of 17)	3.31 (21 of 22)
GOVERNMENT	3.19 (4 of 6)	3.21	3.20 (7 of 9)
HISTORY	3.52 (19 of 23)	3.45 (22 of 23)	3.47
MATHEMATICS	3.24	3.06 (6 of 7)	3.64 - (4 of 5)
PHYSICS	2.97	3.14 (10 of 11)	3.20
PSYCHOLOGY	3.56	3.36	3.19
PSY.D. PROGRAM	3.48	3.36	3.23
SOCIOLOGY	2.98	3.35	2.85

C. AVERAGE GRADUATE RECORD EXAMINATION SCORES OF ENTERING STUDENTS

DEPARTMENT	FALL 1987			FALL 1988		
	VERB	MATH	ADV	VERB	MATH	ADV
AMERICAN STUDIES	635 (6 of 10)	507 (6 of 10)	---	624 (15 of 23)	570 (15 of 23)	---
ANTHROPOLOGY	592 (6 of 9)	525 (6 of 9)	---	510 (6 of 10)	523 (6 of 10)	---
APPLIED SCIENCE	---	---	---	---	---	---
BIOLOGY	586	585	673 (65%)	594	626	700 (72%)
CHEMISTRY	500 (1 of 8)	670 (1 of 8)	---	520 (2 of 7)	690 (2 of 7)	505 (10%) (2 of 7)
COMPUTER SCIENCE	533	684	657 (68%) (9 of 22)	594	688	585 (40%) (6 of 18)
ENGLISH	619 (16 of 17)	529 (16 of 17)	537 (54%) (15 of 17)	650 (21 of 22)	555 (21 of 22)	561 (62%) (19 of 22)
GOVERNMENT	564	544	455 (45%) (2 of 7)	497	522	470 (56%) (1 of 9)
HISTORY	653	592	553 (73%)	656	611	545 (69%) (13 of 14)
MATHEMATICS	488 (4 of 7)	660 (4 of 7)	---	---	---	---
PHYSICS	536 (9 of 11)	716 (9 of 11)	616 (48%) (8 of 11)	529 (10 of 11)	713 (10 of 11)	727 (72%)
PSYCHOLOGY	600	580	576 (63%) (5 of 9)	544	545	544 (50%) (9 of 11)
PSY.D. PROGRAM	603	600	621 (78%)	656	596	624 (82%)
SOCIOLOGY	533 (6 of 8)	530 (6 of 8)	590 (91%) (1 of 8)	523 (3 of 4)	543 (3 of 4)	480 (68%) (1 of 4)

D. REGISTERED REGULAR & PROVISIONAL GRADUATE STUDENTS*
Fall 1986 to Fall 1988

DEPARTMENT	FALL 1986	SPRING 1987	FALL 1987	SPRING 1988	FALL 1988
AMERICAN STUDIES	18	19	17	15	32
ANTHROPOLOGY	14	11	13	14	17
APPLIED SCIENCE	1	1	1	0	0
BIOLOGY	23	24	24	24	19
CHEMISTRY	9	8	11	11	9
COMPUTER SCIENCE	67	58	69	68	68
ENGLISH	16	20	22	28	30
GOVERNMENT	9	9	12	11	11
HISTORY	51	49	56	54	46
MATHEMATICS	12	9	12	11	15
PHYSICS	41	38	42	38	48
PSYCHOLOGY	14	14	16	13	15
SOCIOLOGY	8	6	9	8	10
A & S TOTALS	283	266	304	295	320
PSY.D. PROGRAM**	59	50	54	52	60

*Totals include both full-time and part-time registration.

**Total in Consortium.

NOTE: The Computer Science department now enrolls most of the students listed previously under Applied Science. The Applied Science program now enrolls interdisciplinary students in the sciences.

E. GRADUATE DEGREES CONFERRED 1987-88

DEPARTMENT	DEGREE	AUGUST 1987	DECEMBER 1987	MAY 1988	TOTAL
AMERICAN STUDIES	M.A.	1	0	2	3
ANTHROPOLOGY	M.A.	0	0	4	4
APPLIED SCIENCE	M.S.	0	0	0	0
BIOLOGY	M.A.	1	3	3	7
CHEMISTRY	M.A.	3	0	1	4
	M.S.	0	0	0	0
COMPUTER SCIENCE	M.S.	1	4	5	10
	Ph.D.	0	0	1	1
ENGLISH	M.A.	0	5	4	9
GOVERNMENT	M.A.	3	0	3	6
HISTORY	M.A.	2	7	4	13
	Ph.D.	1	0	0	1
MATHEMATICS	M.A.	0	0	0	0
	M.S.	0	2	0	2
PHYSICS	M.A.	0	0	0	0
	M.S.	0	2	6	8
	Ph.D.	1	3	1	5
PSYCHOLOGY	M.A.	3	0	3	6
	Psy.D.**	6	8	2	16
SOCIOLOGY	M.A.	1	1	2	4
TOTALS	M.A.	14	16	26	56
	M.S.	1	8	11	20
	Ph.D.	2	3	2	7
	Psy.D.**	6	8	2	16

*M.A. IN EDUCATION
(Secondary School Teaching)

TOTAL NUMBER OF DOCTORATES CONFERRED
AUGUST 1987 THROUGH MAY 1988

Biology 2
Classical Studies 0
English 4
History 1
Mathematics 1
Museum Education 0
Secondary School Teaching 1
Social Studies 1
Physical Education 1

Arts and Sciences - 7 Ph.D., 16 Psy.D.**
Education - 18 Ed.D.
Marine Science - 10 Ph.D.

*Degree candidates for the M.A. in Education (Secondary School Teaching) take 12 hours of course work in Arts and Sciences.

**Total in the Consortium.

F. GRADUATE DEGREES AWARDED DURING THE LAST 10 YEARS*
(August - June)

DEPARTMENT	PROGRAM INITIATED	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	AUG. 1988	TOTAL SINCE AUG. 1978
AMERICAN STUDIES	1982-M.A.					0	1	4	5	2	3	1	16
ANTHROPOLOGY	1979-M.A.	0	0	2	2	3	5	1	4	8	4	1	30
APPLIED SCIENCE	1970-M.S.	6	7	14	9	9	10	1	2	0	0	0	58
BIOLOGY	1963-M.A.	7	10	9	11	6	5	8	7	2	7	2	74
CHEMISTRY	1964-M.A./M.S.	0	2	2	6	1	2	9	5	5	4	2	38
COMPUTER SCIENCE	1984-M.S. 1986-Ph.D.							9	10	19	10	0	48
											1	0	1
ENGLISH	1970-M.A.**	14	2	13	9	6	7	9	5	8	9	1	83
GOVERNMENT	1966-M.A.	5	3	4	5	6	1	1	5	3	6	2	41
HISTORY	1955-M.A. 1967-Ph.D.	11	8	5	6	10	7	11	5	14	13	3	93
		1	3	1	3	2	3	2	1	4	1	0	21
MATHEMATICS	1961-M.A./M.S.	4	3	5	3	5	6	6	4	7	2	1	46
PHYSICS	1959-M.A./M.S. 1964-Ph.D.	12	3	9	6	5	10	11	9	5	8	0	78
		6	2	2	5	7	6	5	6	4	5	0	48
PSYCHOLOGY	1953-M.A. 1978-Psy.D.***	1	3	5	5	7	2	9	5	4	6	1	48
						5	9	4	8	8	16	1	51
SOCIOLOGY	1967-M.A.	4	4	4	4	6	2	5	2	3	4	2	40
A & S TOTALS:	M.A./M.S.	64	45	72	66	64	58	84	68	80	76	16	693
	Ph.D.	7	5	3	8	9	9	7	7	8	7	0	70
	Psy.D.***					5	9	4	8	8	16	1	51

*See Table E for M.A. in Education degrees.

**Earlier program suspended in 1963.

***Total in the Consortium.

III. CURRICULUM CHANGES
Approved 1987-88

AMERICAN STUDIES

NEW COURSES:

601. American Culture as Historians Have Seen It. Fall (3).
602. American Culture Through the Lens of Social Science.
Spring (3)
603. Approaching American Culture Through Aesthetic Experience. Fall (3)
604. American Material Culture. Spring (3).
663. American Folklife. Fall (3).
664. Vernacular Architecture in Early America. Spring (3).

ANTHROPOLOGY

CHANGE:

Change in degree requirement:

Old: "All courses, in order to count towards the Master's degree, must be completed with grades of "B" or better."

New: "A candidate must complete 24 semester hours of courses, exclusive of Anthropology 560 (Thesis), with a grade average of "B" or better."

BIOLOGY

NEW COURSE:

553. Molecular Biology Laboratory. Fall (2). Prerequisite or corequisite: Biology 542.

CHANGE:

569. Herpetology. Change credit hours from 2 to 3

COMPUTER SCIENCE:

NEW COURSE:

607. Computer Vision. Fall or Spring (3).

GOVERNMENT

NEW COURSES:

- 570, 571. Tutorial in Political Policy. Fall and Spring (3,3).
572. Tutorial in Contemporary Political Philosophy. Fall or Spring (3).
573. Tutorial in Political Parties. Spring (3).
574. Tutorial in European Political Systems. Fall (3).
575. Tutorial in Politics of Developing Countries. Spring (3).
576. Tutorial in U.S. Foreign Policy. Spring (3).
577. Tutorial in International Organization. Fall (3).
578. Tutorial in International Law. Spring (3).
579. Tutorial in African International Relations. Spring (3).
580. Tutorial in International Political Economy. Spring (3).
581. Tutorial in Soviet Political System. Fall (3).
582. Tutorial in Comparative Communist Systems. Spring (3).
583. Tutorial in Governments and Politics of China and Japan. Fall (3).
584. Tutorial in African Politics. Fall (3).
585. Tutorial in Latin American Politics and Government. Fall or Spring (3).
586. Tutorial in Introduction to Public Administration. Fall or Spring (3).
587. Tutorial in the Politics of States and Localities. Spring (3).
588. Tutorial in Southern Politics. Spring (3).
589. Tutorial in the Legislative Process. Fall (3).
590. Tutorial in the Presidency. Fall (3).
591. Tutorial in the Judicial Process. Spring (3).

593. Tutorial in the Mass Media, Public Opinion, and American Political Behavior. Fall or Spring (3).

594. Tutorial in Public Policy. Fall or Spring (3).

599. Tutorial in Topics in Government. Fall or Spring (3).

STIPULATION:

"A student may apply no more than three tutorials toward the 24 credit hours required for the degree."

CHANGES:

507-1,2. Introduction to Research Methods; now listed as Political Polling and Survey Analysis.

546. The Development of Public Policy; now listed as Tutorial in Public Policy and Administration; also has new description.

HISTORY

NEW COURSE:

618. Pro-Seminar in European History. Fall and Spring (3,3).

PSYCHOLOGY

NEW COURSE:

694. Advanced Practicum. Fall and Spring (3-6).

CHANGES:

560. Thesis. Change credit hours from TBA to Fall (3) and Spring (3).

608. Proseminar in Social Psychology. New description to reflect course content in more detail.

620. Colloquium. Change credit hours from 0 to 1; also has new description to reflect that the course will no longer be graded pass/fail.

622. Directed Readings. Change credit hours from TBA to 3.

670. Interviewing Practicum has been dropped.

693. Practicum. Change credit hours from 4-6 to 4; also has new course description.

Committee on Graduate Studies:

Norman Barka, Anthropology
Donald Baxter, Government
Joanne Braxton, American Studies
Gregory Capelli, Biology
Miles Chappell, Fine Arts
Morton Eckhause, Physics
Philip Funigiello, History
Satoshi Ito, Sociology
Richard Kiefer, Chemistry
Sidney Lawrence, Mathematics
Maynard Nichols, VIMS
Robert Orwoll, Applied Science
Richard Prosl, Computer Science
Ellen Rosen, Psychology
Neill Watson, Clinical Psychology
Peter Wiggins, English
Robert J. Scholnick, Chair