

James Madison University

JMU Scholarly Commons

[All Bulletins](#)

[Bulletins](#)

4-1-1965

Bulletin Madison College, April, 1965

Madison College (Harrisonburg, Va.)

Follow this and additional works at: <https://commons.lib.jmu.edu/allbulletins>

Recommended Citation

Bulletin Madison College, April, 1965 , XXIII, 4, Harrisonburg, (Va.): Madison College.

This Article is brought to you for free and open access by the Bulletins at JMU Scholarly Commons. It has been accepted for inclusion in All Bulletins by an authorized administrator of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.

BULLETIN

MADISON COLLEGE

HARRISONBURG, VIRGINIA

GRADUATE PROGRAM

VOL. XXIII, NO. 3

MARCH, 1965

Bulletin, Madison College, Volume XXIII, Number 3, March, 1965.
Published four times a year: January, February, March and April. Entered
as second class matter November 7, 1934, at the Post Office at Harrisonburg,
Virginia, under the Act of August 24, 1912.

BULLETIN

MADISON COLLEGE

ACCREDITED BY: Southern Association of Colleges and Schools, National Council for Accreditation of Teacher Education for Preparation of Elementary Teachers and Secondary Teachers with the Master's Degree as the Highest Degree Offered, Virginia State Board of Education.

MEMBER OF: Association of American Colleges, Association of Virginia Colleges, American Association of Colleges for Teacher Education, American Council on Education, National Commission on Accrediting, Association of State Colleges and Universities.

CORPORATE MEMBER OF: American Association of University Women.

Contents

	<i>Page</i>
THE VISITORS OF MADISON COLLEGE	3
OFFICERS OF ADMINISTRATION	4
GRADUATE COUNCIL	4
GRADUATE FACULTY	5-7
ADMINISTRATION OF THE GRADUATE PROGRAM	8
ADMISSION TO GRADUATE STUDY	8
DEGREES OFFERED	9
ADMISSION TO CANDIDACY FOR A DEGREE	9
REQUIREMENTS FOR THE MASTER'S DEGREE	9-12
Academic Requirements	9-11; 12
Residence Requirements	10-11
Examination Requirements	11
Thesis Requirements	11
STUDENT ADVISORY COMMITTEES	12-13
SCHOLARSHIP REQUIREMENTS	13
TIME LIMIT	13
CREDITS BY TRANSFER	13
POST-BACCALAUREATE SCHOLARSHIP ASSISTANCE	14-16
PROGRAMS OF STUDY	17
EVENING GRADUATE CLASSES	17
GRADUATE OFFERING:	
Art	18
Biology	19-21
Business and Business Education	22-25
Chemistry	25-27
Education and Psychology	27-41
English	42-43
Home Economics	45-47
Mathematics	47-50
Music	50-51
Science	55-56
Social Science and History	56-60

The Visitors of Madison College

THE HONORABLE BURR P. HARRISON, *Rector*
WINCHESTER

RUSSELL M. WEAVER, *Vice-Rector*
HARRISONBURG

CHARLES C. BROWN
MARTINSVILLE

WALLACE L. CHANDLER
RICHMOND

MRS. D. KIRK HAMMOND
ROANOKE

DABNEY S. LANCASTER
MILLBORO SPRINGS

J. LEONARD MAUCK
MARION

THOMAS E. SEBRELL, III
ALEXANDRIA

MRS. EMILY N. SPONG
PORTSMOUTH

MRS. LINDEN STUART
CHARLOTTESVILLE

G. FRED SWITZER
HARRISONBURG

WOODROW W. WILKERSON
State Superintendent of Public Instruction
RICHMOND

EXECUTIVE COMMITTEE

G. FRED SWITZER, *Chairman*
MRS. LINDEN STUART
RUSSELL M. WEAVER
Rector, member ex officio

RICHARD C. MANDEVILLE, *Secretary*

The Graduate Faculty

ROSALIE NEWTON ALLISON, *Assistant Professor of Psychology*. B.S., Pennsylvania State University; M.S. in Ed., Westminster College in Pennsylvania; Ed.D., University of Georgia.

MARY CAMPBELL BRILL, *Associate Professor of English*. A.B., Syracuse University; A.M., Ph.D., Cornell University.

PATRICIA J. BRUCE, *Associate Professor of Physical and Health Education and Field Supervisor of Student Teaching*. A.B., Wheaton College; M.Ed., Boston University; P.E.D., Indiana University.

LESTER S. BUCHER, *Professor of Music*. B.S., State College, West Chester, Pennsylvania; M.S., University of Pennsylvania; Ed.D., Columbia University.

CHARLES G. CALDWELL, *Professor of Education*. A.B., Roanoke College; M.A., Ph.D., University of Chicago.

WILBERT CHAPPELL, *Professor of Chemistry*. B.S., Ottawa University; A.M., Ph.D., University of Kansas.

RAYMOND D. COOL, *Professor of Chemistry*. B.S., Bridgewater College; M.S., Ph.D., University of Virginia.

MARILYN CRAWFORD, *Associate Professor of Physical and Health Education*. B.S., Woman's College of the University of North Carolina; M.A., University of North Carolina; Ed.D., University of Texas.

WILLIAM L. CURTIS, *Professor of English*. A.B., A.M., Ph.D., University of North Carolina.

GARNEY L. DARRIN, *Associate Professor of Education; Director of the Anthony-Seeger Campus School*. B.S., M.Ed., Wayne State University; Ed.D., University of Maryland.

Z. S. DICKERSON, JR., *Professor of Business Education*. B.S., Eastern Kentucky State College; M.S., Ed.D., University of Kentucky.

RAYMOND C. DINGLEDINE, *Professor of History*. B.A., M.A., Ph.D., University of Virginia.

ANTHONY SAS, *Associate Professor of Geography*. B.A., University of Amsterdam, The Netherlands; M.A., University of Washington; Ph.D., Clark University.

WARREN SCHUETZ, *Associate Professor of Music*. B.S. in M.Ed., M.M.E., Ed.D., University of Illinois.

CAROLINE SINCLAIR, *Professor of Physical and Health Education*. B.S., College of William and Mary; Ph.D., New York University.

ETHEL M. SMEAK, *Assistant Professor of English*. A.B., College of William and Mary; M.A., Ph.D., Vanderbilt University.

ELMER L. SMITH, *Professor of Sociology*. B.S., Florida Southern College; M.A., Western Reserve University; D.S.Sc., Syracuse University.

CRYSTAL THEODORE, *Professor of Art*. A.B., Winthrop College; A.M., Ed.D., Columbia University.

MERCY H. WARREN, *Dean and Professor of Biology*. B.S., College of William and Mary; M.A., Ed.D., Columbia University.

JOHN C. WELLS, *Professor of Physics*. A.B., Colgate University; A.M., Ed.D., Columbia University.

GAXTER DOUGLAS WILSON, *Associate Professor of English*. B.A., The Citadel; M.A., Ph.D., University of Virginia.

4. If the undergraduate record shows a deficiency in the proposed major or minor fields of study, the applicant must make up the deficiency by taking such additional courses as may be recommended by the department head and approved by the Graduate Council. Such courses, if required, do not count for graduate credit.
5. Admission to graduate study does not imply admission to candidacy for a degree.

DEGREES OFFERED

The College offers programs of studies leading to the Master of Arts in Education, the Master of Science in Education, and the Master of Science degrees.

DEGREE REQUIREMENTS FOR THE MASTER OF ARTS IN EDUCATION, THE MASTER OF SCIENCE IN EDUCATION, AND THE MASTER OF SCIENCE

Admission to Candidacy. In order to become eligible for admission to candidacy for a Master's degree the graduate student must:

1. Complete nine semester hours of credit in graduate courses taken at Madison College. Of these credit hours at least three must be in the major field and three in the minor field.
2. Submit a score on the Aptitude section of the Graduate Record Examination.
3. File an application for admission to candidacy with the Graduate Council.

When the student has completed the foregoing requirements the Graduate Council will act upon the applicant's request for admission to candidacy.

Academic Requirements. The candidate must complete (a) twenty-four semester hours of graduate work and submit a thesis, or (b) thirty semester hours of graduate work without a thesis, for the degree of Master of Arts in Education or the degree of Master of Science in Education, depending upon the concentration. A

requirements for the Master's degree. Evening courses held on the campus will be counted in meeting residence requirements but residence requirements cannot be met by taking only evening classes. The equivalent of at least one academic year of residence is required at Madison with the exception that one summer session of graduate study at another Virginia institution may be accepted toward the residence requirements.

Examination Requirements. A comprehensive examination is required of all students. For those students who submit a thesis the examination will be oral, otherwise, it will be written. In the comprehensive examination the student will be examined only on those courses taken prior to the term in which the comprehensive examination is administered.

A candidate who fails on the comprehensive examination may be permitted a re-examination at the discretion of the student's major department and the Graduate Council. A re-examination cannot be given sooner than the semester following the unsuccessful examination.

Thesis Requirements. A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree.

The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval at least three months prior to the time the degree is expected to be awarded.

The thesis shall consist of a written interpretation of a body of facts and opinions gained through critical reading and independent research. There must be an adequate analysis of the assembled data. The thesis must be prepared according to the general requirements established by the Graduate Council and must be completed sixty days before the time of graduation to assure the Advisory Committee of its acceptability. Three unbound copies of the thesis must be filed with the Chairman of the Graduate Council not later than thirty days before the date of graduation. An abstract of the thesis of not more than six hundred words is required.

thesis is being completed must be a member of the committee. The Dean of the College is an ex officio member of all Advisory Committees.

A Graduate Advisory Committee will not be appointed until the student has been admitted to candidacy for a degree.

TIME LIMIT

A graduate student must complete all requirements for the degree within six years from the time he begins his graduate study. The Graduate Council may, however, permit an extension of time because of extenuating circumstances.

CREDITS BY TRANSFER

Not more than six hours of graduate credit from an accredited college or university may be applied to the requirements for the degree upon recommendation of the head of the major department and approval of the Dean of the College. At least six semester hours of the minor must be in graduate courses taken at Madison College. Approval to take graduate courses at other institutions must be obtained prior to enrolling in the courses.

No transfer credit will be allowed for courses taken on the undergraduate level if previously used as credit towards another degree.

SCHOLARSHIP REQUIREMENTS

The grades given in graduate courses are A, B, C and F. Graduate students must receive a mark of "B" or better in a course if it is to count in meeting requirements for a Master's degree.

After a student is admitted to candidacy for a Master's degree, he is automatically placed on probation as soon as he receives a grade below "C" in any course or a grade of "C" in as many as two courses. The courses need not be taken simultaneously. Probation is a warning that achievement is not satisfactory. A student on probation will not be permitted to continue his graduate work if he earns a grade of "C" or below in any subsequent course.

to assist teachers to deepen and broaden their knowledge of subject-matter content, particularly with reference to current subject-matter developments in their respective teaching fields. *A total of approximately 500 scholarships will be awarded.* Any unused part of the quotas allocated for divisions will be re-allocated from time to time to divisions where they can be used advantageously.

- B. Nominations are made in triplicate on official forms and the first two copies are sent to the Office of Teacher Education not later than April 1.

The need for applications being submitted by this date is two-fold: First, the College must be advised as early as possible of those who will enroll in summer programs in order to review the credentials of the applicants and to arrange the appropriate courses. Also, the State Department Office must have sufficient time to process the applications, make re-allocations, prepare the Approval Notices, and the like. The entire month of April will be needed for this purpose.

V. PAYMENT TO TEACHERS

When the candidate has been approved and has submitted a properly completed promissory note and has been reported by the institution as enrolled in courses in the summer session, a check will be sent to the candidate in care of the College. Reimbursement will be at the rate of \$20.00 per semester hour of credit: Minimum—3 semester hours, \$60.00; maximum—9 semester hours, \$180.00. In no instance will the amount reimbursed exceed the actual college resident cost of tuition, required fees, room and board.

VI. PROMISSORY NOTES AND CANCELLATION

The candidate must agree to execute a note to the Commonwealth of Virginia for the amount of scholarship aid received, which obligation shall bear interest at the rate of 3% per year. This note must be endorsed by a responsible adult, who is a resident of Virginia. The obligation in-

By attending the Intersession and Six-Week Session and by taking evening classes at Madison College or extension classes during the regular sessions, it is possible for a student to complete the work for a Master's degree in two calendar years.

PROGRAMS OF STUDY

Madison College offers three programs of study leading to the Master of Arts in Education and Master of Science in Education degrees. These programs are:

1. For Teachers in the Elementary School.
2. For Teachers in the Secondary School.
3. For College Graduates who have not completed the necessary courses in professional education to meet certification requirements.

It is strongly recommended that students who enroll in the program for secondary school teachers major in a subject-matter field. Those who enroll in the program for elementary school teachers may also major in a subject-matter field if the backgrounds and needs of the students concerned indicate that such should be done.

Students may major in biology, business education, English, mathematics, music, and social science as well as in professional education. In addition to the aforementioned areas students may minor in art, home economics and science.

Madison also offers a program for teachers of biology or mathematics which leads to the Master of Science degree.

For details concerning the aforementioned programs and requirements for majors see pages 18-56.

REQUIREMENTS FOR MAJORS AND MINORS, AND COURSE DESCRIPTIONS

The courses offered in each department participating in the graduate program are listed on the pages that follow. A few of the courses listed are taught in the evening during the winter session. A much more comprehensive offering is available in the summer.

DEPARTMENT OF BIOLOGY

The graduate program of the Department of Biology has three aims: (1) to supplement the candidate's subject-matter background and to emphasize the impact of biological principles on economic and social problems of our times; (2) to give to the professional teacher an opportunity to learn techniques of value for actual classroom experiences as well as to introduce modern concepts of Biology; (3) to introduce all students to research, the one fundamental method by which our knowledge progresses.

All majors and minors will be required to select one course from each of the following subject-matter areas:

Ecology and Taxonomy — Biology 501, Biology 510.

Morphology and Anatomy — Biology 540, Biology 610.

Functional Biology — Biology 502, Biology 625, Biology 630.

The remainder of each major student's program should be selected according to the student's aims and interests. Each program must have the approval of the departmental chairman.

A prerequisite for the Master of Science degree is Mathematics 325, Elementary Statistics, or its equivalent.

All candidates for the Master of Science degree will be required to take Biology 600, Thesis, for six credits. Selection of the thesis topic must have the approval of the chairman of the department.

BIOLOGY 501. PLANT ECOLOGY.

Three credits.

A study of the distribution and association of plants in relation to their physical and biological environments. Concepts include migration, invasion, competition, successions and climax as these influence environmental change, conservation and wildlife. Open only by permission of the instructor. (This course was offered formerly as Biology 101.)

BIOLOGY 502. VERTEBRATE PSYCHOLOGY.

Three credits.

A study of vertebrate systemic function. Particular emphasis will be given to the quantitative interpretation of muscle contraction and the nerve impulse. Laboratory exercises will involve the use of vertebrate forms to demonstrate specific functional phenomena. (This course was offered formerly as Biology 102.)

BIOLOGY 600. PHYSIOLOGY OF RESPIRATION.

Three credits.

A comparative study of breathing and respiration in selected invertebrates and vertebrates including man. Consideration will be given to the Emden-Meyerhoff and Krebs's cycles. (This course was offered formerly as Biology 200.)

BIOLOGY 610. HISTOLOGY.

Three credits.

The study and identification of tissues. Practical work in the mounting and staining of selected material. (This course was offered formerly as Biology 210.)

BIOLOGY 625. INVERTEBRATE PHYSIOLOGY.

Three credits.

A comparative study of physiological processes in various invertebrate phyla, interpreted in terms of structural variation, evolutionary history, and ecology. (This course was offered formerly as Biology 225.)

BIOLOGY 630. THE SEED PLANTS.

Three credits.

The morphology and physiology of the Spermatophyta. (This course was offered formerly as Biology 230.) Prerequisite: Biology 200 (offered formerly as Biology 30) or its equivalent.

BIOLOGY 640. MODERN THEORIES IN BIOLOGY.

Three credits.

A study of the meaning, value, and necessity of theories as they are related to man, the animal and plant worlds, and to nature in general. Illustrations showing how theories and progress are related. (This course was offered formerly as Biology 240.)

BIOLOGY 650. SURVEY OF RADIATION BIOLOGY.

Three credits.

A study of the effect of ionizing radiation on the organism. The nature and source of these radiations will be discussed as well as their effect and methods of protection against them. (This course was offered formerly as Biology 250.)

		<i>Semester Hours</i>
Business Education 640.	Seminar in Automated Data Processing Systems	3
Business Education 680.	Reading and Research	3

A minor in business education consists of twelve semester hours of approved courses in business and business education.

Required courses for a *minor* in business education are:

		<i>Semester Hours</i>
Business Education 520.	Advanced Studies in the Basic Business Subjects	3
<i>or</i>		
Business Education 530.	Advanced Studies in the Skill Business Subjects	3
Business Education 550.	Curriculum Construction in Business Education	3
Business Education 610.	Problems in Business Education	3
Business Education 630.	Seminar in American Business	3
<i>or</i>		
Business Education 640.	Seminar in Automated Data Processing Systems	3

BUSINESS EDUCATION 520. ADVANCED STUDIES IN THE BASIC BUSINESS SUBJECTS.

Three credits.

Advanced studies for the improvement of the teaching of General Business, Business Law, Economics, Consumer Business Education, and related areas. (This course was offered formerly as Business Education 120.)

BUSINESS EDUCATION 530. ADVANCED STUDIES IN THE SKILL BUSINESS SUBJECTS.

Three credits.

Advanced studies for the improvement of the teaching of Typewriting, Shorthand, and Bookkeeping. (This course was offered formerly as Business Education 130.)

BUSINESS EDUCATION 680. READING AND RESEARCH.

Three credits.

Examination of approved research procedures for business education. Preparation of reports from assigned field problems applied to various research techniques. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Business Education 250.)

BUSINESS EDUCATION 700. THESIS.

Six credits.

A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree. Students who elect to write a thesis are required to complete twenty-four semester hours in course work. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval at least three months prior to the time the degree is expected to be awarded. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. If a thesis is elected, Business Education 680 will not be taken. (This course was offered formerly as Business Education 300.)

DEPARTMENT OF CHEMISTRY*

A graduate major or minor in chemistry should be built around the needs and interests of the student. A major in chemistry will consist of twenty-one semester hours of graduate work in chemistry (or in a related field) subject to the approval of the head of the department; and a minor in chemistry will consist of twelve semester hours of graduate work in chemistry. The student plans his program with the help of the head of the department.

CHEMISTRY 501. ADVANCED INORGANIC CHEMISTRY.

Three credits.

A course in fundamental concepts which deal with the relation of structure to properties, the periodic system, typical reactions and applications of physical chemical principles to inorganic systems. (This course was offered formerly as Chemistry 101.)

*Neither a major nor minor is currently offered in Chemistry.

CHEMISTRY 700. THESIS.

Six credits.

A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree. Students who elect to write a thesis are required to complete twenty-four semester hours in course work. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval at least three months prior to the time the degree is expected to be awarded. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Chemistry 300.)

DEPARTMENT OF EDUCATION
AND PSYCHOLOGY

MAJOR

The candidate for the degree of Master of Arts in Education or the Master of Science in Education must either major or minor in Education.

The graduate program of the Department of Education and Psychology is designed to improve the competency in professional education of teachers holding positions in the elementary school and for teachers in academic and special subject fields in the secondary school.

The Department of Education and Psychology offers three major programs of study. These programs are: (1) for teachers in the elementary school; (2) for teachers in the secondary school; and (3) for college graduates who have not completed sufficient work in professional education to meet certification requirements.

The Department offers the necessary courses to meet requirements of the State Board of Education for approval as guidance counselors.

It is recommended that the teacher in senior high school, who has the Collegiate Professional Certificate, major in a subject field.

The candidate for the Master's degree who elects to major in Education must successfully complete (a) twenty-four semester hours of work and submit a thesis, or (b) thirty semesters hours of work without a thesis. Education 630 is required of all students majoring in Education.

Semester Hours

Education 507. Diagnostic and Remedial
Techniques in Reading

Education 530. Practicum in Diagnostic
and Remedial Techniques
in Reading

Education 567. Instruction

Education 620. Comparative Education

Education 680. Reading and Research

Education 700. Thesis

3. In a field of interest outside Education to be
determined by the Department concerned,
courses appropriate to the background of an
elementary teacher 12

(12 hours in one field, or 6 hours in each of
two related fields).

PROGRAM TO PREPARE TEACHERS, MAJORING IN EDUCATION, FOR POSITIONS IN SECONDARY SCHOOLS

This program provides a sequence of courses which will im-
prove the competency in professional education of teachers holding
positions in the secondary school.

Minimum Requirements 30

1. Required Courses 9

Education 512. Secondary School
Curriculum and
Co-Curriculum

Education 528. The Psychology of
Adolescence

Education 630. Research Methods in
Education

PROGRAM FOR COLLEGE GRADUATES
WHO HAVE NOT COMPLETED THE NECESSARY
COURSES IN PROFESSIONAL EDUCATION AND WHO
WISH TO MEET CERTIFICATION REQUIREMENTS

This program provides a sequence of professional courses for college graduates who have not completed the necessary courses in professional education and who wish to qualify for the Collegiate Professional Certificate and for teaching positions in the public schools.

Sufficient undergraduate prerequisites for a strong background in professional education are required of all candidates before entering the graduate program.

Semester Hours

Minimum Requirements 30

1. Required courses 12

Education 540. Basis of Curriculum
Development

Education 567. Instruction

Education 584. Human Growth and
Development

Education 630. Research Methods in
Education

2. Education electives selected with the approval
of the adviser in Education 6

Education 501A. Seminar in Education and
Psychology: The Elementary School

Education 501B. Seminar in Education and
Psychology: Educational
Television

Education 501D. Survey of Exceptional
Children

Education 502. The Elementary School
Reading Program

PROGRAM FOR APPROVAL AS GUIDANCE COUNSELORS

Qualifications for the Guidance Counselor as defined in the certification regulations for teachers of the State Board of Education (Vol. 43, No. 1, July, 1960) include the following:

- I. The Collegiate Professional Certificate.
- II. One or more years of successful teaching experience.
- III. A minimum of fifteen semester hours (preferably at the graduate level) in at least four of the following five areas, one of which must be in Counseling and one in Tests and Measurements:

Principles and Practices of Guidance Counseling

Counseling

Tests and Measurements

Occupational and Educational Information
(including Curricula Offering)

Understanding the Individual (in Relation
to His Educational Needs)

- IV. Personal qualities which merit the confidence and respect of pupils, parents, teachers, and school administrators.

The courses outlined below are designed to prepare students to meet the requirements of the State Board of Education for approval as Guidance Counselors for public schools in Virginia.

Semester Hours

Minimum Requirements	30
1. Required courses	18
a. Education 504.	Occupational and Educational Information
Education 516.	Theory and Practice of Guidance

Semester Hours

Education 584. Human Growth and Development

2. One of the following: 3

Education 512. Secondary School Curriculum and Co-Curriculum

Education 540. Basis of Curriculum Development

Education 567. Instruction

Education 591. The Elementary School Curriculum

Education 610. Organization and Administration of Guidance Programs

3. One of the following: 3

Education 501A. Seminar in Education and Psychology: The Elementary School

Education 501B. Seminar in Education and Psychology: Educational Television

Education 502. The Elementary School Reading Program

Education 505. The Role of the School in Society

Education 506. Teaching Reading Skills Beyond the Elementary Grades

Education 507. Diagnostic and Remedial Techniques in Reading

EDUCATION 501E. EDUCATION OF MENTALLY RETARDED CHILDREN.

Three credits.

This course deals with the organization of instruction for the trainable and educable mentally retarded and slow learner. Major emphasis will be on curriculum adjustment, specialized methods, and evaluation. Open to approved undergraduates. (This course was offered formerly as Education 260, and Education 501D.)

EDUCATION 502. THE ELEMENTARY SCHOOL READING PROGRAM.

Three credits.

The total elementary school reading program will be examined including basal reading, remedial reading, recreational reading and reading in the subject matter fields. Various approaches to these four areas such as the basal reader approach, the individualized approach, and the linguistic approach will be studied.

EDUCATION 503. PHILOSOPHY OF EDUCATION.

Three credits.

This course includes a critical survey of widely recognized theory regarding the nature and purpose of education in the Western World, with special emphasis upon such theory as it bears on and gives direction to educational policy and practice within the American democracy. (This course was offered formerly as Education 103.)

EDUCATION 504. OCCUPATIONAL AND EDUCATIONAL INFORMATION.

Three credits.

A survey of the sources of occupational information and their use in counseling individuals and groups; the philosophy and principles underlying the integration of occupational and educational guidance; the study of community job resources; and plant and industrial visits. (This course was offered formerly as Education 104.)

EDUCATION 505. THE ROLE OF THE SCHOOL IN SOCIETY.

Three credits.

Interpretation of the school as society's agency for human betterment, with emphasis on cultural living. Some issues that arise in the organization and operation of the schools. (This course was offered formerly as Education 105.)

EDUCATION 525A. TEACHING OF A SUBJECT FIELD:
LANGUAGE ARTS.

Three credits.

This course considers teaching principles and techniques in particular subject fields for both elementary and secondary schools. The level of treatment is determined by the group enrolled and by the preferences of the instructor. (This course was offered formerly as Education 125A.)

EDUCATION 528. THE PSYCHOLOGY OF ADOLESCENCE.

Three credits.

A study of the dynamics shaping the growth, development, and behavior of the adolescent and youth forms the basis of this course. Extensive analysis and appraisal of current research is required. (This course was offered formerly as Education 128.)

EDUCATION 530. PRACTICUM IN DIAGNOSTIC AND REMEDIAL
TECHNIQUES IN READING.

Three credits.

This course will be a logical continuation of the foregoing course. Each student will be assigned several subjects to diagnose, and for whom he is to plan and carry out a corrective program of reading therapy.

EDUCATION 537. INDIVIDUAL AND GROUP TESTS.

Three credits.

The development, administration, and interpretation of standardized tests are considered in this course, as well as the use of such tests in survey programs, in the evaluation of instructional efficiency, and in the planning and improvement of teaching procedures. *A course in Tests and Measurements is strongly recommended before enrolling in Education 537.* (This course was offered formerly as Education 137.)

EDUCATION 540. BASIS OF CURRICULUM DEVELOPMENT.

Three credits.

This course is designed to help teachers determine what public schools in a democratic society should teach. Also included is the preparation of curriculum guides in all subject fields at both the elementary and secondary school levels. (This course was offered formerly as Education 140.)

EDUCATION 550. TECHNIQUES IN COUNSELING.

Three credits.

This course deals with the various techniques employed in the counseling process. Old and new viewpoints are considered and each student is

the social, economic, and political problems and developments which brought about progress. (This course was offered formerly as Education 220.)

EDUCATION 630. RESEARCH METHODS IN EDUCATION.

Three credits.

This course is designed to develop those skills, insights, and understandings which will enable the student to become both an intelligent consumer and an intelligent producer of educational research. (This course was offered formerly as Education 230.)

EDUCATION 640. THE FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION.

Three credits.

This course deals with such topics as federal, state and local authority and control of education; financial support for public education; problems related to the administration and supervision of pupil personnel, teaching personnel, and of the instructional program. (This course was offered formerly as Education 240.)

EDUCATION 650. SUPERVISION OF INSTRUCTION.

Three credits.

In this course supervision is viewed as educational leadership in the improvement of instruction. The implications of research on the nature and scope of supervision are reviewed; current views on cooperative planning of supervisory programs are analyzed; and the improvement of supervisory techniques studied. (This course was offered formerly as Education 250.)

EDUCATION 680. READING AND RESEARCH.

Three credits.

The student registered for this course is given an opportunity for directed reading and research in areas of his special interest. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Education 290.) Prerequisite: Education 630, or its equivalent.

EDUCATION 700. THESIS.

Six credits.

A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree. Students who elect to write a thesis are required to complete twenty-four semester hours in course work. The Student's Advisory Committee must

ENGLISH 501. THE GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE.

Three credits.

An introduction to the history of the English language with attention to the changing forms of speech as reflected in morphology, phonology, syntax, and semantics. Reading and research in special phases of historical and descriptive grammar. (This course was offered formerly as English 101.)

ENGLISH 520. THE PRACTICE OF LITERARY CRITICISM.

Three credits.

The history and theories of literary criticism are given brief attention. The major emphasis of the course, however, is upon critical examination and analysis, both oral and written, of representative poems, short stories, and dramas. Students are given ample opportunity to practice literary criticism. (This course was offered formerly as English 120.)

ENGLISH 530. STUDIES IN AMERICAN LITERATURE.

Three credits.

A study of literary movements and significant authors of several of the periods of American literature will be made in different years. (This course was offered formerly as English 130.)

ENGLISH 540. POETRY AND PROSE OF THE ENGLISH RENAISSANCE.

Three credits.

The major literary expressions of the English Renaissance from the rise of humanism to Milton, excluding Shakespeare. (This course was offered formerly as English 140.)

ENGLISH 550. MODERN DRAMA.

Three credits.

A study of the representative plays of modern and contemporary dramatists, beginning with Ibsen, Shaw and O'Neill. Wide reading in the works of the chief contemporary dramatists will be required. (This course was offered formerly as English 150.)

ENGLISH 570. STUDIES IN SEVENTEENTH-CENTURY LITERATURE.

Three credits.

A study of selected authors and movements in the poetry and prose of the Seventeenth Century. Especial attention to Metaphysical poetry and

ENGLISH 640. STUDIES IN CONTEMPORARY LITERATURE.

Three credits.

Poetry and fiction of the most significant contemporary authors will be examined. Choice of authors studied will vary in different years. (This course was offered formerly as English 240.)

ENGLISH 680. READING AND RESEARCH.

Three credits.

Opportunity is given the individual student for supervised reading and research in the literature of his special interest. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as English 280.)

ENGLISH 700. THESIS.

Six credits.

A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree. Students who elect to write a thesis are required to complete twenty-four semester hours in course work. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval at least three months prior to the time the degree is expected to be awarded. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as English 300.)

DEPARTMENT OF HOME ECONOMICS

To satisfy the increasing demand for graduate education in all fields of home economics, the department at Madison College offers a limited number of advanced courses.

The graduate courses may be applied toward a minor for the Master's degree.

The graduate courses may be used for renewal of teaching certificates.

Twelve hours of graduate work in home economics constitute a minor.

HOME ECONOMICS 510. FAMILY FINANCIAL PROBLEMS.

Three credits.

Analysis of money expenditures of the family in the United States and the use of the family income. Consumer's markets, standards, labels, will be studied with the latest research information on houses, equipment, food, clothing and savings. (This course was offered formerly as Home Economics 110.) Prerequisite: Undergraduate course in economics.

HOME ECONOMICS 520. WORLD NUTRITION NEEDS AND FOOD RESOURCES.

Three credits.

The major world nutrition problems of today are analyzed. Identifying causative factors and investigating corrective measures are an integral part of the course. (This course was offered formerly as Home Economics 120.)

HOME ECONOMICS 540. CLOTHING CONSTRUCTION TECHNIQUES.

Three credits.

The newer techniques in both custom and fast methods of clothing construction are studied. Emphasis is placed on fittings, underlinings, and finishing details. Garments are constructed incorporating the techniques studied. (This course was offered formerly as Home Economics 140.) Prerequisite: Home Economics 210 or equivalent.

HOME ECONOMICS 610. NEW DEVELOPMENTS IN FOODS.

Three credits.

Review and interpretation of the literature in the field of food and food research. A critical analysis is made of recent developments in new food products. (This course was offered formerly as Home Economics 210.) Prerequisite: Home Economics 140 and Home Economics 380 or equivalent.

HOME ECONOMICS 639. SEMINAR IN TEXTILES.

Three credits.

Recent trends in textile developments affecting characteristic behavior of old and new fibers as reported in current literature. Study in selection and care for specific consumer needs. Problems in construction involving principles of new fabric use. Study of production and distribution. Field trips. (This course was offered formerly as Home Economics 239.) Prerequisite: Home Economics 290 (Textiles) or equivalent. (*Offered Summer 1965.*)

HOME ECONOMICS 676. THE SOCIOLOGY OF THE FAMILY.

Three credits.

The American family is studied in its structural aspects. Primary emphasis is upon the middle class family by reference to the husband-wife, parent-child, and in-law relationships. Family behavior is related to occupational structure, religious orientation, educational patterns and social stratification. (This course was offered formerly as Home Economics 276.) Also listed as Social Science 676.

HOME ECONOMICS 679. SEMINAR IN VOCATIONAL HOME ECONOMICS EDUCATION.

Three credits.

A study is made of the contribution of home economics to American education. A critical examination is made of trends and issues in curriculum development, instruction, guidance, evaluation, supervision, and research. (This course was offered formerly as Home Economics 279.) Prerequisite: Home Economics Education 400 (Vocational Home Economics) or equivalent.

HOME ECONOMICS 680. SEMINAR IN SUPERVISION OF STUDENT TEACHERS IN VOCATIONAL HOME ECONOMICS.

Three credits.

A study of the field of supervision including such topics as the nature and function of supervision, in-service improvement of teachers, techniques of classroom visitation, teaching ratings, teachers' meetings, human relations, and the selection of training centers. (This course was offered formerly as Home Economics 280.) Prerequisites: Bachelor's degree, teaching experience in vocational home economics.

DEPARTMENT OF MATHEMATICS

Major: For a major in mathematics a minimum of twenty-one semester hours in graduate mathematics courses is required. This must include:

Mathematics 630. Introduction to Analysis

and at least one course from each of the following two groups of courses:

A. Mathematics 520. Foundations of Geometry

Mathematics 560. Modern Geometry

- B. Mathematics 510. Fundamental Concepts of Algebra
Mathematics 570. The Algebra of Vectors and Matrices
Mathematics 620. Introduction to Abstract Algebra

The remainder of the major program will consist of electives from the graduate offerings in mathematics, chosen in consultation with the head of the department.

Minor: For a minor, a minimum of twelve semester hours of graduate courses in mathematics is required. At least one course must be chosen from Group A and at least one from Group B.

MATHEMATICS 510. FUNDAMENTAL CONCEPTS OF ALGEBRA.

Three credits.

Attention is given to the fundamental concepts and postulates which form the foundations of algebra. The complex number system and the elementary theories of numbers, polynomials, and equations are developed using the concepts and terminology of modern algebra. (This course was offered formerly as Mathematics 110.)

MATHEMATICS 515. HISTORY OF MATHEMATICS.

Three credits.

History of mathematics from ancient times through the seventeenth century and selected topics from more recent mathematical history.

MATHEMATICS 520. FOUNDATIONS OF GEOMETRY.

Three credits.

A study of the structure of Euclidean geometry and the role of logic in geometric proof. Different systems of axioms are studied as a basis for the development of Euclidean geometry. (This course was offered formerly as Mathematics 120.)

MATHEMATICS 530. FOUNDATIONS OF MATHEMATICS.

Three credits.

This is an introductory study of the logical structure of mathematics. It is concerned with the place of logical reasoning and the significance of logical structure in both mathematical and scientific thought. Modern postulational concepts and methods will be investigated. (This course was offered formerly as Mathematics 100.)

MATHEMATICS 540. INTRODUCTION TO THE THEORY OF STATISTICS.

Three credits.

An introductory course in the theory of probability and statistical inference. Probability; discrete and continuous frequency distributions; sampling theory; tests of hypotheses; correlation and regression. (This course was offered formerly as Mathematics 160.)

MATHEMATICS 550. THEORY OF NUMBERS.

Three credits.

Topics in elementary number theory including properties of integers and prime numbers, divisibility of numbers, simple Diophantine equations, congruences and residues. (This course was offered formerly as Mathematics 150.)

MATHEMATICS 560. MODERN GEOMETRY.

Three credits.

A study of the relationships among the different geometries using both synthetic and algebraic methods. The axiomatic structure of synthetic projective geometry; analytic projective geometry; affine geometry; non-Euclidean geometry. (This course was offered formerly as Mathematics 125.)

MATHEMATICS 570. THE ALGEBRA OF VECTORS AND MATRICES.

Three credits.

An introduction to vector and matrix algebra in the setting of modern algebraic theory. Vectors of 2 and 3 dimensions are discussed. Both the theory and application of matrices are considered. (This course was offered formerly as Mathematics 230.)

MATHEMATICS 620. INTRODUCTION TO ABSTRACT ALGEBRA.

Three credits.

This course is a brief introduction to abstract algebra. It includes a discussion of finite arithmetics, the integers and polynomials, vectors, vector spaces, and fields. Numerous examples will be given to help connect the abstract with the familiar. (This course was offered formerly as Mathematics 130.)

MATHEMATICS 630. INTRODUCTION TO ANALYSIS.

Three credits.

A survey of the fundamental concepts of the Calculus, including sequences, limits, continuity, and differentiability. (This course was offered formerly as Mathematics 220.)

MATHEMATICS 660. COMPLEX VARIABLES.

Three credits.

Analytic functions; differentiation and integration; power series; conformal mapping.

MATHEMATICS 680. READING AND RESEARCH.

Three credits.

Opportunity is given the individual student for supervised reading and research in areas of his special interest. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Mathematics 280.)

DEPARTMENT OF MUSIC

Music and music education is offered as either a major or a minor field of specialization for the degree of Master of Arts in Education. The candidate who elects to major in music must complete fifteen semester hours in music courses and submit a thesis or complete twenty-one semester hours in music courses. Candidates who elect to minor in music must complete twelve semester hours in music courses. Music majors will be expected to have completed an undergraduate major, and music minors an undergraduate minor, in music.

Minimum requirements for a music *major*

	Semester Hours
Required courses	9
1. Music Education 610	3
2. One of the following: Music 561, 562 or 563	3
3. One of the following with the approval of the music department adviser:	

Semester Hours

Music 501, 502, 526, 527, 545, Music
Education 611, Music Education 613 3

Electives 9

Selected, according to student's interests, from
other music courses listed.

Minimum requirements for a music *minor*

Required courses 6

1. Music Education 610 3

2. One of the following with the approval of
the music department adviser:

Music 561, 562 or 563

or

Music 501, 502, 526, 527, 545, or
Music Education 613 3

Electives 6

Selected from other music courses listed.

MUSIC 501. CHORAL MATERIALS AND TECHNIQUES.

Three credits.

A study of the problems, materials, and techniques of teaching choral music in the high school. Laboratory experiences will be provided at the Virginia Music Camp at Massanetta Springs. (This course was offered formerly as Music 110.)

MUSIC 502. INSTRUMENTAL MATERIALS AND TECHNIQUES.

Three credits.

A study of the problems, materials, and techniques of teaching instrumental music in the high school, with emphasis on orchestra. The orchestra of the Music Camp at Massanetta Springs will provide laboratory experience and opportunities for observation. (This course was offered formerly as Music 111.)

MUSIC 511, 512, 513, 514. APPLIED MUSIC.

One credit.

Four semester hours of credit in applied music—piano, voice, organ, and an orchestral instrument—may be offered toward the Master's degree.

Graduate students will be encouraged to study applied music, and work will be suited to their individual needs. (This course was offered formerly as Applied Music 131, 132, 133, 134.)

MUSIC 521. MUSIC OF THE CHURCH.

Three credits.

A study of some of the most common problems of the church musician. Special emphasis will be placed on organ registration, repertory, and service playing; on choirs and choral literature; and on appropriate music for the church year. Students may work along one or more of these lines, according to their interests. (This course was offered formerly as Music 120.)

MUSIC 522. MASTER CLASS IN PIANO.

Three credits.

Emphasis will be placed on a broadened knowledge and use of teaching materials and techniques, on repertory and on improving students' own performance. Students who are more interested in teaching may concentrate on phases of pedagogy in lieu of performance. (This course was offered formerly as Music 136.)

MUSIC 526. ADVANCED CONDUCTING (CHORAL AND INSTRUMENTAL).

Three credits.

Prerequisite: Music 327-328 or equivalent.

Refinement of baton technique.

Score reading. Specific problems selected from standard works. Practical experience with choral and instrumental groups. (This course was offered formerly as Music 135.)

MUSIC 527. INSTRUMENTAL TECHNIQUES.

Two credits.

This course is designed for instrumental music teachers who need further help with one specific instrument or group of instruments. Members of the group will work together and separately, each on his special concentration. (This course was offered formerly as Music 137.)

MUSIC 541. MODERN HARMONY AND COMPOSITION.

Three credits.

A study of the harmonic, contrapuntal and other stylistic devices of the twentieth-century composer and their application in creative writing by the student who wishes to acquire a technique in the contemporary idiom.

Composition in both small and larger forms depending upon the talent and background of the student. This course is not only for the talented composition student but also for the teacher and performer who desires an increased understanding of our contemporary music. (This course was offered formerly as Music 122.)

MUSIC 542. MODERN HARMONY AND COMPOSITION.

Three credits.

A sequel to Music 541. One course may be taken without the other and either may be elected first. (This course was offered formerly as Music 123.)

MUSIC 545. INSTRUMENTATION.

Three credits.

The arranging of music for orchestra, band, and various ensemble groups. Styles in arranging, range and characteristics of the different instruments, and instrumentation for various types of musical composition. (This course was offered formerly as Music 121.)

MUSIC 561. MUSIC OF THE BAROQUE AND CLASSICAL PERIODS.

Three credits.

A study of vocal, instrumental and organ music of the Baroque Period beginning with the late Renaissance composers Monteverdi, G. Gabrielli and Sweelinck and culminating in Bach and Handel; the Mannheim School; the pre-classical Viennese composers; Gluck, Haydn, Mozart, Beethoven. (This course was offered formerly as Music 113.)

MUSIC 562. MUSIC OF THE ROMANTIC PERIOD.

Three credits.

A study of the Romantic movement in music with reference to its historical background and parallel movement in literature and art. The music of Schubert, Weber, Berlioz, Mendelssohn, Liszt, Chopin, Wagner, Brahms and their contemporaries. Post-romanticism: Elgar, MacDowell, R. Strauss, Sibelius, and others. (This course was offered formerly as Music 114.)

MUSIC 563. TWENTIETH-CENTURY MUSIC.

Three credits.

A survey of the trends found in twentieth-century music. Impressionism; "New Music" from Satie to Schoenberg, Bartok, and Hindemith. The music of contemporary American composers. (This course was offered formerly as Music 115.)

MUSIC 564. ANALYTICAL STUDIES IN MUSIC LITERATURE.

Three credits.

The study of representative works from all periods in terms of their formal and stylistic characteristics. Stylistically the analysis will include a consideration of the following: melodic and rhythmic elements, harmonic and contrapuntal techniques, texture (in its many ramifications), orchestration (vocastration) and the interrelation of these elements in the forms as a whole. Finally the study will view each work as a product of a definite aesthetic concept. (This course was offered formerly as Music 150.)

MUSIC EDUCATION 610. RESEARCH AND TRENDS IN MUSIC EDUCATION.

Three credits.

This course deals with psychological factors involved in the teaching of music, with individual measurements in music, and with more recent developments in music education. It is designed to include work which is significant to all branches of music teaching. (This course was offered formerly as Music Education 210.)

MUSIC EDUCATION 611. THE SUPERVISION AND ADMINISTRATION OF MUSIC.

Three credits.

The supervision of teachers of music; administrative responsibilities of music teachers and supervisors. The role of the supervisor of music in the schools. (This course was offered formerly as Music Education 211.)

MUSIC EDUCATION 612. PROJECTS IN MUSIC EDUCATION.

Three credits.

Students who elect this course will select, formulate, carry through and evaluate a specific project in the teaching of music in their own schools. Registration may be for Fall or Spring Term; periodic conferences and reports will be arranged. (This course was offered formerly as Music Education 212.)

MUSIC EDUCATION 613. MUSIC EDUCATION SEMINAR: PRINCIPLES AND PRACTICES IN ELEMENTARY SCHOOL MUSIC.

Three credits.

This course will deal with broader concepts of music in the elementary school and with ways of achieving a more coordinated, more continuous, and more complete program. The first week of the course will be devoted

to complete participation in and exploration of this aspect of the Virginia Music Camp and Workshop at Massanetta Springs. (This course was offered formerly as Music Education 145.)

MUSIC EDUCATION 614. BASIC ISSUES IN MUSIC EDUCATION.

Three credits.

Analysis and interpretation of selected writings of music educators in the light of the study of some of the unstated, and therefore unexamined, presuppositions which underlie many of the current recent criticisms, opinions, and proposals of music educators.

MUSIC 700. THESIS.

Six credits.

A thesis in the major field of interest and completed to the satisfaction of the Student's Advisory Committee and the Graduate Council may be submitted in partial fulfillment of the requirements for the Master's degree. Students who elect to write a thesis are required to complete twenty-four semester hours in course work. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval at least three months prior to the time the degree is expected to be awarded. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Music 300.)

SCIENCE

The Division of the Natural Sciences is offering the following program in science to give those elementary teachers who are interested in science an opportunity to obtain a minor in science in the graduate program. This minor is limited to elementary teachers.

Students electing this minor will be required to take the three courses listed below and one additional science course. These courses will enable the elementary teacher to become acquainted with three areas of scientific progress from which practical techniques as well as theoretical foundations may be learned.

BIOLOGY 510. VERTEBRATE ECOLOGY.

Three credits.

A course designed to acquaint students with fundamental relationships existing between animals and their environment. Emphasis will be placed on the dynamic aspect of ecology and its importance to mankind. The

laboratory will consist of group discussion sessions and selected field trips throughout the Shenandoah regions. (This course was offered formerly as Biology 100.)

PHYSICAL SCIENCE 510. EARTH SCIENCE.

Three credits.

A course designed to familiarize the graduate student with the basic aspects of most branches of geology. Emphasis is upon materials and structure of the earth, and how rock units are shaped into their scenic expression. (This course was offered formerly as Physical Science 100.)

PHYSICAL SCIENCE 520. MATTER AND ENERGY.

Three credits.

This course is intended to give graduate students planning to teach in the elementary school an understanding of one of the major physical science problems facing mankind. Emphasis is placed on matter and energy as unifying concepts in the physical sciences. The course is taught jointly by staff members of the Chemistry and Physics Departments. (This course was offered formerly as Physical Science 101.)

DEPARTMENT OF SOCIAL SCIENCE AND HISTORY

A student may elect to major or minor in Social Science and History in the Graduate Program.

MAJOR—21 hours required.

9 credit hours concentration in one Social Science subject to be selected from: Economics, Geography, History, Political Science, or Sociology, *and*

12 credit hours in at least two other social science subjects.

OR

12 hours credit in one social science subject to be selected from: Economics, Geography, History, Political Science, or Sociology, *and*

3 hours elective from any other social science area *and*

6 hours credit in a thesis.

MINOR—12 hours required.

In order to minor in Social Science and History, the student must complete twelve semester hours from any courses listed in the Graduate Bulletin.

COURSE OFFERINGS IN ECONOMICS, GEOGRAPHY, POLITICAL SCIENCE, HISTORY, AND SOCIOLOGY

A. *Economics*

1. SOCIAL SCIENCE 501A. ECONOMICS SEMINAR: INDUSTRY-IN-ACTION.

Three credits.

This course is designed to highlight the American free enterprise system. Students will participate in field trips to examine how our economic system operates at the production level. Lectures and demonstrations in the field will include visits to major representative industrial plants.

Enrollment is limited. On account of the field trips, a special non-refundable fee of twenty-five dollars (\$25.00) must be paid *in advance* to the Head of the Department of Social Science and History. This special fee will be in addition to the regular registration fees for the course which are payable to the Business Office. The course will be offered during Intersession only. (This course was offered formerly as Social Science 100.)

2. SOCIAL SCIENCE 501B. ECONOMICS SEMINAR: GOVERNMENT AND BUSINESS.

Three credits.

This course is organized to place emphasis on government regulation of business in the United States and competing countries. Students will examine the historical development of regulation, consider its contemporary scope and discuss its philosophical and economic basis.

3. SOCIAL SCIENCE 501C. ECONOMICS SEMINAR: LABOR- MANAGEMENT RELATIONS.

Three credits.

In this seminar economic analysis is applied to the labor market with a consideration given to wage determination, prices and wages, employment and wages and other areas of relationships.

Students will examine the history of the labor movement, the methods, policies and theories of labor and compare these with policies, methods and theories of management.

4. SOCIAL SCIENCE 600. CONTEMPORARY ECONOMICS.

Three credits.

The role of economics in national and world affairs is analyzed and special attention is given to international trade, distribution of wealth, income, taxation and public debt, recurrent major depressions and periods of prosperity, and types of economic systems. (This course was offered formerly as Social Science 200.)

5. SOCIAL SCIENCE 630. SEMINAR IN AMERICAN BUSINESS.

Three credits.

Comprehensive review of current books, magazines, and materials in the areas of Marketing, Banking, Taxation, Selling, Exchanges, Economic Conditions, and other areas essential to improved business understanding. (This course was offered formerly as Social Science 230.) Also listed as Business Education 630.

6. SOCIAL SCIENCE 660. ECONOMIC SYSTEMS OF THE WORLD.

Three credits.

The major types of economic systems, Socialism, Communism, Fascism and Capitalism, will be analyzed and compared with special attention given to national and world affairs and international relations. The distribution of wealth and income, public debt, and business cycles will be explained and compared. (This course was offered formerly as Social Science 260.)

7. SOCIAL SCIENCE 680. READING AND RESEARCH.

Three credits.

Opportunity is offered the individual student for reading and research in the areas of economics which are of special interest to the student. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Social Science 280.)

8. SOCIAL SCIENCE 700. THESIS.

Six credits.

A thesis may be submitted in partial fulfillment of the requirements for the Master's degree. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Coun-

cil for approval. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Social Science 300.)

B. *Geography*

1. SOCIAL SCIENCE 510A. GEOGRAPHY SEMINAR: ECONOMIC.

Three credits.

This course is designed to acquaint the student with the relationship of geography to the other social sciences. Particular emphasis will be placed on the economic aspects of geography. Students will participate in field trips to selective industrial, commercial, and transportation sites.

2. SOCIAL SCIENCE 510B. GEOGRAPHY SEMINAR: REGIONAL.

Three credits.

This course is designed to emphasize the relationship of geography to the other social sciences. The course will include the use of maps in the study of regions and regional problems. It will use the published maps in the study of both local and distant regions. The compilation of maps of the state and local regions from statistics and other source materials will be included among the exercises. Included in the course will be a study of how maps should be used in classrooms as well as in research.

3. SOCIAL SCIENCE 560. POLITICAL GEOGRAPHY.

Three credits.

A detailed study of the world's pressure areas based upon cause and effect of political tensions from a geographic frame of reference. Principles of political geography will be discussed in detail and will then be applied to tension areas, past as well as present, while special reference will be made to the geographic causes which helped to create post World War I problems. (This course was offered formerly as Social Science 160.)

4. SOCIAL SCIENCE 580. CULTURAL GEOGRAPHY.

Three credits.

A systematic as well as regional study of the world's cultures as based upon differences and similarities of the geographic environment on a global scale. Emphasis will be on the distribution of population and the problems which have arisen from this distribution. (This course was offered formerly as Social Science 180.)

5. SOCIAL SCIENCE 590. THE TROPICAL WORLD.

Three credits.

This course is designed to highlight the areas of the world bordering on the Equator, including Central Africa, Southeastern Asia, Central and Northern Latin America and the Pacific. Students will study the physical environment in relationship with the cultural and social characteristics that together make these areas part of the present world political struggle. (This course was offered formerly as Social Science 190.)

6. SOCIAL SCIENCE 680. READING AND RESEARCH.

Three credits.

Opportunity is offered the individual student for reading and research in the areas of geography which are of special interest to the student. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Social Science 280.)

7. SOCIAL SCIENCE 700. THESIS.

Six credits.

A thesis may be submitted in partial fulfillment of the requirements for the Master's degree. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Social Science 300.)

C. History

1. SOCIAL SCIENCE 525. THE UNITED STATES FROM 1800-1850.

Three credits.

This course offers an opportunity for a thorough study of selected topics from this period of United States History. Research papers, lectures and class discussions will deal with the subjects chosen. (This course was offered formerly as Social Science 125.)

2. SOCIAL SCIENCE 535. THE TWENTIETH CENTURY WORLD.

Three credits.

This course deals with the major political, economic, and social developments from the beginning of the present century to the contemporary period. The material will provide students with a back-

ground for understanding contemporary world affairs. (This course was offered formerly as Social Science 135.)

3. SOCIAL SCIENCE 624. COLONIAL AMERICA.

Three credits.

This course deals with the period through the Revolution. Research papers, lectures, and class discussions will offer an opportunity for a thorough study of selected topics. (This course was offered formerly as Social Science 224.)

4. SOCIAL SCIENCE 635. PROBLEMS IN HISTORY OF CIVILIZATION.

Three credits.

This course offers an opportunity for the study of selected subjects and periods from earliest times to the present. Topics include pre-history, the Age of Exploration, the Protestant Reformation, the Industrial Revolution, and other important periods and situations. (This course was offered formerly as Social Science 235.)

5. SOCIAL SCIENCE 680. READING AND RESEARCH.

Three credits.

Opportunity is offered the individual student for reading and research in the areas of history which are of special interest to the student. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Social Science 280.)

6. SOCIAL SCIENCE 700. THESIS.

Six credits.

A thesis may be submitted in partial fulfillment of the requirements for the Master's degree. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Social Science 300.)

D. *Political Science*

1. SOCIAL SCIENCE 520A. GOVERNMENT SEMINAR: FEDERAL.

Three credits.

This course is designed to acquaint the student with the functions and operations of various branches and agencies of American Govern-

ment. Lectures and demonstrations in the field will include visits to agencies and departments in Washington, D. C.

Enrollment is limited. On account of the field trips, a special non-refundable fee of twenty-five dollars (\$25.00) must be paid *in advance* to the Head of the Department of Social Science and History. This special fee will be in addition to the regular registration fees for the course which are payable to the Business Office. The course will be offered during Intersession only. (This course was offered formerly as Social Science 120.)

2. SOCIAL SCIENCE 520B. GOVERNMENT SEMINAR: STATE AND LOCAL.

Three credits.

This course is designed to acquaint the student with the functions and operations of the various branches and agencies of state and local government. Lectures and demonstrations in the field will include visits to at least one state capital and to local governmental offices. (Students who participated in Social Science 520A, Government Seminar: Federal, in the Intersession, 1964, may receive credit for the state and local government seminar.)

Enrollment is limited. On account of the field trips, a special non-refundable fee of twenty-five dollars (\$25.00) must be paid *in advance* to the Head of the Department of Social Science and History. This special fee will be in addition to the regular registration fees for the course which are payable to the Business Office. The course will be offered during Intersession only.

3. SOCIAL SCIENCE 550. PROBLEMS IN STATE AND LOCAL GOVERNMENT.

Three credits.

This course will focus attention on the major problems faced by local and state governments. The problem will include political leadership, operation of the courts, police power, fiscal problems, metropolitan areas and others. (This course was offered formerly as Social Science 150.)

4. SOCIAL SCIENCE 610. MODERN POLITICAL THEORY.

Three credits.

Examination of the contributions of political thinkers from Machiavelli to the present. Bodin, Hobbes, Locke, Montesquieu, Rousseau, Burke, Hegel, and Marx will be among those considered.

5. SOCIAL SCIENCE 650. COMPARATIVE WORLD GOVERNMENTS.

Three credits.

This course is designed to acquaint the student with the governmental forms and structures of the major world powers. A comparison is made between the American Federal Government and the governments of Russia and England. (This course was offered formerly as Social Science 250.)

6. SOCIAL SCIENCE 680. READING AND RESEARCH.

Three credits.

Opportunity is offered the individual student for reading and research in the areas of government which are of special interest to the student. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Social Science 280.)

7. SOCIAL SCIENCE 700. THESIS.

Six credits.

A thesis may be submitted in partial fulfillment of the requirement for the Master's degree. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Social Science 300.)

E. *Sociology*

1. SOCIAL SCIENCE 530A. SOCIOLOGY SEMINAR: SOCIAL PROBLEMS.

Three credits.

This course is organized to place emphasis on social disorganization and the special areas of breakdown. Contemporary problems will be discussed and recent research reviewed on alcoholism, juvenile delinquency, family problems, social mobility, automation and the critical areas.

2. SOCIAL SCIENCE 530B. SOCIOLOGY SEMINAR: SOCIAL THEORY.

Three credits.

A review of the history of sociology will offer a frame of reference from which students will study the classical works of a variety of sociologists. This course will also provide the participant an oppor-

tunity to explore the works of some leading social philosophers and examine comparative social and behavioral concepts.

3. SOCIAL SCIENCE 578. COMMUNITY ANALYSIS.

Three credits.

Representative community studies are read as an aid in the development of theories of community organization. A detailed analysis is made of the relationship between social stratification and occupation, family, religion, political behavior and education. (This course was offered formerly as Social Science 178.)

4. SOCIAL SCIENCE 670. SOCIAL CHANGE.

Three credits.

An analysis is made of the dynamics of social behavior by reference to changes in value orientation, technology, population characteristics, power structure, system of stratification, and communication techniques. (This course was offered formerly as Social Science 270.)

5. SOCIAL SCIENCE 676. THE SOCIOLOGY OF THE FAMILY.

Three credits.

The family is studied in its structural aspects. Primary emphasis is upon the husband-wife, parent-child, and in-law relationships. Family behavior is related to occupational structure, religious orientation, educational patterns, and social stratification. (This course was offered formerly as Social Science 276.) Also listed as Home Economics 676.

6. SOCIAL SCIENCE 680. READING AND RESEARCH.

Three credits.

Opportunity is offered the individual student for reading and research in the areas of sociology which are of special interest to the student. *Reading and Research* may be done only in the major field of study. (This course was offered formerly as Social Science 280.)

7. SOCIAL SCIENCE 700. THESIS.

Six credits.

A thesis may be submitted in partial fulfillment of the requirements for the Master's degree. The Student's Advisory Committee must recommend the thesis subject and outline to the Graduate Council for approval. The thesis must be completed one month before the time of graduation to assure the Advisory Committee of its acceptability. (This course was offered formerly as Social Science 300.)

For further information concerning graduate study at Madison College write:

PERCY H. WARREN, *Dean*
Madison College
Harrisonburg, Virginia