The school that educates for service
GRADUATE DIVISION
1958-1960
The College is Accredited by

The Northwest Association of Secondary and Higher Schools

The Washington State Board of Education

National Nursing Accrediting Service

is a Member of

Association of American Colleges

Association of Seventh-day Adventist Colleges and Secondary Schools

American Council on Education

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Final examinations

Conferral of degree

Summary of Procedure

DEPARTMENTS OF INSTRUCTION
### CALENDAR

#### SUMMER QUARTER, 1958
- **June 9-19**: Monday
- **June 20-29**: Tuesday
- **July 1-11**: Friday
- **July 12-18**: Monday
- **August 15-25**: Friday
- **August 26-31**: Saturday

#### AUTUMN QUARTER, 1958-59
- **September 18, 19, 21, 22**: Registration
- **September 23-25**: Instruction begins
- **November 26**: Thanksgiving recess
- **December 17**: Instruction ends

#### WINTER QUARTER, 1958-59
- **December 8-31**: January 4
- **January 5**: Monday
- **March 18**: Wednesday

#### SPRING QUARTER, 1958-59
- **March 9-23**: Registration
- **March 24-26**: Instruction begins
- **June 5-9**: Friday
- **June 10-12**: Senior Convocation
- **June 6-7**: Saturday
- **June 8-9**: Sunday

#### SUMMER QUARTER, 1959
- **June 8**: Monday
- **June 9-13**: Tuesday
- **July 10-13**: Friday
- **July 14-16**: Monday
- **August 15-18**: Friday
- **August 19-23**: Saturday

### AUTUMN QUARTER, 1959-60
- **September 17, 18, 20-21**: Registration
- **September 22**: Instruction begins
- **November 25-29**: Thanksgiving recess
- **December 22**: Instruction ends
- **December 23-January 3**: Christmas recess

### WINTER QUARTER, 1959-60
- **December 14-22**: January 3
- **January 4**: Monday
- **March 16**: Wednesday

### SPRING QUARTER, 1959-60
- **March 7-16, 21**: Registration
- **March 22-24**: Instruction begins
- **June 3-5**: Friday
- **June 6-8**: Saturday
- **June 9-11**: Sunday

#### Note:
- **Degree completion**
  - Senior Convocation
  - Baccalaureate Service
  - Commencement
# CALENDAR

## SUMMER QUARTER, 1958
- June 9—Monday
- June 10—Tuesday
- July 4—Friday
- July 11—Friday
- July 18—Monday
- August 15—Friday
- August 16—Saturday

- **Registration**
- Instruction begins
- Holiday
- First term ends
- Second term begins
- Instruction ends
- Senior Convocation
- Baccalaureate Service
- Commencement

## AUTUMN QUARTER, 1958-59
- September 18, 19, 21, 22
- September 23—Tuesday
- November 26 (Thanksgiving recess)
- December 17—Wednesday
- December 18-January 4

- **Registration**
- Instruction begins
- Thanksgiving recess
- Instruction ends
- Christmas recess

## WINTER QUARTER, 1958-59
- December 8-15, January 5
- January 2—Monday
- March 18—Wednesday

- Registration
- Instruction begins
- Instruction ends

## SPRING QUARTER, 1958-59
- March 9-18, 21
- March 24—Tuesday
- June 5—Friday
- June 5—Friday
- June 6—Saturday
- June 7—Sunday

- Registration
- Instruction begins
- Instruction ends
- Senior Convocation
- Baccalaureate Service
- Commencement

## SUMMER QUARTER, 1959
- June 8—Monday
- June 9—Tuesday
- July 10—Friday
- July 13—Monday
- August 15—Friday
- August 15—Saturday

- **Registration**
- Instruction begins
- First term ends
- Second term begins
- Instruction ends
- Senior Convocation
- Baccalaureate Service
- Commencement

## AUTUMN QUARTER, 1959-60
- September 17, 19, 20, 21
- September 22—Tuesday
- November 25 (Thanksgiving recess)
- December 22—Tuesday
- December 25-January 5

- Registration
- Instruction begins
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- March 7-16, 21
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- June 5—Friday
- June 6—Saturday
- June 8—Sunday

- Registration
- Instruction begins
- Senior Convocation
- Baccalaureate Service
- Commencement
ADMINISTRATION

BOARD OF TRUSTEES

C. A. Schuck, President
F. W. Christian, Secretary
A. W. Shield, Trustee
L. F. Bach
C. M. Bower
J. S. Dow
A. J. Gordon
Clyde Harris
E. S. Huber
J. C. Keeler
L. L. McInerney
C. J. Neef
W. A. Nelson
J. T. Pottorff
H. C. Rhodes

OFFICERS OF ADMINISTRATION

Percy W. Christian, Ph. D. President of the College
Farley A. Meier, Ed. D. Provost
Andrew A. Swain, B. S. Business Manager
Irving Smith-Black, B. A. Registrar
A. J. Joelson, B. A. Dean of Men
Helen Wash-Stenn, M. A. Dean of Women
Paul C. HOBHACK, M. A. Dean, School of Theology
Frederik E. Hanson, B. N. M. A. Dean, School of Nursing
Anns L. Blackmon, B. S. (L. S.), M. A. Librarian

GRADUATE COUNCIL

George W. Bowett, Chairman
Irving Smith-Black, Secretary
Laurence M. A. Ashley
Emery S. Booth
Stanley Bull
Percy W. Christian
Harold G. Cotton
Farley A. Meier
Robert E. Silver

GRADUATE FACULTY

Bacon, Herbert J., Assistant Professor of Religion
B. A., 1907; B. Th., 1907, Emory University; M. A., 1922, Michigan State University

Bendick, Henry A., Professor of Engineering
B. A., 1902, Yale University; M. A., 1905, University of Wisconsin

Bennett, R. W., Professor of Agriculture
B. A., 1900, Wisconsin State College; M. A., 1902, University of Wisconsin; Ph. D., 1913, University of Wisconsin

Bennett, C. R., Professor of Chemistry
B. S., 1911, Wisconsin State College; M. A., 1914, University of Chicago; Ph. D., 1917, University of Wisconsin

Beresford, George E., Associate Professor of Mathematics
B. A., 1917, State College; M. A., 1919, University of Wisconsin

Birks, Robert H., Professor of Physics
B. A., 1920, Union College; M. A., 1922, University of Nebraska; Ph. D., 1926, University of Wisconsin

Bell, E. W., Associate Professor of Education
B. A., 1900, University of Wisconsin; M. A., 1904, Pacific Union College

Bell, Stanley, Associate Professor of Education
B. A., 1906, American University of Cairo (Egypt); M. A., 1907, University of Edinburgh (Scotland); Ph. D., 1909, University of Michigan

Bergdahl, Rolf, Instructor in English
B. A., 1922, Uppsala University; M. A., 1924, University of Wisconsin

Birks, Gerald A., Associate Professor of Biology
B. S., 1924, University of Wisconsin; M. A., 1926, University of Wisconsin

Birks, R. W., Associate Professor of History
B. A., 1924, Brown University; B. A., 1924, Lehigh University; M. A., 1929, Ph. D., 1933, Northwestern University

Birks, E. W., Associate Professor of Biology
B. S., 1907, M. A., 1912, Union College; Ph. D., 1923, University of Southern California

Birks, R. W., Associate Professor of History
B. A., 1924, Brown University; B. A., 1924, Lehigh University; M. A., 1929, Ph. D., 1933, Northwestern University

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B. A., 1924, Brown University; B. A., 1924, Lehigh University; M. A., 1929, Ph. D., 1933, Northwestern University
**ADMINISTRATION**

**BOARD OF TRUSTEES**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>C. A. Schwall, President</td>
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<tr>
<td>F. W. Christiansen, Secretary</td>
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<td>A. W. Stroh, Treasurer</td>
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<td>L. E. Bode</td>
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<td>C. M. Bower</td>
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<td>N. H. Downer</td>
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<td>A. J. Gondron</td>
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<td>Clyde Hardie</td>
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<td>E. S. Humann</td>
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<td>J. C. Kieck</td>
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<td>L. L. McKinnell</td>
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<td>C. J. Nagel</td>
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<td>W. A. Nelson</td>
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<td>T. T. Porter</td>
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<td>H. C. Rieders</td>
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**OFFICERS OF ADMINISTRATION**

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
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<tbody>
<tr>
<td>Percy W. Christiansen</td>
<td>President of the College</td>
</tr>
<tr>
<td>Fabian A. Meier</td>
<td>Business Manager</td>
</tr>
<tr>
<td>Irwin W. Stone, Jr.</td>
<td>Registrar</td>
</tr>
<tr>
<td>A. J. Jorgenson, B. A.</td>
<td>Dean of Arts</td>
</tr>
<tr>
<td>Helen Wash-Stein, M. A.</td>
<td>Dean of Women</td>
</tr>
<tr>
<td>Paul C. Humes, M. A.</td>
<td>Dean, School of Theda</td>
</tr>
<tr>
<td>Frederick E. Hanson, R. N., M. A.</td>
<td>Dean, School of Nursing</td>
</tr>
<tr>
<td>Anna L. Blackman, B. S. (L. S.), M. A.</td>
<td>Librarian</td>
</tr>
</tbody>
</table>

**GRADUATE COUNCIL**

<table>
<thead>
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<tbody>
<tr>
<td>George W. Bowers, Chairman</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Irwin W. Stone-Black, Secretary</td>
<td>Zoology</td>
</tr>
<tr>
<td>Lawrence M. Ashley</td>
<td>Zoology</td>
</tr>
<tr>
<td>Emory S. Bohr</td>
<td>Education</td>
</tr>
<tr>
<td>Percy W. Christiansen</td>
<td>History</td>
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<tr>
<td>Harold C. Cotton</td>
<td>Education</td>
</tr>
<tr>
<td>Fabian A. Meier</td>
<td>Education</td>
</tr>
<tr>
<td>Robert E. Silver</td>
<td>Education</td>
</tr>
</tbody>
</table>
CUNNET, STERLING K., Professor of Music
S. A., 1923, University of Nebraska; M. A. Ed., 1924, Ed. D., 1930, Temple University

HOPKINS, JOHN J., Professor of Music
B. S., 1909, Earlham College; M. M., 1929, Chicago Musical College

HASELTON, FRANCES B., Professor of Nursing Education
S. N., 1918, Woman's Memorial Hospital; B. A., 1922, Walla Walla College; M. A., 1924, University of Washington

HARRIS, GORDON R., Instructor in Mathematics
B. A., 1926, Washington State College; M. A., 1927, University of Colorado

HENDRICKS, PAUL C., Professor of Religion
B. A., 1919, Pacific Union College; M. A., 1919, Seventh-day Adventist Theological Seminary

JONES, CARL T., Assistant Professor of Chemistry
B. A., 1919, Washington State College; M. S., 1919, California University of Arizona

JONES, LOUISE HALL, Instructor in Nursing Education
B. S., 1923, Florida Institute of Radiology; B. S. B. S. E., 1924, Washington College of Medicine; B. S. N., 1925, Oregon State College; M. A., 1926, Walla Walla College

LEKSE, RICHARD L., Assistant Professor of Biblical Languages
B. A., 1926, Walla Walla College; B. S., 1927, M. A., 1927, University of California

LEWIS, T. K., Associate Professor of Religion
B. A., 1942, Washington Missionary College; M. A., 1943, Seventh-day Adventist Theological Seminary

MECKLING, FRANK E., Associate Professor of History
B. A., 1913, Washington State College; M. A., 1917, University of California at Los Angeles

MERRILL, J. C., Associate Professor of Business Administration
B. Sc. 1903, Walla Walla College; M. A., 1912, University of Washington; C. P. A., 1930, State of Washington

MEIER, FRED A., Associate Professor of Education
B. A., 1912, Union College; M. A., 1918, Ohio State University; Ed. D., 1926, University of Wiscocnas

MOORE, ROBERT J., Assistant Professor of English
B. A., 1914, Atlantic Union College; M. A., 1915, Boston University

SCHWARTZBAR, LILDA GROSS, Associate Professor of Mathematics
B. A., 1920, Walla Walla College; M. A., 1924, University of Washington

SHEAR, BERNICE, Associate Professor of Education
B. A., 1920, Walla Walla College; M. A., 1921, University of Michigan

SHANKS, CECIL W., Associate Professor of Chemistry
B. S., 1914, Walla Walla College; M. S., 1919, University of Nebraska

SIEGEL, ROBERT L., Assistant Professor of Education
B. A., 1946, Walla Walla College; M. A., 1949, University of Washington

SLOPER, J. RANDALL, Instructor in Business Administration
B. S., 1935, Union College; M. Ed., 1936, University of Idaho

SORENSON, AENEUS L., Professor of Modern Languages
B. A., 1912, Evangelical Missionary College; M. A., 1919, University of Michigan

STORM, HENRIETTE G., Associate Professor of Modern Languages
B. A., 1904, Walla Walla College; Dr., U., F., 1922, University of Paris
GENERAL INFORMATION
GENERAL INFORMATION

Walla Walla College is a private, church-related institution of higher learning conducted by the Seventh-day Adventist denomination. Founded in 1892, it serves as a center of higher education for the north of the Church in the Pacific Northwest. Students from other geographic regions of the United States, Canada, and many foreign lands, bring a cosmopolitan influence to its campus that enriches and stimulates the cultural life of the student. The College, though essentially a professional, liberal arts college, also offers certain professional and vocational training.

The College is located in the city of College Place, in the historic, fertile Walla Walla Valley of southeastern Washington. The Oregon Trail, near the campus, leads directly to the site of the Whitman Mission and the Whitman National Monument. The scenic Blue Mountain to the east are but a few minutes' drive from the campus, and offer seasonal opportunities for recreation and relaxation.

The principal objectives of the College are the fostering of an intelligent understanding and devotion to the ideals of loyalty to God and service to humanity, while offering educational experiences encouraging the formation of character marked by a full, harmonious development of the intellectual, physical, and spiritual powers.

The primary purpose of the Graduate Division is to offer work on an advanced level which will increase the professional competence of the elementary and secondary teachers of the denominational educational system, and to provide training which will prepare students for research careers. Since 1949 and 1950, the College has offered graduate work leading to the Master of Arts degree in the departments of Biological Sciences and Education, respectively.

The conduct and behavior of students should conform to the highest standards of the Christian tradition. Individuals whose personal ethics are inconsistent with the spirit and purposes of the College should not seek admission. Any student who is unwilling to act as a responsible member of a Christian community,
Walla Walla College is a private, church-related institution of higher learn-
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dent who is unwilling to act as a responsible member of a Christian community,

13
or whose activities are inconsistent with the accepted principles and standards of the College, places his status as a student in jeopardy.

GENERAL REGULATIONS

The student is under the jurisdiction of the College from the time of arrival on the campus until his connection is terminated by graduation or officially approved withdrawal. Each student is responsible for a complete, thorough understanding of the regulations of the College as published in the Student Handbook and the main Bulletin. Regulations adopted by the College faculty or Board of Trustees and publicly announced shall have the same force as those outlined in college publications.

RESIDENCE

It is the general policy of the College to require all unmarried students to live in one of the College residence halls and to board in the College dining hall. However, under certain circumstances, graduate students may make application to the Administrative Council for permission to live off campus in an officially approved home. Arrangements for such accommodations are not to be completed until approval has been granted. Students who have received approval for off-campus living may be called into the College residence halls at any time.

CHAPEL

The chapel hour, which is held three times each week, is regarded as a vital part of the total educational program at Walla Walla College. Graduate students are encouraged to attend chapel, although attendance is not required, as in the case of undergraduate students.

SABBATH OBSERVANCE

The Seventh-day Sabbath is observed at Walla Walla College from sunset on Friday to sunset Saturday, and all students are expected to conduct themselves in harmony with the sacred nature of the day. This includes attendance at the Friday evening devotional service, as well as Sabbath school and church services on Sabbath morning.

MORAL CONDUCT

Students must abstain from behavior inconsistent with the basic principles of Christian living as interpreted by the College. Specifically, this includes profane and unbecoming language, visiting pool halls or gambling places, attending the theater, motion pictures, or any other type of entertainment not approved by the College, the use of alcoholic beverages or tobacco in any form, card playing or having possession of cards, reading or having possession of obscene literature, and engaging in improper associations. Those who engage in such practices will not knowingly be admitted or retained as students.

SOCIAL STANDARDS

Walla Walla College is a coeducational institution, and as such recognizes the desirability of proper association among its students. Complete information concerning the social policies of the College is utilized in the Student Handbook.

USE OF AUTOMOBILES

Graduate students are required to register their automobiles at the time of class registration. Failure to comply with this regulation makes the student liable to a minimum fine of $10.00. Minusphone regulations concerning registration, parking, etc., are provided each student at the time of registration.

MEDICAL EXAMINATION

At the time of admission to the College, each student is required to submit evidence of a recent standard physical examination, or to have such examination under the direction of the College physician.

TUITION AND FEES

Tuition and fees in the Graduate Division are the same as the tuition and fees for undergraduate students. For complete information concerning these fees, refer to Financial Information in the current annual Bulletin.
GENERAL REGULATIONS
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THE GRADUATE PROGRAM
THE GRADUATE PROGRAM

The Graduate Division offers programs leading to the Master of Arts degree in the departments of Biological Sciences and Education. The various programs are controlled and supervised by the Graduate Council, which is composed of the President, Dean, and Registrar of the College, and representatives of the departments offering graduate work. The Graduate Council is the legislative body responsible for the formulation of all graduate academic policies.

The philosophy of the graduate program of the College is based upon the following basic premises. First, creative teaching requires a scholarly command of the chosen academic discipline which is the result of a rigorous training involving both breadth and depth of preparation. Second, graduate study should develop an understanding and appreciation of research and its consequent values in the individual. Finally, the improvement of the professional competence and qualifications of teachers is regarded as one of the more important functions of graduate study. The student planning a program of graduate study at Walla Walla College should be cognizant of this philosophy.

ADMISSION

Applicants for admission to the Graduate Division shall have been graduated from a recognized four-year college or university, and must possess an adequate background of undergraduate work in the proposed field of graduate study. The applicant should file completed application forms and official transcripts of all work taken on the collegiate level with the Registrar of the College at least two weeks prior to the quarter in which graduate study is to commence. Failure to do so may result in delay in admission and registration. All forms and transcripts submitted for admission become the property of the College and are not returned. Admitted forms are available in the Registrar's Office.
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Admission is determined by the Chairmen of the Graduate Council and the Admission Committee of the College, and is based upon consideration of previous academic record, expectations, personal qualifications, and plans for the future. Applicants who are admitted for graduate study are classified in one of the five

REGULAR: An adequate background of undergraduate work in the proposed field of graduate study, and a grade-point average of at least 2.00 (B) during the senior year, are required. In general, an undergraduate major, or a fair equivalent, is necessary. The minimum requirement for graduate study in education is a minor or the equivalent.

CONDITIONAL: A student with a grade-point average of less than 2.00 (B), or with some deficiency in undergraduate preparation, may be granted provisional admission. Students with provisional status are not granted regular status until one full quarter of graduate work is completed with a minimum grade-point average of 2.00 (B), and undergraduate deficiencies have been satisfied by the completion of prescribed undergraduate courses. Students with provisional status may be advanced in candidacy for degree.

Admission to the Graduate Division does not imply advancement to candidacy for the degree. Students are advanced to candidacy for degree after demonstrating ability to do work of graduate character, and fulfilling the necessary personal qualifications as adjudged by the members of the faculty.

REGISTRATION

After admission to the Graduate Division, the student should confer with the head of the department in which graduate study is proposed. The head of the department, or an assigned advisor, will assist the student in selecting the courses for the first quarter in residence, and in planning the program of study for the degree. The approval of the head of the department, or the advisor, is required for all courses used in meeting the master's degree requirements.

The normal course load is from twelve to twenty credits per quarter. The maximum load for graduate students is sixteen credits per quarter. Students engaged in part-time employment must confer with their advisor and limit their course load.

CHANGES IN REGISTRATION

Changes in registration require the approval of the advisor and must be made during the first full week of instruction in the quarter. A student withdrawing from college or an individual course must file an official drop voucher with the Registrar's Office after securing the advisor's approval. During the first five weeks of any quarter, the student may withdraw from a course and receive a W. Withdrawals after this time will result in the recording of a WF unless exception is granted by the Dean of the College. A WF deducts one hour point for each credit.

COURSE NUMBERING

Courses numbered 300 or above are primarily for graduate students. Courses numbered 200-299 are open to both upper-division undergraduate and graduate students. In some instances certain courses numbered 100-149 are listed in this Bulletin may be included in the graduate program.

SCHOLARSHIP REQUIREMENTS

Students wishing to qualify for the master's degree must maintain a cumulative grade-point average of 2.00 (B) or higher on course work taken in residence. Grades below C are regarded as unsatisfactory and are not acceptable for graduate credit. Unsatisfactory grades are included in the total in computing the grade-point average.

The following system of grades and honor point values is used:

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<thead>
<tr>
<th>Grade</th>
<th>Honor Point Value</th>
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<tr>
<td>A</td>
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<td>D-</td>
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TRANSFER OF GRADUATE CREDIT

A maximum of nine quarter credits of graduate work taken at another recognized institution may be applied toward the master's degree. Acceptance of such work, however, does not reduce the residence requirement of the Graduate Division. Correspondence credit or credit by examination is not accepted.

GRADUATE CREDIT FOR SENIORS

A senior who is within 12 credits of completing the requirements for the baccalaureate degree and who otherwise meets the admission requirements of the Graduate Division, may register for graduate work if recommended by the head of his department and approved by the chairman of the Graduate Council. For such registration a petition for graduate credit in excess of senior requirements must be filed. Approval of the petition will be granted only if the student is progressing directly toward completing graduation requirements, and does not register for more than six credits. The maximum number of graduate credits earned in any quarter is equal to the difference between sixteen and the number of undergraduate credits in the student's official program. The master's degree may not be conferred until two full quarters have elapsed after receiving the baccalaureate degree.

RESPONSIBILITIES OF THE STUDENT

Graduate students are responsible for a complete knowledge of all regulations and procedures as published in this Bulletin. The student should assume the initiative in such matters as arranging for required tests and examinations, securing approval of the program of study, and following all procedures in their proper sequence. Failure to do so may result in unnecessary delay or interruption of graduate study.
Admission is determined by the Chairman of the Graduate Council and the Admissions Committee of the College, and is based upon consideration of progress, academic record, experiences, personal qualifications, and plans for the future. Applicants who are admitted for graduate study are classified in one of the following categories:

**REGULAR:*** An adequate background of undergraduate work in the proposed field of graduate study, and a grade-point average of at least 2.00 (B) during the senior year, are required. In general, an undergraduate major, or a fair equivalent, is necessary. The minimum requirement for graduate study in education is a minor or the equivalent.

**CONDITIONAL:*** A student with a grade-point average of less than 2.00 (B), or with some deficiency in undergraduate preparation, may be granted provisional admission. Students with provisional status are not granted regular status until one full quarter of graduate work is completed with a minimum grade-point average of 2.03 (B), and undergraduate deficiencies have been satisfied by the completion of prescribed undergraduate courses. Students with provisional status may not be advanced in candidacy for degree.

Admission to the Graduate Division does not imply advancement to candidacy for the degree. Students are advanced to candidacy for degree after demonstrating ability to do work of graduate character, and evidencing the necessary personal qualifications as adjudged by the members of the faculty.

**REGISTRATION:*** After admission to the Graduate Division, the student should confer with the head of the department in which graduate study is proposed. The head of the department, or an assigned adviser, will assist the student in selecting the courses for the first quarter in residence, and in planning the program of study for the degree. The approval of the head of the department, or the adviser, is required for all courses used in meeting the master's degree requirements.

The normal course load is from twelve to twenty credits per quarter. The maximum load for graduate students is sixteen credits per quarter. Students engaged in part-time employment must confer with their adviser and limit their course load.

**CHANGES IN REGISTRATION:*** Changes in registration require the approval of the adviser and must be made during the first full week of instruction in the quarter. A student withdrawing from college or an individual course before the official drop deadline will be assessed a W. Withdrawals after this time will result in the recording of a W unless exception is granted by the Dean of the College. A W deducts one honor point for each credit.

**COURSE NUMBERING:*** Courses numbered 200 or above are primarily for graduate students. Courses numbered 150-199 are open to both upper-division undergraduate and graduate students. In some instances certain courses numbered 100-149 as listed in this Bulletin may be included in the graduate program.

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**SCHOLARSHIP REQUIREMENTS:*** Students wishing to qualify for the master's degree must maintain a cumulative grade-point average of 2.00 (B) or higher on course work taken in residence. Grades below C are regarded as unsatisfactory and are not acceptable for graduate credit. Unsatisfactory grades are included in the total in computing the grade-point average.

The following system of grades and honor point values is used:

- A—exceptional
- B—above average
- C—average
- D—below average
- F—failure

1 honor point per credit
1 honor point per credit
1 honor point per credit
1 honor point per credit
1 honor point per credit

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**TRANSFER OF GRADUATE CREDIT:*** A maximum of nine quarter credits of graduate work taken at another recognized institution may be applied toward the master's degree. Acceptance of such work, however, does not reduce the residence requirement of the Graduate Division. Correspondence credit or credit by examination is not accepted.

**GRADUATE CREDIT FOR SENIORS:*** A senior who is within 12 credits of completing the requirements for the baccalaureate degree and who otherwise meets the admission requirements of the Graduate Division, may register for graduate work if recommended by the head of his department and approved by the chairman of the Graduate Council. For such registration a petition for graduate credit in excess of senior requirements must be filed. Approval of the petition will be granted only if the student is progressing directly toward completing graduation requirements, and does not register for more than sixteen credits. The maximum number of graduate credits earned in any one quarter is equal to the difference between sixteen and the number of undergraduate credits in the student's official program. The master's degree may not be conferred until two full quarters have elapsed after receiving the baccalaureate degree.

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DEGREE REQUIREMENTS

The basic philosophy of the Graduate Division of the College is that graduate study should be planned in reference to the individual interests and needs of the student. In planning the program of study, the student's experiences, future objectives, personal qualifications, and previous academic preparation are also considered. The importance of careful planning and close cooperation on the part of the student and the advisor is emphasized.

The general requirements for the master's degree programs in Biological Sciences and Education follow:

GENERAL REQUIREMENTS

The degree of Master of Arts may be conferred upon a student who has received regular admission to the Graduate Division, who satisfactorily completes a program of study approved by the Graduate Council, who has been advanced to candidacy for degree, and who successfully completes all examinations required by his department and the Graduate Division. A student is not eligible for the master's degree until all above requirements and procedures have been completed.

COURSE REQUIREMENTS

The completion of 45 credits in approved graduate courses, including a minimum of 25 credits in the major field, with a cumulative grade-point average of at least 2.00 (B), is required. The selection of a minor, or supporting courses, is made in consultation with the advisor, and in harmony with the basic philosophy of the Graduate Division.

RESIDENCE

Three quarters of residence, or the equivalent, are required. All degree requirements must be completed within six calendar years after initial registration in the Graduate Division.
DEGREE REQUIREMENTS

The basic philosophy of the Graduate Division of the College is that graduate study should be planned in reference to the individual interests and needs of the student. In planning the program of study, the student's experience, future objectives, personal qualifications, and previous academic preparation are also considered. The importance of careful planning and close cooperation on the part of the student and the advisor is emphasized.

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The degree of Master of Arts may be conferred upon a student who has received regular admission to the Graduate Division, who satisfactorily completes a program of study approved by the Graduate Council, who has been advanced to candidacy for degree, and who successfully completes all examinations required by his department and the Graduate Division. A student is not eligible for the master's degree until all above requirements and procedures have been completed.

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The completion of 45 credits in approved graduate courses, including a minimum of 25 credits in the major field, with a cumulative grade-point average of at least 2.00 (B+) is required. The selection of a minor, or supporting course, is made in concert with the advisor, and in harmony with the basic philosophy of the Graduate Division.

RESIDENCE

Three quarters in residence, or the equivalent, are required.

All degree requirements must be completed within six calendar years after initial registration in the Graduate Division.
DEPARTMENTAL REQUIREMENTS
Candidates for a master's degree must also satisfy any additional departmental requirements as listed in this Bulletin under the section Departments of Instruction.

PROGRAM OF STUDY
During the first quarter of graduate study, the student, under the direction of the advisor, shall submit a complete program of study to the Graduate Council for approval. This program of study shall include all courses proposed in meeting the degree requirements, and should be approved by the Graduate Council before the second quarter of graduate study.

ADVANCEMENT TO CANDIDACY
A student will not be considered for degree candidacy until the general background tests and the preliminary comprehensive examinations have been completed. The general background tests are measures of the student's intellectual capacity and skill in the written use of the English language, and should be completed during the first quarter in residence.

The preliminary comprehensive examination is in evaluation of the breadth and depth of the student's competence in the major field, and must be successfully completed before the final quarter in residence. Weakness in a given area may necessitate changes in the program of study or the completion of additional courses. Upon the recommendation of the advisor, the student is advanced to candidacy by the Graduate Council and receives official non-degree status.

Thesis Requirements
A thesis demonstrating ability to conduct research in a systematic and scholarly manner must be presented by the degree candidate. Students majoring in Education may substitute two seminar reports, planned and approved by the advisor, for the thesis. Two copies of the thesis or seminar reports shall be submitted to the chairman of the Graduate Council at least one week prior to the final examination. An abstract of approximately 500 words in length shall accompany each copy of the thesis or reports. The copies of the thesis or seminar reports and the abstract are kept on permanent file in the College Library and the respective department.

FINAL EXAMINATION
A final comprehensive examination, administered by a committee chosen by the chairman of the Graduate Council in consultation with the advisor, must be successfully completed. The examination may be oral, or both written and oral, and will cover the subject matter related to the candidate's field of study. Any candidate who fails this examination may, upon recommendation of the advisor and the approval of the chairman of the Graduate Council, be granted a second examination after the lapse of at least one quarter. The second examination is final.

CONFERMENT OF DEGREE
Upon successful completion of the program of study, and all examinations, the Secretary of the Graduate Council authorizes the conferring of the degree.

SUMMARY OF GRADUATE DIVISION PROCEDURES
The following procedures are outlined for the guidance of graduate students wishing to qualify for the master's degree. The student is expected to assume initiative and responsibility for following these procedures. Failure to follow these in their proper sequence may result in delay or interruption in completing the program of graduate study.

1. Upon admission to the Graduate Division, the student confers with the chairman of the department in which graduate study is proposed for the assignment of an advisor.

2. The advisor assists the student in registering for courses for the first quarter.

3. During the initial quarter of study, the student will complete the general background tests prescribed by the Graduate Council. These tests are administered by the Education Department. The student should arrange for these tests with the head of this department. The test results are transmitted to the chairman and secretary of the Graduate Council and become a part of the student's record.

4. Prior to the end of the first quarter of study, the student, in conference with the advisor, prepares the proposed program of graduate study. A complete transcript of all undergraduate work should be available to insure intelligent program planning. Five typewritten copies of the proposed program, on forms provided by the Registrar's Office, must be submitted to the Graduate Council before the beginning of the second quarter of study. Copies of the approved program, signed by the chairman of the Graduate Council, are then filed with the secretary and the chairman of the Council. Students registering for classes during their second quarter in attendance without having the graduate study program approved, do so at their own risk.

5. Preliminary comprehensive examinations are to be completed before the final quarter in residence. The scheduling of the examinations is to be determined by the student in consultation with the advisor. Upon receipt of a statement from the advisor indicating satisfactory completion of these examinations, the Graduate Council automatically advances the student to candidacy. No student with undergraduate deficiencies or with an unsatisfactory grade-point average may be advanced to candidacy. Students who do not successfully complete the preliminary comprehensive examination may be advised to discontinue graduate study or to register for additional work.

6. The final examination may be oral or both written and oral. The time, type, and the committee administering the final examination are determined by the chairman of the Graduate Council in consultation with the advisor.

Upon receipt of a statement from the chairman of the Graduate Council indicating successful completion of all examinations and procedures outlined, the secretary certifies that the candidate has completed the program of graduate study within the six-year time limit with a satisfactory grade-point average, and authorizes the conferring of the degree.
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Candidates for a master's degree must also satisfy any additional departmental requirements as listed in this Bulletin under the section Departments of Instruction.

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CONFERRING OF DEGREE

Upon successful completion of the program of study, and all examinations, the Secretary of the Graduate Council authorizes the conferring of the degree.

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Students are required to participate in the graduation exercises. Permission to receive the master's degree in absence is granted only by the President of the College.

SUMMARY OF GRADUATE DIVISION PROCEDURES

The following procedures are outlined for the guidance of graduate students wishing to qualify for the master's degree. The student is expected to assume initiative and responsibility for following these procedures. Failure to follow these procedures may result in delay or interruption in completing the program of graduate study.

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DEPARTMENTS OF INSTRUCTION
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INFORMATION concerning course descriptions and times courses are offered may be obtained by referring to the current annual Bulletin and class schedule, respectively. Courses numbered 500 or above are primarily for graduate students. Courses numbered 100-199 are open to both upper-division undergraduate and graduate students. In some instances certain courses numbered 100-199 as listed in the Bulletin may be included in the graduate program.

BIOLOGICAL SCIENCES

Graduate students in the Department of Biological Sciences may elect either a major in biology or zoology. The major in biology is recommended for those who plan to teach on the secondary level and allows a broad choice of the minor supporting work. The zoology major is more specialized, requires the minor to be in botany or chemistry, and primarily prepares the student for research.

The department offers courses in zoology and botany on the main campus, at the Biological Station near Anacortes, Washington, during the summer, and in the Field School of Biology. The courses are largely in the following branches: Animal Morphology, Animal Parasitology, Histology and Microtechnique, Physiology and Nutrition, Human Anatomy, Bacteriology, Ornithology, Mammalogy, Ethology, Entomology, Marine Invertebrates, Ecology, Plant Morphology, and Plant Taxonomy.

302. Vertebrate Embryology: A detailed study of the embryology of the frog, chick, and pig, with emphasis on their relation to human embryology. Four credits.

302. Vertebrate Anatomy: A study of the comparative anatomy of the various classes of vertebrates. Detailed dissections of the fish and of the cat are made in the laboratory. Five credits.
DEPARTMENTS
OF INSTRUCTION

INFORMATION concerning course descriptions and times courses are offered may be obtained by referring to the current annual Bulletin, and class schedule, respectively. Courses numbered 200 or above are primarily for graduate students. Courses numbered 100-199 are open to both upper-division undergraduate and graduate students. In some instances certain courses numbered 100-199 as listed in this Bulletin may be included in the graduate program.

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302. Vertebrate Anatomy: A study of the comparative anatomy of the various classes of vertebrates. Detailed dissections of the chick and of the cat are made in the laboratory. Five credits.
103. VERTEBRATE PHYSIOLOGY. A course designed to acquaint the biology or zoology major with the principles of physiology. Several vertebrate animals including those of humans are studied and compared. Prerequisite: 102. Four credits.

105. SYSTEMATIC BOTANY. Principles of classification of plants with emphasis on the spermatophytes. Four credits. (WWC Biological Station.)

131. MAMMALOGY. A systematic study of mammals with emphasis on taxonomy and geographical distribution. Four credits.

153. ORNITHOLOGY. A systematic study of native birds of North America, with emphasis on identification, migration, geographical distribution, habits and life histories. Four credits.

154. SYSTEMATIC ENTOMOLOGY. A systematic study of insects. Four credits.

155. PALEONTOLOGY. A study of plant and animal fossils, with a survey of the principles of geology. Two or three credits (additional credit may be elected for a four-hour laboratory to accompany the course). Five credits.

156. GENETICS. A study of the principles of inheritance in plants and animals, especially man. Two credits.

208. PHILOSOPHY OF SCIENCE. A study of origins of living things, special creation as opposed to evolution, the Flood, glaciation, problems of species, and distribution of plants and animals. Two credits.

185-186. SEMINAR. A study of modern trends in biology; current biological literature; presentation of scientific papers; group discussion of biological problems. One-half credit per quarter.

186. MORPHOLOGY OF PLANTS. Detailed studies of the type forms of the main plant groups. Autumn quarter: Thallophyta and Bryophyta; winter quarter: Pteridophyta and Spermatophytes. Four credits.

187. FRESH WATER BIOLOGY. A systematic study of the animals and plants found in fresh water lakes and streams. Field work includes trips to a number of lakes and streams. Four credits.

187. VERTEBRATE HISTOLOGY. The microscopic anatomy of vertebrate cells, tissues and organs including reference to their functions. Four credits.

177. ANIMAL MICROTECHNIQUE. A course designed to cover the important methods of technique in making microscope slides of animal tissues. Three credits.

187. PLANT MICROTECHNIQUE. A course designed to cover the important methods of technique in making microscope slides of plant tissues. Three credits.

177-178. PARASITOLOGY. A systematic study of the morphology, life cycles, and the medical aspects of the protozoan, nematode, and worm parasites of the vertebrates with more emphasis on human parasitology. Three credits per quarter.

179. MARINE INVERTEBRATES. A systematic study of the invertebrate animals of Puget Sound with a survey of marine invertebrates from other areas. A review of ecological zones of Puget Sound will be included. In the laboratory work. Four credits. (WWC Biological Station.)

180. ICHTHYOLOGY. A systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters. Field work includes collecting of specimens. Four credits. (WWC Biological Station.)

182. MARINE BOTANY. A systematic study of plants found in Puget Sound, with a survey of marine plants from other areas. Four credits. (WWC Biological Station.)

184. OCEANOGRAPHY. A study of the geology, geography, and biology of the ocean. Four credits. (WWC Biological Station.)

182. FISHERIES BIOLOGY. A study of marine and fresh water fisheries with emphasis upon fisheries surveys and research methods, observation of hatchery and commercial fishing methods, and study of problems involved. Prerequisite: 182. Four credits. (WWC Biological Station.)

186. HISTORY OF BIOLOGY. A survey of the history of biological work from the Greek period to the present. Two credits.

186-187. METHODS IN RESEARCH. A study of the entire field of biological literature, with emphasis upon the research paper; methods of assembling data; methods of compiling data; and writing the finished paper; presentation of an acceptable research paper. One credit per quarter.

196. SPECIAL PROBLEMS IN BIOLOGICAL SCIENCE. Individual work to be carried on under the supervision of the instructor. Time and credit arranged.

201. RESEARCH IN ZOOLOGY. Individual work in a topic of original research carried out under one of the instructors. A report must be prepared for publication before credit will be allowed. Credit arranged.

202. RESEARCH IN BOTANY. Individual work in a topic of original research carried out under one of the instructors. A report must be prepared for publication before credit will be allowed. Credit arranged.

201-301. GRADUATE SEMINAR. Presentation of topical subjects of current interest in botanical science, followed by discussion. Each class member prepares a lecture as if for presentation before a scientific society meeting. One credit per quarter.

207. GENETICS AND EVOLUTION. Advanced study and criticism of evolution in all its phases. Critique of current books on evolution; study of major theories and hypotheses. Prerequisite: 156, 159. Three credits.

211. PLANT ECOLOGY. The relationships between plants and their environment, factors controlling distribution, and detailed study of biotic provinces throughout North America, including adequate field work and experimental methods. Prerequisite: 106. Four credits.

215. ADVANCED MARINE INVERTEBRATES. Detailed study of the echinoderms with emphasis on the lesser groups not included in course 167, including experimental methods and embryology of marine animals. Prerequisite: 183. Two or more credits. (WWC Biological Station.)

220. PARASITES OF MARINE ANIMALS. Original work with parasites of all groups of marine animals, including experimental methods and embryology. Prerequisite: 177-178, 181, 182. Two or more credits. (WWC Biological Station.)

225. ADVANCED PARASITOLOGY. Original work with parasites of the tissues of animal life, including determination of species, experimental methods and life histories. Prerequisite: 156, 158, 177-178, 182. Two or more credits.

231. THESIS. Preparation of the master's dissertation after successfully carrying out original study with a suitable topic to be selected after consultation with the major professor. Five to nine credits.
163. **VERTEBRATE PHYSIOLOGY.** A course designed to acquaint the biology or zoology major with the principles of physiology. Several vertebrate animals including the human are studied and compared. Prerequisite: 104. Four credits.

164. **SYSTEMATIC BOTANY.** Principles of classification of plants with emphasis on the spermatophytes. Four credits. (WWC Biological Station.)

165. **MAMMALOLOGY.** A systematic study of mammals with emphasis on taxonomy and geographical distribution. Four credits.

166. **ORNITHOLOGY.** A systematic study of native birds of North America, with emphasis on identification, migration, geographical distribution, habits and life histories. Four credits.

167. **SYSTEMATIC ENTOMOLOGY.** A systematic study of insects. Four credits.

168. **PALEONTOLOGY.** A study of plant and animal fossils, with a survey of the principles of geology. Two or three credits (the additional credit may be elected as a four-hour laboratory to accompany the course).

169. **GENETICS.** A study of the principles of inheritance in plants and animals, especially man. Two credits.

170. **PHILOSOPHY OF SCIENCE.** A study of origins of living things, of special creation as opposed to evolution, the Flood, glaciation, problems of species, and distribution of plants and animals. Two credits.

171. **SEM.** A study of modern trends in biology; of current biological literature; presentation of scientific papers; group discussion of biological problems. One-half credit per quarter.

172. **MORPHOLOGY OF PLANTS.** Detailed studies of the type forms of the main plant groups: Algae; Bryophyta; Tracheophyta; Gymnosperms; Angiosperms. Four credits.

173. **WATER BIOLOGY.** A systematic study of the animals and plants found in fresh water lakes and streams. Field work includes trips to a number of lakes and streams. Four credits.

174. **VERTEBRATE HISTOLOGY.** The microscopic anatomy of vertebrate cells, tissues and organs including reference to their functions. Four credits.

175. **ANIMAL MICROTECHNIQUE.** A course designed to cover the important methods of technique in making microscope slides of animal tissues. Three credits.

176. **PLANT MICROTECHNIQUE.** A course designed to cover the important methods of technique in making microscope slides of plant tissues. Three credits.

177-178. **PARASITOLOGY.** A systematic study of the morphology, life cycle and the medical aspects of the protozoan, nematode, and worms parasites of the vertebrates with more emphasis on human parasitology. Three credits per quarter.

179. **MARINE INVERTEBRATES.** A systematic study of the invertebrates of Puget Sound with a survey of marine invertebrates on other shores. A review of ecological zones of Puget Sound will be included in the laboratory work. Four credits. (WWC Biological Station.)

180. **ICHthyology.** A systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters. Field work includes collecting of specimens. Four credits. (WWC Biological Station.)

181. **MARINE BOTANY.** A systematic study of plants found in Puget Sound, with a survey of marine plants from other areas. Four credits. (WWC Biological Station.)

182. **OCEANOGRAPHY.** A study of the geology, geography, and biology of the ocean. Four credits. (WWC Biological Station.)

183. **FISHERIES BIOLOGY.** A study of marine and fresh water fisheries with emphasis upon fishery surveys and research methods, observation of hatchery and commercial fishing methods, and study of problems involved. Prerequisite: 164. Four credits. (WWC Biological Station.)

184. **HISTORY OF BIOLOGY.** A survey of the history of biological work from the Greek period to the present. Two credits.

185-186. **METHODS IN RESEARCH.** A study of the entire field of biological literature, with emphasis on the research paper: methods of assembling data: methods of compiling data: methods of writing the finished paper: presentation of an acceptable research paper. One credit per quarter.

187. **SPECIAL PROBLEMS IN BIOLOGICAL SCIENCE.** Individual work to be carried on under the supervision of the instructor. Time and credit arranged.

188. **RESEARCH IN ZOOLOGY.** Individual work in a topic of original research carried out under one of the instructors. A report must be prepared for publication before credit will be allowed. Credit arranged.

189. **RESEARCH IN BOTANY.** Individual work in a topic of original research carried out under one of the instructors. A report must be prepared for publication before credit will be allowed. Credit arranged.

190. **GRADUATE SEMINAR.** Presentation of topics of current interest in biological science, followed by discussion. Each class member prepares a lecture as if for presentation before a scientific society meeting. One credit per quarter.

191. **GENETICS AND EVOLUTION.** Advanced study and criticism of evolution in all its phases; criticism of current books on evolution; study of major theories and hypotheses. Prerequisite: 154, 155. Three credits.

192. **PLANT ECOLOGY.** The relationships between plants and their environment, factors controlling distribution, and detailed study of biotic provinces throughout North America, including adequate field work and experimental methods. Prerequisite: 156. Four credits.

193. **ADVANCED MARINE INVERTEBRATES.** Detailed study of the echinoderms with emphasis on the lesser groups not included in course 163, including experimental methods and embryology of marine animals. Prerequisite: 164. Two or more credits. (WWC Biological Station.)

194. **PARASITES OF MARINE ANIMALS.** Original work with parasites of all groups of marine animals, including experimental methods and embryology. Prerequisite: 177-178, 183, 184. Two or more credits. (WWC Biological Station.)

195. **ADVANCED PARASITOLOGY.** Original work with parasites of forms of animal life, including determination of species, experimental methods and life histories. Prerequisite: 158, 156, 177-178, 182. Two or more credits.

196. **THESES.** Preparation of the master's dissertation after successfully carrying out original study with a suitable topic to be selected after consultation with the major professor. Five to nine credits.
EDUCATION

105. CHILD LITERATURE. Survey of children's literature for the elementary school level. Three credits.

112. HUMAN GROWTH AND DEVELOPMENT. Principles of growth, as related to all phases of development. Attitudes, ideals, and concepts of values are stressed where these are related to mental growth, emotional maturity, and personality development. Four credits.

138. EDUCATIONAL EVALUATION. Designed to acquaint the student with the latest and best instruments for appraising the results of growth in the various aspects of abilities, achievement and personality. Opportunity will be provided for the practical application and interpretation of the results obtained by the use of various tests and scales. Practice is given in the construction and use of teacher-made tests. Prerequisite: Psychology. Three credits.

139. SCHOOL HOME ADMINISTRATION. A course designed especially for those interested in school home work in boarding schools, supervising the development, mission, and organization of school homes, with emphasis on the fostering of spiritual and cultural ideals and leadership, in the light of the educational standards of Seventh-day Adventists and the recent developments in the field of personnel work. Three credits.

132. TEACHING OF READING. Diagnostic and remedial teaching of reading for intermediate and upper grades of the elementary school. Three credits.

151. SCIENCE IN THE SECONDARY SCHOOL. Methods and techniques of teaching science on the secondary school level. Two credits.

152. SOCIAL STUDIES IN THE SECONDARY SCHOOL. Methods and techniques of teaching the social studies on the secondary school level. Two credits.

153. LANGUAGE ARTS IN THE SECONDARY SCHOOL. Methods and techniques of teaching English and related subjects on the secondary school level. Two credits.

157. MATHEMATICS IN THE SECONDARY SCHOOL. Methods and techniques of teaching mathematics on the secondary school level. Two credits.

160. INTRODUCTION TO COUNSELING. Consideration of effective techniques of counseling individuals in the solution of personal problems of the school, family, church, and community. Prerequisite: General Psychology. Two credits.

171 or 172. PRINCIPLES OF AUDIO-VISUAL EDUCATION. A survey of the methods of instruction through the use of audio-visual aids, including recording devices, motion pictures, slides, film strips, charts, maps, posters, opaque projection, flat pictures, and blackboard illustrations. Prerequisite: 9 credits in Education. Three credits.

206. SPECIAL PROBLEMS IN GRADES 1-8. A study of teaching techniques in a schoolroom situation; an analysis of special problems in the various areas of the elementary school. Registration limited. Three credits.

231. PSYCHOLOGY OF LEARNING. The course includes analysis of the mechanisms involved in the learning process. The physiological and psychological basis for functional learning is discussed, and the experimental evidence supporting psychological hypotheses is reviewed. Three credits.

232. PHILOSOPHY OF EDUCATION. A study of the basic principles and development of true education resulting in the formulation of aims and objectives of education for Christian society. Three credits.

233. HISTORY OF THE PROBLEMS OF EDUCATION. A course for advanced students dealing with problems of modern education and their historical background. Textbook, readings, discussion, term paper. Three credits.

234. HISTORY OF EDUCATIONAL THOUGHT. Theories and processes of great educators in ancient and modern times. Interpretation of educational thought from a Christian philosophical viewpoint. Evaluation of educational thought in western civilization. Two credits.

248. MENTAL HEALTH IN EDUCATION. Physiological and psychological factors related to emotional maturity. Identification of mental health activities. Individual mental health, classroom climate, patterns of acceptance and rejection. Two credits.

253. SCHOOL ADMINISTRATION AND SUPERVISION. A course which presupposes some familiarity with problems of administration and supervision. An intensive study of more important problems of organization and administration in secondary and elementary education. Three credits.

255. COUNSELING AND GUIDANCE. Principles and techniques of individual and group counseling with emphasis on the scope, needs, organization of the program; services to students, the instructional staff, and the administration; personnel needed for the program. Three credits.

254. CURRICULUM PLANNING. The relation of curricular materials to educational outcomes in terms of personal and social values. A brief review of curriculum investigations and their significance in the selection and evaluation of school materials and activities. Current practices in curriculum revision. Three credits.

252. SEMINAR. Methods of research applied to current educational issues and trends in America. Two credits.

255. SEMINAR. Topics in elementary education dealing with curriculum, personnel, school plant, finance, public relations, or other related areas. Two credits.

256. SEMINAR. Topics in secondary education dealing with curriculum, personnel, school plant, finance, public relations, or other related areas. Two credits.

258. SPECIAL PROBLEMS IN EDUCATION. Degree candidates who desire to pursue special research problems under the direction of the major professor may register for one to three credits under this number.

260. THESIS. Five to nine credits.

COOPERATING DEPARTMENTS

The following departments offer courses which may be included in the student's graduate program as the minor or supporting work. The
EDUCATION

105. CHILD LITERATURE. Survey of children's literature for the elementary school level. Three credits.

112. HUMAN GROWTH AND DEVELOPMENT. Principles of growth as related to all phases of development. Attitudes, ideals, and concepts of values are stressed when these are related to mental growth, emotional maturity, and personality development. Four credits.

118. EDUCATIONAL EVALUATION. Designed to acquaint the student with the latest and best instruments for appraising the results of growth in the various aspects of abilities, achievement, and personality. Opportunity will be provided for the practical application and interpretation of the results obtained by the use of various tests and scales. Prerequisite is given in the construction and use of teacher-made tests. Psychology. Three credits.

139. SCHOOL HOME ADMINISTRATION. A course designed especially for those interested in school home work in boarding schools, emphasizing the development, mission, and organization of school homes, with emphasis on the function of spiritual and cultural ideals and leadership in the light of the educational standards of Seventh-Day Adventists and the recent developments in the field of personnel work. Three credits.

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171 or 172. PRINCIPLES OF AUDIO-VISUAL EDUCATION. A survey of the methods of instruction through the use of audio-visual aids, including recording devices, motion pictures, slides, film strips, charts, maps, posters, opaque projection, flat pictures, and blackboard illustrations. Prerequisite: C credit in Education. Three credits.

206. SPECIAL PROBLEMS IN GRADES 1-8. A study of teaching techniques in a schoolroom situation; an analysis of special problems in the various areas of the elementary school. Registration limited. Three credits.

207. PSYCHOLOGY OF LEARNING. The course includes analysis of the mechanisms involved in the learning process. The physiological and psychological basis for functional learning is discussed, and the experimental evidence supporting psychological hypotheses is reviewed. Three credits.

208. PHILOSOPHY OF EDUCATION. A study of the basic principles and development of true education resulting in the formulation of aims and objectives of education for Christian society. Three credits.

223. HISTORY OF THE PROBLEMS OF EDUCATION. A course for advanced students dealing with problems of modern education and their historical background. Textbook, readings, discussion, term paper. Three credits.

224. HISTORY OF EDUCATIONAL THOUGHT. Theories and practices of great educators in ancient and modern times. Interpretation of educational thought from a Christian philosophical viewpoint. Evaluation of educational thought in western civilization. Two credits.

228. MENTAL HEALTH IN EDUCATION. Physiological and psychological factors related to emotional maturity. Identification of mental health activities. Individual mental health, classroom climate, patterns of acceptance and rejection. Two credits.

233. SCHOOL ADMINISTRATION AND SUPERVISION. A course which presupposes some familiarity with problems of administration and supervision. An intensive study of more important problems of organization and administration in secondary and elementary education. Three credits.

235. COUNSELING AND GUIDANCE. Principles and techniques of individual and group counseling with emphasis on the scope, need, organization of the program; services to students, the instructional staff, and the administration; personnel needed for the program. Three credits.

241. CURRICULUM PLANNING. The relation of curricular materials to educational outcomes in terms of personal and social values. A brief review of curriculum investigations and their significance in the selection and evaluation of school materials and activities. Current practices in curriculum revision. Three credits.

281. SEMINAR. Methods of research applied to current educational issues and trends in America. Two credits.

282. SEMINAR. Topics in elementary education dealing with curriculum, personnel, school plant, finance, public relations, other related areas. Two credits.

286. SEMINAR. Topics in secondary education dealing with curriculum, personnel, school plant, finance, public relations, other related areas. Two credits.

289. SPECIAL PROBLEMS IN EDUCATION. Degree candidates who elect to pursue special research problems under the direction of the major professor may register for one to three credits under this number.

292. THESIS. Five to nine credits.

COOPERATING DEPARTMENTS

The following departments offer courses which may be included in the student's graduate program as the minor or supporting work. The
### BUSINESS ADMINISTRATION

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>131</td>
<td>Principles of Insurance</td>
<td>3</td>
</tr>
<tr>
<td>136</td>
<td>Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>141-145-146</td>
<td>Cost Accounting</td>
<td>2 credits per quarter</td>
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<tr>
<td>145</td>
<td>Accounting Systems</td>
<td>3</td>
</tr>
<tr>
<td>161</td>
<td>Business Management</td>
<td>3</td>
</tr>
<tr>
<td>162</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>168</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>172</td>
<td>Tax Procedure</td>
<td>3</td>
</tr>
<tr>
<td>174</td>
<td>Fund Accounting</td>
<td>3</td>
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<td>176</td>
<td>Auditing Procedure</td>
<td>3</td>
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<tr>
<td>191-192-193</td>
<td>Money and Banking</td>
<td>2 credits per quarter</td>
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<tr>
<td>199</td>
<td>Special Problems in Business</td>
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### CHEMISTRY

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<tbody>
<tr>
<td>111-112</td>
<td>Elementary Organic Chemistry</td>
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<tr>
<td>111A-112A</td>
<td>Experimental Organic Chemistry</td>
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<tr>
<td>121</td>
<td>Advanced Organic Chemistry</td>
<td>2 credits</td>
</tr>
<tr>
<td>131</td>
<td>Advanced Gravimetric Analysis</td>
<td>3 credits</td>
</tr>
<tr>
<td>132</td>
<td>Advanced Volumetric Analysis</td>
<td>3 credits</td>
</tr>
<tr>
<td>133</td>
<td>Instrumental Analysis</td>
<td>3 credits</td>
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<tr>
<td>135-135A</td>
<td>Physical Chemistry</td>
<td>3 credits per quarter</td>
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<tr>
<td>151A-152A, 153A</td>
<td>Practical Physical Chemistry</td>
<td>1 credit per quarter</td>
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<tr>
<td>154</td>
<td>Biochemistry</td>
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<tr>
<td>154A</td>
<td>Biochemistry Laboratory</td>
<td>1 credit</td>
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<tr>
<td>156</td>
<td>Inorganic Synthesis</td>
<td>3 credits</td>
</tr>
<tr>
<td>156A</td>
<td>Organic Qualitative Analysis</td>
<td>3 credits</td>
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<tr>
<td>157</td>
<td>Advanced Organic Chemistry</td>
<td>2 credits</td>
</tr>
<tr>
<td>162-163</td>
<td>Special Problems</td>
<td>1-3 credits</td>
</tr>
<tr>
<td>165</td>
<td>History of Chemistry</td>
<td>2 credits</td>
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### ENGLISH

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<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>142</td>
<td>Literary Composition</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>154</td>
<td>The Victorian Period</td>
<td>3 credits per quarter</td>
</tr>
<tr>
<td>157</td>
<td>American Literary Masters</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>162-163</td>
<td>The Romantic Period</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>165-166-169</td>
<td>Restoration and Neoclassic Literature</td>
<td>2 credits per quarter</td>
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### HISTORICAL SCIENCE

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<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>111</td>
<td>Archaeology and the Ancient Near East</td>
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</tr>
<tr>
<td>112</td>
<td>Greece and the Hellenistic Age</td>
<td>2 credits</td>
</tr>
<tr>
<td>113</td>
<td>Roman Civilization</td>
<td>3 credits</td>
</tr>
<tr>
<td>115</td>
<td>Current History</td>
<td>3 credits per quarter</td>
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<tr>
<td>134</td>
<td>History of England</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>119</td>
<td>The Far East</td>
<td>3 credits</td>
</tr>
<tr>
<td>121-122-123</td>
<td>History of Russia</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>124</td>
<td>The American Frontier</td>
<td>2 credits per quarter</td>
</tr>
<tr>
<td>125</td>
<td>American Diplomatic Relations</td>
<td>2 credits</td>
</tr>
<tr>
<td>127</td>
<td>The Late Middle Ages</td>
<td>3 credits</td>
</tr>
<tr>
<td>128</td>
<td>The Renaissance</td>
<td>3 credits</td>
</tr>
<tr>
<td>129</td>
<td>The Reformation</td>
<td>3 credits</td>
</tr>
<tr>
<td>132</td>
<td>History of the Pacific Northwest</td>
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<tr>
<td>133</td>
<td>History of the British Empire</td>
<td>3 credits</td>
</tr>
<tr>
<td>134</td>
<td>Twentieth Century Totalitarianism</td>
<td>3 credits</td>
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<tr>
<td>126</td>
<td>Seminar for History Minors</td>
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<tr>
<td>127-128-129</td>
<td>History of Latin America</td>
<td>2 credits per quarter</td>
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<tr>
<td>130-131-132</td>
<td>Special Problems in History</td>
<td>1-2 credits per quarter</td>
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<tr>
<td>134</td>
<td>Seminar for History Majors</td>
<td>1 credit per quarter</td>
</tr>
<tr>
<td>135</td>
<td>Comparative European Governments</td>
<td>3 credits</td>
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<tr>
<td>136</td>
<td>Constitutional Interpretation</td>
<td>3 credits</td>
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<tr>
<td>137</td>
<td>World Politics and International Relations</td>
<td>3 credits</td>
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<tr>
<td>138</td>
<td>Political Theory</td>
<td>3 credits</td>
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<tr>
<td>141</td>
<td>Public Opinion and Propaganda</td>
<td>3 credits</td>
</tr>
<tr>
<td>122-123</td>
<td>Problems of Contemporary Society</td>
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### INDUSTRIAL EDUCATION

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>158</td>
<td>Photography II</td>
<td>2 credits</td>
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<tr>
<td>154</td>
<td>Furniture Design</td>
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<tr>
<td>115</td>
<td>Furniture Construction</td>
<td>3 credits</td>
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<tr>
<td>128</td>
<td>Finishing Materials and Methods</td>
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<tr>
<td>130-131-132</td>
<td>Shop Administration and Planning</td>
<td>3 credits</td>
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<tr>
<td>124</td>
<td>Course Construction</td>
<td>3 credits</td>
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<tr>
<td>126</td>
<td>Methods of Teaching Industrial Arts</td>
<td>3 credits</td>
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</tbody>
</table>
selection of a minor or supporting work promotes an adequate back-
ground in the subject matter area or areas involved.

BUSINESS ADMINISTRATION
131. PRINCIPLES OF INSURANCE. Three credits.
136.-REAL ESTATE. Three credits.
141-145-146. COST ACCOUNTING. Two credits per quarter.
145. ACCOUNTING SYSTEMS. Three credits.
148. BUSINESS MANAGEMENT. Three credits.
156. BUSINESS FINANCE. Three credits.
158. PERSONNEL MANAGEMENT. Three credits.
173. TAX PROCEDURE. Three credits.
174. FUND ACCOUNTING. Three credits.
176. AUDITING PROCEDURE. Three credits.
181-182-183. MONEY AND BANKING. Two credits per quarter.
189. SPECIAL PROBLEMS IN BUSINESS ADMINISTRATION. One
to five credits.

CHEMISTRY
111-112. 113. ELEMENTARY ORGANIC CHEMISTRY. Three credits
per quarter.
111A-112A, 113A. EXPERIMENTAL ORGANIC CHEMISTRY. One or
two credits per quarter.
121. ADVANCED INORGANIC CHEMISTRY. Two credits.
131. ADVANCED GRAVIMETRIC ANALYSIS. Three credits.
132. ADVANCED VOLUMETRIC ANALYSIS. Three credits.
133. INSTRUMENTAL ANALYSIS. Three credits.
151-152. 153. PHYSICAL CHEMISTRY. Three credits per quarter.
151A-152A, 153A. PRACTICAL PHYSICAL CHEMISTRY. One credit
per quarter.
154. BIOCHEMISTRY. Three credits.
154A. BIOCHEMISTRY LABORATORY. One credit.
164. INORGANIC SYNTHESIS. Three credits.
166. ORGANIC QUALITATIVE ANALYSIS. Three credits.
168. ADVANCED ORGANIC CHEMISTRY. Two credits.
169 or 173. SPECIAL PROBLEMS. One to three credits.
173. HISTORY OF CHEMISTRY. Two credits.

ENGLISH
141. 142. 143. LITERARY COMPOSITION. Two credits per quarter.
154. 155. 156. THE VICTORIAN PERIOD. Three credits per quarter.
157. 158. 159. AMERICAN LITERARY MASTERS. Two credits per
quarter.
162. 163. 164. THE ROMANTIC PERIOD. Two credits per quarter.
165. HISTORICAL AND MODERN GRAMMAR AND LINGUISTIC.
Three credits.
167-168-169 RESTORATION AND NEOCLASSIC LITERATURE. Two
credits per quarter.

171, 172-173. OLD AND MIDDLE ENGLISH LITERATURE. Three
credits per quarter.
204, 205, 206. ENGLISH RENAISSANCE LITERATURE. Three credits
per quarter.
208. LITERATURE OF THE ENGLISH BIBLE. Three credits.
397-398-399. SEMINAR. One credit per quarter.

HISTORY, POLITICAL SCIENCE, AND SOCIAL SCIENCE
111. ARCHAEOLOGY AND THE ANCIENT NEAR EAST. Two
credits.
112. GREECE AND THE HELLENISTIC AGE. Two credits.
113. ROMAN CIVILIZATION. Two credits.
131. 132. 133. CURRENT HISTORY. Two credits per quarter.
134. 135. 136. HISTORY OF EUROPE. Two credits per quarter.
138. THE FAR EAST. Three credits.
139. 140. HISTORY OF RUSSIA. Two credits per quarter.
141. 142. 143. THE AMERICAN FRONTIER. Two credits per quarter.
144. 145. AMERICAN DIPLOMATIC RELATIONS. Two credits.
147. THE LATE MIDDLE AGES. Three credits.
149. THE RENAISSANCE. Three credits.
150. THE REFORMATION. Three credits.
152. HISTORY OF CANADA. Three credits.
156. HISTORY OF THE PACIFIC NORTHWEST. Three credits.
157. HISTORY OF THE BRITISH EMPIRE. Three credits.
158. TWENTIETH CENTURY TOTALITARIANISM. Three credits.
166. SEMINAR FOR HISTORY MINORS. One credit.
167. 168. 169. HISTORY OF LATIN AMERICA. Two credits per
quarter.
167. 168. 169. SPECIAL PROBLEMS IN HISTORY. One to two credits
per quarter.
168, 169. SEMINAR FOR HISTORY MAJORS. One credit per quarter.
169. COMPARATIVE EUROPEAN GOVERNMENTS. Three credits.
171. CONSTITUTIONAL INTERPRETATION. Three credits.
172. WORLD POLITICS AND INTERNATIONAL RELATIONS. Three
credits.
185. POLITICAL THEORY. Three credits.
186. PUBLIC OPINION AND PROPAGANDA. Three credits.
170. 171. PROBLEMS OF CONTEMPORARY SOCIETY. Two credits
per quarter.

INDUSTRIAL EDUCATION
150. PHOTOGRAPHY II. Two credits.
154. FURNITURE DESIGN. Three credits.
155. FURNITURE CONSTRUCTION. Three credits.
156. FINISHING MATERIALS AND METHODS. Two credits.
167. SHOP ADMINISTRATION AND PLANNING. Three credits.
168. COURSE CONSTRUCTION. Three credits.
169. METHODS OF TEACHING INDUSTRIAL ARTS. Three credits.
154, 155, 156. MACHINERY AND TOOL MAINTENANCE. Two or three credits per quarter.
157. HISTORY OF INDUSTRIAL ARTS. Two credits.
191, 192, 193. SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION. Six hours maximum credit from this and/or Special Problems Laboratory.
191A, 192A, 193A. SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION LABORATORY. Six hours maximum credit from this and/or Special Problems.

LANGUAGES

152. SPANISH PRONUNCIATION. Two credits.
153. MODERN GERMAN AND ITS LITERATURE. Three credits.
154, 155, 156. GERMAN DIRECTED READING. One to three credits per quarter.
157, 158. SPANISH DIRECTED READING. One to three credits per quarter.
159. ADVANCED SPANISH CONVERSATION. Two credits.
161. SPANISH ESSAY. Three credits.
162. ADVANCED GERMAN COMPOSITION AND CONVERSATION. Three credits.
165, 166. LATIN AMERICAN LITERATURE. Three credits per quarter.

MATHEMATICS

151. THEORY OF EQUATIONS. Four Credits.
152. INTRODUCTION TO MODERN ALGEBRA. Four credits.
153. COLLEGE GEOMETRY. Four credits.
161, 162, 163. DIFFERENTIAL EQUATIONS AND ADVANCED CALCULUS. Four credits per quarter.
171, 172, 173. INTRODUCTION TO ADVANCED ANALYSIS. Four credits per quarter.
190. SELECTED TOPICS IN MATHEMATICS. One to two credits.

MUSIC

147. VOICE METHODS. Three credits.
148. CHORAL CONDUCTING AND ORGANIZATION. Three Credits.
149. INSTRUMENTAL CONDUCTING AND ORGANIZATION. Three credits.
151-152-153. ORCHESTRA. Two credits per quarter.
154, 155, 156. COMPOSITION. Two credits per quarter.
157, 158, 159. HISTORY OF MUSIC. Three credits per quarter.

NURSING AND HEALTH EDUCATION

157. CURRICULUM IN SCHOOLS OF NURSING. Three credits.
157, 158, or 159. DIRECTED TEACHING. Two to six credits.
161. NURSING TEACHING AND MANAGEMENT. Three credits.
162. SUPERVISION IN SCHOOLS OF NURSING. Three credits.
165, 166. NURSING ADMINISTRATION AND ORGANIZATION OF SCHOOLS OF NURSING. Three credits.
167 or 169. CHILD AND YOUTH HEALTH. Three credits.

PHYSICAL EDUCATION AND RECREATION

121, 122. PHYSIOLOGY. Three credits per quarter.
123. PHYSIOLOGY OF EXERCISE. Three credits.
125. LEADERSHIP IN CAMPING AND CAMP CRAFT. Two credits.
126. FOUNDATIONS OF PHYSICAL EDUCATION. Three credits.
127. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION. Three credits.
128. ADMINISTRATION OF SECONDARY PHYSICAL EDUCATION. Three credits.
164, 165, 166. ADVANCED ARTS AND CRAFTS. Two credits per quarter.
174, 175, or 176. RECREATIONAL LEADERSHIP. Two credits.
177. SUMMER CAMPS. Two to five credits.
179. SPECIAL PROBLEMS. One to three credits.
192, 193. SEMINAR IN PHYSICAL EDUCATION. One credit per quarter.
195. METHODS OF TEACHING PHYSICAL EDUCATION. One credit.

PHYSICS

191, 192. ELECTRICITY AND MAGNETISM. Three credits per quarter.
191A, 192A. ELECTRICAL MEASUREMENTS. One credit per quarter.
193, 194. THEORETICAL MECHANICS. Three credits per quarter.
195. THERMODYNAMICS. Four credits.
197, 198, 199. OPTICS. Three credits per quarter.
192. NUCLEAR PHYSICS. Four credits.
193A. NUCLEAR PHYSICS LABORATORY. Two credits.
190. SPECIAL PROBLEMS IN PHYSICS. Credit arranged.

RELIGION

121, 122, 123. SPIRIT OF PROPHETCY AND DENOMINATIONAL HISTORY. Two credits per quarter.
134, 135, 136. HEBREW PROPHETS. Three credits per quarter.
137. RELIGION IN AMERICA. Three credits.
138. MODERN DENOMINATIONS. Three credits.
139. WORLD RELIGIONS. Three credits.
155. MANUSCRIPTS OF THE BIBLE. Two credits.
161, 162, 163. PHILOSOPHY OF RELIGION. Three credits per quarter.
164-166. THEORY OF EVANGELISM. Two credits per quarter.
181A-181A-181A. FIELD EVANGELISM. One credit per quarter.
194, 195, 196. NEW TESTAMENT EPHEMIES. Two credits per quarter.
192, 193. SEMINAR IN RELIGION. One credit per quarter.
154, 155, 156. MACHINE AND TOOL MAINTENANCE. Two or three credits per quarter.

157. HISTORY OF INDUSTRIAL ARTS. Two credits.

161, 162, 163. SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION. Six hours maximum credit from this and/or Special Problems Laboratory.

161A, 162A, 163A. SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION LABORATORY. Six hours maximum credit from this and/or Special Problems.

LANGUAGES

152. SPANISH PRONUNCIATION. Two credits.

153. MODERN GERMAN AND ITS LITERATURE. Three credits.

154, 155, 156. GERMAN DIRECTED READING. One to three credits per quarter.

154, 155, 156. SPANISH DIRECTED READING. One to three credits per quarter.

158. ADVANCED SPANISH CONVERSATION. Two credits.

161. SPANISH ESSAY. Three credits.

162. ADVANCED GERMAN COMPOSITION AND CONVERSATION. Three credits.

165, 166. LATIN AMERICAN LITERATURE. Three credits per quarter.

MATHEMATICS

151. THEORY OF EQUATIONS. Four credits.

152. INTRODUCTION TO MODERN ALGEBRA. Four credits.

153. COLLEGE GEOMETRY. Four credits.

156, 157, 158. DIFFERENTIAL EQUATIONS AND ADVANCED CALCULUS. Four credits per quarter.

171, 172, 173. INTRODUCTION TO ADVANCED ANALYSIS. Four credits per quarter.

190. SELECTED TOPICS IN MATHEMATICS. One to two credits.

MUSIC

147. VOICE METHODS. Three credits.

148. CHORAL CONDUCTING AND ORGANIZATION. Three Credits.

149. INSTRUMENTAL CONDUCTING AND ORGANIZATION. Three credits.

151-152, 153. ORCHESTRACTION. Two credits per quarter.

154, 155, 156. COMPOSITION. Two credits per quarter.

157, 158, 159. HISTORY OF MUSIC. Three credits per quarter.

NURSING AND HEALTH EDUCATION

176. CURRICULUM IN SCHOOLS OF NURSING. Three credits.

157, 158, or 159. DIRECTED TEACHING. Two to six credits.

161. MIDDLE SCHOOL TEACHING AND MANAGEMENT. Three credits.

162. SUPERVISION IN SCHOOLS OF NURSING. Three credits.

163. ORGANIZATION AND ADMINISTRATION OF SCHOOLS OF NURSING. Three credits.

167 or 168. CHILD AND YOUTH HEALTH. Three credits.

PHYSICAL EDUCATION AND RECREATION

121, 122. PHYSIOLOGY. Three credits per quarter.

123. PHYSIOLOGY OF EXERCISE. Three credits.

124. LEADERSHIP IN CAMPING AND CAMP CRAFT. Two credits.

161. FOUNDATIONS OF PHYSICAL EDUCATION. Three credits.

162. ESSAY AND MEASUREMENTS IN PHYSICAL EDUCATION. Three credits.

163. ADMINISTRATION OF SECONDARY PHYSICAL EDUCATION. Three credits.

164, 165. 166. ADVANCED ARTS AND CRAFTS. Two credits per quarter.

174, 175, or 176. RECREATIONAL LEADERSHIP. Two credits.

187. SUMMER CAMPS. Two to five credits.

188. SPECIAL PROBLEMS. One to three credits.

192, 193. SEMINAR IN PHYSICAL EDUCATION. One credit per quarter.

197. METHODS OF TEACHING PHYSICAL EDUCATION. One credit.

PHYSICS

150, 151. ELECTRICITY AND MAGNETISM. Three credits per quarter.

150A, 150B. ELECTRICAL MEASUREMENTS. One credit per quarter.

151, 152, 153. THEORETICAL MECHANICS. Three credits per quarter.

153. THERMODYNAMICS. Four credits.

157, 158, 159. OPTICS. Three credits per quarter.

158. NUCLEAR PHYSICS. Four credits.

160A. NUCLEAR PHYSICS LABORATORY. Two credits.

190. SPECIAL PROBLEMS IN PHYSICS. Credit arranged.

RELIGION

121, 122, 123. SPIRIT OF PROPHETIC AND DENOMINATIONAL HISTORY. Two credits per quarter.

124, 125, 126. HEBREW PROPHETS. Three credits per quarter.

127. RELIGION IN AMERICA. Three credits.

132. MODERN DENOMINATIONS. Three credits.

133. WORLD RELIGIONS. Three credits.

135. MANUSCRIPTS OF THE BIBLE. Two credits.

136, 137, 138. PHILOSOPHY OF RELIGION. Three credits per quarter.

138, 139. THEORY OF EVANGELISM. Two credits per quarter.

188A, 188B, 188C. FIELD EVANGELISM. One credit per quarter.

188, 189, 190. NEW TESTAMENT EPISTLES. Two credits per quarter.

192, 193. SEMINAR IN RELIGION. One credit per quarter.