GRADUATE DIVISION

1961-1962
1962-1963

ARCHIVES

WALLA WALLA COLLEGE LIBRARY
The College is Accredited by

The Northwest Association of Secondary and Higher Schools
The Washington State Board of Education
National League for Nursing

is a member of

Association of American Colleges
Association of Seventh-day Adventist Colleges and Secondary Schools
American Council on Education
National Commission on Accreditation

is approved by

U.S. Government for the training of Veterans under the G.I. Bills 550 and 894
The Attorney General of the United States for nonimmigrant students.
Washington State for training in Vocational Rehabilitation
CONTENTS

CALENDAR ........................................ 4

ADMINISTRATION .................................... 6
  Board of Trustees .................................. 6
  Officers of Administration ......................... 6
  Graduate Council .................................. 6
  Graduate Faculty ................................ 7

GENERAL INFORMATION ............................ 13
  Regulations ...................................... 14
  Tuition .......................................... 15

THE GRADUATE PROGRAM ............................ 19
  Degrees offered.................................. 19
  Admission ....................................... 19
  Registration ..................................... 20
  Scholarship requirements ......................... 21
  Transfer of credit ................................ 21
  Graduate credit for seniors ....................... 21
  Responsibilities of the student ................... 21

DEGREE REQUIREMENTS ............................ 25
  General requirements ............................. 25
  Course requirements ............................... 25
  Residence ....................................... 25
  Program of study ................................ 26
  Advancement to candidacy ........................ 26
  Thesis requirements ............................... 26
  Final examination ................................ 26
  Conferment of degree ............................. 26
  Summary of procedures ............................ 27

DEPARTMENTS OF INSTRUCTION .................... 31
# CALENDAR OF THE GRADUATE DIVISION, 1961-62

## AUTUMN QUARTER, 1961-62

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 24, 25</td>
<td>Sunday, Monday</td>
</tr>
<tr>
<td>September 26</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>November 22 (noon) - 27</td>
<td>Thanksgiving recess</td>
</tr>
<tr>
<td>December 20</td>
<td>Instruction ends</td>
</tr>
<tr>
<td>December 20 - January 3</td>
<td>Christmas recess</td>
</tr>
</tbody>
</table>

## WINTER QUARTER, 1961-62

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 14, 15, January 2</td>
<td>Registration</td>
</tr>
<tr>
<td>January 3</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>March 14</td>
<td>Instruction ends</td>
</tr>
</tbody>
</table>

## SPRING QUARTER, 1961-62

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 8, 9, 19</td>
<td>Registration</td>
</tr>
<tr>
<td>March 20</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>June 1</td>
<td>Instruction ends</td>
</tr>
<tr>
<td>June 1</td>
<td>Senior Consecration</td>
</tr>
<tr>
<td>June 2</td>
<td>Baccalaureate Service</td>
</tr>
<tr>
<td>June 3</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

## SUMMER QUARTER, 1962

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 11</td>
<td>Registration</td>
</tr>
<tr>
<td>June 12</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>July 13</td>
<td>First term ends</td>
</tr>
<tr>
<td>July 16</td>
<td>Second term begins</td>
</tr>
<tr>
<td>August 17</td>
<td>Instruction ends</td>
</tr>
<tr>
<td>August 17</td>
<td>Senior Consecration</td>
</tr>
<tr>
<td>August 18</td>
<td>Baccalaureate Service</td>
</tr>
<tr>
<td>August 18</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

## AUTUMN QUARTER, 1962-63

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 23, 24</td>
<td>Sunday, Monday</td>
</tr>
<tr>
<td>September 25</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>November 21 (noon) - 25</td>
<td>Thanksgiving recess</td>
</tr>
<tr>
<td>December 19</td>
<td>Instruction ends</td>
</tr>
<tr>
<td>December 19 - January 2</td>
<td>Christmas recess</td>
</tr>
</tbody>
</table>
WINTER QUARTER, 1962-63

December 13, 14, 30 .......................................................... Registration
January 2—Wednesday ..................................................... Instruction begins
March 13—Wednesday ........................................................ Instruction ends

SPRING QUARTER, 1962-63

March 7, 8, 18 ........................................................................ Registration
March 19—Tuesday ............................................................... Instruction begins
May 31—Friday ..................................................................... Instruction ends
May 31—Friday ..................................................................... Senior Consecration
June 1—Saturday .................................................................. Baccalaureate Service
June 2—Sunday ..................................................................... Commencement

SUMMER QUARTER, 1963

June 10—Monday ................................................................. Registration
June 11—Tuesday ................................................................. Instruction begins
July 12—Friday ..................................................................... First term ends
July 15—Monday ................................................................. Second term begins
August 16—Friday ............................................................... Instruction ends
August 16—Friday ............................................................... Senior Consecration
August 17—Saturday .......................................................... Baccalaureate Service
August 17—Saturday .......................................................... Commencement
ADMINISTRATION

BOARD OF TRUSTEES

C. A. Scriven, President
P. W. Christian, Secretary
A. W. Spoo, Treasurer
E. E. Bietz
C. M. Bunker
N. R. Dower
A. J. Gordon
Clyde Harris

F. S. Humann
J. C. Kozel
C. J. Nagele
W. A. Nelson
J. T. Porter
E. E. Rippey
H. L. Rudy
G. E. Taylor

OFFICERS OF ADMINISTRATION

Percy W. Christian, Ph. D. ........................................... President of the College
Robert H. Brown, Ph. D. ............................................. Dean of Administration
Hans L. Rasmussen, Ed. D. .......................................... Academic Dean
Thomas W. Walters, Ed. D ........................................... Dean of Students
Arthur W. Spoo, B. S. ................................................ Business Manager
Irene T. Black, B. A. ................................................ Registrar
J. A. Upchurch, B. A. ................................................ Dean of Men
Helen Ward Evans, M. A. ............................................. Dean of Women
Paul C. Heubach, M. A. ............................................. Dean, School of Theology
Wilma L. Leazer, R. N., M. S. ...................................... Dean, School of Nursing
Lenoa Peebles Silver, M. L. ......................................... Librarian

GRADUATE COUNCIL

GRADUATE FACULTY

ALCOCK, HERBERT J., Assistant Professor of Religion
B. A., 1927, B. Th., 1927, Emmanuel Missionary College; M. A., 1942, Michigan State University

APLINGTON, KENNETH A., Professor of English
B. A., 1935, Walla Walla College; M. A., 1942, University of Washington

BALHARIE, GORDON S., Associate Professor of Religion
B. A., 1945, Washington Missionary College; M. A., 1949; B. D., 1960, Seventh-day Adventist Theological Seminary

BARNETT, CLAUDE C., Assistant Professor of Physics
B. S., 19-2, Walla Walla College; M. S., 1936, State College of Washington; Ph. D., 1960, Washington State University

BELL, CHARLES, Assistant Professor of Physics
B. S., 1956, Mississippi State University; M. S., 1957, Ph. D., 1960, Stanford University

BOWERS, GEORGE W., Emeritus Professor of Chemistry
B. A., 1917, Union College; M. A., 1924, Ph. D., 1935, University of Nebraska; LL. D., 1966, Walla Walla College

BROWN, ROBERT H., Professor of Physics
B. A., 1940, Union College; M. S., 1942, University of Nebraska; Ph. D., 1970, University of Washington

BURGESON, RUTH E., Assistant Professor of English
B. A., 1931, M. A., 1957, Pacific Union College

CANADAY, LEWIS H., Instructor in Industrial Education

CHAMBERS, JAMES R., Associate Professor of Chemistry
B. A., 1939, Washington Missionary College; M. S., 1949, Western Reserve University; Ph. D., 1948, Agricultural and Mechanical College of Texas

CHRISTIAN, PERCY W., Professor of History
B. A., 1926, Broadview College; B. S., 1928, Lewis Institute; M. A., 1929, Ph. D., 1935, Northwestern University

COFFIN, HAROLD G., Professor of Biology
B. A., 1947, M. A., 1972, Walla Walla College; Ph. D., 1975, University of Southern California

DAHLBECk, RUSSELL M., Assistant Professor of Physical Education
B. S., 1920, Walla Walla College; M. S., 1923, University of Washington

DAVIS, MELVIN W., Associate Professor of Music
B. A., 1949, College of the Pacific; M. Mus., 1954, Chicago Musical College

EMERY, BEATRICE L., Assistant Professor of Biology
B. A., 1943, Walla Walla College; M. S., 1948, University of Nebraska

FOSTER, ZEPH H., Instructor in Education
B. A., 1951, Walla Walla College; M. S., Ed., 1976, University of Idaho

GERNET, STERLING K., Professor of Music

GOE, DON R., Assistant Professor of Biology
B. A., 1945, Pacific Union College; M. A., 1950, Walla Walla College; Ph. D., 1958, University of Southern California
GROVE, J. PAUL, Assistant Professor of Religion  
B. A., 1944, Washington Missionary College; M. A., 1956, Seventh-day Adventist Theological Seminary

HAFFNER, JOHN J., Professor of Music  
B. A., 1941, Emmanuel Missionary College; M. Mus., 1949, Chicago Musical College

HANSON, FREDRICK R., Professor of Nursing Education  
R. N., 1930, Mason Memorial Hospital; B. A., 1932, Walla Walla College; M. A., 1942, University of Washington

HEUBACH, PAUL C., Professor of Religion  
B. A., 1935, Pacific Union College; M. A., 1944, Seventh-day Adventist Theological Seminary

JONES, CARL T., Associate Professor of Chemistry  
B. A., 1933, Washington Missionary College; M. S., 1939, Catholic University of America; Ph. D., 1959, Oregon State College

JONES, LUCILE HALL, Assistant Professor of Nursing Education  
R. N., 1933, Florida Sanitarium and Hospital; B. S. N. Ed., 1936, Washington Missionary College; M. S., 1955, Oregon State College; M. A., 1956, Walla Walla College

JONES, RALPH L., Assistant Professor of Business Administration  

LITKE, RICHARD L., Associate Professor of Biblical Languages  
B. A., 1948, Walla Walla College; B. A., 1948, M. A., 1953, University of California; Ph. D., 1959, Yale University

LUDGATE, T. K., Associate Professor of Religion  
B. A., 1942, Washington Missionary College; M. A., 1945, Seventh-day Adventist Theological Seminary

MECKLING, FRANK E., Professor of History  
B. A., 1929, Washington Missionary College; M. A., 1931, University of Maryland; Ph. D., 1950, University of California at Los Angeles

MEHLEN, J. G., Associate Professor of Business Administration  

MOORE, ROBERTA J., Associate Professor of English  
B. A., 1948, Atlantic Union College; M. A., 1953, Boston University

PAINE, RICHARD B., Associate Professor of Mathematics  
B. A., 1932, Walla Walla College; M. S., 1937, Ph. D., 1938, University of Washington

RANDOLPH, RICHARD D., Instructor in Music  
B. S., 1952, Union College; M. Mus., 1958, Lewis and Clark College

RASMUSSEN, HANS L., Professor of Education  
B. A., 1937, Emmanuel Missionary College; M. A., 1943, University of Michigan; Ed. D., 1946, Stanford University

RICHY, DONALD W., Assistant Professor of Biology  
B. A., 1950, La Sierra College; M. A., 1956, Walla Walla College

SCHLOTTHAUER, LILAH GODFREY, Associate Professor of Mathematics  
B. A., 1923, Walla Walla College; M. S., 1934, University of Washington

SEARLE, BERNICE E., Associate Professor of Education  
B. A., 1939, Walla Walla College; M. A., 1941, University of Minnesota

SILVER, ROBERT E., Associate Professor of Education  
SORENSON, AGNES L., Professor of Modern Languages
B. A., 1923, Emmanuel Missionary College; M. A., 1929, University of Michigan

STOEHR, HENRIQUE G., Professor of Modern Languages
B. A., 1948, Walla Walla College; Dr., U. P., 1952, University of Paris

TRAUTWEIN, CALVIN L. Assistant Professor of Industrial Education
B. A., 1945, La Sierra College; B. S., 1946, Pacific Union College; Ed. M., 1955, Oregon State College

WALTERS, THOMAS W., Assistant Professor of Education

WEST, MELVIN K., Professor of Music

WESTERMeyer, HARRY E., Professor of History
B. A., 1917, Clinton Theological Seminary; M. A., 1934, College of the Pacific; Ph. D., 1946, Stanford University

*WHITE, ARTHUR L., Instructor in Business Administration
B. S., 1946, Walla Walla College; M. A., 1957, University of Washington

WINTER, EUGENE S., Associate Professor of Physical Education
B. A., 1911, Walla Walla College; M. S., 1918, State College of Washington

WOLFE, WADE H., Instructor in Industrial Education
B. S., 1944, M. A., 1975, Walla Walla College

WRIGHT, EVELYNNE F., Associate Professor of Home Economics
B. A., 1941, Pacific Union College; M. S., 1953, Oregon State College

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 youth 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 coeducational, liberal arts college, also offers certain professional and preprofessional 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 Mountains to the east are but a few minutes’ drive from the campus, and offer unusual opportunities for recreation and relaxation.

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

The primary purposes of the Graduate Division are 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, or
whose activities are inconsistent with the announced principles and standards of the College, places his status as a student in jeopardy.

STUDENT CITIZENSHIP
Each individual coming to Walla Walla College for the purpose of entering any department of the College is subject to its supervision from the time of arrival in College Place, and is under its jurisdiction until his connection is terminated by graduation or by an officially approved withdrawal. Any regulation adopted by the Board or the faculty, and publicly announced to the student body, shall have the same force as if published in this bulletin.

The record of each student is reviewed periodically, and his continuation in college is based upon his attitudes and general conduct, as well as his scholastic attainments.

RESIDENCE
All unmarried students are required to live in one of the College residence halls and to board in the College cafeteria, unless they live with their parents or with other close relatives in the immediate community. Under special circumstances, however, sophomores and upper division students with superior college records may make application to the Dean of Students for permission to live off the campus in an officially approved home. Such applications will be acted on only at the beginning of a quarter. Failure to secure official approval to reside in the community or to withdraw from a College residence hall will invalidate the registration of the student. 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 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 service on Sabbath morning.

MORAL CONDUCT
Students are expected to 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 pernicious 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 outlined in the Student Handbook.
USE OF AUTOMOBILES

All students, whether living in the residence halls or in the community, who own or operate any type of motor vehicle (car, motorcycle, scooter, etc.) must register these within twenty-four hours after arrival at the College. Drivers must, of course, have a valid operator’s license. Furthermore, it is required that all operators of motor vehicles carry public liability and property damage insurance. Evidence for this insurance must be shown at the time of registration and whenever requested.

Failure to comply with these regulations makes the student liable to a penalty of $25. A fee of $1 is charged to defray costs of automobile registration, decal, and administration. Regulations governing the use of automobiles by students are published in the Student Handbook; students are expected to become familiar with these regulations, since failure to comply with them may result in disciplinary action.

MEDICAL EXAMINATION

At the time of admission to the College, each new student is required to submit evidence of a standard physical examination, or to have such examination under the direction of the College physician. Approved forms are available in the Registrar’s Office.

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 items, refer to Financial Information in the current annual Bulletin.
THE GRADUATE PROGRAM
Admission is determined by the Chairman of the Graduate Council and the Admissions Committee of the College, and is based upon consideration of previous academic record, experience, 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 3.00 (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 3.00 (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 3.00 (B), and undergraduate deficiencies have been satisfied by the completion of prescribed undergraduate courses. Students with provisional status may not be advanced to 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 fifteen 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 must file an official drop voucher with the Registrar's Office. During the first seven 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 Academic Dean. Credits for which a Wf is received are included in calculating the grade-point average.

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. Certain courses numbered 100-149 may be included in the graduate program, on approval of the Graduate Council.
SCHOLARSHIP REQUIREMENTS

Students wishing to qualify for the master’s degree must maintain a cumulative grade-point average of 3.00 (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 grade-point values is used in the Graduate Division:

- A—superior 4 grade points per credit
- B—good 3
- C—satisfactory 2
- D—unsatisfactory 1
- F—failure 0

TRANSFER OF GRADUATE CREDIT

A maximum of nine quarter credits of graduate work taken at other recognized institutions 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 proceeding directly toward completing graduation requirements, and does not register for more than sixteen credits. The maximum number of graduate credits earned in any quarter is equal to the difference between sixteen and the number of undergraduate credits possible in the student’s official program for the quarter. 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.
DEGREE REQUIREMENTS
THE basic philosophy of the Graduate Division of the College is that graduate study should be planned in reference to the individual interest 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 adviser 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 3.00 (B), is required. The selection of a minor, or supporting courses, is made in counsel with the adviser, 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 adviser, 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 an 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 adviser, the student is advanced to candidacy by the Graduate Council and receives official notification thereof.

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 with and approved by the adviser, 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 300 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 counsel with the adviser, 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 adviser 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.
Students are required to participate in the graduation exercises. Permission to receive the master's degree in absentia 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 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 adviser.

2. The adviser 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 adviser, 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 counsel with the adviser. Upon receipt of a statement from the adviser indicating satisfactory completion of these examinations, the Graduate Council automatically advances the student to candidacy. No student with undergraduate deficiencies or with an unsatisfactory graduate 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 counsel with the adviser.

7. 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.
DEPARTMENTS OF INSTRUCTION
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 150-199 are open to both upper-division undergraduate and graduate students. Certain courses numbered 100 to 149 may be included in the graduate program, on approval of the Graduate Council.

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 or supporting work. The zoology major is more specialized, requires the minor to be in botany or chemistry, and prepares the student for a career in zoology. The minor concentrations in botany or chemistry should include eight credits beyond the undergraduate minor requirement of that department. Occasionally minors in other areas may be approved. Regardless of the minor chosen, biochemistry is required. One summer's attendance at the Biological Station is expected for either biology or zoology majors.

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.
151. **NATURAL HISTORY OF VERTEBRATES.** A study of amphibians, reptiles, and mammals with emphasis on taxonomy and ecology. Four credits.

156. **INTRODUCTORY ENTOMOLOGY.** A beginning study of insects. Four credits.

157. **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. Three credits.

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

159. **PALEONTOLOGY.** A study of plant and animal fossils, with a survey of the principles of geology. Three credits.

161-162-163. **SEMINAR.** 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.

166. **SYSTEMATIC BOTANY.** Principles of classification of plants with emphasis on the spermatophytes. Four credits.

169. **FRESH-WATER BIOLOGY.** A systematic study of the animals and plants found in fresh-water lakes and streams. Four credits.

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

172. **MICROTECHNIQUE.** A course designed to cover the important methods of making microscope slides of animal and plant tissues. Three credits.

176. **GENERAL ECOLOGY.** A course designed to cover the basic principles of ecology both plant and animal. Four credits (WWC Biological Station.)

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

181. **MARINE INVERTEBRATES.** A study of the invertebrate animals of Puget Sound with emphasis on systematics and natural history. Four credits. (WWC Biological Station.)

182. **ICHTHYOLOGY.** A systematic study of the fishes found in Puget Sound with a survey of the fishes of other waters. Four credits. (WWC Biological Station.)

183. **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.)
185. **Bacteriology.** A study of the various aspects of bacteria and the techniques employed in their study. Five credits.

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

188. **Comparative Physiology.** A study of the physiology and life processes of marine animals with emphasis on invertebrates. Prerequisite: 92-93. Four credits. (WWC Biological Station.)

191. **History of Biology.** A survey of the history of biological science from the Greek period to the present. Two credits.

192. **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: 182. Four credits. (WWC Biological Station.)

195. **Cellular Biology.** Current knowledge and research in the areas of cell physiology, biochemical genetics, bacteriological genetics, and radiation biology will be considered. Prerequisite: 58. Three credits.

196. **Methods in Research.** A study of biological literature, with emphasis on the research paper; methods of gathering data; methods of compiling data; methods of writing the finished paper; presentation of an acceptable research paper. Two credits.

199. **Special Problems in Biological Science.** Individual work to be carried on under the supervision of the instructor. Credit arranged.

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

204-205-206. **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.

208. **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: 158, 159. Three credits.

230. **Advanced Parasitology.** Original work with parasites of all forms of animal life, including determination of species, experimental methods and life histories. Prerequisite: 153, 156, 177-178, 182. Three credits.

235. **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.
154. **HISTORY OF EDUCATION.** A survey of the history of education from early times to the present with emphasis on Western European and American educational developments. Three credits.

166. **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.

183. **METHODS 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.

197. **METHODS COURSES.** Several methods courses are offered by the various departments of the college. They deal with materials and specific methods applicable to the teaching of each individual subject. Consult the regular college bulletin for description; and use the titles and numbers of the courses as listed there. Two credits.

208. **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.

211. **LITERATURE IN THE ELEMENTARY SCHOOL.** A survey of literature suitable to the intermediate through the junior high school levels with attention to evaluation, selection, authors, illustrators, and publishers. Three credits.

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

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

223. **EDUCATION IN THE TWENTIETH CENTURY.** Historical background of modern education with emphasis on trends and developments in the twentieth century. Three credits.

225. **SCHOOL FINANCE.** A course designed for administrators in public and private schools. Emphasis is given to the origin and disbursement of school funds, principles of budget construction and a general overview of the principles of financing education. Three credits.
231. INDIVIDUAL TESTING—BINET. A course designed to familiarize the student with the Stanford-Binet Intelligence Scale, its administration and interpretation. Three credits.

232. INDIVIDUAL TESTING—WAIS. A course designed to familiarize the student with the Wechsler Adult Intelligence Scale, its administration and interpretation. Three credits.

233. INDIVIDUAL TESTING—WISC. A course designed to familiarize the student with the Wechsler Intelligence Scale for Children, its administration and interpretation. Three credits.

235. REMEDIAL READING. Diagnostic and remedial reading techniques, how to recognize reading difficulties and improve reading skills. Three credits.

244. ADMINISTRATION AND SUPERVISION, ELEMENTARY. Organization, administration and supervision in the elementary schools. Three credits.

249. 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.

251. ADMINISTRATION AND SUPERVISION, SECONDARY. A study of problems of organization, administration and supervision in secondary education. Three credits.

252. 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.

256. 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.

262. METHODS OF RESEARCH. Methods of research applied to current educational issues and trends in America. Two credits.

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

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

280. 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.

290. 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 selection of a minor or supporting work presumes an adequate background in the subject matter area or areas involved.

BUSINESS ADMINISTRATION

161. BUSINESS MANAGEMENT. Three credits.
163. BUSINESS FINANCE. Three credits.
165. PERSONNEL MANAGEMENT. Three credits.
172. TAX PROCEDURE. Three credits.
174. FUND ACCOUNTING. Three credits.
176. AUDITING PROCEDURE. Three credits.
177, 178, 179. ACCOUNTING PROBLEMS. Three credits each quarter.
181-182-183. MONEY AND BANKING. Two credits per quarter.
190. SPECIAL PROBLEMS IN BUSINESS ADMINISTRATION. One to five credits.

CHEMISTRY

151-152, 153. PHYSICAL CHEMISTRY. Three credits per quarter.
151A-152A, 153A. PRACTICAL PHYSICAL CHEMISTRY. One credit per quarter.
156. BIOCHEMISTRY. Three credits.
156A. BIOCHEMISTRY LABORATORY. One credit.
164. ORGANIC SYNTHESIS. Three credits.
165. INORGANIC SYNTHESIS. Three credits.
166. ORGANIC QUALITATIVE ANALYSIS. Three credits.
168. ADVANCED ORGANIC CHEMISTRY. Two credits.
182, 183. SPECIAL PROBLEMS. One to three credits.
193. HISTORY OF CHEMISTRY. Two credits.

ENGLISH

154, 155, 156. THE VICTORIAN PERIOD. Three credits per quarter.
157, 158, 159. AMERICAN LITERARY MASTERS. Two credits per quarter.
161, 162, 163. THE ROMANTIC PERIOD. Two credits per quarter.
165. HISTORICAL AND MODERN GRAMMAR AND LINGUISTICS. 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.
184, 185, 186. ENGLISH RENAISSANCE LITERATURE. Three credits per quarter.
189. LITERATURE OF THE ENGLISH BIBLE. Three credits.
197-198-199. SEMINAR. One credit per quarter.
HISTORY, POLITICAL SCIENCE, AND SOCIAL SCIENCE

151, 152, 153. CURRENT HISTORY. Two credits per quarter.
154, 155, 156. HISTORY OF ENGLAND. Two credits per quarter.
159. THE FAR EAST. Three credits.
161, 162, 163. HISTORY OF RUSSIA. Two credits per quarter.
164, 165. THE AMERICAN FRONTIER. Two credits per quarter.
166. AMERICAN DIPLOMATIC RELATIONS. Two credits.
167. THE LATE MIDDLE AGES. Three credits.
168. THE RENAISSANCE. Three credits.
169. THE REFORMATION. Three credits.
174. HISTORY OF CANADA. Three credits.
176. HISTORY OF THE PACIFIC NORTHWEST. Three credits.
179. HISTORY OF THE BRITISH EMPIRE. Three credits.
184. TWENTIETH CENTURY TOTALITARIANISM. Three credits.
186. SEMINAR FOR HISTORY MINORS. One credit.
187, 188, 189. HISTORY OF LATIN AMERICA. Two credits per quarter.
191, 192, 193. SPECIAL PROBLEMS IN HISTORY. One to two credits per quarter.
194, 195. SEMINAR FOR HISTORY MAJORS. One credit per quarter.
151. CONSTITUTIONAL INTERPRETATION. Three credits.
152. WORLD POLITICS AND INTERNATIONAL RELATIONS. Three credits.
165. POLITICAL THEORY. Three credits.
161. PUBLIC OPINION AND PROPAGANDA. Three credits.
171. SOCIAL PSYCHOLOGY. Three credits.
172. PERSONALITY AND LEADERSHIP. Two credits.
173. CURRENT SOCIAL PROBLEMS. Three credits.

HOME ECONOMICS

177. INSTITUTION FOOD PURCHASING. Three credits.
178. INSTITUTION MANAGEMENT. Three credits.

INDUSTRIAL EDUCATION

154, 155, or 156. MACHINE AND TOOL MAINTENANCE. Two or three credits per quarter.
177. HISTORY OF INDUSTRIAL ARTS. Two credits.
191, 192, 193. SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION. Six hours maximum credit from this and/or Special Projects.
194, 195, 196. SPECIAL PROJECTS. Six hours credits maximum from this and/or Special Problems in Industrial Education.
LANGUAGES

152. SPANISH PRONUNCIATION. Two credits.
153. MODERN GERMANY 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.
159. ADVANCED SPANISH CONVERSATION. Two credits.
161. SPANISH ESSAY. Three credits.
161. GERMAN ROMANTICISM. Three credits.
162. CLASSIC GERMAN LITERATURE. Three credits.
163. ADVANCED GERMAN COMPOSITION AND CONVERSATION. Three credits.
165, 166. LATIN AMERICAN LITERATURE. Three credits per quarter.

MATHEMATICS

151. COLLEGE GEOMETRY. Four credits.
152. THEORY OF EQUATIONS. Four credits.
153. INTRODUCTION TO MODERN ALGEBRA. Four credits.
161. DIFFERENTIAL EQUATIONS. Four credits.
162. DIFFERENTIAL EQUATIONS. Two credits.
164. ADVANCED CALCULUS. Two credits.
165. ADVANCED CALCULUS. Four credits.
171, 172, 173. INTRODUCTION TO MATHEMATICAL ANALYSIS. Four credits per quarter.
190. SELECTED TOPICS IN MATHEMATICS. One or two credits.

MUSIC

154-155-156. FORM AND ANALYSIS. Two credits each quarter.
157-158-159. ORCHESTRATION. Two credits each quarter.
161, 162, 163. COMPOSITION. Two credits each quarter.
171, 172, 173. HISTORY AND LITERATURE OF MUSIC SINCE 1750. Two credits each quarter.
197, 198, 199. SELECTED TOPICS IN MUSIC. One to three credits.

NURSING AND HEALTH EDUCATION

155. CURRICULUM IN SCHOOLS OF NURSING. Three credits.
157, 158, or 159. DIRECTED TEACHING. Two to six credits.
161. WARD 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 169. CHILD AND YOUTH HEALTH. Three credits.
167A or 169A. CHILD AND YOUTH HEALTH LABORATORY. One credit.
171. SCHOOL HEALTH EDUCATION. Three credits.
173. HEALTH ADMINISTRATION. Three credits.
175 or 176. TRENDS IN NURSING. Three credits.
178 or 179. COMMUNITY HEALTH EDUCATION. Three credits.
191, 192, 193. RESEARCH IN NURSING. Two to four credits. Maximum 4 credits.

PHYSICAL EDUCATION AND RECREATION

153. LEADERSHIP IN CAMPING AND CAMPCRAFT. Two credits.
161. FOUNDATIONS OF PHYSICAL EDUCATION. Three credits.
162. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION. Three credits.
163. ADMINISTRATION OF PHYSICAL EDUCATION AND HEALTH IN SECONDARY SCHOOLS. Three credits.
164, 165, 166. ADVANCED ARTS AND CRAFTS. Two credits per quarter.
174, 175, or 176. RECREATIONAL LEADERSHIP. Two credits.
191. SPECIAL PROBLEMS. One to three credits.
192, 193. SEMINAR IN PHYSICAL EDUCATION. One credit per quarter.

PHYSICS

153. NUCLEAR PHYSICS. Four credits.
153A. NUCLEAR PHYSICS LABORATORY. Two credits.
190. SPECIAL PROBLEMS IN PHYSICS. Two or three credits.

RELIGION

151. RELIGION IN AMERICA. Three credits.
152. MODERN DENOMINATIONS. Three credits.
153. WORLD RELIGIONS. Three credits.
161, 162, 163. PHILOSOPHY OF RELIGION. Two credits per quarter.
166. ESCHATOLOGY. Three credits.
171-172. PERSONAL EVANGELISM. Two credits each quarter.
174, 175, 176. BIBLICAL BACKGROUNDS. Two credits each quarter.
177, 178, 179. FIELD EVANGELISM. One credit each quarter.
181-182. PUBLIC EVANGELISM. Two credits each quarter.
184, 185, 186. NEW TESTAMENT EPISTLES. Two credits per quarter.
192, 193. SEMINAR IN RELIGION. One credit per quarter.