Walla Walla College is accredited by
The Northwest Association of Schools and Colleges
Association of Seventh-day Adventist Colleges and Secondary Schools
The Washington State Board of Education
Engineers' Council for Professional Development, Inc.
National Association of Schools of Music
Department of Baccalaureate and Higher Degree Programs of the National League for Nursing

is a member of
Association of American Colleges
Council of Member Agencies, Department of Baccalaureate and Higher Degree Programs of the National League for Nursing
American Association of Colleges for Teacher Education
National Association of Summer Sessions
American Council on Education National Commission on Accreditation

is approved by
U.S. Government for the training of veterans under the U.S. Code, Title 38, Chapters 31, 34 and 35
The Attorney General of the United States for nonimmigrant students
Washington State for training in Vocational Rehabilitation
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FOR INFORMATION

Concerning application blanks, bulletins, academic and general information, student handbooks, viewbooks, etc., write to:

Mr. J. D. Victor Fitch, Director
Admissions and Records

Concerning financial arrangements and work opportunities, write to:

Mr. Richard Beck, Director
Student Finance

Concerning room reservations and dormitory information, write to:

Mr. M. E. Loewen, Dean of Men
Sittiner Hall

or

Mrs. Betty Howard, Dean of Women
Conard Hall

Concerning matters of student affairs—off-campus housing, automobile registration, policies, etc., write to:

Mr. Donald D. Lake
Vice President for Student Affairs

WALLA WALLA COLLEGE
College Place, WA 99324
Phone: 509/527-2615

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WALLA WALLA COLLEGE
ACADEMIC CALENDAR, 1975-1976

AUTUMN QUARTER
September 26, 28 ........................................ Registration
September 29, Monday, 7:30 a.m. ............... Instruction Begins
October 27 ................................................ Graduate Record Examinations
November 26, 12:30 p.m. ......................... Thanksgiving Recess
November 30, 10:00 p.m. ......................... Registration for Winter Quarter
December 7-10 ............................................ Quarter Ends
December 18, 1:30 p.m. ............................... Christmas Recess
December 19 - January 4, 10:00 p.m. ......... Quarter Ends

WINTER QUARTER
January 4, 1:00 - 5:00 p.m. .................. Registration of New Students
January 5, Monday, 7:30 a.m. ................... Instruction Begins
January 19 ................................................ Graduate Record Examinations
February 29 - March 3 ......................... Registration for Spring Quarter
March 12 ................................................ Last day to file master's degree order form
March 18, 1:30 p.m. ................................. Last day to add a course
March 19-23, 10:00 p.m. ....................... Spring Recess

SPRING QUARTER
March 23 ................................................ Registration of New Students
March 24, Wednesday, 7:30 a.m. .............. Instruction Begins
April 9, Wednesday ................................ Last day to drop a course
May 23 ................................................ Last day to complete final master's examinations
June 6 .................................................. Commencement

SUMMER SCHOOL, 1976
June 13 - August 8 ................................. Summer Session
June 11 ................................................ Last day to file master's degree order form
June 21 ................................................ Graduate Record Examinations
July 25 ................................................ Last day to complete final master's examinations
August 8 .............................................. Commencement
WALLA WALLA COLLEGE
ACADEMIC CALENDAR, 1975-1976

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June 13 - August 8: Summer Session
June 11: Last day to file master’s degree order form
June 21: Graduate Record Examinations
July 25: Last day to complete final master’s examinations
August 8: Commencement

BOARD OF TRUSTEES
E. R. Wald, Chairman
R. L. Reynolds, Secretary
F. M. Beavon
F. W. Bieber
M. L. Blair
W. D. Blehm
Margaret Brown
J. E. Chase
L. W. Crooker
R. D. Fearing
L. C. Harvat
C. W. Jorgensen
D. M. Macior
B. F. McAdoo, Jr.
O. L. McComas
C. J. Nagle
Dorothy Patchett
L. L. Peake
R. C. Remboldt
G. L. Stair
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ADMINISTRATION
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N. Clifford Sorensen, Ed.D., Vice President for Academic Affairs
Vernon H. Siver, B.A., Vice President for Financial Affairs
Donald D. Lake, M.A., Vice President for Student Affairs
Donald O. Eichner, Ph.D., Vice President for Development and Public Relations
Gordon S. Balbarie, B.Div., Dean, School of Theology
Charles V. Bell, Ph.D., Dean, School of Engineering
J. D. V. Flach, M.Ed., Director of Admissions and Records
Lois Hellie, B.A., Chief Accountant
Betty Ann Howard, B.S., Dean of Women
Wynelle J. Huff, M.S., Dean, School of Nursing
Robert H. Koorey, M.A., Director of Development
Maynard E. Lowery, B.A., Dean of Men
Elwood L. Mabey, M.S.L.S., Director of the Library
Gerald F. Miller, B.Div., Chaplain
Orpha Osborne, B.A., Associate Director of Records
Donald W. Rigby, Ph.D., Dean of Graduate School

ASSOCIATES IN ADMINISTRATION
Kathryn Andrews, B.A., Assistant Director of Records
Richard A. Beck, B.A., Director, Student Finance
Jimmie D. Loyd, M.D., College Physician
Robert L. Noel, M.S., Coordinator, Data Processing
### FACULTY COMMITTEES

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- G. S. Balthurie
- J. D. V. Fitch
- R. Hepler
- R. A. Henderson
- W. W. Juice
- Orpha Osborne

**FACULTY GRANTS, J. D. V. Fitch, Chairman**
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- N. C. Mabery
- L. R. McCloosey
- N. C. Sorensen
- C. A. Schwantes
- V. H. Siver

**FACULTY SENATE, R. L. Reynolds, Chairman**
- N. C. Sorensen
- J. D. V. Fitch
- R. D. Gardner
- Edna Grove
- L. M. Lewis
- Anne Lindt
- O. E. McNeil
- Orpha Osborne
- V. H. Siver
- W. A. Soper
- All department chairman or their designates

**GRADUATE COUNCIL, D. W. Righy, Chairman**
- D. L. Clayton
- L. G. Dickson
- Helen Evans
- J. D. V. Fitch
- G. B. Hare
- E. L. Liske
- N. C. Sorensen
- Orpha Osborne
- Edna Grove
- D. D. Wagner

**LIBRARY, N. C. Sorensen, Chairman**
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- R. K. Emerson
- J. P. Grove
- R. G. W. Kappel
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- E. L. Mabery
- L. R. McCluskey
- O. E. McNeil
- D. L. Schwantes
- G. A. Wiss
- Tammy Bromgard
- Steve Swiss

**STUDENT FINANCE, V. H. Siver, Chairman**
- R. A. Beck
- R. A. Hingley
- Betty Howard
- W. E. Koemig
- M. E. Loewen
- Pat Farver
- Al Jacobson

*Student members*

### THE FACULTY

**BIOLOGY**

Donald W. Righy, Professor of Biology (1958)
- B.A. 1950, Loma Linda University
- M.A. 1956, Walla Walla College
- Ph.D. 1967, Loma Linda University

Dale L. Clayton, Associate Professor of Biology (1969)
- B.A. 1962, Andrews University
- M.A. 1964, Loma Linda University
- Ph.D. 1968, Michigan State University

Jack Dasenbro, Instructor in Agriculture (1970)
- B.S. 1950, Andrews University
- M.S. 1951, University of Minnesota

Leal G. Dickson, Assistant Professor of Biology (1971)
- B.A. 1962, Columbia Union College
- M.S. 1965; Ph.D. 1971, University of Maryland

Larry H. Fisk, Assistant Professor of Biology (1974)
- B.A. 1971, Andrews University
- Doctoral Candidate 1975, Loma Linda University

Joseph P. Galusha, Assistant Professor of Biology (1975)
- B.A. 1969, Walla Walla College
- M.A. 1971, Andrews University
- Ph.D. 1975, Oxford University

Albert E. Grable, Associate Professor of Biology (1963)
- B.S. 1959, Loma Linda University
- M.S. 1962; Ph.D. 1964, University of Minnesota

Lawrence R. McCluskey, Assistant Professor of Biology (1971)
- B.A. 1962, Azlevy Union College
- M.A. 1965; Ph.D. 1967, Duke University

**EDUCATION AND PSYCHOLOGY**

Edna Holz Grove, Associate Professor of Education (1974)
- B.S. 1963, Walla Walla College
- M.Ed. 1964, Eastern Washington State College

Roy A. Hingley, Assistant Professor of Education and Psychology (1970)
- B.Teach. 1963, Canadian Union College
- B.Div. 1965; M.A. 1965, Andrews University
- M.A. 1968, Arizona State University
- Ph.D. 1974, Arizona State University
### FACULTY COMMITTEES

**ACADEMIC STANDARDS, N. C. Sorensen, Chairman**
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- J. D. V. Fitch
- R. Heisler
- R. A. Henderson

- Wyntelle Huff
- P. W. Joice
- Orpha Osborne

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- N. C. Mabery
- L. R. McCluskey

- N. C. Sorensen
- C. A. Schwantes
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- Anne Lindt

- All department chairman or their designates

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- J. D. V. Fitch
- G. B. Hare

- E. L. Liske
- N. C. Sorensen
- Orpha Osborne
- Edna Grove
- D. D. Wagner

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- R. K. Emmerson
- J. P. Grove
- R. G. W. Kappel
- N. C. Mabery

- L. R. McCloskey
- O. E. McNiel
- D. L. Schwanitz
- G. A. Wiss
- E. L. Mabley

- Tammy Bromgard
- Steve Iwass

**STUDENT FINANCE, V. H. Siver, Chairman**
- R. A. Beck
- R. A. Hingley
- Betty Howard
- W. E. Koelnig

- M. E. Loewen
- Pat Farver
- Al Jacobson

*Student members

### THE FACULTY

#### BIOLOGY

- **Donald W. Rigby, Professor of Biology (1958)**
  - B.A. 1950, Loma Linda University
  - M.A. 1956, Walla Walla College
  - Ph.D. 1967, Loma Linda University

- **Dale L. Clayton, Associate Professor of Biology (1969)**
  - B.A. 1962, Andrews University
  - M.A. 1964, Loma Linda University
  - Ph.D. 1968, Michigan State University

- **Jack Dassenko, Instructor In Agriculture (1970)**
  - B.S. 1950, Andrews University
  - M.S. 1951, University of Minnesota

- **Leal G. Dickson, Assistant Professor of Biology (1971)**
  - B.A. 1962, Columbus Union College
  - M.S. 1969; Ph.D. 1971, University of Maryland

- **Lanny H. Fisk, Assistant Professor of Biology (1974)**
  - B.A. 1971, Andrews University
  - Doctoral Candidate 1975, Loma Linda University

- **Joseph P. Galusha, Assistant Professor of Biology (1975)**
  - B.S. 1968, Walla Walla College
  - M.A. 1971, Andrews University
  - Ph.D. 1975, Oxford University

- **Albert E. Grable, Associate Professor of Biology (1963)**
  - B.S. 1959, Loma Linda University
  - M.S. 1962; Ph.D. 1964, University of Minnesota

- **Lawrence R. McCluskey, Assistant Professor of Biology (1971)**
  - B.A. 1962, Azleton Union College
  - M.A. 1965; Ph.D. 1967, Duke University

#### EDUCATION AND PSYCHOLOGY

- **Edna Holz Grove, Associate Professor of Education (1974)**
  - B.S. 1963, Walla Walla College
  - M.S.Ed. 1964, Eastern Washington State College

- **Roy A. Hingley, Assistant Professor of Education and Psychology (1970)**
  - B.T.S. 1963, Canadus Union College
  - B.Div. 1965; M.A. 1965, Andrews University
  - M.A. 1968, Arizona State University
  - Ph.D. 1974, Arizona State University
Jeanne Lewis, Instructor in Education and Home Economics (1973)
B.A. 1965, Andrews University
M.A. 1976, Montana State University

Norman C. Mahler, Professor of Education and Psychology (1966)
B.A. 1952, Walla Walla College
M.A. 1954, Andrews University
Ed.D. 1962, University of Southern California

Harold T. Ochs, Professor of Education (1969)
B.A. 1957, Walla Walla College
M.E.D. 1957, Eastern Washington State College
Ed.D. 1972, University of Idaho

Halliburt E. Phillips, Associate Professor of Education and Psychology (1970)
B.A. 1960, University of London
M.A. 1964, Andrews University
Ed.D. 1976, Boston University

Jean M. Prout, Assistant Professor of Education (1973)
B.S. 1968, Atlantic Union College
M.E.D. 1974, Walla Walla College

Vernon W. Shafer, Lecturer in Psychology (1973)
B.S. 1949, Walla Walla College
M.S. 1973, University of Southern California
Ph.D. 1958, Ohio State University

Dale G. Wagner, Associate Professor of Education and Psychology (1966)
B.A. 1957, Walla Walla College
M.A. 1958, Eastern Washington State College
Ed.D. 1973, University of Idaho

SUPPORTING DEPARTMENTS, CHAIRMEN

Claude C. Barnett, Professor of Physics (1957)
B.S. 1925, Walla Walla College
M.S. 1956, State College of Washington
Ph.D. 1940, Washington State University

Charles V. Bell, Professor of Engineering (1972)
B.S. 1956, Mississippi State University
M.S. 1957, Ph.D. 1969, Stanford University

George L. Caviness, Professor of Modern Languages (1971)
B.A. 1937, Pacific Union College
M.A. 1939, University of California at Berkeley
Ph.D. 1947, Ohio State University

C. Loren Dickinson, Professor of Communications (1962)
B.A. 1937, Union College
M.A. 1960, University of Nebraska
Ph.D. 1968, University of Denver

Helen Ward Enye, Professor of English (1955)
B.A. 1945, Walla Walla College
M.A. 1955, Ph.D. 1965, Stanford University

Gordon B. Hare, Professor of Mathematics (1957)
B.A. 1951, Columbia Union College
M.S. 1954, Ph.D. 1964, University of Colorado

Robert A. Heineman, Professor of History (1967)
B.A. 1962, Walla Walla College
Ph.D. 1967, Washington State University

Paul W. Joplin, Professor of Business (1971)
B.S. 1948, Union College
M.B.A. 1953, University of Denver
Ed.D. 1963, University of Nebraska

Carl T. Jones, Professor of Chemistry (1953)
B.A. 1939, Columbia Union College
M.S. 1939, Catholic University of America
Ph.D. 1959, Oregon State College

E. Harold Lickley, Professor of Music (1965)
B.A. 1930, Union College
B.A. 1931, Knox College
M.A. 1939, Trinity Christian University
D. Music 1970, University of Indiana

Elwin L. Liske, Assistant Professor of Industrial Education and Technology (1963)
B.S. 1960, Walla Walla College
M.S. 1967, San Jose State College

Lee Loewen, Assistant Professor of Office Administration (1974)
B.S. 1947, Union College
M.Ed. 1964, Walla Walla College

Elwood L. Mabley, Associate Professor of Library Science (1968)
B.A. 1948, Walla Walla College
M.S.L.S. 1969, University of Southern California

Kenneth R. Mackintosh, Professor of Art (1961)
B.F.A. 1939, M.F.A. 1961, Otis Art Institute of Los Angeles County

William J. Napier, Professor of Health, Physical Education and Recreation (1975)
B.A. 1933, Union College
M.S. 1934, University of Colorado
Ph.D. 1947, University of Southern California

Mary Schwantes, Assistant Professor of Home Economics (1969)
B.S. 1968, M.S. 1972, Eastern Michigan University
Jeanne Lewis, Instructor in Education and Home Economics [1973]
B.A. 1963, Andrews University
M.A. 1976, Montana State University
Norman C. Mahre, Professor of Education and Psychology [1966]
B.Th. 1952, Wartburg College
M.A. 1958, Andrews University
Ed.D. 1962, University of Southern California
Harold T. Orty, Professor of Education [1949]
B.A. 1957, Wartburg College
M.Ed. 1957, Eastern Washington State College
Ed.D. 1962, University of Idaho
Hallbert E. Phillips, Associate Professor of Education and Psychology [1970]
B.A. 1960, University of London
M.A. 1964, Andrews University
Ed.D. 1976, Boston University
Jean M. Pratj, Assistant Professor of Education [1973]
B.S. 1968, Atlantic Union College
M.Ed., 1974, Wartburg College
Vermon W. Shafer, Lecturer in Psychology [1973]
B.Th. 1949, Wartburg College
M.S. 1973, University of Southern California
Ph.D. 1958, Ohio State University
Dale O. Wagner, Associate Professor of Education and Psychology [1966]
B.A. 1957, Wartburg College
Ph.D. 1963, Eastern Washington State College
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B.S. 1948, Union College
M.B.A. 1953, University of Denver
Ed.D. 1960, University of Nebraska
Carl T. Jones, Professor of Chemistry [1953]
B.A. 1939, Columbia Union College
M.S. 1939, Catholic University of America
Ph.D. 1959, Oregon State College
E. Harold Lickley, Professor of Music [1965]
B.A. 1930, Union College
M.A. 1959, DePaul University
D. Music 1970, University of Indiana
Elwin L. Liske, Assistant Professor of Industrial Education and Technology [1965]
B.S. 1963, Wartburg College
M.S. 1967, San Jose State College
LeeLoewen, Assistant Professor of Office Administration [1974]
B.S. 1947, Union College
M.Ed. 1964, Wartburg College
Elwood L. Mabey, Associate Professor of Library Science [1968]
B.A. 1948, Wartburg College
M.S.L.S. 1959, University of Southern California
Kenneth R. MacIntosh, Professor of Art [1961]
B.F.A. 1959, M.F.A. 1961, Otis Art Institute of Los Angeles County
William J. Napier, Professor of Health, Physical Education and Recreation [1975]
B.A. 1939, Union College
M.S. 1934, University of Colorado
Ph.D. 1971, University of Southern California
Mary Schwantes, Assistant Professor of Home Economics [1969]
B.S. 1968, M.S. 1972, Eastern Michigan University
GENERAL INFORMATION

Walla Walla College is a Christian institution of higher learning operated by the Seventh-day Adventist Church. The College is located in the City of College Place in the historic, fertile Walla Walla valley of southeastern Washington. The old Oregon Trail near the campus leads to the site of the old mission which was directed by Marcus Whitman from 1836 to 1847, and which has been reconstructed by the federal government at the Whitman Mission. 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 seventh-day sabbath is observed at Walla Walla College from sunset Friday to sunset Saturday. No instructional activities are conducted during these hours.

ACCREDITATION

The College is accredited by the Northwest Association of Schools and Colleges, the Association of Seventh-day Adventist Colleges and Secondary Schools, the Washington State Board of Education and is a member of the American Association of Colleges for Teacher Education, Association of American Colleges and the American Council on Education National Commission on Accreditation.

DEGREES OFFERED

The College offers courses of study leading to the Master of Arts (M.A.), Master of Education (M.Ed.) and Master of Science (M.S.) degrees. The M.A. and M.S. degrees are thesis programs and the M.Ed. is a nonthesis program.

ADMINISTRATION

The master's degree programs are directed and supervised by the Graduate Council, which is the legislative body responsible for the formulation of all graduate academic policies and curricula.

GRADING SYSTEM

The following system of grades and grade-point values is used in graduate studies:

- A = 4 grade points per credit
- B = 3
- C = 2
- D = 1
- F = 0

GRADUATE FACILITIES

Life Sciences Complex

The Department of Biology facilities in the Life Sciences Complex, completed in 1967, include staff and graduate student offices, classrooms and teaching laboratories, controlled environment rooms and chambers, radioisotope laboratory, animal and greenhouse complexes, photographic darkroom, museum and a shop.

Marine Biological Station

Additional Department of Biology facilities occupy 40 acres of beach and timberland at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. The physical plant includes five laboratory buildings, a cafeteria, an assembly hall, shops and 29 cabins for student and staff housing.

Smith Hall

The Department of Education is housed in a modern, air-conditioned, three-story building. Facilities include offices for staff and graduate assistants, laboratories for testing, psychology and audiovisual productions, observation rooms and an audiovisual and instructional materials center containing workrooms, a photographic darkroom, an offset pressroom and a closed circuit television center.

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GENERAL INFORMATION

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The seventh-day sabbath is observed at Walla Walla College from sunset Friday to sunset Saturday. No instructional activities are conducted during these hours.

ACCREDITATION

The College is accredited by the Northwest Association of Schools and Colleges, the Association of Seventh-day Adventist Colleges and Secondary Schools, the Washington State Board of Education and is a member of the American Association of Colleges for Teacher Education, Association of American Colleges and the American Council on Education National Commission on Accreditation.

DEGREES OFFERED

The College offers courses of study leading to the Master of Arts (M.A.), Master of Education (M.Ed.) and Master of Science (M.S.) degrees. The M.A. and M.S. degrees are thesis programs and the M.Ed. is a nonthesis program.

ADMINISTRATION

The master's degree programs are directed and supervised by the Graduate Council, which is the legislative body responsible for the formulation of all graduate academic policies and curricula.

GRADING SYSTEM

The following system of grades and grade-point values is used in graduate studies:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
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<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
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</tbody>
</table>

GRADUATE FACILITIES

Life Sciences Complex

The Department of Biology facilities in the Life Sciences Complex, completed in 1967, include staff and graduate student offices, classrooms and teaching laboratories, controlled environment rooms and chambers, radiolotope laboratory, animal and greenhouse complexes, photographic darkroom, museum and a shop.

Marine Biological Station

Additional Department of Biology facilities occupy 40 acres of beach and timberland at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. The physical plant includes five laboratory buildings, a cafeteria, an assembly hall, shops and 29 cabins for student and staff housing.

Smith Hall

The Department of Education is housed in a modern, air-conditioned, three-story building. Facilities include offices for staff and graduate assistants, laboratories for testing, psychology and audiovisual productions, observation rooms and an audiovisual and instructional materials center containing workrooms, a photographic darkroom, an offset pressroom and a closed circuit television center.
Peterson Memorial Library

The library is a vital part of the educational program at Walla Walla College. The building was completed in 1964 and remodeled in 1984. Reading room accommodations, the open-shelf system, seminar and conference rooms, a periodical room and a listening/viewing facility, contribute to the study and enjoyment of learning materials. Microformers make accessible microforms of scholarly material. The curriculum library, located in Smith Hall, contains a large collection of textbooks, children’s literature books, a collection of mounted pictures, filmstrips, tapes and phonorecsords. The library on the Portland campus serves specifically the students of nursing assigned there to obtain their clinical practice. The combined libraries contain approximately 125,000 volumes. An average of 4,500 volumes is accessioned annually. There are about 900 currently received periodicals. Periodical indexes and other bibliographical aids are also available. Resources in other libraries are available to graduate students and faculty members through the library’s membership in the Pacific Northwest Bibliographic Center, which serves as a clearinghouse for interlibrary loans.

FINANCIAL INFORMATION

Payments Required to Register

An advance payment of $600 plus any balance due from a previous quarter shall be paid at the time of registration. Part-time students shall pay the full tuition charge in advance if less than $600.

Tuition

1 - 12 credits – $42 per credit

The tuition includes all laboratory fees and rentals (typewriter, piano and organ).

Regular tuition is charged for auditing classes and triple tuition is charged for individual tutoring.

General Fee: A general fee of $10 per quarter is charged students registered for six or more credits which provides student association membership, ID card and a yuccam ticket.

Special Fees

Degree, Master’s

Degree, Master’s in absentia

$25

35

Refunds

A student withdrawing from classes during the quarter will receive the following tuition refunds:

90% during first week of quarter

75% between first and third weeks

50% between third and sixth weeks

No tuition refunded after sixth week

Statements

Statements will be issued each month giving an account for the previous month. Tuition and room rent for the quarter will be charged in advance at the beginning of each quarter. Actual food service charges are billed at the close of each month. Village students may obtain their statements from the cashier in the accounting office.

It is expected that statements will be paid within ten days from time of mailing. The College operates on a cash basis and is dependent upon prompt payment of accounts.

Remittances

Checks, drafts and money orders should be made payable to Walla Walla College and should be sent to Walla Walla College Accounting Office, College Place, Washington 99324.

Student Health Service

The clinical facilities and 12 beds of the health service are available at reasonable charges to graduate students requiring treatment or minor hospitalization. Prescriptions and other medicines are available at special prices. In case of serious illness or surgery, the Walla Walla General Hospital provides complete service to students. Financial arrangements must be made directly with the hospital.

Release of Transcripts or Degrees

By action of the board of trustees of the College, a degree or transcript of credit, official or unofficial, may not be released until the student’s account is paid in full.

To expedite the release of transcripts, diplomas and other legal documents, the student should send a money order or certified check to cover the balance of his account when requesting transcripts, etc.

Loans

The following loan funds are recommended and applications may be obtained from the Student Finance Office.

Federally Insured Loans. Many banks are offering Federally Insured Loans to college students. These are long-term, low interest loans that need not be repaid until the student completes his course of study. To obtain an interest-subsidized loan, dependent students must submit a Parents’ Confidential Statement (PCS); independent students must submit a Student Financial Statements (SFS). Consult the loan officer of your bank for additional information.
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Payments Required to Register

An advance payment of $600 plus any balance due from a previous quarter shall be paid at the time of registration. Part-time students shall pay the full tuition charge in advance if less than $600.

Tuition

1 - 12 credits – $62 per credit

The tuition includes all laboratory fees and rentals (typewriter, piano and organ).

Regular tuition is charged for auditing classes and triple tuition is charged for individual tutoring.

General Fee: A general fee of $80 per quarter is charged students registered for six or more credits which provides student association membership, ID card and a cafeteria ticket.

Special Fees

Degree, Master's

$25

Degree, Master's in absentia

35

Refunds

A student withdrawing from classes during the quarter will receive the following tuition refunds:

90% during first week of quarter
75% between first and third weeks
50% between third and sixth weeks
No tuition refunded after sixth week

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National Direct Student Loan. The National Direct Student Loan is made available through the United States Department of Health, Education and Welfare and Walla Walla College. To qualify, the student must have financial need as evidenced by submission of a Parents' Confidential Statement (PCS). Priority in awarding this aid is given to students with the greatest financial needs. Repayments begin after the applicant's student status terminates.

Oregon State Student Loan. Under this plan Oregon State residents may borrow from their hometown bank if they are accepted for enrollment or are enrolled in good standing and carrying at least a half-time course of study. To obtain an interest-subsidized loan, dependent students must submit a Parents' Confidential Statement (PCS); independent students must submit a Student Financial Statement (SFS).

Graduate Assistantships
A limited number of graduate assistantships are available to provide students with an opportunity for professional experiences in their chosen fields of specialization or in activities that may be valuable in preparing them more fully for their future occupational roles.

Assistantships are open to both men and women with evidence of sufficient maturity and potential to benefit from the program. Applications will be considered from prospective graduate students, postgraduates and those already admitted as regular graduate students. The stipends are awarded for periods up to 12 months, plus full remission of tuition and fees for approved courses during the period of the assistantship.

Duties of an assistant may include participation in research, instructional and guidance services, and professional activities. Application forms for graduate assistantships may be obtained by writing directly to the chairman of the Department of Biology or to the chairman of the Department of Education and Psychology. Applications for biology assistantships must be submitted before April 15, while the deadline for applications for education and psychology assistantships is February 1.

GRADUATE PROGRAM

Master's degree programs are offered in the Department of Biology, and in the Department of Education and Psychology. Graduate study is planned in reference to the student's experience, future objectives, personal qualifications and previous academic preparation. The importance of careful planning and close cooperation between the student and his assigned adviser is emphasized.

OBJECTIVES OF THE GRADUATE PROGRAM
The program provides an atmosphere which stimulates intellectual curiosity and independent thinking. It strives to develop an appreciation of the value of research and an acquaintance with basic research techniques. It endeavors to strengthen the professional competence of the individual in his area of specialization.

ADMISSION TO GRADUATE STUDY
Applicants for admission to graduate study shall have been graduated from a recognized four-year college or university, and should have completed a basic background of undergraduate work in the proposed field of graduate study. Applicants without such a background should expect to make up deficiencies.

The applicant must file completed graduate application forms and two official transcripts of all work taken on the collegiate level with the Associate Director of Records of the College at least three months prior to the quarter in which graduate study is to commence. Failure to do so may
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result in delay in admission and registration. All forms and transcripts submitted for admission become the property of the College and are not returned. Admission forms are available from the Admissions Secretary.

Eligibility for admission as a graduate student is determined by the Graduate Council of the College upon the recommendation of the Biology or Education and Psychology departments.

Admission Requirements for the Master's Degree Program

In addition to an acceptable baccalaureate degree, applicants for admission to a graduate degree program must have the following:

1. Satisfactory scores on the Graduate Record Examinations or on other tests approved by the Graduate Council.

Applicants in biology must have taken the Graduate Record Examination: Aptitude Tests and Advanced Test in Biology. The results of these examinations are to be submitted with the application for admission.

Applicants in education are encouraged to submit examination results with the application for admission; these are required before advancement to candidacy can be considered. It is strongly recommended that education students take the Graduate Record Examination: Aptitude Tests and Advanced Test in Education before making application for admission or during the quarter in which graduate study is first begun.

2. A minimum cumulative grade-point average of 2.75 on either the last 96 credits toward the baccalaureate degree or on the total undergraduate program, whichever is higher.

An applicant whose undergraduate grade-point average is below 2.75 may be admitted if there is other evidence of ability to pursue the graduate degree. Such evidence may include one or more of the following: performance on the Graduate Record Examinations, strong professional recommendations, postgraduate work at a recognized institution, experience in areas related to the desired graduate specialization, or other criteria established by the departments concerned.

A student who meets the requirements for admission to the master's degree program but who registers only as a postgraduate has no assurance that credits earned will later apply toward the master's degree.

Admission Requirements for the Nondegree Program

Graduates of an accredited college or university with a cumulative undergraduate GPA of 2.00 may be admitted as postgraduate students to take courses toward provisional and standard certification, special credentials or additional coursework. These credits may not apply to a master's degree.

Graduate Credit for Seniors

Seniors who wish to take graduate numbered (500) courses must submit for evaluation an approved senior outline and transcript to the Graduate Council. Approval to register for a course is given only after determination of eligibility for admission to the Graduate School. Graduate courses for certification and the library science curriculum may be taken without prior permission. However, credits taken under any circumstances will not apply to a graduate program without completed graduate application forms and registration approval.

GENERAL DEGREE REQUIREMENTS

Responsibilities of the Student

The graduate student is responsible for a knowledge of all regulations and procedures as published in this bulletin. The student must assume the initiative in such matters as arranging for required tests and examinations, securing approval of his 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.

Residence and Time Requirements

A minimum of 45 quarter credits is required, at least 33 of which must be earned while in residence.

Credits older than six calendar years usually are not used to satisfy degree requirements. However, a student may submit a request to Graduate Council for validation of an outdated course if its content is comparable to a current course and if the student is knowledgeable in it. These judgments shall be made by persons with expertise in the respective disciplines.

Course Requirements and Scholarship

The completion of a minimum of 45 quarter credits in approved graduate courses with a cumulative grade-point average of at least 3.00 is required. Grades of all courses on the graduate program excluding deficiencies will be compiled in the grade-point average.

Courses numbered 500 or above are primarily for graduate students. A minimum of 24 credits must be earned in courses numbered 500 or above for the Master of Arts and Science degrees. A minimum of 30 credits is required in courses numbered 400 or above for the Master of Education degree. Courses numbered 400 to 499 are open to both undergraduate and graduate students. Courses numbered 350-399 may be included in the graduate program on approval of the Graduate Council.

Departmental Requirements

Candidates for a master's degree must also satisfy additional departmental requirements as listed in this bulletin under the section Departments of Instruction.
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Eligibility for admission as a graduate student is determined by the Graduate Council of the College upon the recommendation of the Biology or Education and Psychology departments.

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In addition to an acceptable baccalaureate degree, applicants for admission to a graduate degree program must have the following:

1. Satisfactory scores on the Graduate Record Examinations or on other tests approved by the Graduate Council.

Applicants in biology must have taken the Graduate Record Examination: Aptitude Tests and Advanced Test in Biology. The results of these examinations are to be submitted with the application for admission.

Applicants in education are encouraged to submit examination results with the application for admission; these are required before advancement to candidacy can be considered. It is strongly recommended that education students take the Graduate Record Examinations: Aptitude Tests and Advanced Test in Education before making application for admission or during the quarter in which graduate study is first begun.

2. A minimum cumulative grade-point average of 2.75 on either the last 90 credits toward the baccalaureate degree or on the total undergraduate program, whichever is higher.

An applicant whose undergraduate grade-point average is below 2.75 may be admitted if there is other evidence of ability to pursue the graduate degree. Such evidence may include one or more of the following: performance on the Graduate Record Examinations, strong professional recommendations, postgraduate work at a recognized institution, experience in areas related to the desired graduate specialization, or other criteria established by the departments concerned.

A student who meets the requirements for admission to the master's degree program but who registers only as a postgraduate has no assurance that credits earned will later apply toward the master's degree.

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Graduates of an accredited college or university with a cumulative undergraduate GPA of 2.00 may be admitted as postgraduate students to take courses toward provisional and standard certification, special credentials or additional coursework. These credits may not apply to a master's degree.

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Course Requirements and Scholarship
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Courses numbered 500 or above are primarily for graduate students. A minimum of 24 credits must be earned in courses numbered 500 or above for the Master of Arts and Science degrees. A minimum of 30 credits is required in courses numbered 400 or above for the Master of Education degree. Courses numbered 400 to 499 are open to both undergraduate and graduate students. Courses numbered 350-399 may be included in the graduate program on approval of the Graduate Council.

Departmental Requirements
Candidates for a master's degree must also satisfy additional departmental requirements as listed in this bulletin under the section Department of Instruction.
Second Master's Degree

The second master's degree requires a minimum of 30 additional quarter credits with approval of the Graduate Council.

Course Load

The normal load is 12 credits per quarter. Any course load above this amount must be approved by the Graduate Council.

Changes in Registration

Students withdrawing from college or individual courses must file an official drop voucher with the Records Office. Withdrawal slips must be signed by the adviser and the instructor involved. The final date for dropping a class is the Wednesday of the week prior to final examinations. Students doing pass/fail work prior to withdrawal will receive a W (withdrawal). Students withdrawing from all classes during the quarter will receive W's.

Transfer of Graduate Credit

A maximum of 12 quarter credits of graduate work taken at other recognized institutions may be approved for transfer toward the master's degree. A GPA of 3.00 must be maintained on all coursework taken in residence. The transfer credits may be by extension if acceptable toward the master's degree at the school offering the extension work. It is the responsibility of the student to provide such documentation. Correspondence credit or credit by examination is not accepted.

Bulletin

The student's degree candidacy must be based on the graduate bulletin in effect at the time the proposed program for graduate study is approved by the Graduate Council.

PROGRAM OF STUDY

Prior to registering for the first quarter of study, all students admitted for a master's degree program must consult with the chairman of their department for assistance in selecting courses. An adviser and/or advisory committee will subsequently be appointed to guide the student in planning a program of study to complete the degree. All course selection and program changes must be made in conference with the adviser, and with approval of the Graduate Council.

Toward the end of the quarter in which the student is about to complete his first 9-15 credit hours of approved graduate study (exclusive of deficiencies), application must be made for advancement to degree candidacy. Since a minimum of 30 credit hours should be earned after advancement to candidacy has been granted, any delay in filling this application may result in a loss of earned credits.

ADVANCEMENT TO DEGREE CANDIDACY

Admission to graduate study merely constitutes permission to register for course work. It does not imply candidacy.

A student may be advanced to master's degree candidacy by fulfilling the following conditions:

1. Arrange for the removal of any undergraduate deficiencies.
2. Candidates for master's degrees in education must submit their scores on the Graduate Record Examination: Aptitude Tests and Advanced Test in Education or on other tests approved by the Graduate Council.
3. Complete 9 to 15 credits of approved graduate study with a minimum grade-point average of 3.00. If grade points earned on these credits do not average 3.00, advancement to candidacy will not be approved.
4. Submit the "Application for Degree Candidacy and Proposed Program of Courses" form to the department chairman outlining a study program including courses completed and those yet to be completed in fulfillment of the requirements for the master's degree. This program must be considered for approval by the staff of the department concerned upon completion of 9 to 15 credit hours.
5. Secure approval of the proposed program by the Graduate Council. Approval of the program and advancement to master's degree candidacy will be officially acknowledged by a letter from the chairman of the Graduate Council.

Advancement to master's degree candidacy indicates that the Graduate Council and the department concerned encourage the candidate to complete the master's degree. The degree is granted only after successful completion of the approved program of studies within the regulations of the College.

Changes in Program

Changes in the proposed program may not be made without the prior approval of the department chairman, associate director of records and chairman of the Graduate Council.

THESIS REQUIREMENT

A thesis demonstrating ability to conduct research in a systematic and scholarly manner must be presented by candidates for the Master of Arts and Master of Science degrees. The thesis is planned with and approved by the student's advisory committee. Completion of the thesis must be in accordance with the requirements of each department. Approved copies of the completed thesis are kept on permanent file in the college library and in the respective departments.
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Transfer of Graduate Credit
A maximum of 12 quarter credits of graduate work taken at other recognized institutions may be approved for transfer toward the master's degree. A GPA of 3.00 must be maintained on all coursework taken in residence. The transfer credits may be by extension if acceptable toward the master's degree at the school offering the extension work. It is the responsibility of the student to provide such documentation. Correspondence credit or credit by examination is not accepted.

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Approved copies of the completed thesis are kept on permanent file in the college library and in the respective departments.
FINAL EXAMINATIONS

Master's degree candidates must pass a written and/or oral examination administered by an examining committee. The nature of further examination, if required, is to be determined by the examination committee. A representative of the Graduate Council, who is not a member of the candidate's advisory committee, attends each oral examination.

Examination Regulations
1. Examinations should be completed at least two weeks before commencement.
2. It is the candidate's responsibility to schedule his examination with the department chairman.
3. The examination is conducted by the chairman of the candidate's advisory committee. Success or failure in the examination is determined by the examination committee.
4. Questions in the examination will be based upon the candidate's thesis and/or areas of study.
5. The time allowed for the examination is ordinarily not more than two hours.
6. Any candidate who fails the examination may be granted only one opportunity by the examination committee to retake his final examination after a lapse of at least one quarter.

CONFIRMATION OF DEGREE

The candidate must file in duplicate the order form for the master's degree with the Registrar's Office prior to the beginning of the final quarter. Students are required to participate in the graduation exercises. In special cases permission to receive the master's degree as an associate may be granted by the President of the College.

DEPARTMENTS OF INSTRUCTION

BIOLOGICAL SCIENCES

The Department of Biology offers a Master of Science degree in biology. Courses are offered in zoology and botany on the main campus and at the Marine Biological Station near Anacortes, Washington. The program of course work and research developed for each graduate student takes into account the future goals, present interests and academic background of the student. In addition to a basic course in Biology (zoology and botany), specific background courses, or their equivalents, should include genetics, development, physiology and ecology. An adequate preparation in chemistry (inorganic and organic), physics (general physics) and mathematics (algebra, trigonometry, some calculus) will complete the necessary foundation upon which an individualized graduate program may be built. There is sufficient flexibility to allow a student to propose a program of a more interdisciplinary nature if desired. Because of the spectrum of biological and interdisciplinary opportunities presented at the Marine Biological Station, all graduate students are expected to attend one summer term.

The specific objectives of the Department of Biology applicable to the graduate program are:
1. To increase the competence of secondary school teachers, especially those in the Seventh-day Adventist educational system.
2. To prepare students for positions in institutions of higher education by giving them a firm foundation for work toward the doctorate.
3. To provide a preparation for research careers.
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DEPARTMENTS OF INSTRUCTION

BIOLOGICAL SCIENCES

The Department of Biology offers a Master of Science degree in biology. Courses are offered in zoology and botany on the main campus and at the Marine Biological Station near Anacortes, Washington. The program of course work and research developed for each graduate student takes into account the future goals, present interests and academic background of the student. In addition to a basic course in Biology (zoology and botany), specific background courses, or their equivalents, should include genetics, development, physiology and ecology. An adequate preparation in chemistry (inorganic and organic), physics (general physics) and mathematics (algebra, trigonometry, some calculus) will complete the necessary foundation upon which an individualized graduate program may be built. There is sufficient flexibility to allow a student to propose a program of a more interdisciplinary nature if desired. Because of the spectrum of biological and interdisciplinary opportunities presented at the Marine Biological Station, all graduate students are expected to attend one summer term.

The specific objectives of the Department of Biology applicable to the graduate program are:
1. To increase the competence of secondary school teachers, especially those in the Seventh-day Adventist educational system.
2. To prepare students for positions in institutions of higher education by giving them a firm foundation for work toward the doctorate.
3. To provide a preparation for research careers.
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401 PLANT PHYSIOLOGY
A course designed to cover the principles of physiology of plants in general. One laboratory per week. Prerequisite: 360, 392.

403 ORNITHOLOGY
A systematic study of native birds of North America, with emphasis on identification, migration, geographical distribution, habits and life histories. Two laboratories per week.

405 GENERAL ENTOMOLOGY
A study of insect morphology, physiology, ecology and classification. One laboratory per week.

412 PLANT ANATOMY
A study of the microscopic anatomy of plant tissues with emphasis on their origin and development. Primary attention will be devoted to the vascular plants. Recommended prerequisite: 360. One laboratory per week.

424 HERPETOLOGY
A systematic study of amphibians and reptiles with emphasis on natural history and ecology. Two laboratories per week.

426 SYSTEMATIC BOTANY
A study of the principles of plant classification, together with a systematic survey of vascular plants, with emphasis on natural history and ecology. Two laboratories per week.

429 LIMNOLOGY
A study of the factors responsible for the presence and distribution of animals and plants in fresh waters. Field work includes trips to a number of lakes and streams for collection of living specimens as well as habitat analysis. Two laboratories per week.

432 INTRODUCTION TO PALEOBIOLoGY
A study of earth's history as exhibited by the fossils with particular emphasis on paleobiological relationships. Two laboratories per week.

444 MAMMALOLOGY
A systematic study of mammals with emphasis on natural history and ecology. Two laboratories per week.

446 GENERAL ECOLOGY
A course designed to cover the basic principles of plant and animal ecology. Field trips to nearby areas illustrating these principles are part of the laboratory work. Two laboratories per week.

447 PARASITOLOGY
A systematic study of the morphology, life cycle and host-parasite relationships of protozoan, helminth and acariid parasites. Two laboratories per week.

449 VERTEBRATE HISTOLOGY
The microscopic anatomy of vertebrate cells, tissues and organs including reference to their functions. Two laboratories per week.

451 VERTEBRATE ZOOLOGY
A study of the biology of the invertebrates with emphasis on their ecology, morphology and physiology. Two laboratories per week.

464 ANIMAL BEHAVIOR
A comparative study of the behavior of animals with emphasis on an experimental analysis of behavior. A research project will be required. Two laboratories per week.

465 BACTERIOLOGY
A presentation of the basic principles necessary for an understanding of morphology and function of bacteria. Laboratory work, including unknowns, points out techniques employed in their study. Two laboratories per week.

477 INDEPENDENT STUDY IN BIOLOGICAL SCIENCE
Directed study in an approved area. The student will be required to read widely on an assigned subject, follow regular research methods, and present a paper showing competence in and extent of his study. Permission from the chairman of the department required. One to three credits per quarter; maximum, six credits.

483 PHILOSOPHY OF ORIGINS AND SPECIATION
The various theories on the origin and history of living organisms will be compared in light of present scientific knowledge in the area of biochemistry, paleontology, morphology, geology, genetics and other related areas. For majors and minors only.

490 TECHNIQUES IN FIELD BIOLOGY
A study of the techniques used in the collection and preservation of biological specimens for museum purposes. Emphasis is placed on the recording and preservation of ecological data obtained with the collections of specimens. The topic for a given year will depend on the instructor offering the course and credit will be given on the rate of one hour credit for each week spent working in the field.
495 COLLOQUIUM
A departmental seminar offered each quarter in which current areas of research are presented by the staff and visiting lecturers. Required of all juniors, seniors and graduate students. No credit.

501 RESEARCH IN BIOLOGY 2, 4, 8
Individual work in a topic of original research carried out under the direction of one of the instructors. Two to four credits per quarter; maximum, eight credits.

503 GENETICS AND SPECIATION 3
A study of the nature and function of the genetic material as it relates to population and species variability and change. Prerequisite: 261.

510 GRADUATE SEMINAR 1, 5
Presentation of topics and discussion of current research in specific areas of biology. One credit any quarter; three credits required; maximum, five credits.

511 BIOSYSTEMATICS 4
A study of the process of speciation and its relationship to currently used taxonomic methods and rules of nomenclature.

518 SYSTEMATIC ENTOMOLOGY 4
A study of the principles of classification of insects. Laboratory work emphasizes recognition of orders and families with special problems on the specific level. Recommended prerequisite: 405. Two laboratories per week.

521 PRINCIPLES OF ECONOMIC ENTOMOLOGY 3
An evaluation of the various methods of controlling economically important species. Prerequisite: 405.

522 CELLULAR BIOLOGY 5
Current knowledge and research in the areas of cell physiology, biochemical genetics, bacteriological genetics and radiation biology will be considered. Two laboratories per week. Prerequisite: 392, 393.

Reading Courses—A maximum of six credits may be selected from Reading Courses.

525 READINGS IN PHYSIOLOGY 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

526 READINGS IN INVERTEBRATE ZOOLOGY 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

527 READINGS IN ENTOMOLOGY 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

528 READINGS IN ECOLOGY 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

529 READINGS IN SYMBIOSIS 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

530 READINGS IN BIOSYSTEMATICS 2, 4
Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

545 THESIS 8
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.
495 COLLOQUIUM
A departmental seminar offered each quarter in which current areas of research are presented by the staff and visiting lecturers. Required of all juniors, seniors and graduate students. No credits.

501 RESEARCH IN BIOLOGY
Individual work in a topic of original research carried out under the direction of one of the instructors. Two to four credits per quarter; maximum, eight credits.

503 GENETICS AND SPECIATION
A study of the nature and function of the genetic material as it relates to population and species variability and change. Prerequisite: 261.

510 GRADUATE SEMINAR
Presentation of topics and discussion of current research in specific areas of biology. One credit any quarter; three credits required; maximum, five credits.

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A study of the process of speciation and its relationship to currently used taxonomic methods and rules of nomenclature.

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Analysis of classical and current literature in the field by means of reports and conferences with staff. Two credits; maximum, four credits.

545 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.
BIOLOGICAL SCIENCES

BIOLOGY COURSES: Marine Station
Biology 101, 102, 103 or equivalent is prerequisite for all courses listed below.

460 MARINE ECOLOGY
A study of interspecific, intraspecific and community relationships demonstrated by marine organisms.

462 Ichthyology
A systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters.

463 Marine Botany
A systematic study of plants found in Puget Sound, with a survey of marine plants from other areas.

467 Biological Oceanography
A study of physical, chemical and geological effects on marine organisms.

468 Comparative Physiology
A comparative study of the physiology and life processes of animals with emphasis on invertebrates. Prerequisite: 392.

470 Biophysics
An introductory course emphasizing the physical aspects of living organisms studied by the experimental and conceptual methods of physics with application to marine life.

474 Marine Invertebrates
A study of the biology of selected groups of marine invertebrates.

508 Physiology of the Algae
A comparative study of the physiology of representative members of the major algal groups. Collection and growth of pure cultures of single-celled forms and related metabolic processes, nutritional factors, light requirements, synchronization and growth will be emphasized.

514 Symbiosis
A study of sharply defined associations between organisms. Selected examples of the viruses, bacteria, plants and animals are used to illustrate varying degrees of relationships. Prerequisites: Coursework in one group of animals or plants or microbes or parasitology. Chemistry courses through organic are highly recommended.

DEPARTMENT OF EDUCATION AND PSYCHOLOGY

The Department of Education and Psychology offers two Master's degree programs—the Master of Arts, a thesis program, and the Master of Education, a non-thesis program. The programs permit professional enrichment through liberal course selection in the areas of Administration, Elementary Language Arts, Elementary Teaching, Guidance, Junior High Specialization, Library Resources, Secondary Content Areas.

In addition to the general objectives of the graduate program, the following are specific objectives of the Department of Education and Psychology:

1. To assist the student in developing a philosophy of education consistent with Christian ethics.
2. To develop an understanding of the relationship between teaching and the learning process.

MASTER OF ARTS

A prerequisite for the master of arts degree in education is the completion of a minimum of 27 undergraduate credits in education and/or psychology. Deficiencies may be removed after admission to graduate study but will not apply to the 45 credits minimum required for the graduate degree.

Basic Requirements
500 Graduate Seminar (1)
561 Methods of Research (3)
590 Thesis (8)

Area of Specialization (Choose one)
Administration
Curriculum and Instruction
Educational Foundations (philosophy, history, psychology and sociology)
Educational Psychology (developmental and learning psychology, measurement and statistics)
Guidance and Counseling

A minimum of 18 credit hours is required in the chosen area of specialization. For many candidates, additional specialization credit beyond the 18 hours minimum may be desirable.

The program of study for the area of specialization is planned with the department advisor to meet the individual needs and interests of each student. Certain approved specialization credits may be earned in related courses from departments other than Education and Psychology.
BIOLOGICAL SCIENCES

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Biology 101, 102, 103 or equivalent is prerequisite for all courses listed below.

460 MARINE ECOLOGY
A study of interspecific, intraspecific and community relationships demonstrated by marine organisms.

462 ICHTHYOLOGY
A systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters.

463 MARINE BOTANY
A systematic study of plants found in Puget Sound, with a survey of marine plants from other areas.

467 BIOLOGICAL OCEANOGRAPHY
A study of physical, chemical and geological effects on marine organisms.

468 COMPARATIVE PHYSIOLOGY
A comparative study of the physiology and life processes of animals with emphasis on invertebrates. Prerequisite: 392.

470 BIOPHYSICS
An introductory course emphasizing the physical aspects of living organisms studied by the experimental and conceptual methods of physics with application to marine life.

474 MARINE INVERTEBRATES
A study of the biology of selected groups of marine invertebrates.

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EDUCATION AND PSYCHOLOGY

Electives
A minimum of 8 credit hours should be earned in departments other than Education and Psychology. The remaining credit hours needed to complete the degree may be earned in elective courses within the Education and Psychology Department.
A minimum of 24 credits must be in courses numbered 500 or higher.
There are no requirements with respect to experience or certification.
Practicum courses such as 560 and 565 may be required for certification purposes but they are not applicable to the 45 credits minimum required for the graduate degree.

MASTER OF EDUCATION

Basic Requirements
Graduate Seminar
Methods of Research
Foundations

Area of Specialization
Administration
Biology
Biophysics
Business Teacher Education
Chemistry
Elementary Language Arts
Elementary Teaching
English
Guidance

Electives with advisement
Under advisement select professional education courses or content courses from not more than two related areas as specified in departmental graduate program guides.

45 credits minimum

Two-thirds of the minimum 45 credits to be 400 level or higher.
One year of validated satisfactory professional experience.
All candidates must qualify for a state-approved teaching certificate before the degree is granted. It is the responsibility of the candidate to present evidence of this qualification.
All course work for the above degree must be planned with and approved by the departmental advisor.

TEACHING CERTIFICATION

Walla Walla College is a state-approved teacher education institution.
As such, it is authorized to recommend graduates to the Washington State Department of Education for the provisional and standard certificates. The course offerings also provide for teaching certificates currently available from the General Conference Department of Education. Information concerning specific certificates is available in the regular bulletin and/or from the certification consultant.

Requirements for Standard Certificate—Fifth Year
To be recommended for the Washington Standard Certificate, the candidate must fulfill the following requirements:
1. Hold a valid Washington provisional certificate.
2. Complete two years of successful teaching.
3. Complete 45 quarter credits beyond the bachelor’s degree.
4. Take History of the Pacific Northwest (for all elementary teachers and for those secondary teachers who plan to teach in the social sciences).

Of the 45 credits, 23 credits must be in residence; 30 credits may be earned prior to the first year of teaching; at least 15 hours must be earned after the first year of teaching; a maximum of 12 credits may be earned by correspondence and/or extension study. Correspondence or extension credits must be from schools approved by the college recommending the candidate for certification.

The fifth-year program must be planned by authorized personnel in the Education Department. By careful programming, some students are able to complete the requirements for the master’s degree in education at the same time they are fulfilling the requirements for the Standard Certificate.

PRINCIPAL’S CREDENTIAL

Walla Walla College provides course offerings leading to both the provisional and standard principal’s credentials (elementary, secondary and general).

COURSES IN EDUCATION

361 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
Designed to prepare the student for teaching language arts in the elementary school. Includes objectives, planning, methods and materials
EDUCATION AND PSYCHOLOGY

Electives
A minimum of 8 credit hours should be earned in departments other than Education and Psychology. The remaining credit hours needed to complete the degree may be earned in elective courses within the Education and Psychology Department.
A minimum of 24 credits must be in courses numbered 500 or higher.
There are no requirements with respect to experience or certification.
Practicum courses such as 560 and 565 may be required for certification purposes but are not applicable to the 45 credits minimum required for the graduate degree.

MASTER OF EDUCATION
Basic Requirements
Graduate Seminar
Methods of Research
Foundations
Area of Specialization
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Biology
Biophysics
Business Teacher Education
Chemistry
Elementary Language Arts
Elementary Teaching
English
Guidance

Electives with advisement
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COURSES IN EDUCATION
361 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
Designed to prepare the student for teaching language arts in the elementary school. Includes objectives, planning, methods and materials
necessary for instruction in spelling, creative writing, listening, speaking, manuscript and cursive writing.

362 READING IN THE ELEMENTARY SCHOOL
A basic course stressing current theory, effective instructional procedures, and learning resources for teachers of reading in the primary and intermediate grades of the elementary school. Corequisite: 366.

365 SOCIAL STUDIES AND RELIGION IN THE ELEMENTARY SCHOOL
Examination and application of current media and practices used in teaching social sciences and religion in the elementary school. Actual classroom observance and teaching will be required.

365 LS LIBRARY MATERIALS FOR CHILDREN
See Library Science.

369 SCIENCE AND HEALTH IN THE ELEMENTARY SCHOOL
Procedures of teaching science and health in the elementary school with attention to recent media and trends. Classroom experience provided.

373 MATHEMATICS IN THE ELEMENTARY SCHOOL
Survey of the content, media and processes used in teaching mathematics in the elementary school; emphasis on newer approaches.

390 EDUCATIONAL EVALUATION
A practical introduction to principles and techniques of evaluating classroom activities in elementary and secondary schools.

400 TOPICS IN EDUCATION
The study of advanced topics through class activities. One to three credits per quarter.

404 HISTORY OF EDUCATION
A survey of the history of education.

412 Eng. LITERATURE FOR CHILDREN AND ADOLESCENTS
See Department of English.

426 EDUCATIONAL GUIDANCE
The philosophy, functions, organization, personnel and evaluation of the school guidance program.

431 METHODS OF SCHOOL HEALTH INSTRUCTION
Concepts of unit planning, methods, techniques, sources and evaluation of instructional materials are studied. Students are required to read widely and collect material pertinent to the course.

431 Soc. SOCIOLOGY OF EDUCATION
See Department of Sociology and Social Work.

439 IE&T INDUSTRIAL ARTS IN THE ELEMENTARY SCHOOL
See Department of Industrial Education and Technology.

461 METHODS OF AUDIOVISUAL EDUCATION
A survey of the methods of instruction through the use of audiovisual aids.

462 INSTRUCTIONAL AIDS–PRODUCTION
Experiences in the production of instructional aids.

464/465 MICROTEACHING—Elementary/Secondary
Elementary: A teaching laboratory to prepare elementary teachers in skills necessary to effective teaching. Students present brief demonstration lessons to a small class of children. Self-evaluation is complemented by evaluation of supervisors, practicing teachers and peers, along with video recordings. Prerequisite: at least two methods courses.
Secondary: Teaching procedures which are applicable at any level are considered. Laboratory practice in certain teaching skills will be provided following the microteaching model. The class will meet one night each week and each student will participate weekly in an afternoon teaching laboratory. Prerequisite: one methods course in the student’s major or minor area of study.
Students taking elementary will register for 464 (2 credits); students taking secondary will register for 465 (3 credits).

474 WORKSHOP
Workshop in selected areas of educational concern. Designed for both experienced teachers and those preparing to enter the teaching profession. One to three credits; maximum, six credits.

477 INDEPENDENT STUDY IN EDUCATION
Directed study in an approved area. Permission from the chairman of the department and supervising instructor is required. One to three credits any quarter; maximum, six credits.

490 TEACHING HIGH SCHOOL READING
Basic principles of reading instruction; methods, materials and organization of the developmental and corrective reading programs in high school.

492 EDUCATION OF THE GIFTED
Emphasis is placed upon the design of learning opportunities for gifted children in the light of psychological characteristics of such children.

493 SYSTEMS OF THOUGHT
An intensive study of various aspects of philosophical thinking and their bearing upon education. Especially valuable in comprehending much current writing in education. (Ideally should precede or be taken concurrently with 522.)
EDUCATION AND PSYCHOLOGY

necessary for instruction in spelling, creative writing, listening, speaking, manuscript and cursive writing.

362 READING IN THE ELEMENTARY SCHOOL 3
A basic course stressing current theory, effective instructional procedures, and learning resources for teachers of reading in the primary and intermediate grades of the elementary school. Corequisite: 366.

365 SOCIAL STUDIES AND RELIGION IN THE ELEMENTARY SCHOOL 4
Examination and application of current media and practices used in teaching social sciences and religion in the elementary school. Actual classroom observation and teaching will be required.

365 LS LIBRARY MATERIALS FOR CHILDREN 3
See Library Science.

369 SCIENCE AND HEALTH IN THE ELEMENTARY SCHOOL 3
Procedures of teaching science and health in the elementary school with attention to recent media and trends. Classroom experience provided.

373 MATHEMATICS IN THE ELEMENTARY SCHOOL 3
Survey of the content, media and processes used in teaching mathematics in the elementary school; emphasis on newer approaches.

390 EDUCATIONAL EVALUATION 3
A practical introduction to principles and techniques of evaluating classroom activities in elementary and secondary schools.

400 TOPICS IN EDUCATION 1-3
The study of advanced topics through class activities. One to three credits per quarter.

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A survey of the history of education.

412 Eng. LITERATURE FOR CHILDREN AND ADOLESCENTS 3
See Department of English.

426 EDUCATIONAL GUIDANCE 3
The philosophy, functions, organization, personnel and evaluation of the school guidance program.

431 METHODS OF SCHOOL HEALTH INSTRUCTION 3
Concepts of unit planning, methods, techniques, sources and evaluation of instructional materials are studied. Students are required to read widely and collect material pertinent to the course.

431 Soc. SOCIOLOGY OF EDUCATION 2
See Department of Sociology and Social Work.

439 I&J INDUSTRIAL ARTS IN THE ELEMENTARY SCHOOL 3
See Department of Industrial Education and Technology.

461 METHODS OF AUDIOVISUAL EDUCATION 2
A survey of the methods of instruction through the use of audiovisual aids.

462 INSTRUCTIONAL AIDS—PRODUCTION 2
Experiences in the production of instructional aids.

464/465 MICROTEACHING—Elementary/Secondary 2/3
Elementary: A teaching laboratory to prepare elementary teachers in skills necessary to effective teaching. Students present brief demonstration lessons to a small class of children. Self-evaluation is supplemented by evaluation of supervisors, practicing teachers and peers, along with video recordings. Prerequisite: at least two methods courses. Secondary: Teaching procedures which are applicable at any level are considered. Laboratory practice in certain teaching skills will be provided following the microteaching model. The class will meet one night each week and each student will participate weekly in an afternoon teaching laboratory. Prerequisite: one methods course in the student's major or minor area of study. Students taking elementary will register for 464 (2 credits); students taking secondary will register for 465 (3 credits).
EDUCATION AND PSYCHOLOGY

496 ELEMENTARY SCHOOL GUIDANCE
A study of the rationale for elementary school guidance with emphasis upon current research and issues. Attention will be focused upon the tools and techniques of both classroom and out-of-class guidance functions and services.

Graduate Courses

500 GRADUATE SEMINAR
Discussion periods in which faculty and students explore significant issues through the examination and analysis of research and appropriate literature in the area of education. One credit; maximum, three credits.

504 ELEMENTARY SCHOOL CURRICULUM
A study of the elementary school curriculum, including objectives, essentials of a good program, varying curriculum patterns and appraisal of current practices.

508 SECONDARY SCHOOL CURRICULUM
Overview of the secondary school curriculum, with emphasis on the various subject fields, organization of the school for curriculum development, educational objectives; the courses of study; evaluation of the secondary school curriculum.

522 PHILOSOPHY OF EDUCATION
A study of the basic philosophies and development of educational thinking resulting in the formulation of aims and objectives of education for today's schools.

535 EDUCATION IN THE TWENTIETH CENTURY
Intended to help a student become conversant with significant problems, issues, trends and proposals affecting the theory and practice of education today.

526 SCHOOL FINANCE
A course designed for administrators, emphasizing origins and disbursement of school funds.

527 SCHOOL PLANNING AND CONSTRUCTION
A survey of how to plan and build schools, including the involvement of the lay citizen. Selection of site, trends in design, function of buildings and plant, costs and obligations will be studied. Professional architects and engineers will be guest lecturers.

535 CORRECTIVE READING
Analysis, correction, and prevention of reading problems are studied along with refinement of group and informal testing. Supervised practice with pupils having mild disabilities in reading. Prerequisite: 362; corequisite: 366.

539 SUPERVISION
For principals, classroom teachers or those planning to be supervisors. Identifies duties of both teacher and supervisors, and suggests methods for the improvement of teachers in service through a comprehensive supervision program.

544 ADMINISTRATION OF THE ELEMENTARY SCHOOL
Organization, supervision and administration of elementary schools.

550 SCHOOL LAW
Utilizing the case study method, this course is designed to acquaint the student with the legal basis for public and parochial school operation in the United States.

551 ADMINISTRATION OF THE SECONDARY SCHOOL
Problems and procedures in the organization and administration of secondary schools.

556 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 practice in curriculum revision.

558 SCHOOL ACTIVITIES
Designed to acquaint the student with the range of the school activities program; to define the purpose of such activities; to provide him with a valid basis for evaluating existing or proposed activities; and to provide opportunity for intensive study of one activity.

560 ADMINISTRATIVE PRACTICUM
Professional laboratory experience for candidates for an administrative credential. The course is designed to involve each candidate in a variety of practical administrative experiences and to assist him in his successful induction into school leadership, by permission of the department chairman.

561 METHODS OF RESEARCH
Procedures in the selection and evaluation of research projects and techniques in the analysis of research data.

567 COMPARATIVE EDUCATION
A comparison of systems and philosophies of education in various parts of the world; emphasis on the role of cultural impacts.
EDUCATION AND PSYCHOLOGY

496 ELEMENTARY SCHOOL GUIDANCE
A study of the rationale for elementary school guidance with emphasis upon current research and issues. Attention will be focused upon the tools and techniques of both classroom and out-of-class guidance functions and services.

Graduate Courses

500 GRADUATE SEMINAR
Discussion periods in which faculty and students explore significant issues through the examination and analysis of research and appropriate literature in the area of education. One credit; maximum, three credits.

504 ELEMENTARY SCHOOL CURRICULUM
A study of the elementary school curriculum, including objectives, essentials of a good program, varying curriculum patterns and appraisal of current practices.

508 SECONDARY SCHOOL CURRICULUM
Overview of the secondary school curricula, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the courses of study; evaluation of the secondary school curriculum.

522 PHILOSOPHY OF EDUCATION
A study of the basic philosophies and development of educational thinking resulting in the formulation of aims and objectives of education for today's schools.

525 EDUCATION IN THE TWENTIETH CENTURY
Intended to help the student become conversant with significant problems, issues, trends and proposals affecting the theory and practice of education today.

526 SCHOOL FINANCE
A course designed for administrators, emphasizing origins and disbursement of school funds.

527 SCHOOL PLANNING AND CONSTRUCTION
A survey of how to plan and build schools, including the involvement of the lay citizen. Selection of site, trends in design, function of buildings and plant, costs and obligations will be studied. Professional architects and engineers will be guest lecturers.

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Designed to acquaint the student with the range of the school activities program; to define the purpose of such activities; to provide him with a valid basis for evaluating existing or proposed activities; and to provide opportunity for intensive study of one activity.

560 ADMINISTRATIVE PRACTICUM
Professional laboratory experience for candidates for an administrative credential. The course is designed to involve each candidate in a variety of practical administrative experiences and to assist in his successful induction into school leadership. By permission of the department chairman.

561 METHODS OF RESEARCH
Procedures in the selection and evaluation of research projects and techniques in the analysis of research data.

567 COMPARATIVE EDUCATION
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<td>350</td>
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<td>EXPERIMENTAL PROBLEMS</td>
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<td>PSYCHOLOGY OF EXCEPTIONAL CHILDREN</td>
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<td>CHILD PSYCHOLOGY</td>
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**EDUCATION AND PSYCHOLOGY**

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<td>CHILDHOOD LEARNING DISORDERS</td>
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<td>MOTIVATION</td>
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<td>PSYCHOLOGY OF PERSONALITY</td>
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<td>MENTAL HEALTH</td>
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<td>464</td>
<td>COUNSELING RELATIONSHIPS</td>
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<td>WORKSHOP IN PSYCHOLOGY</td>
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<td>INDEPENDENT STUDY IN PSYCHOLOGY</td>
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EDUCATION AND PSYCHOLOGY

575 READINGS IN EDUCATION 2-4
Advanced study confined to topic areas where the student can demonstrate a considerable degree of expertise due to previous formal studies and/or experience. To be done under the guidance and direction of a faculty member. The student will engage in an analysis of current literature and require written and/or oral reports and conferences with the staff. By permission of the department chairman. Maximum, four credits.

581 PROFESSIONAL PROJECT 2, 4, 6; 6
Selected areas of advanced study involving reading and research. Formal report required. Prerequisite: consent of department chairman and graduate standing. Two, four or six credits any quarter; maximum, six credits.

590 THESIS 8

COURSES IN PSYCHOLOGY

350 ELEMENTARY STATISTICS 3
Descriptive techniques and other selected fundamental procedures for summarizing and interpreting data from tests and research in the various disciplines.

375 EXPERIMENTAL PROBLEMS 3
An advanced course which enables the student to develop skills in experimental design and to apply such skills to an individual research project. Prerequisite: 350 or equivalent.

400 TOPICS IN PSYCHOLOGY 1-3
The study of advanced topics through class activities. One to three credits per quarter.

430 PSYCHOLOGICAL TESTING 3
Principles of test selection, administration and interpretation are considered together with the contributions and limitations of the major types of standardized tests and inventories used in the behavioral sciences.

431 PSYCHOLOGY OF EXCEPTIONAL CHILDREN 3
Characteristics and problems of exceptional children with consideration of essential educational adaptation.

433 CHILD PSYCHOLOGY 3
Principles of growth as related to various phases of human development during the preadolescent years: physical, mental and emotional.

436 CHILD PSYCHOLOGY LABORATORY 1
Prerequisite or corequisite: 435.

437 CHILDHOOD LEARNING DISORDERS 3
An introduction to play therapy and psycho-educational programs with emphasis on perceptual, sensory and motor areas. Designed for teachers and counselors of young children in both early childhood and elementary school levels. Prerequisite: 435.

440 ADOLESCENT PSYCHOLOGY 3
Principles of growth as related to various phases of human development during the adolescent years—physical, mental and emotional.

442 MOTIVATION 3
A study of basic drives and causes of behavior in organisms with emphasis upon human behavior. This course includes a laboratory.

444 SOCIAL PSYCHOLOGY 3
The dynamics of social interaction and interpersonal behavior with application to contemporary society.

445 SOCIAL PSYCHOLOGY LABORATORY 1
Prerequisite: 444.

446 PSYCHOLOGY OF PERSONALITY 3
Theories concerning personality development, assessment and adjustment will be considered.

449 MENTAL HEALTH 3
Physiological and psychological factors related to emotional maturity. Individual mental health, classroom climate, patterns of acceptance and rejection.

464 COUNSELING RELATIONSHIPS 3
A practical introduction to psychological theory and skills essential for developing effective and helping relationships with individuals and groups.

474 WORKSHOP IN PSYCHOLOGY 1-3; 6
A workshop designed to provide experiences in investigation and evaluation of contemporary problems and practices in psychology. One to three credits; maximum, six credits.

477 INDEPENDENT STUDY IN PSYCHOLOGY 1-6
Directed independent study in an approved area. Permission from the chairman of the department and supervising instructor is required. One to three credits any quarter; maximum, six credits.
EDUCATION AND PSYCHOLOGY

489 VOCATIONAL DEVELOPMENT THEORY 3
Theories of vocational choice and methods of studying occupations and occupational information are considered as they relate to educational and vocational guidance.

Graduate Courses

501 STATISTICS IN RESEARCH 3
An introduction to sampling theory, probability and statistical inference as applied to research analysis and hypothesis testing. Includes simple multivariate techniques and selected distribution-free tests of significance. Prerequisite: 350 or equivalent.

515 COUNSELING THEORIES AND TECHNIQUES 3
A study and application of the theories and techniques for counseling. Professional relationships and ethics are considered.

518 GROUP COUNSELING 2
Theories and techniques of counseling in group situations. Prerequisite: 515.

521 PSYCHOLOGY OF LEARNING 3
The physiological and psychological bases for functional learning are discussed, and the experimental evidence supporting psychological hypotheses is reviewed.

532 INDIVIDUAL TESTING—Intelligence 4
Supervised experience in the administration, interpretation and writing of psychological reports. Several intelligence instruments will be reviewed. Major emphasis, however, will center on Binet and Wechsler Intelligence Scales. Prerequisite: 430 and permission of the instructor.

534 ASSESSMENT OF THE INDIVIDUAL 2
Methods applicable to comprehensive assessment for describing behavior. Experience in the collection and analysis of data will be provided. Prerequisite: 532.

564 ABNORMAL PSYCHOLOGY 3
A study of behavioral disturbances, therapeutic measures and theories.

SUPPORTING COURSES

Selected courses are available, with advisement, from the following departments: Art, Biology, Business and Economics, Chemistry, Communications, English, Health and Physical Education, History and Political Science, Home Economics, Library Science, Mathematics, Modern Languages, Music, Office Administration, Physics, Sociology and Social Work.

ART

361-362-363 ADVANCED SCULPTURE 2-2-2
Prerequisite: 261, 262, 263.

400 TOPICS IN ART 1-3
The study of advanced topics through class activities. One to three credits per quarter.

477 INDEPENDENT STUDY IN ART 1-6
One to three credits any quarter; maximum, six credits.

BIOLOGY (See pages 23-28)

BUSINESS

400 TOPICS IN BUSINESS 1-3
The study of advanced topics through class activities. One to three credits per quarter.

411 ADVANCED ACCOUNTING 4
Prerequisite: 213.

412 CPA REVIEW 4
Prerequisite: 411 or permission of instructor.

413 ACCOUNTING THEORY 4
Prerequisite: 213.

414 FUND ACCOUNTING 4
Prerequisite: 113 or 116.

419 AUDITING PROCEDURES 4
Prerequisites: Eight hours of accounting beyond 213.

421 MONEY AND BANKING 4
Prerequisite: 223.

422 COMPARATIVE ECONOMIC SYSTEMS 4
Prerequisite: 223.

423 ECONOMICS OF FOREIGN TRADE 4
Prerequisite: 223.
EDUCATION AND PSYCHOLOGY

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ART

361-362-363 ADVANCED SCULPTURE 2-2-2
Prerequisite: 261, 262, 263.

400 TOPICS IN ART 1-3
The study of advanced topics through class activities. One to three credits per quarter.

477 INDEPENDENT STUDY IN ART 1-6
One to three credits any quarter; maximum, six credits.

BIOLOGY (See pages 23-28)

BUSINESS

400 TOPICS IN BUSINESS 1-3
The study of advanced topics through class activities. One to three credits per quarter.

411 ADVANCED ACCOUNTING 4
Prerequisite: 213.

412 CPA REVIEW 4
Prerequisite: 411 or permission of instructor.

413 ACCOUNTING THEORY 4
Prerequisite: 213.

414 FUND ACCOUNTING 4
Prerequisite: 113 or 116.

419 AUDITING PROCEDURES 4
Prerequisites: Eight hours of accounting beyond 213.

421 MONEY AND BANKING 4
Prerequisite: 223.

422 COMPARATIVE ECONOMIC SYSTEMS 4
Prerequisite: 223.

423 ECONOMICS OF FOREIGN TRADE 4
Prerequisite: 225.
### SUPPORTING COURSES

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<td>BUSINESS CYCLES</td>
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<td>INVESTMENTS</td>
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<td>HUMAN RELATIONS IN MANAGEMENT</td>
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<td>RETAIL STORE OPERATION AND MANAGEMENT</td>
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<td>WORKSHOP IN BUSINESS TEACHER EDUCATION</td>
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<td>SUPERVISION</td>
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<td>406, 407</td>
<td>BIOCHEMISTRY</td>
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<td>Permission from the chairman of the department required. One to three credits any quarter; maximum, six credits.</td>
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<th>Prerequisites</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>TOPICS IN COMMUNICATION</td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
<td>1-3</td>
</tr>
<tr>
<td>401</td>
<td>INTRODUCTION TO GENERAL SEMANTICS</td>
<td>Prerequisites: 101-102 or equivalent or permission of the instructor.</td>
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<tr>
<td>443</td>
<td>PERSUASIVE SPEAKING</td>
<td>Prerequisite: 101-102.</td>
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<tr>
<td>453</td>
<td>RHETORIC AND PUBLIC ADDRESS</td>
<td>Prerequisite: 101-102.</td>
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<tr>
<td>472</td>
<td>METHODS OF TEACHING SPEECH COMMUNICATION</td>
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<tr>
<td>477</td>
<td>INDEPENDENT STUDY IN SPEECH</td>
<td>Permission from the chairman of the department required. One to three credits; maximum, six credits.</td>
<td>1-6</td>
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<tr>
<td>497</td>
<td>SEMINAR IN COMMUNICATION MEDIA</td>
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<td>2</td>
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</table>
SUPPORTING COURSES

SPEECH PATHOLOGY AND AU迪LOGY

387 STUTTERING: THEORIES AND THERAPIES 4
Prerequisite: 385, 386.

441 ADVANCED AUDIOLOGY 3
Prerequisite: 384.

461 DIAGNOSIS IN SPEECH PATHOLOGY 3
Prerequisite: 393.

473 CLEFT PALATE SPEECH 3
Prerequisite: 396.

475 VOICE DISORDERS 3
Prerequisite: 385

JOURNALISM

363 PUBLIC RELATIONS 3

400 TOPICS IN JOURNALISM 1-3
The study of advanced topics through class activities. One to three credits per quarter.

412 SCRIPT WRITING 3
Prerequisite: English 101-102-103 or 104-105.

426 SCHOOL PUBLICATIONS 2

477 INDEPENDENT STUDY IN JOURNALISM 1-6
Instructor’s approval required. One to three credits any quarter; maximum six credits.

ENGLISH

350 DIRECTED READING 1-2; 3
Prerequisites: 224, 225, 226 or 244, 245, 246 or 251, 252, 253. One or two credits any quarter; maximum, three credits.

354, 355, 356 TWENTIETH CENTURY LITERATURE 2
Prerequisites: 224, 225, 226 and 244, 245, 246.

361 CLASSICAL BACKGROUNDS 3
Prerequisites: 224, 225, 226 or 244, 245, 246 or 251, 252, 253.

371 MODERN ENGLISH GRAMMAR 3

385, 386 CREATIVE WRITING 3, 3

400 TOPICS IN ENGLISH 1-3
The study of advanced topics through class activities. One to three credits per quarter.

404, 405, 406 THE VICTORIAN PERIOD 3, 3, 3
Prerequisite: 244, 245, 246.

407, 408, 409 AMERICAN LITERARY MASTERS 3, 3, 3
Prerequisite: 244, 225, 226.

412 LITERATURE FOR CHILDREN AND ADOLESCENTS 3

421, 422, 423 THE ROMANTIC PERIOD 2, 2, 2
Prerequisite: 244, 245, 246.

425 INTRODUCTION TO ENGLISH LINGUISTICS 3

426 HISTORY OF THE ENGLISH LANGUAGE 3

427, 428, 429 RESTORATION AND NEOCLASSIC LITERATURE 2, 2, 2
Prerequisite: 244, 245, 246.

441 OLD AND MIDDLE ENGLISH LITERATURE 3
Prerequisite: 244, 245, 246.

442 CHAUCER 3
Prerequisite: 244, 245, 246.

453 AMERICAN LITERATURE BACKGROUNDS 3
Prerequisite: 224, 225, 226.

464, 465, 466 RENAISSANCE LITERATURE 3, 3, 3
Prerequisite: 244, 245, 246.

467 SHAKESPEARE 3
An intensive study of content and form in selected works of Shakespeare, their relationship to their times, and their contribution to the development of drama and poetry in the Renaissance. Prerequisite: 244, 245, 246.
### SUPPORTING COURSES

#### SPEECH PATHOLOGY AND AUDILOGY
- **387 STUTTERING: THEORIES AND THERAPIES** 4
  Prerequisite: 385, 386.
- **441 ADVANCED AUDILOGY** 3
  Prerequisite: 384.
- **461 DIAGNOSIS IN SPEECH PATHOLOGY** 3
  Prerequisite: 393.
- **473 CLEFT PALATE SPEECH** 3
  Prerequisite: 386.
- **475 VOICE DISORDERS** 3
  Prerequisite: 385.

#### JOURNALISM
- **363 PUBLIC RELATIONS** 3
- **400 TOPICS IN JOURNALISM** 1-3
  The study of advanced topics through class activities. One to three credits per quarter.
- **412 SCRIPT WRITING** 3
  Prerequisite: English 101-102-103 or 104-105.
- **426 SCHOOL PUBLICATIONS** 2
- **477 INDEPENDENT STUDY IN JOURNALISM** 1-6
  Instructor’s approval required. One to three credits any quarter; maximum six credits.

#### ENGLISH
- **350 DIRECTED READING** 1-2; 3
  Prerequisites: 224, 225, 226 or 244, 245, 246 or 251, 252, 253. One or two credits any quarter; maximum, three credits.
- **354, 355, 356 TWENTIETH CENTURY LITERATURE** 2
  Prerequisites: 224, 225, 226 and 244, 245, 246.
- **361 CLASSICAL BACKGROUNDS** 3
  Prerequisites: 224, 225, 226 or 244, 245, 246 or 251, 252, 253.
- **371 MODERN ENGLISH GRAMMAR** 3
- **385, 386 CREATIVE WRITING** 3, 3
- **400 TOPICS IN ENGLISH** 1-3
  The study of advanced topics through class activities. One to three credits per quarter.
- **404, 405, 406 THE VICTORIAN PERIOD** 3, 3, 3
  Prerequisite: 244, 245, 246.
- **407, 408, 409 AMERICAN LITERARY MASTERS** 3, 3, 3
  Prerequisite: 224, 225, 226.
- **412 LITERATURE FOR CHILDREN AND ADOLESCENTS** 3
- **421, 422, 423 THE ROMANTIC PERIOD** 2, 2, 2
  Prerequisite: 244, 245, 246.
- **425 INTRODUCTION TO ENGLISH LINGUISTICS** 3
- **426 HISTORY OF THE ENGLISH LANGUAGE** 3
- **427, 428, 429 RESTORATION AND NEOCLASSIC LITERATURE** 2, 2, 2
  Prerequisite: 244, 245, 246.
- **441 OLD AND MIDDLE ENGLISH LITERATURE** 3
  Prerequisite: 244, 245, 246.
- **442 CHAUCER** 3
  Prerequisite: 244, 245, 246.
- **453 AMERICAN LITERATURE BACKGROUNDS** 3
  Prerequisite: 224, 225, 226.
- **464, 465, 466 RENAISSANCE LITERATURE** 3, 3, 3
  Prerequisite: 244, 245, 246.
- **467 SHAKESPEARE** 3
  An intensive study of content and form in selected works of Shakespeare, their relationship to their times, and their contribution to the development of drama and poetry in the Renaissance. Prerequisite: 244, 245, 246.
### SUPPORTING COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>468</td>
<td>LITERATURE OF THE BIBLE</td>
<td>3</td>
</tr>
<tr>
<td>471</td>
<td>METHODS OF TEACHING HIGH SCHOOL ENGLISH</td>
<td>4</td>
</tr>
<tr>
<td>473</td>
<td>METHODS OF TEACHING MODERN GRAMMARS IN THE ELEMENTARY AND SECONDARY SCHOOLS</td>
<td>3</td>
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<tr>
<td>477</td>
<td>INDEPENDENT STUDY IN ENGLISH</td>
<td>1-6</td>
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<tr>
<td>492-493</td>
<td>SEMINAR</td>
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</table>

### HEALTH, PHYSICAL EDUCATION, AND RECREATION

<table>
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<tr>
<td>350</td>
<td>AQUATICS</td>
<td>3</td>
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<tr>
<td>351</td>
<td>SCHOOL HEALTH PROGRAM</td>
<td>3</td>
</tr>
<tr>
<td>363</td>
<td>PHYSIOLOGY OF EXERCISE</td>
<td>3</td>
</tr>
<tr>
<td>352</td>
<td>HEALTH EDUCATION IN CHURCH PROGRAMS</td>
<td>3</td>
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<td>358</td>
<td>PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL</td>
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<td>361</td>
<td>KINESIOLOGY</td>
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<tr>
<td>400</td>
<td>TOPICS IN PHYSICAL EDUCATION</td>
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### HISTORY AND POLITICAL SCIENCE

<table>
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<td>477</td>
<td>INDEPENDENT STUDY IN HEALTH AND PHYSICAL EDUCATION</td>
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### HISTORY

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<td>HISTORICAL ENGLAND</td>
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<td>433, 436</td>
<td>HISTORICAL MODERN GERMANY</td>
<td>3</td>
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<td>461</td>
<td>ANCIENT MEDITERRANEAN CIVILIZATIONS</td>
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<td>462</td>
<td>EARLY MIDDLE AGES</td>
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<td>463</td>
<td>LATE MIDDLE AGES</td>
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<tr>
<td>464</td>
<td>THE RENAISSANCE</td>
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<td>465</td>
<td>THE REFORMATION</td>
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<tr>
<td>467</td>
<td>THE CRUCIBLE OF REVOLUTION, 1789-1815</td>
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<td>468</td>
<td>THE MODERN TRANSITION, 1815-1914</td>
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<tr>
<td>469</td>
<td>INTERWAR EUROPE, 1914-1945</td>
<td>3</td>
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<td>470</td>
<td>CONTEMPORARY EUROPE, 1945 TO THE PRESENT</td>
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<td>474, 475, 476</td>
<td>HISTORY OF RUSSIA</td>
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<td>387, 388, 389</td>
<td>HISTORICAL LATIN AMERICA</td>
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<td>424</td>
<td>THE AMERICAN FRONTIER</td>
<td>4</td>
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<td>445</td>
<td>THE AMERICAN CIVIL WAR AND RECONSTRUCTION</td>
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<td>446</td>
<td>HISTORY OF THE PACIFIC NORTHWEST</td>
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### Supporting Courses

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<tbody>
<tr>
<td>468</td>
<td>Literature of the Bible</td>
<td>3</td>
</tr>
<tr>
<td>471</td>
<td>Methods of Teaching High School English</td>
<td>4</td>
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<tr>
<td>473</td>
<td>Methods of Teaching Modern Grammars in the Elementary and Secondary Schools</td>
<td>3</td>
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<tr>
<td>477</td>
<td>Independent Study in English</td>
<td>1-6</td>
</tr>
<tr>
<td>491</td>
<td>Seminar</td>
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### Health, Physical Education, and Recreation

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<td>350</td>
<td>Aquatics</td>
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<td>351</td>
<td>School Health Program</td>
<td>3</td>
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<tr>
<td>363</td>
<td>Physiology of Exercise</td>
<td>3</td>
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<td>352</td>
<td>Health Education in Church Programs</td>
<td>3</td>
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<td>358</td>
<td>Physical Education in the Elementary School</td>
<td>3</td>
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<td>361</td>
<td>Kinesiology</td>
<td>3</td>
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<tr>
<td>400</td>
<td>Topics in Physical Education</td>
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<tr>
<td>403</td>
<td>Leadership in Camping and Campcraft</td>
<td>2</td>
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<tr>
<td>420</td>
<td>Teaching Techniques of Physical Education Activities</td>
<td>2</td>
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<tr>
<td>422</td>
<td>Foundations of Physical Education</td>
<td>3</td>
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<td>431</td>
<td>Methods of School Health Instruction</td>
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<tr>
<td>437</td>
<td>Field Training</td>
<td>3</td>
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<td>451</td>
<td>Administration of Physical Education</td>
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<td>472</td>
<td>Methods of Teaching Physical Education</td>
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### History and Political Science

### History

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<tr>
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<td>Independent Study</td>
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<td>492-493</td>
<td>Seminar</td>
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### European History

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<tr>
<td>377, 378, 379</td>
<td>History of England</td>
<td>2, 2, 2</td>
</tr>
<tr>
<td>435, 436</td>
<td>History of Modern Germany</td>
<td>3, 3</td>
</tr>
<tr>
<td>461</td>
<td>Ancient Mediterranean Civilizations</td>
<td>3</td>
</tr>
<tr>
<td>462</td>
<td>Early Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>463</td>
<td>The Late Middle Ages</td>
<td>3</td>
</tr>
<tr>
<td>464</td>
<td>The Renaissance</td>
<td>3</td>
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<tr>
<td>465</td>
<td>The Reformation</td>
<td>3</td>
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<tr>
<td>467</td>
<td>The Crucible of Revolution, 1789-1815</td>
<td>3</td>
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<tr>
<td>468</td>
<td>The Modern Transition, 1815-1914</td>
<td>3</td>
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<tr>
<td>469</td>
<td>Interwar Europe, 1914-1945</td>
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<tr>
<td>470</td>
<td>Contemporary Europe, 1945 to the Present</td>
<td>3, 3, 3</td>
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<tr>
<td>474, 475, 476</td>
<td>History of Russia</td>
<td>3</td>
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### American History

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<tr>
<td>387, 388, 389</td>
<td>History of Latin America</td>
<td>2, 2, 2</td>
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<tr>
<td>424</td>
<td>The American Frontier</td>
<td>4</td>
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<tr>
<td>445</td>
<td>The American Civil War and Reconstruction</td>
<td>3</td>
</tr>
<tr>
<td>446</td>
<td>History of the Pacific Northwest</td>
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</tbody>
</table>
SUPPORTING COURSES

448 THE MAKING OF MODERN AMERICA SINCE 1877 3
Prerequisite: 201, 202, 203.

449 RECENT AMERICA, 1919 TO THE PRESENT 3
Prerequisite: 201, 202, 203.

457, 458, 459 SOCIAL AND INTELLECTUAL HISTORY OF THE U.S. 3, 3
Prerequisite: 201, 202, 203.

POLITICAL SCIENCE

400 TOPICS IN POLITICAL SCIENCE 1-3
The study of advanced topics through class activities. One to three credits per quarter.

401 CONSTITUTIONAL HISTORY 3

402 INTERNATIONAL RELATIONS 3

414, 415, 416 AMERICAN DIPLOMATIC HISTORY 2, 2, 2

424, 425 WESTERN POLITICAL THOUGHT 3, 3

426 AMERICAN POLITICAL THOUGHT 3

477 INDEPENDENT STUDY IN POLITICAL SCIENCE 1-6
The study of advanced topics through class activities. Instructor's approval required. One to three credits per quarter; maximum, six credits.

HOME ECONOMICS

382 CHILD DEVELOPMENT 3

400 TOPICS IN HOME ECONOMICS 1-3
The study of advanced topics through class activities. One to three credits per quarter.

403 TEXTILE DESIGN 3
Prerequisite: 302 or equivalent.

412 FOODS IN CULTURES OF THE WORLD 3
Prerequisite: Adequate background in food preparation.

422 EXPERIMENTAL COOKERY 3
Prerequisites: 101, 102, 103 and Chemistry 101-102, 103 or 161-162, 163 or equivalent.

424, 425 INTERIOR DECORATION 3, 3
Must be taken in sequence unless by permission of instructor.

437-438 COMMUNITY NUTRITION 2-1
Prerequisite: 220 or permission of instructor.

441-442 ADVANCED NUTRITION 2-2
Prerequisites: 101, 102, 103 and 220; Chemistry 101-102, 103 or 161-162, 163.

443 DIET IN DISEASE 3
Prerequisites: 101, 102, 103 and 220 or equivalent.

447 INSTITUTION FOOD PURCHASING 3
Check with instructor before registering for this course.

448 INSTITUTION MANAGEMENT 3
Prerequisite: 206 or permission of instructor.

461-462 TAILORING 2-2
Prerequisite: 241, 242, 243 or equivalent.

471 METHODS OF TEACHING HOME ECONOMICS 3

477 INDEPENDENT STUDY IN HOME ECONOMICS 1-3; 3
One to three credits any quarter; maximum, six credits.

486 ADVANCED INTERIOR DECORATION 3
Prerequisites: 222, 223 and 424, 425 or equivalent.

493 SEMINAR 1
SUPPORTING COURSES

448 THE MAKING OF MODERN AMERICA SINCE 1877 3
Prerequisite: 201, 202, 203.

449 RECENT AMERICA, 1919 TO THE PRESENT 3
Prerequisite: 201, 202, 203.

457, 458, 459 SOCIAL AND INTELLECTUAL HISTORY OF THE U.S. 3, 3, 3
Prerequisite: 201, 202, 203.

POLITICAL SCIENCE

460 TOPICS IN POLITICAL SCIENCE 1-3
The study of advanced topics through class activities. One to three credits per quarter.

401 CONSTITUTIONAL HISTORY 3

402 INTERNATIONAL RELATIONS 3

414, 415, 416 AMERICAN DIPLOMATIC HISTORY 2, 2, 2

424, 425 WESTERN POLITICAL THOUGHT 3, 3

426 AMERICAN POLITICAL THOUGHT 3

477 INDEPENDENT STUDY IN POLITICAL SCIENCE 1-6
The study of advanced topics through class activities. Instructor’s approval required. One to three credits per quarter; maximum, six credits.

HOME ECONOMICS

382 CHILD DEVELOPMENT 3

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The study of advanced topics through class activities. One to three credits per quarter.

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Prerequisite: 302 or equivalent.

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Prerequisite: Adequate background in food preparation.

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Prerequisites: 101, 102, 103 and Chemistry 101-102-103 or 161-162-163 or equivalent.

424, 425 INTERIOR DECORATION 3, 3
Must be taken in sequence unless by permission of instructor.

437-438 COMMUNITY NUTRITION 2-1
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Prerequisites: 101, 102, 103 and 220 or equivalent.

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Check with instructor before registering for this course.

448 INSTITUTION MANAGEMENT 3
Prerequisite: 206 or permission of instructor.

461-462 TAILORING 2-2
Prerequisite: 241, 242, 243 or equivalent.

471 METHODS OF TEACHING HOME ECONOMICS 3

477 INDEPENDENT STUDY IN HOME ECONOMICS 1-3; 3
One to three credits any quarter; maximum, six credits.

486 ADVANCED INTERIOR DECORATION 3
Prerequisites: 222, 223 and 424, 425 or equivalent.

493 SEMINAR 1
## Supporting Courses

### Industrial Education and Technology

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
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<tr>
<td>352, 353</td>
<td>Radio Communications</td>
<td>4, 4</td>
<td>271, 272, 273 or equivalent, and 291 recommended.</td>
</tr>
<tr>
<td>356</td>
<td>Air Conditioning</td>
<td>2</td>
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<tr>
<td>362</td>
<td>Applied Photography</td>
<td>3</td>
<td>161 or equivalent.</td>
</tr>
<tr>
<td>366</td>
<td>Industrial Materials</td>
<td>3</td>
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<tr>
<td>370</td>
<td>Press Photography</td>
<td>1</td>
<td>362 or equivalent.</td>
</tr>
<tr>
<td>371, 372</td>
<td>Industrial Electronics</td>
<td>4, 4</td>
<td>271, 272, 273 or equivalent.</td>
</tr>
<tr>
<td>381, 382, 383</td>
<td>Machine Tool Practice II</td>
<td>2, 2, 2</td>
<td>244, 245-246 or equivalent.</td>
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<tr>
<td>387</td>
<td>Course Construction</td>
<td>3</td>
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<tr>
<td>389</td>
<td>Shop Administration and Planning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>399</td>
<td>Oil Hydraulics</td>
<td>3</td>
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<tr>
<td>400</td>
<td>Topics in Industrial Education</td>
<td>1-3</td>
<td>3 credits per quarter.</td>
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<td>and Technology</td>
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<tr>
<td>411, 412, 413</td>
<td>Television Systems and Circuit</td>
<td>3, 3, 3</td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
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<td>Analysis</td>
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<tr>
<td>415-416</td>
<td>Advanced Lithography</td>
<td>3-3</td>
<td>271, 272, 273 or equivalent.</td>
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<td>439</td>
<td>Industrial Arts in the Elementary</td>
<td>3</td>
<td>School</td>
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<td>447</td>
<td>History and Philosophy of Industrial Education</td>
<td>3</td>
<td></td>
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<tr>
<td>472</td>
<td>Methods of Teaching Industrial Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>477</td>
<td>Independent Study in Industrial Education and Technology</td>
<td>1-6</td>
<td>Prerequisite: lower division work in same area for supervisory or teaching-aid construction. Six credits maximum from this and/or Industrial Practicum.</td>
</tr>
<tr>
<td>484, 485, 486</td>
<td>Industrial Practicum</td>
<td>1-6</td>
<td>Prerequisite: lower division work in chosen area.</td>
</tr>
<tr>
<td>488</td>
<td>Senior Problem</td>
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</table>

### Library Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>355</td>
<td>History of Books and Printing</td>
<td>3</td>
</tr>
<tr>
<td>365</td>
<td>Library Materials for Children</td>
<td>3</td>
</tr>
<tr>
<td>382</td>
<td>School Library as a Materials Center</td>
<td>3</td>
</tr>
<tr>
<td>384</td>
<td>Advanced Cataloging and Classification</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: 286.</td>
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</tr>
<tr>
<td>400</td>
<td>Topics in Library Science</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>– The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>413</td>
<td>Selection of Library Materials</td>
<td>3</td>
</tr>
<tr>
<td>461</td>
<td>Reference Materials in the Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: 271.</td>
<td></td>
</tr>
<tr>
<td>464</td>
<td>Reference Materials in the Humanities</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisite: 271.</td>
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<tr>
<td>467</td>
<td>Reference Materials in the Sciences</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisite: 271.</td>
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<td>472</td>
<td>Methods of Library Instruction</td>
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<tr>
<td>477</td>
<td>Independent Study in Library Science</td>
<td>1-3, 3</td>
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<td>483</td>
<td>Administration of School Libraries</td>
<td>3</td>
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<tr>
<td>490</td>
<td>Directed Field Work</td>
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<td>– One to three credits any quarter; maximum, three credits.</td>
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<td>493</td>
<td>Seminar in School Library Problems</td>
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### Mathematics

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<tr>
<td>351, 352, 353</td>
<td>Advanced Calculus</td>
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<tr>
<td>400</td>
<td>Topics in Mathematics</td>
<td>1-3</td>
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<td>– The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>411, 412, 413</td>
<td>Modern Algebra</td>
<td>4, 4, 4</td>
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<tr>
<td>471</td>
<td>Methods of Teaching Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>477</td>
<td>Independent Study in Mathematics</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>– Permission from the chairman of the department required. One to three credits; maximum, six credits.</td>
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### SUPPORTING COURSES

#### INDUSTRIAL EDUCATION AND TECHNOLOGY

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<th>Course Code</th>
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<tr>
<td>352, 353</td>
<td>RADIO COMMUNICATIONS</td>
<td>4, 4</td>
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<tr>
<td></td>
<td>Prerequisite: 271, 272, 273 or equivalent, and 291 recommended.</td>
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</tr>
<tr>
<td>356</td>
<td>AIR CONDITIONING</td>
<td>2</td>
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<td>362</td>
<td>APPLIED PHOTOGRAPHY</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisite: 161 or equivalent.</td>
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<td>366</td>
<td>INDUSTRIAL MATERIALS</td>
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<tr>
<td>370</td>
<td>PRESS PHOTOGRAPHY</td>
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<tr>
<td></td>
<td>Prerequisite: 362 or equivalent.</td>
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<tr>
<td>371, 372</td>
<td>INDUSTRIAL ELECTRONICS</td>
<td>4, 4</td>
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<tr>
<td></td>
<td>Prerequisite: 271, 272, 273 or equivalent.</td>
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<td>381, 382, 383</td>
<td>MACHINE TOOL PRACTICE II</td>
<td>2, 2</td>
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<tr>
<td></td>
<td>Prerequisite: 244, 245-246 or equivalent.</td>
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<td>387</td>
<td>COURSE CONSTRUCTION</td>
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<td>389</td>
<td>SHOP ADMINISTRATION AND PLANNING</td>
<td>3</td>
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<td>399</td>
<td>OIL HYDRAULICS</td>
<td>3</td>
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<td>400</td>
<td>TOPICS IN INDUSTRIAL EDUCATION AND TECHNOLOGY</td>
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<td></td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>411, 412, 413</td>
<td>TELEVISION SYSTEMS AND CIRCUIT ANALYSIS</td>
<td>3, 3</td>
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<td></td>
<td>Prerequisite: 271, 272, 273 or equivalent.</td>
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<tr>
<td>415-416</td>
<td>ADVANCED LITHOGRAPHY</td>
<td>3-3</td>
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<tr>
<td></td>
<td>Prerequisite: 237-238-239 or equivalent.</td>
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<tr>
<td>439</td>
<td>INDUSTRIAL ARTS IN THE ELEMENTARY SCHOOL</td>
<td>3</td>
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<tr>
<td>447</td>
<td>HISTORY AND PHILOSOPHY OF INDUSTRIAL EDUCATION</td>
<td>3</td>
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<tr>
<td>472</td>
<td>METHODS OF TEACHING INDUSTRIAL ARTS</td>
<td>3</td>
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<td>477</td>
<td>INDEPENDENT STUDY IN INDUSTRIAL EDUCATION AND TECHNOLOGY</td>
<td>1-6</td>
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<tr>
<td></td>
<td>Prerequisite: lower division work in same area for supervisory or teaching aid construction. Six credits maximum from this and/or Industrial Practicum.</td>
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<tr>
<td>484, 485, 486</td>
<td>INDUSTRIAL PRACTICUM</td>
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<tr>
<td></td>
<td>Prerequisite: lower division work in chosen area.</td>
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<td>488</td>
<td>SENIOR PROBLEM</td>
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#### LIBRARY SCIENCE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>355</td>
<td>HISTORY OF BOOKS AND PRINTING</td>
<td>3</td>
</tr>
<tr>
<td>365</td>
<td>LIBRARY MATERIALS FOR CHILDREN</td>
<td>3</td>
</tr>
<tr>
<td>382</td>
<td>SCHOOL LIBRARY AS A MATERIALS CENTER</td>
<td>3</td>
</tr>
<tr>
<td>384</td>
<td>ADVANCED CATALOGING AND CLASSIFICATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: 286.</td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>TOPICS IN LIBRARY SCIENCE</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>413</td>
<td>SELECTION OF LIBRARY MATERIALS</td>
<td>3</td>
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<tr>
<td>461</td>
<td>REFERENCE MATERIALS IN THE SOCIAL SCIENCES</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisite: 271.</td>
<td></td>
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<tr>
<td>464</td>
<td>REFERENCE MATERIALS IN THE HUMANITIES</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisite: 271.</td>
<td></td>
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<tr>
<td>467</td>
<td>REFERENCE MATERIALS IN THE SCIENCES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: 271.</td>
<td></td>
</tr>
<tr>
<td>472</td>
<td>METHODS OF LIBRARY INSTRUCTION</td>
<td>3</td>
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<tr>
<td>477</td>
<td>INDEPENDENT STUDY IN LIBRARY SCIENCE</td>
<td>1-3; 3</td>
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<tr>
<td></td>
<td>Opens only to minors. Permission from the chairman of the department required. One to three credits any quarter; maximum, three credits.</td>
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<tr>
<td>483</td>
<td>ADMINISTRATION OF SCHOOL LIBRARIES</td>
<td>3</td>
</tr>
<tr>
<td>490</td>
<td>DIRECTED FIELD WORK</td>
<td>1-3; 3</td>
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<tr>
<td></td>
<td>One to three credits any quarter; maximum, three credits.</td>
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<tr>
<td>493</td>
<td>SEMINAR IN SCHOOL LIBRARY PROBLEMS</td>
<td>3</td>
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</table>

#### MATHEMATICS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>351, 352, 353</td>
<td>ADVANCED CALCULUS</td>
<td>3, 3, 3</td>
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<tr>
<td></td>
<td>Prerequisite: 283.</td>
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<tr>
<td>400</td>
<td>TOPICS IN MATHEMATICS</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
<td></td>
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<tr>
<td>411, 412, 413</td>
<td>MODERN ALGEBRA</td>
<td>4, 4, 4</td>
</tr>
<tr>
<td></td>
<td>Permission of the instructor required.</td>
<td></td>
</tr>
<tr>
<td>471</td>
<td>METHODS OF TEACHING MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>477</td>
<td>INDEPENDENT STUDY IN MATHEMATICS</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>Permission from the chairman of the department required. One to three credits; maximum, six credits.</td>
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</table>
SUPPORTING COURSES

MODERN LANGUAGES

400 TOPICS IN MODERN LANGUAGES 1-3
The study of advanced topics through class activities. One to three credits per quarter.

403 MODERN GERMAN LITERATURE 4

404, 405, 406 FRENCH DIRECTED READING 1-3, 6
Prerequisite: 304, 305, 306. One to three credits; maximum, six credits.

408 ROMANTICISM AND REALISM 4
(French)

411, 412, 413 GERMAN DIRECTED READING 1-3, 6
Prerequisite: 317-318-319. One to three credits; maximum, six credits.

414, 415, 416 SPANISH DIRECTED READING 1-3, 6
Prerequisite: 341-342-343. One to three credits; maximum, six credits.

419 THE SEVENTEENTH CENTURY 4
(French)

421 GERMAN CLASSICISM 4

422 GERMAN ROMANTICISM 4

424, 425, 426 CONTEMPORARY SPANISH LITERATURE 2, 2, 2

431, 432, 433 LATIN AMERICAN LITERATURE 3, 3, 3

438 MODERN PERIOD OF FRENCH LITERATURE 4

471 METHODS OF TEACHING MODERN LANGUAGES 3

477 INDEPENDENT STUDY IN MODERN LANGUAGES 1-6
Permission from the chairman of the department required. One to three credits any quarter; maximum, six credits.

MUSIC

382 VOCAL TECHNIQUES 3

387 BASIC CONDUCTING 2

388 INSTRUMENTAL CONDUCTING 2
Prerequisite: 387.

389 CHORAL CONDUCTING 2
Prerequisite: 387.

400 TOPICS IN MUSIC 1-3
The study of advanced topics through class activities. One to three credits per quarter.

406 COUNTERPOINT 3
Prerequisite: 304 and 305.

OFFICE ADMINISTRATION

400 TOPICS IN OFFICE ADMINISTRATION 1-3
The study of advanced topics through class activities. One to three credits per quarter.

409 ORCHESTRATION 3
Prerequisite: 304 and 305.

411, 412, 413 COMPOSITION I 1, 2, 1, 2, 1, 2
Prerequisite: 204-205-206 and/or permission of instructor.

415 COMPOSITION II 1, 3, 3
Prerequisite: 411, 412, 413 and/or permission of instructor. One to three credits; maximum, three credits.

472 THE TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 2

473 THE TEACHING OF MUSIC IN THE SECONDARY SCHOOL 2

477 INDEPENDENT STUDY IN MUSIC 1-3, 3
Instructor’s approval required. One to three credits any quarter; maximum six credits.

481, 482, 483 SELECTED TOPICS IN MUSIC 1-3, 3
One to three credits any quarter; maximum, three credits.

489 OFFICE ADMINISTRATION SEMINAR 1-3
SUPPORTING COURSES

MODERN LANGUAGES

400 TOPICS IN MODERN LANGUAGES 1-3
The study of advanced topics through class activities. One to three credits per quarter.

403 MODERN GERMAN LITERATURE 4

404, 405, 406 FRENCH DIRECTED READING 1-3, 6
Prerequisite: 304, 305, 306. One to three credits; maximum, six credits.

408 ROMANTICISM AND REALISM 4
(French)

411, 412, 413 GERMAN DIRECTED READING 1-3, 6
Prerequisite: 317-318-319. One to three credits; maximum, six credits.

414, 415, 416 SPANISH DIRECTED READING 1-3, 6
Prerequisite: 341-342-343. One to three credits; maximum, six credits.

419 THE SEVENTEENTH CENTURY 4
(French)

421 GERMAN CLASSICISM 4

422 GERMAN ROMANTICISM 4

424, 425, 426 CONTEMPORARY SPANISH LITERATURE 2, 2, 2

431, 432, 433 LATIN AMERICAN LITERATURE 3, 3, 3

438 MODERN PERIOD OF FRENCH LITERATURE 4

471 METHODS OF TEACHING MODERN LANGUAGES 3

477 INDEPENDENT STUDY IN MODERN LANGUAGES 1-6
Permission from the chairman of the department required. One to three credits any quarter; maximum, six credits.

MUSIC

382 VOCAL TECHNIQUES 3

387 BASIC CONDUCTING 2

388 INSTRUMENTAL CONDUCTING 2
Prerequisite: 387.

389 CHORAL CONDUCTING 2
Prerequisite: 387.

400 TOPICS IN MUSIC 1-3
The study of advanced topics through class activities. One to three credits per quarter.

406 COUNTERPOINT 3
Prerequisite: 304 and 305.

OFFICE ADMINISTRATION

400 TOPICS IN OFFICE ADMINISTRATION 1-3
The study of advanced topics through class activities. One to three credits per quarter.

409 ORCHESTRATION 3
Prerequisite: 394 and 305.

411, 412, 413 COMPOSITION I 1-2, 1-2, 1-2
Prerequisite: 201-205-206 and/or permission of instructor.

415 COMPOSITION II 1-3
Prerequisite: 411, 412, 413 and/or permission of instructor. One to three credits; maximum, three credits.

472 THE TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 2

473 THE TEACHING OF MUSIC IN THE SECONDARY SCHOOL 2

477 INDEPENDENT STUDY IN MUSIC 1-3, 3
Instructor’s approval required. One to three credits any quarter; maximum six credits.

481, 482, 483 SELECTED TOPICS IN MUSIC 1-3, 3
One to three credits any quarter; maximum, three credits.

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SUPPORTING COURSES

400 ORCHESTRATION 3
Prerequisite: 394 and 305.

411, 412, 413 COMPOSITION I 1-2, 1-2, 1-2
Prerequisite: 201-205-206 and/or permission of instructor.

415 COMPOSITION II 1-3
Prerequisite: 411, 412, 413 and/or permission of instructor. One to three credits; maximum, three credits.

472 THE TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 2

473 THE TEACHING OF MUSIC IN THE SECONDARY SCHOOL 2

477 INDEPENDENT STUDY IN MUSIC 1-3, 3
Instructor’s approval required. One to three credits any quarter; maximum six credits.

481, 482, 483 SELECTED TOPICS IN MUSIC 1-3, 3
One to three credits any quarter; maximum, three credits.

491 OFFICE ADMINISTRATION SEMINAR 1-3
### SUPPORTING COURSES

**PHYSICS**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>350</td>
<td>PHYSICS AND MODERN LIFE</td>
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<tr>
<td>352, 353</td>
<td>RADIONUCLIDE RESEARCH TECHNIQUES</td>
<td>2, 2</td>
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<tr>
<td></td>
<td>Prerequisite: 211, 212, 213 or Chemistry 161-162-163.</td>
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<tr>
<td>362, 363</td>
<td>THEORETICAL MECHANICS</td>
<td>3, 3</td>
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<tr>
<td>400</td>
<td>TOPICS IN PHYSICS</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>411, 412, 413</td>
<td>ATOMIC AND NUCLEAR PHYSICS</td>
<td>3, 3, 3</td>
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<tr>
<td></td>
<td>Prerequisite: 301, 302, 303. Corequisite: 414, 415, 416, 417, 418, 419.</td>
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<td>414, 415, 416</td>
<td>EXPERIMENTAL PHYSICS</td>
<td>1, 1, 1</td>
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<tr>
<td>417, 418, 419</td>
<td>PHYSICS SEMINAR II</td>
<td>1, 1, 1</td>
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<td>471</td>
<td>METHODS OF TEACHING PHYSICAL SCIENCE</td>
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<td>477</td>
<td>INDEPENDENT STUDY IN PHYSICS</td>
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<td>Permission from the chairman of the department required. One to three credits any quarter; maximum, six credits.</td>
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**SOCIOLGY AND SOCIAL WORK**

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<tbody>
<tr>
<td>351</td>
<td>SOCIOLOGY OF COMMUNITIES</td>
<td>3</td>
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<td>358</td>
<td>CRIMINOLOGY</td>
<td>2</td>
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<td>359</td>
<td>JUVENILE DELINQUENCY</td>
<td>2</td>
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<td>400</td>
<td>TOPICS IN SOCIOLOGY</td>
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<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<td>431</td>
<td>SOCIOLOGY OF EDUCATION</td>
<td>3</td>
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<td>432</td>
<td>SOCIOLOGY OF RELIGION</td>
<td>2</td>
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<td>Prerequisite: 204, 205.</td>
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<td>433</td>
<td>SOCIOLOGY OF LAW</td>
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<td>464</td>
<td>HISTORY OF SOCIOLOGICAL THOUGHT</td>
<td>3</td>
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<td>465</td>
<td>SOCIOLOGICAL THEORY</td>
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<td>466</td>
<td>METHODS OF SOCIAL RESEARCH</td>
<td>3</td>
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<tr>
<td></td>
<td>Prerequisites: 204, 205, 465; Psychology 350</td>
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<td>477</td>
<td>INDEPENDENT STUDY IN SOCIOLOGY</td>
<td>1-6</td>
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<tr>
<td></td>
<td>The study of advanced topics through class activities. Instructor's approval required. One to three credits; maximum, six credits.</td>
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## SUPPORTING COURSES

### PHYSICS

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<tbody>
<tr>
<td>350</td>
<td>PHYSICS AND MODERN LIFE</td>
<td>3</td>
</tr>
<tr>
<td>352, 353</td>
<td>RADIOISOTOPE RESEARCH TECHNIQUES</td>
<td>2, 2</td>
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<tr>
<td></td>
<td>Prerequisite: 211, 212, 213 or Chemistry 161-162-163.</td>
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<tr>
<td>362, 363</td>
<td>THEORETICAL MECHANICS</td>
<td>3, 3</td>
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<tr>
<td>400</td>
<td>TOPICS IN PHYSICS</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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</tr>
<tr>
<td>411, 412, 413</td>
<td>ATOMIC AND NUCLEAR PHYSICS</td>
<td>3, 3, 3</td>
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<tr>
<td></td>
<td>Prerequisite: 301, 302, 303. Corequisite: 414, 415, 416; 417, 418, 419.</td>
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<td>414, 415, 416</td>
<td>EXPERIMENTAL PHYSICS</td>
<td>1, 1, 1</td>
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<tr>
<td>417, 418, 419</td>
<td>PHYSICS SEMINAR II</td>
<td>1, 1, 1</td>
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<tr>
<td>471</td>
<td>METHODS OF TEACHING PHYSICAL SCIENCE</td>
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<td>477</td>
<td>INDEPENDENT STUDY IN PHYSICS</td>
<td>1-6</td>
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<td></td>
<td>Permission from the chairman of the department required. One to three credits any quarter; maximum, six credits.</td>
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### SOCIOLOGY AND SOCIAL WORK

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>351</td>
<td>SOCIOLOGY OF COMMUNITIES</td>
<td>3</td>
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<tr>
<td>358</td>
<td>CRIMINOLOGY</td>
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<td>359</td>
<td>JUVENILE DELINQUENCY</td>
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<td>400</td>
<td>TOPICS IN SOCIOLOGY</td>
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<td>The study of advanced topics through class activities. One to three credits per quarter.</td>
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<tr>
<td>431</td>
<td>SOCIOLOGY OF EDUCATION</td>
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<td>432</td>
<td>SOCIOLOGY OF RELIGION</td>
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<td>433</td>
<td>SOCIOLOGY OF LAW</td>
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<td>464</td>
<td>HISTORY OF SOCIOLOGICAL THOUGHT</td>
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<td>465</td>
<td>SOCIOLOGICAL THEORY</td>
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<td>466</td>
<td>METHODS OF SOCIAL RESEARCH</td>
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<td></td>
<td>Prerequisites: 204, 205, 465; Psychology 350</td>
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<td>477</td>
<td>INDEPENDENT STUDY IN SOCIOLOGY</td>
<td>1-6</td>
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<td></td>
<td>The study of advanced topics through class activities. Instructor's approval required. One to three credits; maximum, six credits.</td>
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