GRADUATE BULLETIN
1983-84
Walla Walla College is accredited by
The Northwest Association of Schools and Colleges
Seventh-day Adventist Board of Regents
The Washington State Board of Education

Walla Walla College offers programs accredited by
Engineering Accreditation Commission of the Accreditation Board for
Engineering and Technology, Inc.
Council on Social Work Education
National Association of Schools of Music
Department of Baccalaureate and Higher Degree Programs of the
National League for Nursing

is a member of
American Association of Collegiate Registrars and Admissions Officers
American Society for Engineering Education
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 Independent Colleges and Universities
National Association of Summer Sessions
American Council on Education National Commission on Accreditation

is approved by
American Dietetic Association
State Approving Agency for the training of veterans under the U.S.
Code, Title 38, Chapters 31, 32, 34 and 35
The Attorney General of the United States for non-immigrant students
Washington State for training in Vocational Rehabilitation

Equal Opportunity Commitment
Walla Walla College maintains a policy of equal educational opportunity for
all applicants without regard to sex, race, color, handicap, national and/or
ethnic origin, and in administration of its educational and admissions
policies, financial affairs, employment programs, student life and services, or
any other college-administered program.

Information contained in this publication is hereby certified as true and
correct in content and policy as of the date of publication, in compliance with
The Veterans Administration DVB Circular 20-78-84 and Public Law 94-902.
Walla Walla College is accredited by
- The Northwest Association of Schools and Colleges
- Seventh-day Adventist Board of Regents
- The Washington State Board of Education

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- Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc.
- Council on Social Work Education
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- Department of Baccalaureate and Higher Degree Programs of the National League for Nursing

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- American Association of Colleges for Teacher Education
- National Association of Independent Colleges and Universities
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FOR INFORMATION

ADMISSIONS
Academic Information
Application Blanks
Bulletins
General Information

Director of Admissions and Records
(509) 527-2811

FINANCES
General Financial Information
Work Opportunities

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(509) 527-2817

GRADUATE ASSISTANTSHIPS
Joe Galusha,
Chairman, Biology Department
(509) 527-2605

Dale Wanger,
Chairman, Ed./Psychology Dept.
(509) 527-2211

STUDENT AID
Loans and Grants

Sergio Hernandez, Director
Financial Aid
(509) 527-2554

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General Information
Room Reservations

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Sittrix Hall
(509) 527-2111

Paula Chapman, Dean of Women
Conrad Hall
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STUDENT AFFAIRS
Automobile Registration
Off-Campus Housing
Student Life
Student Handbooks

Edward Bayan, Vice President
Student Affairs
(509) 527-2511

COLLEGE ADDRESS
Walla Walla College
College Place, WA 99324

GENERAL TELEPHONE NUMBERS
Parlons Campus
Marine Station, Rialto Beach
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(509) 258-4115
(206) 283-2206

Administrative offices are closed from Friday noon until Monday morning and on legal holidays. The administrative offices are available on Sunday by appointment.
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### WALLA WALLA COLLEGE
#### ACADEMIC CALENDAR 1983-84

#### AUTUMN QUARTER
- **September 27**  
  - T: Registration
  - F: W: Instruction Begins
- **October 12**  
  - W: Last Day to Add Classes
- **November 23**  
  - W: Last Day to Drop Classes
- **December 12**  
  - M: *Graduate Record Examinations*
  - S: Thanksgiving Vacation Begins (noon)
  - T: Thanksgiving Vacation Ends (10:00 p.m.)
- **January 11, 12, 13**  
  - S M T W
  - 11, 12, 13, 14: Final Examinations

#### WINTER QUARTER
- **January 3**  
  - T: Registration
  - F: W: Instruction Begins
- **February 1**  
  - T: Last Day to Add Classes
- **February 6**  
  - M: *ASWWC State Frolic*
  - W: *Graduate Record Examinations*
  - F: M: Last Day to File Master’s Degree
  - Order Form
- **March 22**  
  - W: Last Day to Drop Classes
  - S M T W
  - 22, 23, 24, 25: Final Examinations

#### SPRING QUARTER
- **March 20**  
  - T: Registration
  - F: W: Instruction Begins
- **April 30**  
  - M: *Graduate Record Examinations*
- **May 2**  
  - W: Spring Compass Day
- **June 20**  
  - S: Last Day to Drop Classes
  - T: Last Day to Complete Final Master’s Exam
  - M: Final Examinations
  - W: Commencement (10:00 a.m.)

#### SUMMER QUARTER
- **June 10**  
  - S: Registration
  - M: Instruction Begins
  - M: *Graduate Record Examinations*
  - F: Last Day to File Master’s Degree
  - Order Form
  - S: Last Day to Complete Final Master’s Exam
  - W: Commencement

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*Registration with the Counseling and Guidance Center for Graduate Record Examinations must be made at least eight weeks prior to test date.*
WALLA WALLA COLLEGE
ACADEMIC CALENDAR 1983-84

AUTUMN QUARTER
September 27 T Registration
30 W Instruction Begins
October 12 W Last Day to Add Classes
17 M *Graduate Record Examinations
November 23 W Last Day to Drop Classes
24 W Thanksgiving Vacation Begins (noon)
27 S Thanksgiving Vacation Ends (10:00 p.m.)
December 12 M *Graduate Record Examination
11, 12, 13, 14 MTW Final Examinations

WINTER QUARTER
January 3 T Registration
4 W Instruction Begins
18 W Last Day to Add Classes
February 1 W ASWWC Snow Frolic
6 M *Graduate Record Examinations
13 M Last Day to File Master’s Degree Order Form
22 W Last Day to Drop Classes
Mar. 11, 12, 13, 14 MTW Final Examinations

SPRING QUARTER
March 20 T Registration
21 W Instruction Begins
April 4 W Last Day to Drop Classes
30 M *Graduate Record Examinations
May 2 W Spring Camp Day
9 W Last Day to Drop Classes
20 S Last Day to Complete Final Master’s Exam
27, 28, 29, 30 MTW Final Examinations
June 3 S Commencement (10:00 a.m.)

SUMMER QUARTER
June 10 S Registration
11 M Instruction Begins
11 M *Graduate Record Examinations
15 F Last Day to File Master’s Degree Order Form
July 27 F Last Day to Complete Final Master’s Exam
August 4 Sa Commencement
*Registration with the Counseling and Guidance Center for Graduate Record Examinations must be made at least eight weeks prior to test date.
WALLA WALLA COLLEGE
BOARD OFFICERS

Richard Fearing, Chairman
N. Clifford Sorensen, Secretary

ADMINISTRATION

N. Clifford Sorensen, Ed.D., President
Richard A. Beck, B.A., Vice President for Development
Edward Boyett, Ed.D., Vice President for Student Affairs
Rodney Heister, Ph.D., Vice President for Academic Affairs
Manford Simcock, M.A., Vice President for Financial Affairs
Verne V. Weber, Ph.D., Vice President for Recruitment and Public Relations

ADMINISTRATIVE STAFF

Kathryn Andrews, B.A., Associate Director of Records
Charles V. Bell, Ph.D., Dean, School of Engineering
Jerry Bokoles, M.A., Director of Counseling Services
John C. Broni, Ph.D., Dean, School of Theology
Paula Chapman, Dean of Women
Winston De Haven, M.A., Chaplain
Scott S. Duncan, B.S., Director of Audiolingual Services
Don A. Edge, B.S., Director of Plant Services
Marilyn Glenn, M.A., Director, Teaching Learning Center
Jim Hall, M.B.A., Controller
Sergio Hernandez, M.Ed., Director of Financial Aid
Wynette J. Huff, Ph.D., Dean, School of Nursing
Melvin S. Lang, Ph.D., Director of Summer Session
J. D. Lovey, M.D., College Physician
Elwood L. Mabrey, M.S., Director of the Libraries
Orpha Osborne, B.A., Director of Admissions and Records
Alfred E. Perry, Ph.D., Director, Grants and Foundations
Lydia Probaskas, Dean of Men
Kathleen C. Ragenovich, B.S., Director of Student Accounts and Employment
Donald W. Rigby, Ph.D., Dean, Graduate School
Lloyd Sampsel, B.S., Director of Educational Computer Services
Alfred O. Tucker, B.S., Chief Accountant

MARINE STATION

Donald W. Rigby, Ph.D., Director

COMMITTEE ASSIGNMENTS

ACADEMIC STANDARDS, Lorne Galm, Chairman
Rodney Heister, ex officio
Orpha Osborne, ex officio
John Brunt

FACULTY GRANTS, Lawrence McCloskey, Chairman
Richard Beck, ex officio
Alfred Perry, ex officio
Richard Emmerson

FACULTY SENATE, N. C. Sorensen, ex officio
Rodney Heister, ex officio
Elwood Mabrey, ex officio
Orpha Osborne, ex officio
Manford Simcock, ex officio
Sam Myers

GRADUATE COUNCIL, D. W. Rigby, ex officio
Joseph Galusha
Rodney Heister, ex officio
Orpha Osborne, ex officio
Dale Wagner, ex officio

LIBRARY,

Eldwood Mabrey, ex officio
Charles Amman
Robert Henderson

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Paula Chapman, ex officio
Lynn Probaskas, ex officio
Orpha Osborne, ex officio
Cassie Ragenovich, ex officio

TEACHER EDUCATION COUNCIL, Dale Wagner, ex officio
Rodney Heister, ex officio
Chester Blake
Lee Loewen

Lee Johnston
Two students selected by ASWCC
Ernest Bursky
Two students selected by ASWCC
Haro Ochs
One graduate student
WALLA WALLA COLLEGE
BOARD OFFICERS

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N. Clifford Sorensen, Secretary

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Rodney Heisler, Ph.D., Vice President for Academic Affairs
Manfred Simcock, M.A., Vice President for Financial Affairs
Verne V. Wehje, Ph.D., Vice President for Recruitment and Public Relations

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John C. Bromm, Ph.D., Dean, School of Theology
Paula Chapman, Dean of Women
Winston De Haven, M.A., Chaplain
Scott R. Duncan, B.S., Director of Audiovisual Services
Dan A. Edge, B.S., Director of Plant Services
Marilyn Glain, M.A., Director, Teaching Learning Center
Jim Hall, M.B.A., Controller
Sergio Hernandez, M.Ed., Director of Financial Aid
Wynell J. Huff, Ph.D., Dean, School of Nursing
Melvin S. Lang, Ph.D., Director of Summer Session
J. D. Leese, M.D., College Physician
Elwood L. Mabley, M.S.L.S., Director of the Libraries
Orpha Osborne, B.A., Director of Admissions and Records
Alfred E. Perry, Ph.D., Director, Grants and Foundations
Lynn Prohaska, Dean of Men
Kathleen (Cassey) Ragenovich, B.S., Director of Student Accounts and Employment
Donald W. Rigby, Ph.D., Dean, Graduate School
Lloyd Sampsel, B.S., Director of Educational Computer Services
Alfred O. Tucker, B.S., Chief Accountant

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Orpha Osborne, ex officio
John Brunt

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Richard Beck, ex officio
Alfred Perry, ex officio
Richard Emmerson

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Rodney Heisler, ex officio
Elwood Mabley, ex officio
Orpha Osborne, ex officio
Manfred Simcock, ex officio
Sam Myers

GRADUATE COUNCIL, D. W. Rigby, ex officio
Joseph Galusha
Rodney Heisler, ex officio
Orpha Osborne, ex officio

LIBRARY

Charles Amidar, Chairman
Lee Johnston
Robert Henderson

STUDENT FINANCIAL AID, Sergio Hernandez, Ex Officio Chairman
Paula Chapman, ex officio
Lynn Prohaska, ex officio
Orpha Osborne, ex officio
Cassie Ragenovich, ex officio

TEACHER EDUCATION COUNCIL, Dale Wagner, Ex Officio Chairman
Rodney Heisler, ex officio
Chester Blake
Lee Loewen

MARINE STATION

Donald W. Rigby, Ph.D., Director
THE FACULTY

BIOLOGY

Joseph P. Galusha, Chairman and Professor of Biology (1975)
B.S. 1964, Walla Walla College
M.A. 1971, Andrews University
Ph.D. 1975, Oxford University

Charles J. Amlaner, Assistant Professor of Biology (1979)
B.S., 1974, M.A., 1976, Andrews University
Ph.D., 1983, Oxford University

Jack Dusasenko, Assistant Professor of Agriculture (1978)
B.S., 1978, Andrews University
M.S., 1981, University of Minnesota

Susan C. Dixon, Assistant Professor of Biology (1980)
B.S. 1974, M.S. 1976, Walla Walla College
Doctoral Candidate 1984, Oregon State 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. McMaster, Professor of Biology (1971)
B.A. 1961, Atlantic Union College
M.A. 1965, Ph.D. 1967, Duke University

Donald W. Rigby, Professor of Biology (1958)
B.A. 1959, Loma Linda University
Ph.D. 1967, Loma Linda University

EDUCATION AND PSYCHOLOGY

Dale G. Wagner, Chairman and Professor of Education and Psychology (1966)
M.A., 1955, Walla Walla College
Ed.M., 1959, Eastern Washington State College
Ed.D., 1970, University of Idaho

R. Gary Brendel, Assistant Professor of Education and Psychology (1980)
B.A., 1967, Union College
M.A., 1969, University of Denver

Gloria Hicnblothom, Assistant Professor of Education (1976)
B.S., 1966, M.Ed. 1971, Walla Walla College

Dale A. Johnson, Associate Professor of Education and Psychology (1970)
B.A., 1964, Union College
M.A., 1967, University of Nebraska
Ph.D., 1978, University of California, Riverside

Glory A. Knowling, Associate Professor of Education (1980)
B.S., 1976, Union College
M.A., 1979, Ph.D. 1980, University of Iowa

Harold T. Ochs, Professor of Education and Psychology (1960)
B.A. 1935, Walla Walla College
M.Ed. 1957, Eastern Washington State College
Ed.D. 1972, University of Idaho

Robert E. Phillips, Professor of Education and Psychology (1970)
B.A. 1969, University of Lethbridge
M.A. 1964, Andrews University
Ed.D. 1975, Boston University

Vernon W. Shafer, Lecturer in Psychology (1977)
B.A. 1962, Walla Walla College
M.A. 1973, University of Southern California
Ph.D. 1978, Ohio State University

David A. Thomas, Assistant Professor of Education (1983)
B.A. 1966, Wayne State University
M.Ed. 1977, Walla Walla College
Ed.D. 1983, Montana State University

Verlie, Y. Ward, Instructor in Education (1983)
B.S. 1971, Union College
M.A. 1977, Andrews University

SPECIALIZATION AREAS (Secondary), CHAIRMEN

Claude C. Barnett, Professor of Physics (1977)
B.S., 1969, Walla Walla College
M.S., 1970, State College of Washington
Ph.D., 1972, Washington State University

Charles V. Bell, Professor of Engineering (1972)
B.S. 1956, Mississippi State University
M.S., 1957, Ph.D. 1961, Stanford University

Chester D. Blake, Professor of Industrial Technology (1966)
B.S., 1962, Walla Walla College
M.A., 1968, San Jose State University
Ed.D., 1985, Washington State University

Reinhard Czertatzi, Associate Professor of Modern Languages (1967)
B.A. 1966, Atlantic Union College
M.A., 1966, Midwestern College

Loren Dickinson, Professor of Communications (1962)
B.A., 1957, Union College
M.A., 1961, University of Nebraska
Ph.D. 1966, University of Denver

Leone C. Hargis, Professor of History (1971)
B.A. 1964, Walla Walla College

Gary M. Hembrough, Associate Professor of Health, Physical and
Recreational Education (1972)
B.A., 1961, Loma Linda University
M.A. 1969, California State University at Fresno

Wilma M. Hepper, Professor of Sociology and Social Work (1973)
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M.A. 1956, Ph.D. 1970, University of Nebraska

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B.S., 1957, Valley City State Teachers College
M.A., 1961, Colorado State College
Ph.D., 1972, University of Northern Colorado

Lionel Lemons, Assistant Professor of Office Administration (1976)
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Elwood L. Mobley, Associate Professor of Library Science and
Director of Libraries (1968)
B.S. 1948, Walla Walla College
M.L.S. 1959, University of Southern California

Roy Miller, Assistant Professor of Business (1983)
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M.B.A., 1981, University of Maryland
THE FACULTY

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Joseph P. Galunsha, Chairman and Professor of Biology (1975)
B.S. 1964, Wabash College
M.A. 1971, Andrews University
D.Phil. 1977, Oxford University

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B.S., M.S., 1974, Andrews University

Jack Dassencio, Assistant Professor of Agriculture (1978)
B.S. 1970, Andrews University
M.S. 1971, University of Minnesota

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Ed.D. 1975, Boston University

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Ph.D. 1968, Ohio State University

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M.Ed. 1977, Wabash College
Ed.D. 1983, Missouri State University

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M.A. 1975, Andrews University

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Ph.D. 1981, Washington State University

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B.S. 1956, Mississippi State University
M.S. 1957, Ph.D. 1961, Stanford University

Chester D. Blake, Professor of Industrial Technology (1986)
B.S. 1981, Wabash College
M.A. 1988, San Jose State University
Ed.D. 1988, Washington State University

Reinhard Czertaczki, Associate Professor of Modern Languages (1967)
B.A. 1964, Atlantic Union College
M.A. 1968, Middlebury College

Loren Dickinson, Professor of Communications (1962)
B.A. 1957, Union College
M.A. 1963, University of Nebraska
Ph.D. 1968, University of Denver

Lorne Glaim, Professor of History (1973)
B.A. 1964, Wabash College

Gary M. Homburg, Associate Professor of Health, Physical and
Recreational Education (1971)
B.A. 1967, Loma Linda University
M.A. 1974, California State University at Fresno

Wilma M. Hopper, Professor of Sociology and Social Work (1973)
B.A. 1970, Union College
M.A. 1984, Ph.D. 1979, University of Nebraska

Malcolm N. Lang, Professor of Mathematics (1975)
B.S. 1977, Valley City State Teachers College
M.A. 1988, Colorado State College
Ph.D. 1972, University of Northern Colorado

Lori Luewen, Assistant Professor of Office Administration (1976)
B.S. 1967, Union College
M.S. 1980, Wabash College

Elwood L. Mobley, Associate Professor of Library Science and
Director of Libraries (1978)
B.S. 1948, Wabash College
M.S. 1959, University of Southern California

Rall Kristner, Assistant Professor of Business (1983)
B.S. 1976, Columbia Union College
M.B.A. 1981, University of Maryland
GENERAL INFORMATION

Walla Walla College is a Christian institution of higher learning operated by the Seventh-day Adventist Church. It is committed to equal opportunity for all students and extends the rights, privileges, programs and activities generally accorded or made available to all members of the college community. Walla Walla College does not discriminate on the basis of handicap, sex, race, color, national and/or ethnic origin in administration of its admissions, educational, financial, employment and student life programs and policies, or any other college-administered program.

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 of 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

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FINANCIAL INFORMATION
Board Actions
All actions voted by the College Board, Faculty, or Finance Committee at any time shall have equal force or, if necessary, supersede statements published in this bulletin.

Payments Required to Register
An advance payment of $1,400 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 $1,400.
Tuition
1 - 12 quarter hours — $142 per quarter hour
The tuition includes all laboratory fees.

General Fee
A general fee of $18 per quarter is charged and student registered for six or more quarter hours which provides student association membership and ID card.

Special Fees
Application Fee, new students (nonrefundable) $15.00

Audit Credit
Regular Tuition

Change of Program (class added or dropped), each 2.00

Classes with numerous or extended field trips Special Fee

Degree, Master's
Diplomas 7.50
M.A. and M.S. thesis binding (two copies) 24.00

In absentia 17.50

Academic Regalia (gown, hood) Actual cost

I.D. Card Replacement 3.00

Late Registration 20.00

(plus $2/day from published registration date)

Transcript
First copy (requests only in writing) Free

Additional Copies, each 2.00

Refunds
A student withdrawing from classes during the quarter will receive the following tuition refunds (general fee not refundable):

* Tuition: 100% through the fourth day of classes after regularly scheduled registration
25% — second week
50% — third and fourth weeks
No tuition is refunded after the fourth week.

* Students dropping all classes during this period will be charged a processing fee of $50 or 5% of tuition, whichever is less.

Room Rent: 80% during first two weeks of quarter
50% between third through fifth weeks
30% between sixth through eighth weeks

The beginning of the quarter will be considered the first day of class instruction.

When a student withdraws during a quarter, no refund will be made until 30 days after the close of the month in which he withdraws. STUDENTS WHO LEAVE SCHOOL WITHOUT COMPLETING WITHDRAWAL PROCEDURES WILL BE CHARGED UNTIL PROPER ARRANGEMENTS ARE MADE.

Past Due Accounts
A finance charge computed at a periodic rate of one percent per month is assessed against a past due account. This is an annual percentage rate of 12 percent.

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 or 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.

Residences
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.

Insurance — Medical, Accident and Hospitalization
Student medical, accident and hospital insurance may be purchased at registration by students enrolling for six or more quarter hours. Students not wanting coverage are required to sign a waiver declining participation. Dependency coverage is available for married students. The premium is charged on the student's first statement of account after his initial enrollment. No changes or refunds are allowed once the information has been sent to the insurance company (two weeks after the first day of classes). Information describing cost, coverage and claim procedures will be supplied each student at registration. Inquiries should be directed to the Student Health Center.

Student Health Center
Clinical facilities are available for students requiring medical attention. 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., etc. Requests for transcripts must be in writing.

Loans, Assistantships
The following loans and assistantships are available, and applications may be obtained from the Student Finance Office.

The Guaranteed Student Loan Program (GSLP). This allows a student to borrow directly from commercial lenders and credit unions. These loans are available to students who are citizens or nationals of the United States, or those at the college for other than a temporary purpose. These loans which have an annual interest rate of 9% do not have to be repaid until 6 months after students status has terminated. For graduate students, the annual loan limit is $5,000, the aggregate limit is $25,000, including undergraduate loans.
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1 - 12 quarter hours — $142 per quarter hour
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16
National Direct Student Loan. The National Direct Student Loan is made available through the United States Department of Education and Walla Walla College. To qualify, the students must have financial need as evidenced by submission of a WWC application for financial aid and Financial Aid Form (FAF) by April. Priority in awarding this aid is given to students with the greatest financial needs. Repayments begin after the applicant's student status terminates. Applications and FAF are available through the college Financial Aid office.

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 an 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 application 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 study is to commence. Failure to do so may result in delay in admission and registration. All forms and transcripts submitted for admission
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become the property of the College and are not returned. Admission forms are available from the Admissions Office.

Eligibility for admission as a graduate student is determined by the Graduate Council of the College upon the recommendations 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 Examination (GRE: Advanced and Advanced Test of General Ability in Psychology and the Aptitude Test or the UAP: Field Test of General Ability and the Aptitude Test. The test scores are used in part to determine eligibility for admission to the Graduate School. Applicants in education must provide transcripts of test scores for the GRE: Advanced Test in Psychology and the Aptitude Test. Applicants in education must provide transcripts of test scores for the GRE: Advanced Test in Education and the Aptitude Test or the UAP: Field Test in Education and the Aptitude Test. Students who intend to pursue a counseling specialization, or whose intended graduate major was psychology, may elect to substitute the Advanced Test in Psychology for the Advanced Test in Education.

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 Examination, 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 credit 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 additional courses. These credits may not apply to a master’s degree.

Graduate Credit for Seniors
Seniors who wish to take graduate number (500) courses must submit for evaluation an approved senior project 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, credit 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 hours is required, at least 33 of which must be earned while in residence.

Credit older than six calendar years usually is 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 hours 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 computed in the grade point average.

Courses numbered 500 or above are primarily for graduate students. A minimum of 24 quarter hours must be earned in courses numbered 500 or above for the Master of Arts and Master of Science degrees. A minimum of 30 quarter hours 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. Usually, not more than 4 quarter hours of lecture (300) or workshop (475) courses will be included in a program. 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.

Second Master’s Degree
The second master’s degree requires a minimum of 30 additional quarter hours with approval of the Graduate Council.

Course Load
The normal load is 12 hours 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
become the property of the College and are not returned. Admission forms are available from the Admissions Office.

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Applicants in biology must provide transcripts of test scores for the GRE: Advanced Test in Biology and the Aptitude Test on the UAP: Field Test in Biology and the Aptitude Test.

Applicants in education must provide transcripts of test scores for the GRE: Advanced Test in Education and the Aptitude Test on the UAP: Field Test in Education and the Aptitude Test in Education. Students who intend to pursue a counseling specialization, or whose undergraduate major was psychology, may elect to substitute the Advanced Test in Psychology for the Advanced Test in Education.

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 credit 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 additional courses. 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 project 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, credit 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 interpretation of graduate study.

Residence and Time Requirements
A minimum of 45 quarter hours is required, at least 33 of which must be earned while in residence.

Credit older than six calendar years usually is not used to satisfy degree requirements, however, a student may submit a request to the 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 hours 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 computed in the grade point average.

Courses numbered 500 or above are primarily for graduate students. A minimum of 24 quarter hours must be earned in courses numbered 500 or above for the Master of Arts and Master of Science degrees. A minimum of 30 quarter hours 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. Usually, not more than 6 quarter hours of Studio (600) or workshop (750) courses will be included in a program. Courses numbered 500-599 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.

Second Master’s Degree
The second master’s degree requires a minimum of 30 additional quarter hours with approval of the Graduate Council.

Course Load
The normal load is 12 hours 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 indicated in the academic calendar. Students dropping after the final withdrawal will receive a W (withdrawal). Students withdrawing from all classes during the quarter will receive Ws.

Transfer of Graduate Credit

A maximum of 12 quarter hours 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 in all course work taken in residence. The transfer credit may be 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 to the 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 consultation with the adviser, and with approval of the Dean of the Graduate Council.

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

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. Arrive for the removal of any undergraduate deficiencies.
2. Complete 9 to 15 quarter hours of approved graduate study with a minimum grade-point average of 3.00. If grade-point earned on this credit do not average 3.00, advancement to candidacy will not be approved.
3. 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 quarter hours.
4. 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, director of admissions and 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.

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 examining 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. It is the candidate's responsibility to schedule written and/or oral examinations with the department chairman.
2. The examinations are coordinated by the chairman of the department and the candidate's advisory committee. Success or failure of the examinations is determined by the examining committee.
3. Questions in the examination will be based on the candidate's areas of study and/or thesis.
4. The time allowed for the oral examination is ordinarily not more than two hours, while written examinations take considerably longer.
5. Any candidate who fails either written or oral examinations may be granted only one opportunity by the examination committee to retake the respective examination after a lapse of at least one quarter.
6. Final examinations should be completed at least two weeks before commencement.
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 indicated in the academic calendar. Students doing passing work prior to withdrawal will receive a W (withdrawal). Students withdrawing from all classes during the quarter will receive Ws.

Transfer of Graduate Credit
A maximum of 12 quarter hours 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 in all course work taken in residence. The transfer credit may be 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.

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

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. Arrive for the removal of any undergraduate deficiencies.
2. Complete 9 to 15 quarter hours of approved graduate study with a minimum grade-point average of 3.00. If grade point earned on this credit do not average 3.0, advancement to candidacy will not be approved.
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4. 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, director of admissions and records and chairman of the Graduate Council.

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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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3. Questions in the examination will be based on the candidate's areas of study and/or thesis.
4. The time allowed for the oral examination is ordinarily not more than two hours, while a written examination take considerably longer.
5. Any candidate who fails either written or oral examinations may be granted only one opportunity by the examination committee to retake the respective examination after a lapse of at least one quarter.
6. Final examinations should be completed at least two weeks before commencement.
CONFERMENT OF DEGREE

The candidate must file in duplicate the order form for the master's degree and academic regalia with the Office of the Dean of the Graduate School. Consult the academic calendar for the last day to file the order form 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 *in absentia* 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 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 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 schoolteachers, 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.
CONFERMENT OF DEGREE

The candidate must file in duplicate the order form for the master’s degree and academic regalia with the Office of the Dean of the Graduate School. Consult the academic calendar for the last day to file the order form prior to the beginning of the final quarter.

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DEPARTMENTS OF INSTRUCTION

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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.
Biol. 401: Plant Physiology
A study of the principles of plant physiology. One laboratory per week. Prerequisite: Biol. 370, Biol. 392.

Biol. 403: Ornithology
Systematic study of native birds of North America, with emphasis on identification, migration, geographical distribution, habits and life histories. Two laboratories per week.

Biol. 405: General Entomology
Study of insect morphology, physiology, ecology and classification. One laboratory per week.

Biol. 412: Plant Anatomy
A study of the microscopic anatomy of plant tissues with emphasis on their origin and development. Emphasizes the vascular plants. Recommended: Biol. 380. One laboratory per week.

Biol. 414: Herpetology
Systematic study of amphibians and reptiles with emphasis on natural history and ecology. Two laboratories per week.

Biol. 424: Systematic Botany
Study of the principles of plant classification, together with a systematic survey of the flowering plants with emphasis on natural history and ecology. Two laboratories per week. One weekend field trip required. (College Persistence Mark — 4 quarter hours; Marine Studies — 5 quarter hours.)

Biol. 426: Limnology
Study of the factors responsible for the presence and distribution of animals and plants in fresh water. Field work includes a number of laboratory exercises and collections of living specimens as well as data analysis. Two laboratories per week.

Biol. 432: Introduction to Paleobiology
Study of earth history as exhibited by the fossils with particular emphasis on paleobiological relationships. Two laboratories per week. Prerequisite: Permission of instructor.

Biol. 444: Malacology
Systematic study of molluscs with emphasis on natural history and ecology. Two laboratories per week.

Biol. 446: General Ecology
Study of the relationship of plants and animals, both as individuals and assemblages, to their physical and biological environment. Field studies designed to examine ecological principles are part of the laboratory work. Two laboratories per week. Prerequisites: Zoology 320, Paleontology 320, and permission of instructor.

Biol. 447: Parasitology
Systematic study of the morphology, life cycle and host-parasite relationships of protozoans, nematodes and arthropod parasites. Two laboratories per week. Prerequisite: Chem. 320, 322, 326.

Biol. 449: Vertebrate Histology
Study of the microscopic anatomy of vertebrate cells, tissues and organs, including reference to their functions. Two laboratories per week.

Biol. 451: Invertebrate Zoology
Study of the biology of invertebrates with emphasis on their ecology, morphology and physiology. Two laboratories per week.

Biol. 459: Psychology
Readings in, and discussion of, current concepts of the biological bases of behavior in animals and man. Material is of a comparative nature with emphasis on innate behavior. One laboratory per week. Prerequisites: Biol. 101, 102, 210 or Biol. 210, 222 and PSYC 130 or permission of instructor. Recommended: Biol. 374.

Biol. 465: Bacteriology
Principles of morphology and function of bacteria. Laboratory work, including unknowns, points out techniques employed in their study. Two laboratories per week. Prerequisite or corequisite: Chem. 321, 322, 326.

Biol. 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 the extent of his study. Permission from the chairman of the department required. One to three hours per quarter; maximum, six.

Biol. 483: Philosophy of Origins and Speciation
Comparison of the various theories on the origin and history of living organisms in light of present scientific knowledge in biochemistry, palentology, morphology, ecology, genetics and other related areas. For majors and minors only. Recommended for senior year.

Biol. 490: Techniques in Field Biology
Study of the techniques used in the collection and preservation of biological specimens for the study of biology. Emphasizes the recording and preservation of ecological data obtained with the collections of specimens. Topics vary depending on the instructor; credit will be given at the rate of one quarter hour for each week spent working in the field.

Biol. 495: Colloquium
A series of talks designed to expose students to modern scientific research and research careers. Each lecture is normally given by a visiting scientist. Six quarters required of all junior- senior and graduate biology majors.

Biol. 501: Research in Biology
Individual work in a field of original research carried out under the direction of one of the instructors. Two to four hours per quarter; maximum, eight.

Biol. 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: Biol. 261.

Biol. 510: Graduate Seminar
Presentation of topics and discussion of current research in specific areas of biology. One credit each quarter; minimum of five, and maximum of six quarters. Spring quarter normally involves a Research Plan and Progress Report for first-year graduate students. See Biology Department for alternate options.

Biol. 511: Biosystematics
A study of the process of classification and its relationship to currently used taxonomic methods and rules of nomenclature.

Biol. 518: Systematic Entomology
A study of the principles of classification of insects. Laboratory work emphasizes identification of orders and families with special problems on the specific level. Recommended prerequisite: Biol. 405. Two laboratories per week.

Biol. 521: Principles of Economic Entomology
An evaluation of the various methods of controlling economically important species. Prerequisite: Biol. 405.

Biol. 522: Cellular Biology
Current knowledge and research in the areas of cell physiology, biochemical genetics, histological genetics and radiation biology will be considered. Two laboratories per week. Prerequisite: Biol. 392.
BIOL 301, 302, 303 or equivalent is prerequisite for all courses listed below.

BIOL 360 MARINE ECOLOGY
Study of interspecific, intraspecific and community relationships demonstrated in marine organisms.

BIOL 422 ICTHYOLOGY
Systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters.

BIOL 423 MARINE BOTANY
Systematic study of plants found in Puget Sound, with a survey of marine plants from other oceans.

BIOL 426 INTRODUCTION TO OCEANOGRAPHY
A physical, chemical and geological study of the ocean and oceanic bodies of life, emphasizing the mutual interactions between the oceanic biotopes and its environment.

BIOL 428 COMPARATIVE PHYSIOLOGY
Comparative study of the physiology and life processes of animals with emphasis on vitamin interactions. Prerequisite: BIOL 302.

BIOL 520 MARINE BIOPHYSICS
Introduction to the physical aspects of marine organisms studied by the experimental and conceptual methods of physics with application to marine life.

BIOL 576 MARINE INVERTEBRATES
A study of the biology of selected groups of marine invertebrates.
BIOL 534 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 relation of photosynthetic processes, nutritional factors, light requirements, respiration and growth will be emphasized.

BIOL 536 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. Prerequisite: Course work in one group of animals or plants or microbes or parasitology. Chemistry courses through organic are highly recommended.

BIOL 541 BEHAVIOR OF MARINE ORGANISMS
A study of interspecific and intraspecific behaviors of marine animals and their behavioral responses to the physical environment. The course involves laboratory experiences, field observations and a research project. Prerequisite: BIOL 270 or BIOL 418 or PSYC 310 and background in organismal biology and psych of the invertebrate.
EDUCATION AND PSYCHOLOGY

The Department of Education and Psychology offers two master's degree programs—the Master of Education, a nonthesis program; and the Master of Arts, a thesis program. These programs permit professional enrichment through liberal course selection in the areas of school administration; elementary, junior high, or secondary instruction; and Counseling.

In addition to the general objectives of the graduate program, the following are specific objectives of the department:

1. To assist the student in developing a philosophy of education consistent with Christian principles.
2. To develop an understanding of the relationship between theoretical concepts and educational processes.

PROGRAM SEQUENCE

The graduate student must assume personal responsibility for initiating all procedures in consultation with an assigned adviser in the Education and Psychology Department. Those working toward a master of arts degree must also follow the thesis requirements as outlined in Departmental Requirements for Programs and Theses.

I. Pre candidacy Level
A. Read all introductory information in this bulletin and follow explicitly the directions given therein.
B. Take the Graduate Record Examination: Aptitude Tests and Advanced Test in Education if these have not been taken previously.
C. Apply to the Office of Admissions and Records for admission to graduate study.
D. Upon acceptance to graduate study, consult with the chairman of Education and Psychology for the assignment of a program adviser.
E. In consultation with the assigned adviser, plan the pre candidacy phase of the program to include each of the following:
   1. Orientation to graduate study in the fall or summer of the first year of grad uate residency.
   2. Arrangements for the removal of all prerequisite deficiencies.
   3. Registration plan for the first 9-15 quarter hours of course work, including Methods of Research.
F. Consult with the credential officer if certification is being contemplated.
G. Taking no more than 12 hours per quarter, complete your first 9-15 quarter hours exclusive of deficiencies and including Methods of Research. Toward the end of the quarter or summer session in which you expect to meet this requirement, prepare with your adviser an Application for Degree Candidacy and Program Approval.

II. Candidacy Level
A. Complete all courses and deficiencies as specified in the approved program of studies. A minimum of 30 approved quarter hours should be earned after advancement to candidacy has been granted by the Graduate Council.

B. In the quarter or summer session immediately before the one in which you plan to complete the program, do each of the following:
   1. Register for Graduate Seminar.
   2. File order form for master's degree with Records Office. (See Academic Calendar for last filing date.)
C. At the beginning of the quarter or summer session in which you plan to graduate, do each of the following:
   1. Submit evidence of experience and certification qualifications.
   2. Arrange with the chairman of Education and Psychology Department for the selection of an examination committee and for an examination date.

MASTER OF EDUCATION (M.Ed.)

The master of education degree is a nonthesis program with a variety of specialized options designed to enhance the professional competencies of practitioners in education.

By careful planning, a qualified candidate may coordinate many of the requirements for the degree with preparation for state certification as a teacher, principal or educational staff associate (counselor). However, completion of minimum degree requirements does not necessarily satisfy certification requirements. Students pursuing a certificate must consult with the credential adviser early in their program sequence.

General Prerequisites (applicable to all M.Ed. programs)

In addition to admission requirements for the master's degree, as described elsewhere in this bulletin, certain background experiences are considered prerequisite for all candidates. Deficiencies may be removed after admission to graduate study but the credit earned thereby will not apply to the minimum degree requirements. A plan for the removal of all prerequisite deficiencies must be submitted prior to advancement to degree candidacy and program approval. It is normally expected that the first of the following prerequisites will precede the second:

1. 30 quarter hours in professional education. Any course, from any department, will satisfy the intent of this requirement if its emphasis is specifically directed toward instructional-learning principles, pupil characteristics, teaching methodology, curriculum materials or the role and function of various school personnel.
2. Not less than nine months of verified, satisfactory educational work experience. Up to 30 quarter hours for the master's degree may be earned prior to the experience, but a minimum of 15 quarter hours must be earned thereafter.
EDUCATION AND PSYCHOLOGY

The Department of Education and Psychology offers two master's degree programs—the Master of Education, a nonthesis program; and the Master of Arts, a thesis program. These programs permit professional enrichment through liberal course selection in the areas of school administration; elementary, junior high, or secondary instruction; and counseling.

In addition to the general objectives of the graduate program, the following are specific objectives of the department:

1. To assist the student in developing a philosophy of education consistent with Christian principles.
2. To develop an understanding of the relationship between theoretical concepts and educational processes.

PROGRAM SEQUENCE

The graduate student must assume personal responsibility for initiating all procedures in consultation with an assigned adviser in the Education and Psychology Department. Those working toward a master of arts degree must also follow the thesis requirements as outlined in Departmental Requirements for Programs and Theses.

I. Pre-candidacy Level
   A. Read all introductory information in this bulletin and follow explicitly the directions given therein.
   B. Take the Graduate Record Examination: Aptitude Tests and Advanced Tests in Education if these have not been taken previously.
   C. Apply to the Office of Admissions and Records for admission to graduate study.
   D. Upon acceptance to graduate study, consult with the chairman of Education and Psychology for the assignment of a program adviser.
   E. In consultation with the assigned adviser, plan the pre-candidacy phase of the program to include each of the following:
      1. Orientation to graduate study in the fall or summer of the first year of graduate residence.
      2. Arrangements for the removal of all prerequisite deficiencies.
      3. Registration plans for the first 9-15 quarter hours of course work, including Methods of Research.
   F. Consult with the credential officer if certification is being contemplated.
   G. Taking no more than 12 hours per quarter, complete your first 9-15 quarter hours exclusive of deficiencies and including Methods of Research. Toward the end of the quarter or summer session in which you expect to meet this requirement, prepare with your adviser an Application for Degree Candidacy and Program Approval.

II. Candidacy Level
   A. Complete all courses and deficiencies as specified in the approved program of studies. A minimum of 30 approved quarter hours should be earned after advancement to candidacy has been granted by the Graduate Council.
   B. In the quarter or summer session immediately before the one in which you plan to complete the program, do each of the following:
      1. Register for Graduate Seminar.
      2. File order form for master's degree with Records Office. (See Academic Calendar for last filing date.)
   C. At the beginning of the quarter or summer session in which you plan to graduate, do each of the following:
      1. Submit evidence of experience and certification qualifications.
      2. Arrange with the chairman of Education and Psychology Department for the selection of an examination committee and for an examination date.

MASTER OF EDUCATION (M.Ed.)

The master of education degree is a nonthesis program with a variety of specialized options designed to enhance the professional competency of practitioners in education.

By careful planning, a qualified candidate may coordinate many of the requirements for the degree with preparation for state certification as a teacher, principal or educational staff associate (counselor). However, completion of minimum degree requirements does not necessarily satisfy certification requirements. Students pursuing a certificate must consult with the credential adviser early in their program sequence.

General Prerequisites (applicable to all M.Ed. programs)

In addition to admission requirements for the master's degree, as described elsewhere in this bulletin, certain background experiences are considered prerequisite for all candidates. Deficiencies may be removed after admission to graduate study but the credit earned thereby will not apply to the minimum degree requirements. A plan for the removal of all prerequisite deficiencies must be submitted prior to advancement to degree candidacy and program approval. It is normally expected that the first of the following prerequisites will precede the second one:

1. 30 quarter hours in professional education. Any course, from any department, will satisfy the intent of this requirement if its emphasis is specifically directed toward instructional-learning principles, pupil characteristics, teaching methodology, curriculum materials or the role and function of various school personnel.
2. Not less than nine months of verified, satisfactory educational work experience. Up to 30 quarter hours for the master's degree may be earned prior to the experience, but a minimum of 15 quarter hours must be earned thereafter.

To be acceptable, the work experience must come from full-time involvement with the professional or paraprofessional academic processes which usually take place in schools or other educational service settings.
agencies. Activities such as classroom teaching, school administration, library work, counseling or work as a dormitory dean will be considered according to its pertinence to the candidate’s chosen area of specialization.

Verification of the experience must be by letter from an administrator under whom the experience was gained. The letter should attest to the time spent, the nature of the activities, and the quality of performance. It is the responsibility of the candidate to obtain this verification.

Other specific prerequisites should also be noted for each area of specialization.

**Basic Requirements (applicable to all M.Ed. programs)**

Unless otherwise indicated, a minimum M.Ed. program comprises 45 quarter hours. Some programs may include more than this minimum because of the nature of the degree or to provide for the particular needs and interests of the student.

Two-thirds of the minimum 45 quarter hours must be from courses numbered 400 and above. Graduate credit is not granted for courses below the 350 level unless such courses have been specifically approved by the Graduate Council.

All courses included in the degree program must be approved by an assigned adviser in the Education and Psychology Department.

Each program must contain at least 21 quarter hours in basic and professional education courses distributed as follows:

- 10 quarter hours in basic courses required of all candidates.
- EDUC 561 Methods of Research (before advancement to candidacy)
- EDUC 522 Philosophy of Education (before advancement to candidacy)
- EDUC 500 Graduate Seminar (toward the end of the program)
- PSYC 521 Psychology of Learning
- OR EDUC 525 Education in the Twentieth Century

11 quarter hours in professional education courses as defined under General Prerequisites, No. 1. These 11 quarter hours are additional to those earned to satisfy the basic requirements above. However, they may be an exclusive part of, and not necessarily additional to, professional education courses which may be specified for a chosen area of specialization.

A no-credit orientation to graduate study is required of all candidates either in the fall or summer of the first year of residency, whichever comes first.

Upon completion of 9 to 15 quarter hours, a planned program of study must be submitted for consideration by the staff of the department. Recommendations will then be made to the Graduate Council concerning advancement to degree candidacy.

All candidates who do not already qualify for a certificate must complete the...
EDUCATION AND PSYCHOLOGY

agencies. Activities such as classroom teaching, school administration, library work, counseling or work as a dormitory dean will be considered according to its pertinence to the candidate's chosen area of specialization.

Verification of the experience must be by letter from an administrator under whom the experience was gained. The letter should attest to the time spent, the nature of the activities, and the quality of performance. It is the responsibility of the candidate to obtain this verification.

Other specific prerequisites should also be noted for each area of specialization.

Basic Requirements (applicable to all M.Ed. programs)

Unless otherwise indicated, a minimum M.Ed. program comprises 45 quarter hours. Some programs may include more than this minimum because of the nature of the degree or to provide for the particular needs and interests of the student.

Two-thirds of the minimum 45 quarter hours must be from courses numbered 400 and above. Graduate credit is not granted for courses below the 350 level unless such courses have been specifically approved by the Graduate Council.

All courses included in the degree program must be approved by an assigned adviser in the Education and Psychology Department.

Each program must contain at least 22 quarter hours in basic and professional education courses distributed as follows:

10 quarter hours in basic courses required of all candidates.
EDUC 561 Methods of Research (before advancement to candidacy)
EDUC 522 Philosophy of Education (before advancement to candidacy)
EDUC 508 Graduate Seminar (toward the end of the program)
PSYC 521 Psychology of Learning
OR EDUC 525 Education in the Twentieth Century

11 quarter hours in professional education courses as defined under General Prerequisites, No. 1. These 11 quarter hours are additional to those earned to satisfy the basic requirements above. However, they may be an exclusive part of, and not necessarily, additional to, professional education courses which may be specified for a chosen area of specialization.

A no-credit orientation to graduate study is required of all candidates either in the fall or summer of the first year of residency, whichever comes first.

Upon completion of 9 to 15 quarter hours, a planned program of study must be submitted for consideration by the staff of the department. Recommendations will then be made to the Graduate Council concerning advancement to degree candidacy.

All candidates who do not already qualify for a certificate must complete the

EDUCATION AND PSYCHOLOGY

academic requirements for state certification as a teacher, principal or educational staff associate before the degree is granted. It is not necessary to be in possession of the certificate before graduation, but eligibility must be established in all respects except that of citizenship. Preparation for the certificate will normally be according to Washington State requirements for either the provisional (initial) or standard (continuing) level. Candidates from out-of-state may produce evidence of qualifying in the state, province or country of their intended future educational employment if a specific certification program exists therein. Otherwise, they must meet the Washington State requirements.

Areas of Specialization

Programs of specialization are sufficiently flexible to meet individual needs while at the same time providing a basic core of substantive fifth-year experience applicable to various state certificates.

Specializations may be planned in the following approved areas:

School Administration
Secondary Instruction in:

Counseling and Guidance
- Biology
- Biophysics
- Business
- Chemistry
- English
- History
- Industrial Arts
- Language
- Arts
- Mathematics
- Physical Education
- Physics
- Social Sciences

Elementary Instruction

Special Education

Junior High Instruction

A candidate wishing to pursue a specialization in an area other than any listed above may submit for consideration by the department staff and the Graduate Council an individualized self-planned proposal itemizing at least 24 quarter hours in the chosen specialization area. Additional supporting credit as needed to complete the degree will be selected in harmony with all other specified degree requirements. It is essential that this type of program be planned in consultation with an assigned adviser in the Department of Education and Psychology.

School Administration

Specialization Prerequisites: Three years of satisfactory certificated classroom teaching. Must have acquired all qualifications for a state-approved teaching certificate.

Area Requirements: 24 quarter hours in courses related to school administration, supervision, curriculum and counseling. Must include the following courses unless they were a part of the undergraduate sequence:

EDUC 501 Elementary Curriculum
EDUC 508 Secondary Curriculum
EDUC 526 School Finance
EDUC 544 Administration of the Elementary School
OR EDUC 551 Administration of the Secondary School

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EDUC 559 Supervision
EDUC 590 School Law
EDUC 556 Curriculum Planning
PSYC 444 Social Psychology

11 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

EDUC 560 Administrative Practicum does not apply toward the minimum of 45 quarter hours.

Counseling and Guidance (50 quarter hours minimum)

Specialization Prerequisites:

EDUC 210 Foundations of Education 3
PSYC 220 Educational Psychology 4
PSYC 350 Elementary Statistics 4
PSYC 430 Psychological Testing 3
PSYC 472 Psychology of Childhood and Adolescence 4

Basic Requirements:

EDUC 561 Methods of Research 3
EDUC 522 Philosophy of Education 3
EDUC 500 Graduate Seminar 1
EDUC 521 Psychology of Learning 3

Counseling Core:

PSYC 410 Behavior Modification 3
EDUC 426 Principles and Procedures of Guidance 3
PSYC 431 Psychology of Exceptional Children 3
PSYC 489 Vocational Development Theory 3
PSYC 515 Counseling Theories and Techniques 3
PSYC 518 Group Counseling 2

Special Education Counseling Emphasis:

PSYC 533 Assessment and Instruction of Exceptional Students 4
EDUC 537 Instruction of Exceptional Students 4
PSYC 538 Counseling Exceptional Students and Parents 25
PSYC 563 Field Experience 3
PSYC 565 Practicum 6

School Counseling Emphasis:

PSYC 534 Assessment of the Individual 2
PSYC 563 Field Experience 3
PSYC 565 Practicum 6

Additional supporting courses from education and psychology, and/or from other departments, as needed to complete a minimum of 50 quarter hours specified for the counseling specialization.

The degree in counseling requires completion of the Educational Staff Associate certification program as approved by the State of Washington.

Elementary Instruction

Specialization Prerequisites: A major in elementary education or an equivalent concentration of 45 quarter hours.

Area Requirements: 11 quarter hours in professional education courses as defined under General Prerequisites No. 1. EDUC 390 Educational Evaluation or its equivalent must be included if it was not a part of the undergraduate sequence.

15 quarter hours in academic content courses from departments other than education and psychology. These courses must be in subject-matter areas relevant to the content of the elementary curriculum.

9 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Elementary Instruction - Special Education

This emphasis is designed to meet the special education endorsement for certification in the State of Washington.

Specialization Prerequisites: A major in elementary education or an equivalent concentration of 45 quarter hours, and PSYC 431 Psychology of Exceptional Children.

Area Requirements:

SPED 553 Assessment of Exceptional Students 4
SPED 557 Instruction of Exceptional Children 4
SPED 558 Counseling Exceptional Students 3
SPED 578 Field Work and Teaching in Special Education 8
FETH 324 Adaptive Physical Education and Recreation 8
(Fore endorser, not for graduate credit) 3
PSYC 410 Behavior Modification 3

10 additional quarter hours in supporting courses from education and psychology, and/or from other departments as needed to complete the minimum of 45 quarter hours.

Junior High Instruction

Specialization Prerequisites: Majors and/or minors in two content areas above for this specialization, or two equivalent subject-matter concentra-
EDUC 559 Supervision  
EDUC 560 School Law  
EDUC 556 Curriculum Planning  
PSYC 444 Social Psychology

11 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

EDUC 560 Administrative Practicum does not apply toward the minimum of 45 quarter hours.

### Counseling and Guidance (50 quarter hours minimum)

#### Specialization Prerequisites:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EDUC 210</td>
<td>Foundations of Education</td>
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<tr>
<td>PSYC 220</td>
<td>Educational Psychology</td>
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<tr>
<td>PSYC 350</td>
<td>Elementary Statistics</td>
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<tr>
<td>PSYC 430</td>
<td>Psychological Testing</td>
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<tr>
<td>PSYC 452</td>
<td>Psychology of Childhood and Adolescence</td>
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#### Basic Requirements:

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<th>Course</th>
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<tbody>
<tr>
<td>EDUC 561</td>
<td>Methods of Research</td>
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<tr>
<td>EDUC 522</td>
<td>Philosophy of Education</td>
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<td>EDUC 500</td>
<td>Graduate Seminar</td>
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<td>EDUC 521</td>
<td>Psychology of Learning</td>
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#### Counseling Core:

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<th>Course</th>
<th>Units</th>
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<tr>
<td>PSYC 410</td>
<td>Behavior Modification</td>
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<tr>
<td>EDUC 426</td>
<td>Principles and Procedures of Guidance</td>
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<tr>
<td>PSYC 431</td>
<td>Psychology of Exceptional Children</td>
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<tr>
<td>PSYC 489</td>
<td>Vocational Development Theory</td>
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<tr>
<td>PSYC 515</td>
<td>Counseling Theories and Techniques</td>
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<td>PSYC 518</td>
<td>Group Counseling</td>
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### Special Education Counseling Emphasis:

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<th>Course</th>
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<tbody>
<tr>
<td>PSYC 533</td>
<td>Assessment and Instruction of Exceptional Students</td>
</tr>
<tr>
<td>EDUC 537</td>
<td>Instruction of Exceptional Students</td>
</tr>
<tr>
<td>PSYC 538</td>
<td>Counseling Exceptional Students and Parents</td>
</tr>
<tr>
<td>PSYC 563</td>
<td>Field Experience</td>
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<td>PSYC 565</td>
<td>Practicum</td>
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#### School Counseling Emphasis:

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<th>Course</th>
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<tr>
<td>PSYC 534</td>
<td>Assessment of the Individual</td>
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<tr>
<td>PSYC 563</td>
<td>Field Experience</td>
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<td>PSYC 565</td>
<td>Practicum</td>
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</tbody>
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### Additional Supporting courses from education and psychology, and/or from other departments, as needed to complete a minimum of 50 quarter hours specified for the counseling specialization.

The degree in Counseling requires completion of the Educational Staff Associates certification program as approved by the State of Washington.

#### Elementary Instruction

### Specialization Prerequisites:

A major in elementary education or an equivalent concentration of 45 quarter hours.

#### Area Requirements:

11 quarter hours in professional education courses as defined under General Prerequisites No. 1. EDUC 390 Educational Evaluation or its equivalent must be included if it was not a part of the undergraduate sequence.

15 quarter hours in academic content courses from departments other than education and psychology. These courses must be in subject-matter areas relevant to the content of the elementary curriculum.

9 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

#### Elementary Instruction — Special Education

This emphasis is designed to meet the special education endorsement for certification in the State of Washington.

### Special Education Prerequisites:

A major in elementary education or an equivalent concentration of 45 quarter hours, and PSYC 431 Psychology of Exceptional Children.

#### Area Requirements:

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<th>Course</th>
<th>Units</th>
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<td>SPED 533</td>
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<tr>
<td>SPED 578</td>
<td>Field Work and Teaching in Special Education</td>
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<tr>
<td>PHYS 524</td>
<td>Adaptive Physical Education and Recreation (For endorsement, not for graduate credit)</td>
</tr>
<tr>
<td>PSYC 410</td>
<td>Behavior Modification</td>
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</tbody>
</table>

16 additional quarter hours in supporting courses from education and psychology, and/or from other departments as needed to complete the minimum of 45 quarter hours.

#### Senior High Instruction

### Specialization Prerequisites:

Majors and/or minors in two content areas chosen for this specialization, or two equivalent subject-matter concentra-
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tions with a minimum of 27 quarter hours each. The two content areas must be in academic subjects commonly taught at junior high level.

Area Requirements: 11 quarter hours in professional education courses as defined under General Prerequisites No. 1. If not as possible, these courses should be related to junior high curriculum and instruction.

15 quarter hours in academic content courses from two departments other than education and psychology. These courses must be in the same general areas as the two prerequisite content areas specified above.

9 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Secondary Instruction

Specialization Prerequisites: A major in the area of content specialization or an equivalent concentration of 45 quarter hours.

Area Requirements: 24 quarter hours in academic content courses related to an approved area of specialization. All courses for the 24 quarter hours specialization must be chosen in consultation with and approved by an advisor in the department(s) concerned.

In specialization where only one content area is emphasized (e.g., English), up to 6 of the 24 quarter hours may be selected from not more than two supporting departments other than the major area of emphasis. In interdisciplinary areas (*), courses must be distributed among areas listed in parentheses according to the needs and interests of the candidates.

The approved areas of specialization are:

- Biology
- Biophysics (biology, chemistry, engineering, mathematics, physics)
- Chemistry
- Business Teacher Education
- English
- History
- Industrial Arts
- Language Arts (English, communications, journalism, library science)
- Mathematics
- Physical Education
- Physics
- Social Science (history, political science, sociology)

11 quarter hours in professional education courses as defined under General Prerequisites No. 1. If not as possible, these courses should be related to secondary curriculum and instruction. All professional education courses must be approved by an assigned adviser in the Education and Psychology Department.

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MASTER OF ARTS—IN EDUCATION (M.A.)

In the master of arts program, educators and others with appropriate backgrounds may specialize within an approved general area of education according to their interests. The inclusion of a thesis requirement provides an opportunity for the development of scholarly investigative and reporting skills. It particularly serves those wishing to contribute to knowledge through research, or those aspiring toward a higher degree beyond the master’s. Qualified candidates seeking denominational or state certification as a teacher, principal or counselor may coordinate many of the requirements of the degree with preparation for the certificate. However, completion of minimum M.A. requirements will rarely satisfy certification requirements in their entirety. Students pursuing a certificate of any kind should consult with the credential advisor early in their program sequence.

Prerequisites

In addition to admission requirements for the master’s degree program, as described elsewhere in this bulletin, an M.A. candidate must meet the prerequisites listed under the chosen area of specialization. Unless specifically noted, there are no requirements with respect to work experience or certification either prior to or during the degree program.

Deficiencies with respect to specialization prerequisites may be removed after admission to graduate study, but the credit earned thereby will not apply to the minimum degree requirements. A plan for the removal of all deficiencies must be submitted prior to advancement to degree candidacy and program approval.

Basic Requirements (applicable to all M.A. programs)

Unless otherwise indicated, a minimum M.A. program comprises 45 quarter hours of credit. Some programs may include more than this minimum because of the nature of the specialization or to provide for the particular needs and interests of the student.

A minimum of 24 quarter hours for the M.A. degree must be from courses numbered 580 and above.

All courses included in the degree program must be approved by an assigned adviser in the Education and Psychology Department.

The following courses are required for all candidates:

- EDUC 500 Graduate Seminar toward the end of the program
- EDUC 522 Philosophy of Education (before advancement to candidacy)
- EDUC 551 Methods of Research (before advancement to candidacy)
- EDUC 590 Thesis

An on-credit orientation to graduate study is required of all candidates either in the fall or summer of the first year of residency, whichever comes first. Upon completion of 9 to 15 quarter hours, a planned program of study must be submitted for consideration by the staff of the department. Recom-
EDUCATION AND PSYCHOLOGY

ations with a minimum of 27 quarter hours in each. The two content areas must be in academic subjects commonly taught at junior high level.

Area Requirements: 11 quarter hours in professional education courses as defined under General Prerequisites No. 1. Insofar as possible, these courses should be related to junior high curriculum and instruction.

15 quarter hours in academic content courses from two departments other than education and psychology. These courses must be in the same general areas as the two prerequisite content areas specified above.

9 additional quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Secondary Instruction

Specialization Prerequisites: A major in the area of content specialization or an equivalent concentration of 45 quarter hours.

Area Requirements: 24 quarter hours in academic content courses related to an approved area of specialization. All courses for the 24 quarter hours specialization must be chosen in consultation with and approved by an advisor in the department(s) concerned.

In specialization where only one content area is emphasized (e.g., English), up to 6 of the 24 quarter hours may be selected from not more than two supporting departments other than the major area of emphasis. In interdisciplinary areas (*), courses must be distributed among areas listed in parentheses according to the needs and interests of the candidates.

The approved areas of specialization are:

Biology
*Biophysics (biology, chemistry, engineering, mathematics, physics)

Chemistry

Business Teacher Education

English

History

Industrial Arts

*Language Arts (English, communications, journalism, library science)

Mathematics

Physical Education

Physical Science

*Social Science (history, political science, sociology)

11 quarter hours in professional education courses as defined under General Prerequisites No. 1. Insofar as possible, these courses should be related to secondary curriculum and instruction. All professional education courses must be approved by an assigned advisor in the Education and Psychology Department.

MASTER OF ARTS—IN EDUCATION (M.A.)

In the master of arts program, educators and others with appropriate backgrounds may specialize in an approved general area of education according to their interests. The inclusion of a thesis requirement provides an opportunity for the development of scholarly investigative and reporting skills. It particularly serves those wishing to contribute to knowledge through research, or those aspiring toward a higher degree beyond the master's.

Qualified candidates seeking denominational or state certification as a teacher, principal or counselor may coordinate many of the requirements of the degree with preparation for the certificate. However, completion of minimum M.A. requirements will rarely satisfy certification requirements in their entirety. Students pursuing a certificate of any kind should consult with the credential advisor early in their program sequence.

Prerequisites

In addition to admission requirements for the master's degree program, as described elsewhere in this bulletin, an M.A. candidate must meet the prerequisites listed under the chosen area of specialization. Unless specifically noted, there are no requirements with respect to work-experience or certification either prior to or during the degree program.

Deficiencies with respect to specialization prerequisites may be removed after admission to graduate study, but the credit earned thereby will not apply to the minimum degree requirements. A plan for the removal of all deficiencies must be submitted prior to advancement to degree candidacy and program approval.

Basic Requirements (applicable to all M.A. programs)

Unless otherwise indicated, a minimum M.A. program comprises 45 quarter hours of credit. Some programs may include more than this minimum because of the nature of the specialization or to provide for the particular needs and interests of the student.

A minimum of 24 quarter hours for the M.A. degree must be from coursework numbered 500 and above. All courses included in the degree program must be approved by an assigned advisor in the Education and Psychology Department.

The following courses are required of all candidates:

EDUC 500 Graduate Seminar toward the end of the program

EDUC 522 Philosophy of Education (before advancement to candidacy)

EDUC 561 Methods of Research (before advancement to candidacy)

EDUC 590 Thesis

A 2-credit orientation to graduate study is required of all candidates either in the fall or summer of the first year of residency, whichever comes first.

Upon completion of 9 to 15 quarter hours, a planned program of study must be submitted for consideration by the staff of the department. Recommend-
mandations will then be made to the Graduate Council concerning advancement to degree candidacy.

Areas of Specialization

The program of study for the area of specialization is planned in consultation with the departmental advisor to meet the individual needs and interests of each student. A minimum of 18 quarter hours is required in the chosen area. For many candidates, additional specialization credit beyond the minimum of 18 quarter hours may be desirable or necessary, especially if certification is also being sought. Specializations may be planned in the following approved areas:

School Administration

Specialization Prerequisites: 3 years of satisfactory, certified classroom teaching.

Area Requirements: 18 quarter hours in courses related to school administration and supervision.

12 quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Although EDUC 560 Administrative Practicum is required for candidates working toward a Washington State principal’s credential, it does not apply toward the minimum of 45 quarter hours.

Curriculum and Instruction

Specialization Prerequisites: 30 quarter hours in professional education. Any course from any department, will satisfy the intent of this requirement if its emphasis is specifically directed toward instructional-learning principles, pupil characteristics, teaching methodology, curriculum materials, or the role and function of various school personnel.

Not less than nine months of verified, satisfactory educational work experience. Up to 38 quarter hours for the M. A. degree may be earned prior to the experience, but a minimum of 15 quarter hours must be earned thereafter.

Verification of the experience must be by letter from an administrator under whom the experience was gained. The letter should attest to the time spent, the nature of the activities and the quality of performance. It is the responsibility of the candidate to obtain this verification.

Area Requirements: 18 quarter hours in professional education courses as defined under specialization prerequisites, above. Insofar as possible, emphasis should be directed toward one of the following: preschool, elementary, junior high, secondary or higher education. 12 quarter hours in supporting academic content courses from departments other than education and psychology. These courses must be in subject-matter clearly related to the area of emphasis chosen for specialization. On the junior high, secondary and higher education levels, supporting courses must be from not more than two content areas.

Educational Foundations

Specialization Prerequisites: A minor in psychology or sociology, or an equivalent concentration of 28 quarter hours in one of these areas. Six quarter hours in philosophy and 3 quarter hours in educational psychology. These quarter hours may be an inclusive part of, and not necessarily additional to, the minor prerequisite stated above.

Area Requirements: 18 quarter hours in not more than two of the following areas: historical, philosophical, sociological and psychological foundations of education.

Candidates specializing in psychological foundations should choose courses related to learning, development, measurement and statistics.

12 quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Counseling and Guidance (50 quarter hours minimum)

Specialization Prerequisites: A minor in psychology or an equivalent 28 quarter hours including elementary statistics and a course in child and adolescent development.

15 quarter hours in professional education, as defined under the Specialization Prerequisites for Curriculum and Instruction. These quarter hours may be an inclusive part of, and not necessarily additional to, the minor prerequisite stated above.

Area Requirements: 18 quarter hours in courses related to counseling, psychology and guidance activities or theory. Must include courses in counseling techniques, measurement theory and assessment skills.

6 quarter hours in PSYC 56S Practicum in Counseling.

12 quarter hours in supporting courses from education and psychology and/or from other departments, as needed to complete the minimum of 50 quarter hours specified for the counseling specialization.

Individualized Option

A candidate wishing to pursue a specialization in an area other than any listed above may submit for consideration by the departmental staff and the Graduate Council an individualized self-designed proposal itemizing at least 18 quarter hours in a chosen specialization area with appropriate prerequisites. Additional supporting credits, as needed to complete the degree, will be selected in harmony with all other specified degree requirements. It is essential that this type of program be planned in consultation with an assigned advisor in the Department of Education and Psychology.

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EDUCATION AND PSYCHOLOGY

mandations will then be made to the Graduate Council concerning advancement to degree candidacy.

Areas of Specialization

The program of study for the area of specialization is planned in consultation with the departmental advisor to meet the individual needs and interests of each student. A minimum of 18 quarter hours is required in the chosen area. For many candidates, additional specialization credit beyond the minimum of 18 quarter hours may be desirable or necessary, especially if certification is also being sought.

Specializations may be planned in the following approved areas:

School Administration

Specialization Prerequisites: Three years of satisfactory, certificated classroom teaching.

Area Requirements: 18 quarter hours in courses related to school administration and supervision.

12 quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Although EDUC 560 Administrative Practicum is required for candidates working toward a Washington State principal's credential, it does not apply toward the minimum of 45 quarter hours.

Curriculum and Instruction

Specialization Prerequisites: 30 quarter hours in professional education. Any course from any department, will satisfy the intent of this requirement if its emphasis is specifically directed toward instructional-learning principles, pupil characteristics, teaching methodology, curriculum materials, or the role and function of various school personnel.

Not less than nine months of verified, satisfactory educational work experience. Up to 36 quarter hours for the M.A. degree may be earned prior to the experience, but a minimum of 15 quarter hours must be earned thereafter.

Verification of the experience must be by letter from an administrator under whom the experience was gained. The letter should attest to the time spent, the nature of the activities, and the quality of performance. It is the responsibility of the candidate to obtain this verification.

Area Requirements: 18 quarter hours in professional education courses as defined under specialization prerequisites, above. Insofar as possible, emphasis should be directed toward one of the following: preschool, elementary, junior high, secondary or higher education. 12 quarter hours in supporting academic content courses from departments other than education and psychology. These courses must be in subject-matter clearly related to the area of emphasis chosen for specialization. On the junior high, secondary and higher education levels, supporting courses must be from more than two content areas.

Educational Foundations

Specialization Prerequisites: A minor in psychology or sociology, or an equivalent concentration of 30 quarter hours in one of these areas. 6 quarter hours in philosophy and 3 quarter hours in educational psychology. These quarter hours may be an inclusive part of, and not necessarily additional to, the minor prerequisite stated above.

Area Requirements: 18 quarter hours in not more than two of the following areas: historical, philosophical, sociological and psychological foundations of education.

Candidates specializing in psychological foundations should choose courses related to learning, development, measurement and statistics.

12 quarter hours in supporting courses from education and psychology, and/or from other departments, as needed to complete the minimum of 45 quarter hours.

Counseling and Guidance (30 quarter hours minimum)

Specialization Prerequisites: A minor in psychology or an equivalent 28 quarter hours including elementary statistics and a course in child and adolescent development.

15 quarter hours in professional education, as defined under the Specialization Prerequisites for Curriculum and Instruction. These quarter hours may be an inclusive part of, and not necessarily additional to, the minor prerequisite stated above.

Area Requirements: 18 quarter hours in courses related to counseling, psychology and guidance activities and theory. Must include courses in counseling techniques, measurement theory and assessment skills.

6 quarter hours in PSYC 565 Practicum in Counseling.

12 quarter hours in supporting courses from education and psychology and/or from other departments, as needed to complete the minimum of 30 quarter hours specified for the counseling specialization.

Individualized Option

A candidate wishing to pursue a specialization in an area other than any listed above may submit for consideration by the departmental staff and the Graduate Council an individualized self-planned proposal itemizing at least 18 quarter hours in a chosen specialization area with appropriate prerequisites. Additional supporting credits, as needed to complete the degree, will be selected in harmony with all other specified degree requirements. It is essential that this type of program be planned in consultation with an assigned advisor in the Department of Education and Psychology.
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 initial and continuing 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 consultants.

Requirements for Continuing Certificate—Fifth Year
To be recommended for the Washington continuing certificate, the candidate must fulfill the following requirements:
1. Hold a valid Washington provisional initial certificate.
2. Complete three years of successful teaching.
3. Complete an approved competency based program of 45 quarter hours beyond the provisional initial certificate.

Of the 45 quarter hours, 21 must be in residence; 30 may be earned prior to the first year of teaching; at least 15 quarter hours must be earned after the first year of teaching.

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 continuing certificate.

COURSES IN EDUCATION
EDUC 266 ELEMENTARY TUTORING 1-3
Supervised teaching experience on a one-to-one or small-group basis providing opportunity to develop and demonstrate teaching competence and selection of appropriate teaching strategies in an elementary school classroom. (8 or NC only)

EDUC 267 SECONDARY TUTORING 1-3
Supervised teaching experience on a one-to-one or small group basis providing opportunity to develop and demonstrate teaching competence and selection of appropriate teaching strategies in a secondary school classroom. (8 or NC only)

EDUC 361 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL 3
A study of issues currently important in language arts education, with emphasis on research and practical implications for teaching, functions and programs of the language arts in the elementary school curriculum.

EDUC 362 READING IN THE ELEMENTARY SCHOOL 4
A basic course stressing current theory, effective instructional procedures, learning resources and tutoring experience for teachers of reading in the primary and intermediate grades of the elementary school.

EDUC 372 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.

LIBR 374 LIBRARY MATERIALS FOR CHILDREN 3
See the Library Science section of the undergraduate bulletin.

ENGL 375 LITERATURE IN THE ELEMENTARY SCHOOL 3
See the English section of the undergraduate bulletin.

EDUC 377 CLASSROOM MANAGEMENT 3
In production to varied structuring of the learning environment and the special considerations required in small schools and multiple classrooms. Explores the human relations within the teaching profession.

EDUC 380 EDUCATIONAL EVALUATION 3
Introduction to philosophic and techniques of evaluating classroom activities in elementary and secondary schools.

EDUC 401 HISTORY OF EDUCATION 2
Survey of the history of education.

EDUC 426 PRINCIPLES AND PROCEDURES OF GUIDANCE 3
Introduction to the philosophy, functions, organization and evaluation of guidance programs.

EDUC 428 HANDWORK ACTIVITIES IN THE ELEMENTARY SCHOOL 3
See the Industrial Technology section of the undergraduate bulletin.

SOCI 444 SOCIOLOGY OF EDUCATION 3
See the Sociology and Social Work section of the undergraduate bulletin.

EDUC 450 SOCIAL STUDIES, RELIGION, SCIENCE AND HEALTH IN THE ELEMENTARY SCHOOL 4
Examination of current materials and methodology used in the elementary curriculum in the areas of social studies, religion, science and health. Classroom observation and teaching will be required.

EDUC 452 DIRECTED TEACHING—In Service 6
Directed laboratory experience for a teacher desiring to improve his professional skills. Includes training in methods of analysis and practice in methods of self-analysis. Registration only by permission of the Student Teaching Committee after completion of the required courses in professional education.

EDUC 461 METHODS OF A/V INSTRUCTION 2
Survey of the methods of instruction through the use of audio-visual aids.

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

EDUC 472 METHODS OF SCHOOL HEALTH INSTRUCTION 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

PHIS 472 PHYSICAL EDUCATION IN THE SECONDARY SCHOOL 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

PHIS 473 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

42S WORKSHOP 1-3, 6
Workshop in selected areas of educational concern. Designed for both experienced teachers and those preparing to enter the teaching profession. One to three quarter hour maximum. 6, 24 quarter hours.

EDUC 475 TEACHING READING SKILLS IN CONTENT AREAS 3
Introduction to diagnosis, vocabulary, comprehension skills, rate variation, management and study skills in junior high and secondary reading.

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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 initial and continuing 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 coordinators.

Requirements for Continuing Certificate—Fifth Year

To be recommended for the Washington continuing certificate, the candidate must fulfill the following requirements:

1. Hold a valid Washington provisional initial certificate.
2. Complete three years of successful teaching.
3. Complete an approved competency-based program of 45 quarter hours beyond the provisional initial certificate.

Of the 45 quarter hours, 21 must be in residence; 30 may be earned prior to the first year of teaching; at least 15 quarter hours must be earned after the first year of teaching.

The fifth-year program must be planned by authorized personnel in the Education Department. By careful planning, 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 continuing certificate.

COURSES IN EDUCATION

EDUC 201 ELEMENTARY TUTORING 1.3
Supervised teaching experience on a one-to-one or small-group basis providing opportunity to develop and demonstrate teaching competence and selection of appropriate teaching strategies in an elementary school classroom. (S or NC, only)

EDUC 202 SECONDARY TUTORING 1.3
Supervised teaching experience on a one-to-one or small-group basis providing opportunity to develop and demonstrate teaching competence and selection of appropriate teaching strategies in a secondary school classroom. (S or NC, only)

EDUC 331 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL 3
A study of issues currently important in language arts education, with emphasis on research and practical implications for teaching, functions and programs of the language arts in the elementary school curriculum.

EDUC 332 READING IN THE ELEMENTARY SCHOOL 3
A basic course utilizing current theory, effective instructional procedures, learning resources and tutoring experience for teachers of reading in the primary and intermediate grades of the elementary school.

EDUC 335 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.

LIBR 374 LIBRARY MATERIALS FOR CHILDREN
See the Library Science section of the undergraduate bulletin.

ENGL 375 LITERATURE IN THE ELEMENTARY SCHOOL
See the English section of the undergraduate bulletin.

EDUC 375 CLASSROOM MANAGEMENT 3
See the English section of the undergraduate bulletin.

EDUC 390 EDUCATIONAL EVALUATION 3
Introduction to psychological techniques of evaluating classroom activities in elementary and secondary schools.

EDUC 401 HISTORY OF EDUCATION 2
Survey of the history of education.

EDUC 402 PRINCIPLES AND PROCEDURES OF GUIDANCE 3
Introduction to the philosophy, functions, organization and evaluation of guidance programs.

EDUC 403 EXCEPTIONAL STUDENTS IN THE CLASSROOM 3
Survey of current special education laws; materials and techniques for teaching exceptional children within the educational mainstream. Prerequisites: EDUC 220 or permission of instructor.

EDUC 410 HANDWORK ACTIVITIES IN THE ELEMENTARY SCHOOL 3
See the Industrial Technology section of the undergraduate bulletin.

SOC 444-SOCIOLOGY OF EDUCATION 3
See the Sociology and Social Work section of the undergraduate bulletin.

EDUC 450 SOCIAL STUDIES, RELIGION, SCIENCE AND HEALTH IN THE ELEMENTARY SCHOOL 4
Examination of current materials and methodology used in the elementary curriculum in the areas of social studies, religion, science and health. Classroom observation and teaching will be required.

EDUC 452 DIRECTED TEACHING—In-Service 6
Directed laboratory experiences for a teacher desiring to improve his professional skills. Includes training in methods of analysis of teaching and practice in methods of self-analysis. Registration only by permission of the Student Teaching Committee after completion of the required courses in professional education.

EDUC 461 METHODS OF AUDIOMEDICAL EDUCATION 2
Survey of the methods of instruction through the use of audiovisual aids.

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

EDUC 472 METHODS OF SCHOOL HEALTH INSTRUCTION 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

PHTH 472 METHODS OF TEACHING SECONDARY PHYSICAL EDUCATION 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

PHTH 473 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL 3
See the Health, Physical Education and Recreation section of the undergraduate bulletin.

EDUC 474 WORKSHOP 1-15
Workshop in selected areas of educational concern. Designed for both experienced teachers and those preparing to enter the teaching profession. One to three quarter hours; maximum, 15 quarter hours.

EDUC 475 TEACHING READING SKILLS IN CONTENT AREAS 3
Introduction to diagnostic, vocabulary, comprehension skills, rate variation, management and study skills in junior and senior high school reading.
EDUCATION AND PSYCHOLOGY

EDUC 477 INDEPENDENT STUDY IN EDUCATION 3-3-6
Description of student learning strategies and supervision. In consultation with the student's advisor, the instructor will meet once a week to discuss the student's progress. The program is designed to provide individualized instruction based on the student's needs.

EDUC 478 ELEMENTARY MICROTEACHING 2
A teaching laboratory to prepare secondary teachers in the theory and practice of teaching. This course will focus on the development of teaching skills and strategies. Emphasis will be on the planning and implementation of lessons.

EDUC 479 SECONDARY MICROTEACHING 2
This course is designed to prepare secondary teachers in the theory and practice of teaching. Emphasis will be on the planning and implementation of lessons.

EDUC 480 EDUCATION OF THE GIFTED 3
Introduction to the design of learning opportunities for gifted children in the light of their psychological characteristics.

EDUC 481 SYSTEMS OF THOUGHT 3
Intensive study of various aspects of philosophical thinking and their bearing upon education. Emphasis will be on the development of critical thinking skills.

EDUC 482 ELEMENTARY SCHOOL CURRICULUM 3
Study of the rationale for elementary school guidance with emphasis upon current research and issues. Focuses on the tools and techniques of both classroom and out-of-class guidance functions and services.

GRADUATE COURSES
EDUC 500 GRADUATE SEMINAR 3
Intensive study of current research and issues in the field of education, focusing on the development of critical thinking skills.

EDUC 501 ELEMENTARY SCHOOL CURRICULUM 3
A study of the elementary school curriculum, including objectives, essentials of a good program, varying curriculum patterns, and appraisal of current practices.

EDUC 502 SECONDARY SCHOOL CURRICULUM 3
Overview of the secondary school curriculum, with emphasis on the various subject fields and the organization of the curriculum. Special emphasis on the interpretation of educational objectives.

EDUC 503 PHILOSOPHY OF EDUCATION 3
A study of the basic philosophies and development of educational thinking leading to the formulation of aims and objectives of education for today's schools.

EDUC 525 EDUCATION IN THE TWENTIETH CENTURY 3
Intended to help the student become conversant with significant problems, issues, trends, and proposals affecting the theory and practice of education today.

EDUC 526 SCHOOL FINANCE 3
A course designed for administrators, emphasizing the raising and disbursement of school funds.

EDUC 532 SCHOOL PLANT PLANNING AND CONSTRUCTION 3
A survey of how to plan and build schools, including the involvement of the lay citizen in the evaluation of building projects. Focuses on the development of critical thinking skills.

EDUC 533 CORRECTIVE READING 3
Analysis, correction and prevention of reading problems are studied along with new content. This course is designed to prepare secondary teachers in the theory and practice of teaching. Emphasis will be on the planning and implementation of lessons.

EDUC 534 ADMINISTRATION OF THE ELEMENTARY SCHOOL 3
Organization, supervision and administration of elementary schools.

EDUC 535 ADMINISTRATION OF THE SECONDARY SCHOOL 3
Organization, supervision and administration of secondary schools.

EDUC 536 CURRICULUM PLANNING 3
The relation of curriculum materials to educational outcomes in terms of personal and social values. A brief review of curriculum investigations and their significance in the selection and evaluation of school materials and activities. Current practices in curriculum revision.

EDUC 537 SCHOOL ACTIVITIES 3
Designed to acquaint the student with a range of the school activities program; to introduce the process of such activities; to provide him with the tools for evaluating criteria or proposed activities; and to provide opportunities for intensive study of one activity.

EDUC 540 ADMINISTRATIVE PRACTICUM 3
Professional laboratory experience for candidates for administrative certification. The course is designed to involve each candidate in a variety of practical administrative experiences and to invite in his successful induction into school leadership, by permission of the department chairman.

EDUC 541 METHODS OF RESEARCH 3
Procedures in the selection and evaluation of research projects and techniques in the analysis of research data.

EDUC 542 COMPARATIVE EDUCATION 3
A comparison of systems and philosophies of education in various parts of the world, with emphasis on the role of cultural impacts.

EDUC 575 READINGS IN EDUCATION 3
Advanced study of selected topics not covered by regular courses. The student will be required to meet at least once a week with the instructor to discuss and evaluate the reading material.

EDUC 581 PROFESSIONAL PROJECT 3
A study of advanced study involving reading and research. Formal report required. Prerequisites: consent of department chairman and graduate standing. Two, three or six hours any quarter; maximum, six.

EDUC 590 THESIS 3
A study of advanced study involving reading and research. Formal report required. Prerequisites: consent of department chairman and graduate standing. Two, three or six hours any quarter; maximum, six.

EDUC 591 SPECIALIZED COURSES 3
Selection of special courses for students in need of special education, including special education in reading. Prerequisite: PSYC 411.

EDUC 592 SPECIALIZED COURSES 3
Selection of special courses for students in need of special education, including special education in reading. Prerequisite: PSYC 411.

EDUC 593 SPECIALIZED COURSES 3
Selection of special courses for students in need of special education, including special education in reading. Prerequisite: PSYC 411.

EDUC 594 SPECIALIZED COURSES 3
Selection of special courses for students in need of special education, including special education in reading. Prerequisite: PSYC 411.
EDUCATION AND PSYCHOLOGY

SPED 537 INSTRUCTION OF EXCEPTIONAL CHILDREN
Development and implementation of individualized instructional programs.

SPED 538 COUNSELING EXCEPTIONAL STUDENTS
Dissertation and practice of counseling techniques with parents and students regarding academic, behavioral and vocational concerns.

SPED 575 FIELD WORK AND TEACHING IN SPECIAL EDUCATION

COURSES IN PSYCHOLOGY

PSYC 310 ELEMENTARY STATISTICS
Introduction to fundamental procedures for summarizing and interpreting quantitative data from tests and research in the social sciences.

PSYC 360 SMALL GROUP PROCEDURES
Study of small group process by the use of simulations, confrontation techniques and role playing. Especially useful for teachers, ministers, nurses and social workers.

PSYC 375 EXPERIMENTAL PROBLEMS
Advanced study of experimental design with application to an individual research project. Prerequisite: PSYC 200 or equivalent.

400 TOPICS IN PSYCHOLOGY
The study of advanced topics through class exercises. One to three hours per quarter.

PSYC 405 PSYCHOLOGY OF ORGANIZATIONAL CHANGE
Examination of the characteristics of social organizations, their structure and system of interaction, with particular emphasis on the problems of bringing about change within social organizations (i.e., churches, communities, schools, businesses, etc.).

PSYC 410 BEHAVIOR MODIFICATION
Study of the principles and processes of learning with special emphasis on the shaping and changing of human behavior.

PSYC 415 DYNAMICS OF BEHAVIOR
Introduction to the dynamic mechanisms of human adjustment and behavior.

PSYC 420 INTRODUCTION TO CLINICAL PSYCHOLOGY
Introduction to the application of psychological theories and techniques as used in the clinical setting; various approaches to treatment of emotional problems in clinical practice, hospital and community settings.

PSYC 425 PSYCHOLOGY AND RELIGION
Examination of psychological concepts and human behavior from a biblical and theological perspective.

PSYC 430 PSYCHOLOGICAL TESTING
Study of the principles of test selection, administration and interpretation; considerations of the questions and limitations of the major types of standardized tests and inventories used in the behavioral sciences.

PSYC 431 PSYCHOLOGY OF EXCEPTIONAL CHILDREN
Study of the characteristics and problems of exceptional children; consideration of essential educational techniques.

PSYC 442 MOTIVATION
Study of basic drives and sources of behavior in organisms with emphasis upon human behavior.

PSYC 443 SOCIAL PSYCHOLOGY
Study of the dynamics of social interaction and interpersonal behavior as applied to contemporary society.

PSYC 445 SOCIAL PSYCHOLOGY LABORATORY
Corequisites: PSYC 444.

PSYC 446 PSYCHOLOGY OF PERSONALITY
Study of theories concerning personality development, assessment and adjustment.

PSYC 449 MENTAL HEALTH
Study of physiological and psychological factors related to mental maturity; individual mental health, classroom climate, patterns of acceptance and rejection.

PSYC 452 PSYCHOLOGY OF CHILDHOOD AND ADOLESCENCE
Analysis of psychological development from infancy through adolescence.

PSYC 465 CHILDHOOD LEARNING DISORDERS
Introduction to play therapy and psychodramatic 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: PSYC 452.

PSYC 470 COUNSELING RELATIONSHIPS
Introduction to psychological theory and skills essential for developing effective and helping relationships with individuals and groups.

PSYC 480 VOCATIONAL DEVELOPMENT THEORY
Study of theories of vocational choice and methods of studying occupations and occupational information as they relate to educational and vocational guidance.

PSYC 481 ABNORMAL PSYCHOLOGY
Study of behavioral disturbances, therapeutic measures and theories.

PSYC 485 ANALYSIS OF PSYCHOLOGICAL EXPERIMENTS
Experience in the analysis of psychological research.

GRADUATE COURSES

PSYC 501 STATISTICS IN RESEARCH
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: PSYC 350 or equivalent.

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

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

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

PSYC 522 INDIVIDUAL TESTING—Intelligence
Supervised experience in the administration, interpretation and scoring of psychological tests. Several intelligence instruments will be reviewed. May be repeated for credit. Prerequisite: PSYC 515.

PSYC 531 ASSESSMENT OF THE INDIVIDUAL
Method application to comprehensive assessment for describing behavior. Experience in the collection and analysis of data will be provided. Prerequisite: PSYC 515.

PSYC 532 FIELD EXPERIENCE
Designed to provide a liberal spectrum of experience in actual field settings under approved direction. Permission of the instructor required.

PSYC 545 PRACTICUM IN COUNSELING
Professional experience in the counseling function. Prerequisites: PSYC 515; PSYC 574 and permission of the instructor.
EDUCATION AND PSYCHOLOGY

SPED 537 INSTRUCTION OF EXCEPTIONAL CHILDREN
Development and implementation of individualized instructional programs.

SPED 538 COUNSELING EXCEPTIONAL STUDENTS
Discussion and practice of counseling techniques with parents and students regarding academic, behavioral and vocational concerns.

SPED 578 FIELD WORK AND TEACHING IN SPECIAL EDUCATION

COURSES IN PSYCHOLOGY

PSYC 330 ELEMENTARY STATISTICS
Introduction to fundamental procedures for summarizing and interpreting quantitative data from tests and research in the social sciences.

PSYC 360 SMALL-GROUP PROCEDURES
Study of small group process by the use of simulations, confrontation techniques and role playing. Especially helpful for teachers, ministers, nurses and social workers.

PSYC 375 EXPERIMENTAL PROBLEMS
Advanced study of experimental design with application to an individual research project. Prerequisite: PSYC 300 or equivalent.

400 TOPICS IN PSYCHOLOGY
1.3 The study of advanced topics through class activities. One to three hours per quarter.

PSYC 400 PSYCHOLOGY OF ORGANIZATIONAL CHANGE
Examination of the characteristics of social organizations, their structure and systems of communication with particular emphasis on the problems of bringing about change within social organizations (i.e., churches, communities, schools, businesses, etc.).

PSYC 410 BEHAVIOR MODIFICATION
Study of the principles and processes of learning with special emphasis on the shaping and changing of human behavior.

PSYC 415 DYNAMICS OF BEHAVIOR
Introduction to the dynamic mechanisms of human adjustment and behavior.

PSYC 420 INTRODUCTION TO CLINICAL PSYCHOLOGY
Introduction to the application of psychological theories and techniques as used in the clinical setting. Exploration of various approaches to treatment of emotional problems in clinical practice, hospital and community settings.

PSYC 425 PSYCHOLOGY AND RELIGION
Examination of psychological concepts and human behavior from a biblical and theological perspective.

PSYC 430 PSYCHOLOGICAL TESTING
Study of the principles of test construction, administration and interpretation; consideration of the construction and limitation of the major types of standardized tests and inventories used in the behavioral sciences.

PSYC 431 PSYCHOLOGY OF EXCEPTIONAL CHILDREN
Study of the characteristics and problems of exceptional children; consideration of educational implications.

PSYC 442 MOTIVATION
Study of basic drives and sources of behavior in organisms with emphasis upon human behavior.

PSYC 443 SOCIAL PSYCHOLOGY
Study of the dynamics of social interaction and interpersonal behavior with applications to contemporary society.

PSYC 445 SOCIAL PSYCHOLOGY LABORATORY
Corequisite: PSYC 444.
### SUPPORTING COURSES

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

See the undergraduate bulletin for course descriptions and prerequisites.

#### ART

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<td>ART 364, 365, 366</td>
<td>SCULPTURE</td>
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<td>ART 400</td>
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The study of advanced topics through class activities. One to three hours per quarter.

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One to three hours per quarter; maximum, six.

#### BIOLOGICAL SCIENCES (See pages 25-29)

#### BUSINESS

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

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<td>BUED 477</td>
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Permission from the chairman of the department required. One to three hours per quarter; maximum, six.

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<td>ECON 446</td>
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<td>INVESTMENTS</td>
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<td>MGMT 476</td>
<td>HUMAN RELATIONS IN MANAGEMENT</td>
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### CHEMISTRY

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<td>SPCH 443</td>
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#### SPEECH PATHOLOGY AND AUDIOLOGY

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<td>DIAGNOSIS IN SPEECH-LANGUAGE PATHOLOGY</td>
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### Supporting Courses

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

See the undergraduate bulletin for course descriptions and prerequisites.

#### ART

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

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One to three hours any quarter; maximum, six.

#### Biological Sciences (See pages 25-29)

#### Business

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

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Permission from the chairman of the department required. One to three hours per quarter; maximum, six.

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#### Chemistry

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#### Communications

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<td>RHETORIC AND PUBLIC ADDRESS</td>
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<td>METHODS OF TEACHING SPEECH COMMUNICATION</td>
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#### Speech Pathology and Audiology

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ENGL 445 SHAKESPEARE
ENGL 454 LITERATURE OF THE BIBLE
ENGL 455 CLASSICAL backgrounds
ENGL 464 DEVELOPMENT OF ENGLISH DRAMA
ENGL 465 DEVELOPMENT OF THE ENGLISH NOVEL
ENGL 466 PHILOSOPHICAL AND CRITICAL PROSE
ENGL 472 METHODS OF TEACHING HIGH SCHOOL ENGLISH
ENGL 477 INDEPENDENT STUDY IN ENGLISH
ENGL 484 HISTORY OF THE ENGLISH LANGUAGE
ENGL 496 SEMINAR
ENGL 581 INDEPENDENT STUDY
ENGL 596 LITERARY CRITICISM

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HELD 384 SCHOOL HEALTH PROGRAMS
HELD 472 METHODS OF SCHOOL HEALTH INSTRUCTION
PETH 363, 364, 365 ANALYSIS OF TEAM ACTIVITIES
PETH 400 TOPICS IN PHYSICAL EDUCATION
PETH 425 PHYSIOLOGY OF EXERCISE
PETH 472 METHODS OF TEACHING SECONDARY PHYSICAL EDUCATION
PETH 473 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL
PETH 477 INDEPENDENT STUDY IN HEALTH AND PHYSICAL EDUCATION
PETH 484 ADMINISTRATION OF HEALTH, PHYSICAL EDUCATION AND RECREATION
PETH 491 HISTORY OF HEALTH, PHYSICAL EDUCATION AND RECREATION
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HIST 435 HISTORY OF MODERN GERMANY
HIST 465 THE MIDDLE AGES
HIST 465 RENAISSANCE AND REFORMATION
HIST 467 ENLIGHTENMENT AND REVOLUTION
HIST 468 THE MODERN TRANSITION, 1812-1919
HIST 469 CONTEMPORARY EUROPE, 1919 TO THE PRESENT

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HIST 445 CIVIL WAR AND RISE OF INDUSTRIAL AMERICA, 1850-1900
HIST 446 HISTORY OF THE PACIFIC NORTHWEST
HIST 449 TWENTIETH CENTURY AMERICA
HIST 457 SOCIAL AND INTELLECTUAL HISTORY OF THE U.S.

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PLEC 426 AMERICAN POLITICAL THOUGHT
PLEC 427 AMERICAN DIPLOMATIC HISTORY
PLEC 454 INTERNATIONAL RELATIONS

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FOND 427 COMMUNITY NUTRITION
FOND 441, 442 ADVANCED NUTRITION
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FOND 447 INSTITUTIONAL FOOD PURCHASING
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HMEC 405 ADVANCED WEAVING
HMEC 424 INTERIOR DESIGN, HOUSING AND INTERIORS
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IECT 381, 382, 383 TELEVISION SYSTEMS AND CIRCUIT ANALYSIS
URPS 355 APPLIED PHOTOGRAPHY
URPS 358 PHOTO ASSIGNMENTS
COE 376 TECHNICAL FACILITY PLANNING
CS 381, 382, 383 MACHINE TOOL OPERATION
CS 391, 392, 393 HYDRAULICS
CS 499 TOPICS IN INDUSTRIAL EDUCATION AND TECHNOLOGY
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**AMERICAN HISTORY**

- HIST 424 THE AMERICAN FRONTIER (4)
- HIST 445 CIVIL WAR AND RISE OF INDUSTRIAL AMERICA, 1850-1900 (4)
- HIST 466 HISTORY OF THE PACIFIC NORTHWEST (4)
- HIST 468 TWENTIETH CENTURY AMERICA (4)
- HIST 467 SOCIAL AND INTELLECTUAL HISTORY OF THE U.S. (4)

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- PLS 424, 425 WESTERN POLITICAL THOUGHT (4, 4)
- PLS 426 AMERICAN POLITICAL THOUGHT (4)
- PLS 427 AMERICAN DIPLOMATIC HISTORY (4)
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- FONT 422 EXPERIMENTAL COOKERY (3)
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- HMEC 403 ADVANCED WEAVING (3)
- HMEC 424 INTERIOR DESIGN, HOUSING AND INTERIORS (3)
- HMEC 461 TAILORING (3)
- HMEC 472 METHODS OF TEACHING HOME ECONOMICS (3)
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- ELEC 360 LINEAR INTEGRATED CIRCUITS (5)
- ELEC 362 DIGITAL INTEGRATED CIRCUITS (6)
- ELEC 381, 382, 383 TELEVISION SYSTEMS AND CIRCUIT ANALYSIS (3, 3, 3)
- CPRP 335 APPLIED PHOTOGRAPHY (3)
- CPRP 336 RADIO ASSIGNMENTS (1)
- ENGR 276 TECHNICAL FACILITY PLANNING (3)
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LIBR 400 TOPICS IN LIBRARY SCIENCE 3
LIBR 456 ADMINISTRATION OF SCHOOL LIBRARIES 3
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FREN 408 19TH CENTURY FRENCH LITERATURE 4
FREN 409 20TH CENTURY FRENCH LITERATURE 4
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GERM 421 18TH CENTURY GERMAN LITERATURE 4
GERM 422 19TH CENTURY GERMAN LITERATURE 4
GERM 423 20TH CENTURY GERMAN LITERATURE 4
SPAN 414 SPANISH DIRECTED READING 1-3; 6
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SPAN 431, 432, 433 SURVEY OF LATIN-AMERICAN LITERATURE 3, 3, 3
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MUCT 425 ORCHESTRATION 3

SUPPORTING COURSES

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MUCT 428 COMPOSITION II 1-3; 3
MEED 354 VOCAL TECHNIQUES AND METHODS 3
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