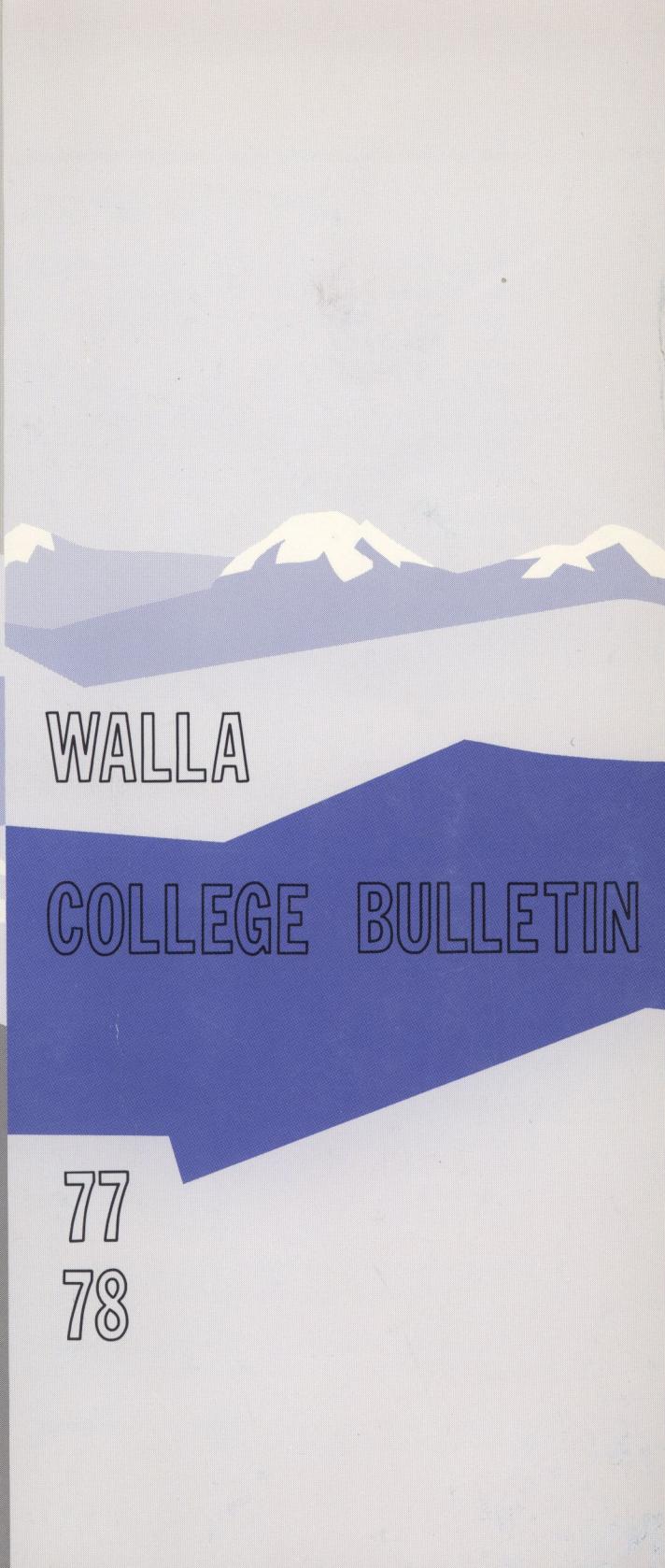


WALLA



WALLA

COLLEGE BULLETIN

77

78

FOR INFORMATION

ADMISSIONS	.....	Orpha N. Osborne, Associate Director
Application Blanks		Records
Academic Information		509/527-2811
General Information		
Student Handbooks		
FINANCES	.....	Grace Hallsted, Director
General Financial Information		Student Accounts and Employment
Work Opportunities		509/527-2817
STUDENT AID	.....	Victor Fitch, Director
Loans and Grants		Financial Aid
		509/527-2314
RESIDENCE HALL		
LIVING	.....	Walter Meske, Dean of Men
General Information		Sittner Hall
Room Reservations		509/527-2953
		<i>or</i>
		Alice Hoffman, Dean of Women
		Conard Hall
		509/527-2661
STUDENT AFFAIRS	.....	Donald D. Lake, Vice President
Off-Campus Housing		Student Affairs
Automobile Registration		509/527-2511
Student Life		
COLLEGE ADDRESS	.....	Walla Walla College
		College Place, WA 99324
GENERAL TELEPHONE		
NUMBER	.....	Area Code 509/527-2615
RESIDENCE HALL TELEPHONE NUMBERS		
Conard Hall	.....	527-2662, 2663
Foreman Hall	.....	527-2532, 2533
Sittner Hall	.....	527-2952
Whitman Lodge	.....	527-2591

Administrative offices are closed from Friday noon until Monday morning and on legal holidays. The administrative officers are available on Sundays by appointment.

The Accounting, Student Accounts and Employment, and Admissions and Records offices are open on Sunday from 9:00 a.m. to 12:00 noon.

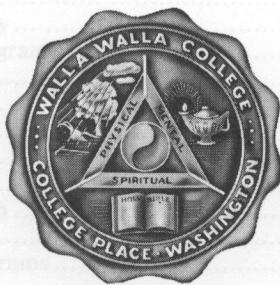
Cover design by Carmen Hammon McWilliams, senior art student.
Inside illustrations by Tim Larson, lecturer in art.

WALLA WALLA COLLEGE

BULLETIN

1977-78

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Instructional Areas	1
Education and Instructional Areas	1
Engineering	1
English	1
Health, Physical and Recreational Education	1
History	1
Home Economics	1
Industrial Technology	1
Interdisciplinary Areas	1
Library Science	1
Mathematics	1
Modern Language	1
Music	1
Nursing	1
Office Administration	1
Physics	1
Preprofessional Programs	1
Religion	1
Sociology and Social Work	1
Financial Information	1
Index	1



Walla Walla College is accredited by

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

is a member of

American Association of Collegiate Registrars and Admissions Officers
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
U.S. Government for the training of veterans under the U.S. Code, Title 38,
Chapters 31, 34 and 35
The Attorney General of the United States for nonimmigrant students
Washington State for training in Vocational Rehabilitation

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DEGREES OFFERED BY WALLA WALLA COLLEGE

BACCALAUREATE DEGREES

Agriculture (minor)	Humanities
Applied Music	*English
Art	*Fine Arts
*Commercial Art	*History
*Fine Art	*Modern Languages
Automotive Technology	*Philosophy
Biblical Languages	Industrial Arts Education
Biology	Industrial Technology
Biomedical Electronics Technology	Interior Design (minor)
Biophysics	Journalism
Business Administration	Library Science (minor)
*Accounting	Mathematics
*Economics	Medical Technology
*Health Facility Administration	Medical Technology and Clinical Chemistry (double major)
*Information Science	Music Education
*Management	Music Performance
*Marketing	Music Theory
Business Education	Nursing
Chemistry	Office Administration
Communication Media	Plant Maintenance Technology
Computer Science (minor)	Physical Education
Electronics Technology	Recreational Education
Elementary Education	*Community Recreation
Engineering	*Correctional Recreation
*Civil	*Outdoor Education
*Electrical	*Therapeutic Recreation
*Mechanical	*Youth Services Leadership
English	Physics
Foods and Nutrition	Political Science (minor)
French	Psychology
German	Religion
Graphics Technology	Social Work
Health	Sociology
History	Spanish
Home Economics	Speech Communication
<hr/>	
*Concentration available	Speech Pathology and Audiology
	Theology

ASSOCIATE DEGREES

Agriculture	Graphics Technology
Automotive Technology	Medical Secretary
Aviation Technology	Office Secretary
Business	Plant Maintenance Technology
Dietetic Technology	Respiratory Therapy
Early Childhood Education	Secretarial Accounting
Electronics Technology	

CERTIFICATE PROGRAMS

Automotive Mechanics	Offset Copy Preparation
Aviation	Plant Maintenance
Electricity/Electronics	Printing
Office Secretary	Respiratory Therapy

PREPROFESSIONAL CURRICULA

Chiropractic (2)*	Optometry (2)
Dentistry (2)	Osteopathy (3)
Dental Assistant (1)	Pharmacy (2)
Dental Hygiene (2)	Public Health (4)
Law (4)	Physical Therapy (2)
Medicine (4)	Radiological Technology (1)
Medical Technology (3)	Veterinary Science (2)
Occupational Therapy (2)	

*Numbers in parentheses indicate the years of study required on the WWC campus before acceptance into a professional school

GRADUATE PROGRAMS

Master of Education

Counseling and Guidance
Elementary Instruction
Junior High Instruction
School Administration
Secondary Instruction in: Biology, Biophysics, Business, Chemistry, English, Health & PE, History, Industrial Arts, Language Arts, Mathematics, Physics, Social Science

Master of Arts

Education
Counseling and Guidance
Curriculum and Instruction
Educational Foundations
School Administration

Teaching Credentials available in the areas mentioned above

Principal's Credentials (provisional and standard)

Elementary
Secondary
General

Master of Science

Biology

JUNE 1977	JULY 1977	AUGUST 1977
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 ^{24/31} 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
SEPTEMBER 1977	OCTOBER 1977	NOVEMBER 1977
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DECEMBER 1977	JANUARY 1978	FEBRUARY 1978
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
MARCH 1978	APRIL 1978	MAY 1978
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 ^{23/30} 24 25 26 27 28 29	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
JUNE 1978	JULY 1978	AUGUST 1978
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 ^{23/30} ^{24/31} 25 26 27 28 29	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Aviation Technology

Business

Computer Technology

Early Childhood Education

Electronics Technology

Electronics Technology

Electronics Technology

Electronics Technology

Electronics Technology

Electronics Technology

WALLA WALLA COLLEGE

ACADEMIC CALENDAR, 1977-78

AUTUMN QUARTER

September 25, 26	SM	Freshman Orientation, Testing, Registration
	27 T	Registration
	28 W	Instruction Begins
October 13	TH	Last Day to Enter Classes
November 23	W	Thanksgiving Vacation Begins
	27 S	Thanksgiving Vacation Ends (10:00 p.m.)
December 7	W	Last Day to Delete Classes and Request S/NC Grades
11, 12, 13, 14	SMTW	Final Examinations

WINTER QUARTER

January 3	T	Registration
	4 W	Instruction Begins
	18 W	Last Day to Enter Classes
March 8	W	Last Day to Delete Classes and Request S/NC Grades
12, 13, 14, 15	SMTW	Final Examinations

SPRING QUARTER

March 21	T	Registration
	22 W	Instruction Begins
April 5	W	Last Day to Enter Classes
May 24	W	Last Day to Delete Classes and Request S/NC Grades
28, 29, 30, 31	SMTW	Final Examinations
June 4	S	Commencement (10:00 a.m.)

SUMMER QUARTER (1978)

June 12	M	Registration
	13 T	Instruction Begins
July 3, 4	MT	Independence Day Vacation
August 6	S	Commencement (10:00 a.m.)

BOARD OF TRUSTEES

M. C. Torkelsen, *Chairman*
N. C. Sorensen, *Secretary*

F. M. Beavon	Duane Huey
F. W. Bieber	E. M. Norton
M. J. Blair	Millie Oberg
Ruth Carroll	Dorothy Patchett
J. E. Chase	L. L. Reile
R. D. Fearing	R. C. Remboldt
Nathan Forde	G. L. Starr
H. J. Harris	T. W. Walters
Larry Havstad	R. M. Wisbey

ADMINISTRATION

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Donald M. Warren, *Ph.D., Vice President for Academic Affairs*
Richard A. Beck, *B.A., Vice President for Financial Affairs*
Donald D. Lake, *M.A., Vice President for Student Affairs*
Donald O. Eichner, *Ph.D., Vice President for Development and Public Relations*

ASSOCIATES IN ADMINISTRATION

D. Malcolm Maxwell, *Ph.D., Dean, School of Theology*
Charles V. Bell, *Ph.D., Dean, School of Engineering*
_____, *Director of Admissions and Records*
Lois Hellie, *B.A., Chief Accountant*
Alice Hoffman, *Dean of Women*
Wynelle J. Huff, *M.S., Dean, School of Nursing*
Robert H. Koorennny, *M.S., Director of Development*
Walter Meske, *M.A., Dean of Men*
Elwood L. Mabley, *M.S.L.S., Director of the Libraries*
Ronald L. Carter, *Ph.D., Chaplain*
Orpha Osborne, *B.A., Associate Director of Records*
Donald W. Rigby, *Ph.D., Dean, Graduate School*
Melvin S. Lang, *Ph.D., Director of Summer Session*

ASSISTANTS IN ADMINISTRATION

Dan Akers, B.S., *Director of Public Information*
Kathryn Andrews, B.A., *Assistant Director of Records*
Gwendolyn Burt, B.A., *Assistant Dean of Women*
Shirley Cody, M.L.S., *Assistant Librarian, Assistant Director of Records*
Lyle W. Cornforth, Ed.D., *Director of Counseling and Guidance*
Mary Dassenko, B.A., *Assistant Dean of Women*
Charles E. Davis, B.S., *Director of Purchasing*
Scott R. Duncan, B.S., *Director of Audiovisual Services*
J. D. V. Fitch, M.Ed., *Director of Financial Aid*
Melvin W. Gilliland, M.A., *Associate Librarian*
Shirley Graves, M.S.L.S., *Associate Librarian*
Grace Hallsted, *Director of Student Accounts and Employment*
Carolyn Hazelton, M.L.S., *Assistant Librarian*
Ilo Hutton, *Assistant Dean of Women*
Betty Duncan, B.A., *Freshman Advisement Coordinator*
Maynard E. Loewen, B.A., *Field Recruitment Officer*
Esther Losey, B.S., *Associate Director of Health Service*
J. D. Losey, M.D., *College Physician*
Annabelle Owens, *Associate Dean of Women*
Sandra Peña, B.S., *Assistant Director of Food Service*
Lynn Prohaska, *Associate Dean of Men*
Taylor Ruhl, M.S.L.S., *Assistant Librarian*
Clyde J. Sample, B.S., *Director of Food Service*
Helen Spechko, R.N., *Director of Health Service*
Fay Van Dyk, M.A., *Associate Dean of Women*
Philip Velez, M.A., *Associate Dean of Men*
Darl L. Wallace, *Director of Educational Computer Services*
Joyce Wickward, *Assistant Accountant*
Eugene S. Winter, Ph.D., *Assistant Director of Development*

MARINE STATION STAFF

Lawrence R. McCloskey, Ph.D., *Acting Director*
Ross O. Barnes, Ph.D., *Research Assistant Professor*

AUXILIARY ENTERPRISES, Managers

Richard A. Beck, B.A., *General Manager*
Michael Bogdanovich, *College Place Bindery*
Lester Border, *Plant Services*
Eugene Jacobson, B.S., *Grounds*
William E. Koenig, M.S., *College Dairy and Farm*
Chester Lindt, M.A., *Custodial Department*
_____, *College Laundry and Dry Cleaners*
John D. Wohlers, B.A., *Color Press*
Mrs. John D. Wohlers, *College Store*

INSTRUCTIONAL FACULTY*

Rosalee Abrams, *Instructor in Nursing* (1972)

B.S. 1972, Walla Walla College
M.N. 1977, University of Oregon

Terry L. Anderson, *Associate Professor of Physics* (1972)

B.S. 1969; M.A. 1969, Pacific Union College
M.S. 1971; Ph.D. 1976, University of Nebraska

Wanda Anderson, *Instructor in Nursing* (1968)

B.S. 1957, Walla Walla College

Ross O. Barnes, *Research Associate* (1974)

B.A. 1967, Andrews University
Ph.D. 1973, University of California

Claude C. Barnett, *Professor of Physics* (1957)

B.S. 1952, Walla Walla College
M.S. 1956, State College of Washington
Ph.D. 1960, Washington State University

Beverly G. Beem, *Associate Professor of English* (1976)

B.A. 1967, Union College
M.A. 1969, Andrews University
Ph.D. 1974, University of Nebraska

Charles V. Bell, *Professor of Engineering* (1972)

B.S. 1956, Mississippi State University
M.S. 1957; Ph.D. 1960, Stanford University

Frederick R. Bennett, *Professor of Engineering* (1961)

B.S. 1955, Walla Walla College
M.S. 1966; Ph.D. 1977, Washington State University

June Bishop, *Assistant Professor of Home Economics* (1972)

B.S. 1950; M.S. 1971, Loma Linda University

Roland D. Blaich, *Associate Professor of History* (1968)

B.A. 1966; M.A. 1967, California State College at Los Angeles
Ph.D. 1975; Washington State University

**Chester D. Blake, *Assistant Professor of Industrial Technology* (1966)

B.S. 1963, Walla Walla College
M.S. 1968, San Jose State College

Carol M. Brown, *Assistant Professor of Nursing* (1976)

B.S. 1965, Walla Walla College
M.S. 1968, Loma Linda University
Ed.M. 1975, Oregon State University

Gene L. Bruns, *Instructor in Health, Physical and*

Recreational Education (1977)

B.S. 1977, Walla Walla College

**John C. Brunt, *Assistant Professor of Theology* (1971)

B.A. 1964, Loma Linda University
M.A. 1966; B.Div. 1967, Andrews University

Ruth E. Burgeson, *Associate Professor of English* (1957)

B.A. 1951; M.A. 1957, Pacific Union College

**Ernest J. Bursey, *Assistant Professor of Theology* (1973)

B.A. 1964, Pacific Union College
M.Div. 1970, Andrews University

*Dates in parentheses indicate the beginning year of employment at Walla Walla College.

**On leave

- Sandra L. Camp, Associate Professor of Music (1972)**
 B.Mus.Ed. 1957; M.A. 1966, Andrews University
 D.M.E. 1976, Indiana University
- Lewis H. Canaday, Professor of Industrial Technology (1953)**
 B.S. 1953; M.A. 1959, Walla Walla College
 Ed.M. 1961, Oregon State University
- Florence Carrigan, Assistant Professor of Nursing (1968)**
 B.S. 1953, Columbia Union College
 M.Ed. 1968, Columbia University Teachers College
- George L. Caviness, Professor of Modern Languages (1971)**
 B.A. 1937, Pacific Union College
 M.A. 1939, University of California at Berkeley
 Ph.D. 1947, Ohio State University
- James R. Chambers, Professor of Chemistry (1960)**
 B.A. 1939, Columbia Union College
 M.S. 1949, Case Western Reserve University
 Ph.D. 1958, Texas A and M University
- Janice P. Chance, Associate Professor of Nursing (1959)**
 B.S. 1959, Walla Walla College
 M.S. 1967, Loma Linda University
- Clarence E. Chinn, Professor of Chemistry (1967)**
 B.A. 1951, Walla Walla College
 M.S. 1953; Ph.D. 1956, Oregon State University
 Ph.D. 1969, University of Tennessee
- Patricia Ann Clarkson, Assistant Professor of Nursing (1977)**
 B.S. 1954, Loma Linda University
 M.P.H. 1967, University of Michigan
- Dale L. Clayton, Professor of Biology (1969)**
 B.A. 1962, Andrews University
 M.A. 1964, Loma Linda University
 Ph.D. 1968, Michigan State University
- Jon A. Cole, Professor of Engineering (1964)**
 B.S.C.E. 1961, Illinois Institute of Technology
 M.S. 1964; Ph.D. 1970, University of Wisconsin
- Lanny Collins, Assistant Professor of Music (1977)**
 B.A. 1964, Andrews University
 M.Mus. 1971, University of Missouri
- Donna Crawford, Instructor in Nursing (1976)**
 B.S. 1973, Walla Walla College
- Edward F. Cross, Professor of Engineering (1947)**
 M.E. 1929, Stevens Institute of Technology
 M.A. 1938, Columbia University
 Doctor of Engineering, *honoris causa*, 1974, Walla Walla College
- Reinhard Czeratzki, Associate Professor of Modern Languages (1967)**
 B.A. 1964, Atlantic Union College
 M.A. 1967, Middlebury College
- Jack Dassenko, Assistant Professor of Agriculture (1970)**
 B.S. 1950, Andrews University
 M.S. 1951, University of Minnesota
- Donald Dawes, Assistant Professor of Industrial Technology (1976)**
 B.S. 1961, Walla Walla College
 M.Ed. 1966, Oregon State University

- Loren Dickinson, *Professor of Communications* (1962)
B.A. 1957, Union College
M.A. 1960, University of Nebraska
Ph.D. 1968, University of Denver
- Leal G. Dickson, *Associate Professor of Biology* (1971)
B.A. 1962, Columbia Union College
M.S. 1969; Ph.D. 1971, University of Maryland
- Edna M. Downing, *Assistant Professor of Nursing* (1970)
B.S. 1965, Loma Linda University
M.S. 1970, University of California at San Francisco
- Jon Dybdahl, *Assistant Professor of Theology* (1976)
B.A. 1965, Pacific Union College
M.A. 1966; B.D. 1967, Andrews University
- Donald O. Eichner, *Associate Professor of Political Science* (1963)
B.A. 1951, Walla Walla College
M.A. 1958, Andrews University
Ph.D. 1969, The American University
- Richard K. Emmerson, *Assistant Professor of English* (1971)
B.A. 1970, Columbia Union College
M.A. 1971, Andrews University
Ph.D. 1976, Stanford University
- Thomas J. Emmerson, *Assistant Professor of Art* (1976)
B.A. 1972, Walla Walla College
B.F.A. 1974, Otis Art Institute
- Judith Ann Farnsworth, *Assistant Professor of Nursing* (1971)
B.S. 1969, Walla Walla College
M.S. 1972, University of California at San Francisco
- Gerald I. Ferguson, *Associate Professor of Music* (1972)
B.A. 1948, Walla Walla College
M.A. 1951, Teachers College, Columbia University
- Garth E. Fisher, *Assistant Professor of Industrial Technology* (1975)
B.Sc. 1966, Andrews University
- Lanny H. Fisk, *Assistant Professor of Biology* (1974)
B.A. 1971, Andrews University
Ph.D. 1976, Loma Linda University
- Ray W. Fowler, *Professor of Business* (1970)
B.A. 1929, Union College
M.A. 1941, University of Idaho
Ph.D. 1951, University of Nebraska
- L. Donovan French, *Associate Professor of English* (1966)
B.A. 1964, Walla Walla College
M.A. 1969, Washington State University
- Joseph G. Galusha, *Assistant Professor of Biology* (1975)
B.S. 1968, Walla Walla College
M.A. 1971, Andrews University
D.Phil. 1975, Oxford University
- Robert W. Gardner, *Assistant Professor of Sociology and Social Work* (1971)
B.A. 1969, Pacific Union College
M.A. 1971, Loma Linda University
Ph.D. 1977, University of Utah
- Melvin W. Gilliland, *Assistant Professor of Library Science* (1966)
B.A. 1949, Union College
M.A. 1965, University of Denver

- Lorne E. Glaim, Professor of History (1971)**
B.A. 1964, Walla Walla College
M.A. 1966; Ph.D. 1973, Washington 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
- Shirley A. Graves, Associate Professor of Library Science (1969)**
B.A. 1960, Loma Linda University
M.A. 1964, University of Redlands
M.S.L.S. 1969, University of Southern California
- Edna Holst Grove, Associate Professor of Education (1974)**
B.S. 1963, Walla Walla College
M.Ed. 1964, Eastern Washington State College
- J. Paul Grove, Professor of Theology (1958)**
B.A. 1944, Columbia Union College
M.A. 1956; B.Div. 1961, Andrews University
- Kenneth L. Gruesbeck, Instructor in Industrial Technology (1964)**
B.A. 1952, Columbia Union College
M.A. 1977, Walla Walla College
- Gary M. Hamburgh, Assistant Professor of Health, Physical and Recreational Education (1972)**
B.A. 1971, Loma Linda University
M.A. 1974, California State University at Fresno
- Gordon B. Hare, Professor of Mathematics (1957)**
B.A. 1951, Columbia Union College
M.S. 1954; Ph.D. 1964, University of Colorado
- Carolyn Hazelton, Assistant Professor of Library Science (1972)**
B.S. 1965, Walla Walla College
M.L.S. 1971, University of Washington
- Rodney Heisler, Professor of Engineering (1970)**
B.S.E. 1965, Walla Walla College
M.S.E.E. 1967; Ph.D. 1970, Washington State University
- Robert A. Henderson, Professor of History (1967)**
B.A. 1962, Walla Walla College
Ph.D. 1967, Washington State University
- Solange Henderson, Assistant Professor of Spanish (1973)**
B.A. 1971, Walla Walla College
M.A. 1976, Middlebury College
- Ric Henry, Instructor in Sociology and Social Work (1977)**
B.S. 1973, Pacific Union College
M.S.W. 1977, Atlanta University
- Dale B. Hepker, Associate Professor of English (1973)**
B.A. 1953, Union College
M.A. 1963, University of Nebraska
- Wilma M. Hepker, Associate Professor of Sociology and Social Work (1973)**
B.A. 1953, Union College
M.A. 1966; Ph.D. 1976, University of Nebraska
- Gloria Hicinbothom, Assistant Professor of Education (1976)**
B.S. 1966, Walla Walla College
M.Ed. 1971, Walla Walla College
- Roy A. Hingley, Assistant Professor of Education and Psychology (1970)**
B.Th. 1962, Canadian Union College
B.Div. 1965; M.A. 1965, Andrews University
M.A. 1968, Arizona State University
Ph.D. 1974, Arizona State University

- Sherrick S. Hiscock, II, Assistant Professor of Music (1973)**
 B.Mus.Ed. 1963, Florida State University
 M.Mus. 1970, University of Miami
- *Wynelle Huff, Associate Professor of Nursing (1971)**
 B.S. 1962, Union College
 M.S. 1964, University of California at San Francisco
- Juanita M. Hunter, Instructor in Nursing (1975)**
 B.S. 1955, Loma Linda University
- Robert J. Hunter, Associate Professor of Music (1966)**
 A.B. 1959, Pacific Union College
 M.A. 1962, Andrews University
 Ed.D. 1973, University of the Pacific
- Myrna Jansen, Instructor in Nursing (1975)**
 B.S. 1958, Walla Walla College
 M.S. 1973, Oregon College of Education
- Dale A. Johnson, Assistant Professor of Education and Psychology (1976)**
 B.A. 1964, Union College
 M.A. 1967, University of Nebraska
- Gordon O. Johnson, Associate Professor of Physics (1974)**
 B.S. 1966, Walla Walla College
 M.S. 1967; Ph.D. 1972, California Institute of Technology
- Paul W. Joice, Professor of Business (1971)**
 B.S. 1949, Union College
 M.B.A. 1953, University of Denver
 Ed.D. 1962, University of Nebraska
- *Leno Jones, Assistant Professor of Nursing (1972)**
 B.S. 1972, Walla Walla College
 M.S. 1973, University of Washington
- Robert G. W. Kappel, Associate Professor of Business (1973)**
 B.A. 1957, University of Washington
 M.B.A. 1971, University of Nebraska
- Miriam Anne Kelly, Instructor in Nursing (1973)**
 B.S. 1968, University of Oregon
- Lucile Harper Knapp, Associate Professor of Theology (1961)**
 B.A. 1947, Walla Walla College
 M.A. 1949, Andrews University
- Melvin S. Lang, Professor of Mathematics (1967)**
 B.S. 1957, Valley City State Teachers College
 M.A. 1958, Colorado State College
 Ph.D. 1972, University of Northern Colorado
- H. Lloyd Leno, Professor of Music (1960)**
 B.A. 1948, Walla Walla College
 M.A. 1954, Columbia Teachers College
 A.Mus.D. 1970, University of Arizona
- E. Harold Lickey, Professor of Music (1965)**
 B.A. 1950, Union College
 M.Mus. 1958, Texas Christian University
 D.Mus. 1970, Indiana University
- Anne Lindt, Assistant Professor of Nursing (1973)**
 B.S. 1954; M.S. 1966, Loma Linda University
- Elwin L. Liske, Associate Professor of Industrial Technology (1963)**
 B.S. 1963, Walla Walla College
 M.A. 1967, San Jose State College

*On leave

- Lee Loewen, *Assistant Professor of Office Administration* (1974)
B.S. 1947, Union College
M.Ed. 1968, Walla Walla College
- Annette Loftus, *Assistant Professor of Nursing* (1969)
B.S. 1955, Walla Walla College
M.S. 1971, University of Oregon
- Elwood L. Mabley, *Associate Professor of Library Science* (1968)
B.A. 1948, Walla Walla College
M.S.L.S. 1959, University of Southern California
- Virginia Mabley, *Assistant Professor of Office Administration* (1971)
B.A. 1948; M.Ed. 1973, Walla Walla College
- Kenneth R. MacKintosh, *Professor of Art* (1961)
B.F.A. 1959; M.F.A. 1961, Otis Art Institute of Los Angeles County
- Glenn W. Masden, *Professor of Engineering* (1957)
B.S.E.E. 1955; M.S.E.E. 1958, University of Colorado
- Gordon R. Mattison, *Assistant Professor of Theology* (1976)
B.A. 1964, Loma Linda University
M.A. 1965, Andrews University
- D. Malcolm Maxwell, *Professor of Theology* (1965)
B.A. 1956, Pacific Union College
M.A. 1958, Andrews University
Ph.D. 1968, Drew University
- Roger W. May, *Assistant Professor of Mathematics* (1975)
B.S. 1970, Andrews University
M.S. 1972; Ph.D. 1975, Florida State University
- Lawrence R. McCloskey, *Associate Professor of Biology* (1971)
B.A. 1961, Atlantic Union College
M.A. 1965; Ph.D. 1967, Duke University
- Oran E. McNiel, *Professor of Engineering* (1964)
B.S. 1961, Walla Walla College
M.S.E.E. 1969; Degree of Engineer 1971, Stanford University
- Jacob G. Mehling, *Professor of Business* (1947)
B.B.A. 1934, Walla Walla College
M.A. 1947, University of Washington
- William W. Messer, *Assistant Professor of Business* (1977)
B.S. 1969, Andrews University
M.B.A. 1973; J.D. 1975, University of Cincinnati
- Bonnie Meyer, *Assistant Professor of Nursing* (1972)
B.S. 1969; M.S. 1972, Loma Linda University
- Verlene Meyer, *Instructor in Nursing* (1973)
B.S. 1972, Walla Walla College
- *Ronald Mitchell, *Instructor of Nursing* (1973)
B.S. 1972, Walla Walla College
- Nathan Moore, *Professor of English* (1967)
B.A. 1963, Rockford College
M.A. 1965, Carleton University
Ph.D. 1972, University of British Columbia
- Dennis Monroe, *Assistant Professor of Health, Physical and Recreational Education* (1977)
B.S. 1972, Walla Walla College
M.A. 1976, University of Dayton

*On leave

- William J. Napier, *Professor of Health, Physical and Recreational Education* (1975)
B.A. 1949, Union College
M.S. 1954, University of Colorado
Ph.D. 1971, University of Southern California
- *Wanda J. Newcomb, *Instructor in Nursing* (1974)
B.S. 1971, Loma Linda University
- Robert L. Noel, *Professor of Engineering* (1963)
B.S. 1950; M.S. 1951, University of Wisconsin
- Harold T. Ochs, *Professor of Education and Psychology* (1969)
B.A. 1950, Walla Walla College
M.Ed. 1957, Eastern Washington State College
Ed.D. 1972, University of Idaho
- Merlene L. Olmsted, *Instructor in Home Economics* (1977)
B.A. 1969, Walla Walla College
M.A. 1975, Loma Linda University
- Carolyn Olson, *Assistant Professor of Nursing* (1970)
B.S. 1961, Loma Linda University
M.S. 1972, University of Oregon
- Jack S. Paulman, *Associate Professor of Business* (1976)
B.S. 1947, Pepperdine College
M.S. 1953, University of Southern California
M.S.P.H. 1975, Loma Linda University
- Alfred E. Perry, *Professor of Industrial Technology and Associate Professor of Biology* (1969)
B.A. 1953; M.A. 1958, Walla Walla College
Ph.D. 1965, Oklahoma State University
- Hollibert E. Phillips, *Professor of Education and Psychology* (1970)
B.A. 1960, University of London
M.A. 1964, Andrews University
Ed.D. 1970, Boston University
- Jean M. Prest, *Assistant Professor of Education* (1973)
B.S. 1968, Atlantic Union College
M.Ed. 1974, Walla Walla College
- Ed E. Quiring, *Associate Professor of Office Administration* (1966)
B.A. 1964, Walla Walla College
M.Ed. 1968, Oregon State University
- Sharon Rawson, *Instructor in Nursing* (1970)
B.S. 1956, Walla Walla College
- Lee H. Reynolds, *Assistant Professor of Business* (1977)
B.S. 1965, Union College
M.A. 1967, University of Nebraska
- Donald W. Rigby, *Professor of Biology* (1958)
B.A. 1950, Loma Linda University
M.A. 1956, Walla Walla College
Ph.D. 1967, Loma Linda University
- Donnie Thompson Rigby, *Associate Professor of Communications* (1958)
B.A. 1952, Loma Linda University
M.A. 1965, Redlands University
- William B. Rippon, *Professor of Chemistry* (1976)
B.Sc. 1965, University of Sydney
Ph.D. 1969, Newcastle University

*On leave

- E. Joyce Riter, *Associate Professor of Nursing* (1961)
B.S. 1960, Walla Walla College
M.N. 1964, University of Washington
- Robert C. Rittenhouse, *Assistant Professor of Chemistry* (1976)
B.S. 1971, Atlantic Union College
Ph.D. 1975, Worcester Polytechnic Institute
- Taylor D. Ruhl, *Assistant Professor of Library Science* (1974)
B.Mus.Ed. 1971; M.Mus. 1972, Pacific Union College
M.S.L.S. 1974, University of Southern California
- E. Gary Schneider, *Associate Professor of Health, Physical and Recreational Education* (1971)
B.A. 1959; M.A. 1960, Andrews University
M.P.H. 1971, Loma Linda University
- F. Ruth Schneider, *Instructor in Nursing* (1973)
B.S. 1973, Walla Walla College
- Carlos A. Schwantes, *Associate Professor of History* (1969)
B.A. 1967, Andrews University
M.A. 1968; Ph.D. 1976, University of Michigan
- David L. Schwantes, *Instructor in Journalism* (1974)
B.A. 1973, Walla Walla College
M.A. 1977, University of Oregon
- Mary Schwantes, *Assistant Professor of Home Economics* (1969)
B.S. 1968; M.S. 1972, Eastern Michigan University
- Ward A. Soper, *Associate Professor of Mathematics* (1965)
B.A. 1961, Andrews University
M.A. 1962, University of Michigan
- N. Clifford Sorensen, *Professor of Education and Psychology* (1972)
B.S. 1958; M.A. 1963, Walla Walla College
Ed.D. 1973, University of Southern California
- Glenn E. Spring, *Associate Professor of Music* (1965)
B.A. 1962, Loma Linda University
M.Mus. 1964, Texas Christian University
D.M.A. 1972, University of Washington
- Carolyn Stevens, *Associate Professor of English* (1970)
B.A. 1965, Pacific Union College
M.A. 1966, Loma Linda University
Ph.D. 1977, University of Washington
- Robert D. Sutton, *Associate Professor of Engineering* (1974)
B.S. 1961; M.S. 1964; Ph.D. 1971, University of California at Berkeley
- Alden L. Thompson, *Associate Professor Theology* (1970)
B.A. 1965, Walla Walla College
M.A. 1966; B.Div. 1967, Andrews University
Ph.D. 1975, University of Edinburgh
- *Thomas M. Thompson, *Assistant Professor of Mathematics* (1971)
B.A. 1968, Walla Walla College
M.A. 1971, University of Washington
- Calvin L. Trautwein, *Professor of Industrial Technology* (1951)
B.A. 1945, Loma Linda University
B.S. 1950, Pacific Union College
Ed.M. 1955, Oregon State College
Ed.D. 1962, Colorado State College
- Fred W. Troutman, *Assistant Professor of Nursing* (1972)
B.S. 1966, Walla Walla College
M.S. 1974, Loma Linda University

*On leave

- Robert R. Tupper, *Assistant Professor of Music* (1972)
B.Mus. 1969, Walla Walla College
M.Mus. 1970, University of Oklahoma
- Patti A. Velez, *Instructor in Health, Physical and Recreational Education* (1977)
B.S. 1970, Loma Linda University
M.A. 1977, United States International University
- Larry E. Neverka, *Assistant Professor of Theology* (1976)
B.A. 1965, La Sierra College
M.A. 1966; B.D. 1966, Andrews University
- Dale B. Visger, *Assistant Professor of Industrial Technology* (1977)
B.S. 1958, Walla Walla College
M.Ed. 1963, Oregon State University
- Dale O. Wagner, *Professor of Education and Psychology* (1966)
B.A. 1952, Walla Walla College
Ed.M. 1958, Eastern Washington State College
Ed.D. 1973, University of Idaho
- Betty Wallace, *Assistant Professor of Nursing* (1970)
B.S. 1967, Walla Walla College
M.S. 1970, University of Michigan
- Donald M. Warren, *Professor of Behavioral Science* (1976)
B.A. 1947; M.A. 1959, Pacific Union College
Ph.D. 1966, Stanford University
- John L. Waterbrook, *Associate Professor of Health, Physical and Recreational Education* (1965)
B.S. 1966; M.Ed. 1969, Walla Walla College
Ed.D. 1974, University of Northern Colorado
- Eileen V. Watson, *Instructor in Communications* (1976)
B.S. 1970, Loma Linda University
M.A. 1971, California State University
- Verne V. Wehtje, *Professor of English* (1976)
B.A. 1956, Walla Walla College
M.A. 1962, University of Washington
Ph.D. 1967, University of Nebraska
- Harold C. Weir, *Assistant Professor of Health Sciences* (1977)
B.A. 1957, Walla Walla College
M.Ed. 1970, University of Washington
- Lois A. Whitchurch, *Assistant Professor of Nursing* (1967)
B.S. 1965, Walla Walla College
M.S. 1967, Loma Linda University
- Gerald A. Winslow, *Associate Professor of Theology* (1968)
B.A. 1967, Walla Walla College
M.A. 1968, Andrews University
- Eugene S. Winter, *Professor of Health, Physical and Recreational Education* (1946)
B.A. 1941, Walla Walla College
M.S. 1948, State College of Washington
Ph.D. 1963, University of Oregon
- Gary Alan Wiss, *Professor of English* (1966)
B.A. 1966, Walla Walla College
M.A. 1969; D.A. 1976, University of Oregon
- Clarence A. Wood, *Assistant Professor of Speech Pathology and Audiology* (1966)
B.A. 1961, Loma Linda University
M.A. 1963, University of Denver

Robert F. Wood, *Associate Professor of Engineering (1976)*

B.S. 1960, Walla Walla College

M.S. 1966, University of Texas

Ph.D. 1970, University of Illinois

Evelynne F. Wright, *Professor of Home Economics (1945)*

B.A. 1941, Pacific Union College

M.S. 1953, Oregon State College

LECTURERS

Joseph N. Barnes, Ph.D., *Lecturer in Theology and Sociology and Social Work*

Maxine Blome, M.S., *Lecturer in Nursing*

Ronald L. Carter, Ph.D., *Lecturer in Theology*

Andrew Dressler, III, M.Acct., *Lecturer in Business*

Ed S. Kasner, M.S.W., *Lecturer in Sociology and Social Work*

Margaret J. Kimpton, M.C., *Lecturer in Nursing*

Timothy E. Larson, B.S., *Lecturer in Art*

P. E. Mitchell, M.S.W., *Lecturer in Sociology and Social Work*

David Neff, M.Div., *Lecturer in Theology*

Harold T. Osterud, M.D., M.P.H., *Lecturer in Nursing*

Sue Perkins, M.A., *Lecturer in Health, Physical and Recreational Education*

Vernon W. Shafer, Ph.D., *Lecturer in Psychology*

Betty Winslow, M.S., *Lecturer in Nursing*

EMERITI

Herbert J. Alcock, M.A., *Professor of Religion*

Irene T. Black, B.A., *Registrar*

George W. Bowers, Ph.D., LL.D., *Professor of Chemistry*

Darrell J. Cowin, *Assistant Professor of Industrial Education and Technology*

Frederick R. Hanson, M.A., *Professor of Nursing*

Carl T. Jones, *Professor of Chemistry*

Frank E. Meckling, Ph.D., *Professor of History*

Hans L. Rasmussen, Ed.D., *Academic Dean*

Lilah Godfrey Schlotthauer, M.S., *Associate Professor of Mathematics*

Cecil W. Shankel, M.A. *Professor of Chemistry*

Agnes L. Sorenson, M.A., *Professor of Modern Languages*

Henrique G. Stoehr, Dr.U.P., *Professor of Modern Languages*

Genevieve Stabler Weaver, B.A., *Associate Professor of Secretarial Science*

PRESIDENTS OF WALLA WALLA COLLEGE

John M. H. Smith	Edward A. Sutherland	1892-1897
Paul A. Young	Emmett J. Hibbard	1897-1898
Physical Education	Walter R. Sutherland	1898-1900
B.S. 1970, L.A. 1971	Edwin L. Stewart	1900-1902
M.A. 1972	Charles C. Lewis	1902-1904
Larry E. Vey	Joseph L. Kay	1904-1905
B.A. 1961, M.A. 1962	Marion E. Cady	1905-1911
Physical Education	Ernest C. Kellogg	1911-1917
B.S. 1961, M.Ed. 1963	Walter I. Smith	1917-1930
B.S. 1963	John E. Weaver	1930-1933
Dale O. Waggoner	William M. Landeen	1933-1938
B.A. 1952, M.A. 1953	George W. Bowers	1938-1955
B.S. 1953	Percy W. Christian	1955-1964
B.S. 1955	William H. Shephard	1964-1968
Betty Wallace	Robert L. Reynolds	1968-1976
B.S. 1926	N. Clifford Sorenson	1976-

Donald M. Weller, *Associate Professor of English* (1966-1970)
 Ph.D. 1966, Stanford University
 John L. Waterbrook, *Associate Professor of Physical and Recreational Education* (1969-1974)
 B.S. 1966, M.Ed. 1969, Walla Walla College
 Ed.D. 1974, University of Northern Colorado

EMERITI

Eileen V. Watson, *Instructor in Communications* (1966-1971)
 B.S. 1970, Long Beach University
 M.A. 1971, California State University
 Verne V. Websa, *Professor of English* (1961-1967)
 B.A. 1954, Walla Walla College
 M.S. 1961, University of Washington
 Ph.D. 1967, University of Minnesota
 Harold C. West, *Assistant Professor of Chemistry* (1961-1967)
 B.A. 1957, Walla Walla College
 M.S. 1961, University of Washington
 Clarence W. Whalen, *Professor of English* (1961-1967)
 B.A. 1955, Walla Walla College
 M.S. 1961, University of Oregon
 Gerald A. Williamson, *Professor of English* (1961-1967)
 B.A. 1951, University of Washington
 M.A. 1953, University of Oregon
 Eugene L. Winter, *Professor of Health, Physical and Recreational Education* (1966-1970)
 B.A. 1941, Walla Walla College
 M.S. 1966, State College of Washington
 Ph.D. 1968, University of Oregon

Gary Albin Wirs, *Professor of English* (1961-1967)
 B.A. 1956, Walla Walla College
 M.A. 1960, D.A. 1974, University of Oregon

Clarence A. Wood, *Assistant Professor of Speech Pathology and Audiology* (1966-1967)
 B.A. 1961, Long Beach University
 M.A. 1963, University of Denver

COMMITTEE ASSIGNMENTS

The letters following individual names are used to indicate the authority for the given membership as follows:

- P Appointed by President
- N Appointed by Nominating Committee
- F Elected by Faculty
- S Selected by ASWWC

The last academic year of the term of office is given by the dates in *italics* following the individual names.

ACADEMIC MASTER PLANNING (Ad Hoc to Faculty Senate)

- Hollibert Phillips, *chairman, P*
- Nathan Moore, *Editor, P*
- Dale Clayton, *N*
- Lorne Glaim, *N*
- Elwin Liske, *N*
- Carolyn Stevens, *N*

ACADEMIC STANDARDS (VIII-20†) (Five-Year Terms)

- Donald Warren, *ex officio chairman*
- Orpha Osborne, *ex officio*
- Rodney Heisler, *N, 1978-79*
- Robert Henderson, *N, 1979-80*
- Robert Kappel, *N, 1977-78*
- William Napier, *N, 1980-81*
- Verne Wehtje, *N, 1981-82*

ADMINISTRATIVE COUNCIL (VIII-2†)

- N. Clifford Sorenson, *ex officio chairman*
- Richard Beck, *ex officio*
- Donald Eichner, *ex officio*
- Alice Hoffman, *ex officio*
- Donald Lake, *ex officio*
- Malcolm Maxwell, *ex officio*
- Walter Meske, *ex officio*
- Donald Warren, *ex officio*
- Charles Bell, *P*
- Ronald Carter, *P*
- Hollibert Phillips, *P*
- Director of Admissions and Records
- Graduate Manager of ASWWC

† Page in Faculty Handbook

ADMISSIONS (VIII-21†) (Two-Year Terms)

Director of Admissions and Records, *ex officio chairman*
Victor Fitch, *ex officio*
Alice Hoffman, *ex officio*
Donald Lake, *ex officio*
Walter Meske, *ex officio*
Donald Warren, *ex officio*
James Chambers, *F*, 1977-78
Bonny Eichner, *F*, 1978-79
Fred Perry, *P*, 1978-79
Florence Schneider, *F*, 1977-78

CAMPUS DRESS CODE (VIII-18†)

Mary Schwantes, *chairman, P*
Alice Hoffman, *ex officio*
Donald Lake, *ex officio*
Walter Meske, *ex officio*
* Ron Wilkinson, *ex officio*
* Tammy Dimke, *ex officio*
Lee Johnston, *P*
Lee Loewen, *P*
Eileen Watson, *P*
* Karen Gimble, *S*
* Shelley Hamilton, *S*
* Roy Jenson, *S*
* Wayne Shafer, *S*
* Larry Summerton, *S*

COMPUTER USERS (Ad Hoc to Office of Academic Affairs)

Rodney Heisler, *chairman*
Darlene Wallace, *executive secretary*
Claude Barnett
Richard Beck
Dale Clayton
Garth Fisher
Joseph Galusha
Lois Hellie
Oran McNeil
Robert Noel
Orpha Osborne
Jack Paulman
Robert Rittenhouse
Ward Soper
Dale Wagner
Donald Warren

† Page in *Faculty Handbook*

* Student members

CURRICULUM (VIII-23†) (Five-Year Terms)

- Donald Warren, *ex officio chairman*
Orpha Osborne, *ex officio*
Claude Barnett, *N*, 1979-80
Jon Cole, *N*, 1977-78
Richard Emmerson, *N*, 1980-81
Donald Rigby, *N*, 1978-79
Carlos Schwantes, *N*, 1981-82
Director of Admissions and Records

FACULTY GRANTS (VIII-3†) (One-Year Terms)

- Terry Anderson, *chairman, P*
Richard Beck, *ex officio*
Donald Warren, *ex officio*
Robert Gardner, *F*
Larry McCloskey, *F*
Barton Rippon, *F*
Carolyn Stevens, *F*

FACULTY HANDBOOK REVISION (VIII-16†) (Two-Year Terms)

- Nathan Moore, *chairman, P*, 1977-78
Fred Bennett, *F*, 1977-78
Sandra Camp, *F*, 1977-78
Lorne Glaim, *F*, 1978-79
Shirley Graves, *F*, 1978-79
Vacancy, *F*, 1978-79

FACULTY INTERDISCIPLINARY COLLOQUIUM (VIII-26†)

(Two-Year Terms)

- Donald Warren, *ex officio*
Terry Anderson, *N*, 1977-78
Dale Clayton, *F*, 1978-79
Jack Dassenko, *F*, 1978-79
Richard Emmerson, *F*, 1978-79
Robert Hunter, *N*, 1977-78
Alden Thompson, *N*, 1977-78

HONORS (Ad Hoc to Faculty Senate)

- Lorne Glaim, *chairman*, *N*
Terry Anderson, *N*, 1979-80-81-82-83
Richard Emmerson, *N*, 1978-79-80-81-82-83
Robert Gardner, *N*, 1978-79-80-81-82-83
Melvin Lang, *N*, 1978-79-80-81-82-83
Donnie Rigby, *N*, 1978-79-80-81-82-83
Verna Wachtel, *N*, 1979-80
Jerry Winslow, *N*, 1979-80

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FACULTY SENATE (VIII-6†) (Two-Year Terms)

- N. Clifford Sorensen, *ex officio chairman*
Richard Beck, *ex officio*
Elwood Mabley, *ex officio*
Orpha Osborne, *ex officio*
Donald Warren, *ex officio*
Reinhard Czeratzki, *F*, 1977-78
Garth Fisher, *F*, 1978-79
Joseph Galusha, *F*, 1977-78
Robert Kappel, *F*, 1978-79
Gary Schneider, *F*, 1977-78
David Schwantes, *F*, 1978-79
Director of Admissions and Records
All Academic Department Chairmen and School Deans

FINANCIAL AID (VIII-10†) (One-Year Terms)

- Victor Fitch, *ex officio chairman*
Donald Lake, *ex officio*
Orpha Osborne, *ex officio*
Donald Warren, *ex officio*
Lewis Canaday, *P*
Lee Reynolds, *P*
Director of Admissions and Records

GOVERNMENT (VIII-18†) (One-Year Terms)

- Donald Lake, *ex officio chairman*
Alice Hoffman, *ex officio*
Walter Meske, *ex officio*
Dale Hepker, *F*
Carlos Schwantes, *F*
Carolyn Stevens, *P*
Gerald Winslow, *P*

GRADUATE COUNCIL (VIII-22†) (Two-Year Terms)

- Donald Rigby, *ex officio chairman*
Orpha Osborne, *ex officio*
Dale Wagner, *ex officio*
Donald Warren, *ex officio*
Leal Dickson, *P*, 1977-78
Dale Johnson, *P*, 1978-79
Elwin Liske, *P*, 1977-78
Robert Rittenhouse, *P*, 1978-79
Verne Wehtje, *P*, 1978-79
Director of Admissions and Records

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GRIEVANCE (not yet in handbook) (Two-Year Terms)

- Malcolm Maxwell, *chairman, N, 1978-79*
 - Melvin Lang, *F, 1977-78*
 - Donnie Rigby, *F, 1978-79*
 - Beverly Beem, alternate for Rigby, *F, 1978-79*
 - Charles Bell, alternate for Lang, *F, 1977-78*
- * Ted Bertleson, *S*
 - * Jayne Metz, *S*
 - * Sue Aime, alternate for Metz, *S*
 - * Leonard Soloniuik, alternate for Bertleson, *S*
 - Staff representatives and their alternates, 2,2

HEALTH AND SAFETY (VIII-8†) (One-Year Terms)

- Richard Beck, *chairman, P*
 - Charles Davis, *ex officio*
 - Alice Hoffman, *ex officio*
 - Donald Lake, *ex officio*
 - J. D. Losey, *ex officio*
 - Walter Meske, *ex officio*
 - Clyde Sample, *ex officio*
 - Helen Spechko, *ex officio*
 - Paul Coleman, *P*
 - John Wohlers, *P*
- * Jan Bartlett, *S*
 - * Doug Botimer, *S*
 - * Betty Hale, *S*
 - * Harley Heinrich, *S*
 - * Gina Leeper, *S*
- Representative, Department of Health, P.E. and Recreation

HONORARY DEGREES (VIII-23†)

- Donald Warren, *chairman, P*
- Edward Cross, *P*
- Paul Grove, *P*
- Harold Ochs, *P*
- Donald Rigby, *P*

HONORS (Ad Hoc to Faculty Senate) (Four-Year Terms)

- Lorne Glaim, *chairman, N, 1978-79*
- Terry Anderson, *N, 1980-81*
- Richard Emmerson, *N, 1977-78*
- Robert Gardner, *N, 1980-81*
- Melvin Lang, *N, 1978-79*
- Donnie Rigby, *N, 1977-78*
- Verne Wehtje, *N, 1979-80*
- Jerry Winslow, *N, 1979-80*

† Page in *Faculty Handbook*

* Student members

HOUSE (VIII-2†)

- N. Clifford Sorensen, *ex officio chairman*
Richard Beck, *ex officio*
Donald Eichner, *ex officio*
Donald Lake, *ex officio*
Donald Warren, *ex officio*

LIBRARY (VIII-26†) (Three-Year Terms)

- Donald Warren, *ex officio chairman*
Elwood Mabley, *ex officio*
Dale Clayton, *F*, 1979-80
Richard Emmerson, *F*, 1977-78
Lee Loewen, *P*, 1978-79
Robert Rittenhouse, *P*, 1979-80
David Schwantes, *P*, 1977-78
Gerald Winslow, *F*, 1978-79
* Rori Leeper, *S*, *One-Year Term*
* John Matterand, *S*, *One-Year Term*

LYCEUM SOCIAL ACTIVITIES (VIII-12†) (One-Year Terms)

- Donald Eichner, *chairman, P*
* Tammy Dimke, *ex officio*
Glenn Masden, *P*
Sherrick Hiscock, *P*
David Schwantes, *F*
Gary Wiss, *F*
* Glenn Balkins, *S*
* Paul Chuljian, *S*
* Kathy Willard, *S*

MASTER PLANNING (VIII-5†) (Four-Year Terms)

- Alden Thompson, *chairman, P*, 1979-80
Richard Beck, *ex officio*
N. Clifford Sorensen, *ex officio*
Donald Warren, *ex officio*
* Ronald Wilkinson, *ex officio*
June Bishop, *F*, 1978-79
Lester Border, *P*, 1980-81
Loren Dickinson, *chairman elect, P*, 1979-80
Robert Koorenni, *P*
Elwin Liske, *F*, 1980-81
Oran McNeil, *P*, 1977-78
Walter Meske, *F*, 1977-78
Donald Rigby, *F*, 1978-79

† Page in *Faculty Handbook*
* Student members

MENTAL HEALTH (VIII-7†) (Two-Year Terms)

- Lyle Cornforth, *ex officio chairman, P*
Ronald Carter, *ex officio*
Alice Hoffman, *ex officio*
Donald Lake, *ex officio*
J. D. Losey, *ex officio*
Walter Meske, *ex officio*
Helen Spechko, *ex officio*
Betty Wallace, *ex officio*
Vernon Shafer, *P*
* Ted Bertleson, *S*
* Michael Blankenship, *S*
* Sylvia Green, *S*
* Jan Kiele, *S*
* Sharon Plummer, *S*
Health Educator

NOMINATING (VIII-16†) (Two-Year Terms)

- N. Clifford Sorensen, *ex officio*
Donald Warren, *ex officio*
Jon Cole, *F, 1978-79*
Joseph Galusha, *F, 1977-78*
Wilma Hepker, *F, 1977-78*
Malcolm Maxwell, *F, 1978-79*
Verne Wehtje, *F, 1977-78*

PREPROFESSIONAL EVALUATION (VIII-9†) (One-Year Terms)

- Donald Warren, *ex officio chairman*
Alice Hoffman, *ex officio*
Donald Lake, *ex officio*
Walter Meske, *ex officio*
Gordon Johnson, *P*
Melvin Lang, *P*
Malcolm Maxwell, *P*
Donald Rigby, *P*
Bart Rippon, *P*

PREVIEW (VIII-11†) (One-Year Terms)

- Donald Eichner, *chairman, P*
Scott Duncan, *ex officio*
Loren Dickinson, *F*
Robert Tupper, *P*
Larry Veverka, *F*
* Dan Pashke, *S*
* Kathy Willard, *S*

† Page in *Faculty Handbook*

* Student members

PUBLIC RELATIONS (VIII-5a†) (Two-Year Terms)

Donald Eichner, *chairman, P*
Dan Akers, *P*
David Bullock, *P*
Victor Fitch, *P*
Robert Koorenny, *P*
Kenneth MacKintosh, *P*
David Schwantes, *P*

RANK AND TENURE (VIII-19†) (Three-Year Terms)

Donald Warren, *ex officio nonvoting*
Loren Dickinson, *F, 1977-78*
Gordon Hare, *F, 1978-79*
Robert Henderson, *P, 1977-78*
Rodney Heisler, *F, 1979-80*
Gerald Winslow, *F, 1979-80*

RELIGIOUS INTERESTS (VIII-13†)

Bart Rippon, *chairman, P*
Ronald Carter, *ex officio*
Richard Gage, *ex officio*
Alice Hoffman, *ex officio*
Donald Lake, *ex officio*
Malcolm Maxwell, *ex officio*
Walter Meske, *ex officio*
William Napier, *P*
Gary Schneider, *P*
* Ruth Blabey, *S*
* Craig Knecht, *S*
Church Lay Activities Leader
A church member representing the community
Faculty Advisers for SS, MV, ASWWC Religious Activities,
Spiritual Vice Presidents of EMS, AGA, CS, AD, ASWWC,
Senior Sabbath School Superintendent, MV Leader

† Page in *Faculty Handbook*
* Student members

STUDENT AFFAIRS (VIII-12†) (One-Year Terms)

- Donald Lake, *ex officio chairman*
Alice Hoffman, *ex officio*
Walter Meske, *ex officio*
Art Christensen, *P*
Edna Grove, *P*
Chester Lindt, *F*
Gordon Mattison, *F*
William Messer, *P*
Robert Sutton, *F*
* Glenn Balkins, *S*
* Mike Blankenship, *S*
* Allison Jones, *S*
* Tim Patchett, *S*
* Wayne Schaffer, *S, Alternate*
Representative from Academic Affairs Office

STUDENT-FACULTY COUNCIL (VIII-4†)

The membership of this committee is determined by numerous *ex officio* designations and selections made by several campus organizations

STUDENT FINANCE (VIII-10†) (One-Year Terms)

- Richard Beck, *ex officio chairman*
Victor Fitch, *ex officio*
Alice Hoffman, *ex officio*
Walter Meske, *ex officio*
Walter Anderson, *P*
Jake Mehling, *P*
Fred Perry, *F*
Two Student Members, *S*

STUDENT INVOLVEMENT (VIII-15†) (Two-Year Terms)

- Melvin Lang, *chairman, P, 1977-78*
Beverly Beem, *F, 1978-79*
Jon Dybdahl, *F, 1978-79*
Donnie Rigby, *F, 1977-78*
Carlos Schwantes, *P, 1978-79*
* Paul Chuljian, *S*
* Kris Ordelheide, *S*
* Dick Patchett, *S*
* Beverly Rippey, *S*

The College offers vocational training with interests and abilities in industrial and vocational skills. Instruction is therefore offered which develops both understanding and proficiency in a number of technical and industrial areas. The institution believes in the value and dignity of practical work.

While serving primarily the Seventh-day Adventist youth of the Pacific Northwest, the College accepts students from other states and countries who work and who are willing to contribute to the College.

† Page in *Faculty Handbook*

* Student members

TEACHER EDUCATION COUNCIL (VIII-24†) (One- or Three-Year Terms)

- Dale Wagner, *ex officio chairman*
Donald Warren, *ex officio*
Claude Barnett, *N*, 1977-78, *ii***
Edna Grove, *N*, 1979-80, *iii*
Gordon Hare, *N*, 1979-80, *ii*
Lee Loewen, *N*, 1977-78, *i*
Harold Ochs, *N*, 1977-78, *iii*
Robert Rittenhouse, *N*, 1978-79, *i*
Gary Schneider, *N*, 1978-79, *i*
Verne Wehtje, *N*, 1978-79, *ii*
William Elder, *N*, 1977-78, *vi*
Graduate Student, *N*, 1977-78

† Page in *Faculty Handbook*

** These numerals refer to committee categories as outlined in the *Faculty Handbook*.



COLLEGE AIMS

Walla Walla College is a Christian institution of higher learning operated by the Seventh-day Adventist Church. The College recognizes that true education "has to do with the whole being, and with the whole period of existence possible to man. It is the harmonious development of the physical, the mental, and the spiritual powers. It prepares the student for the joy of service in this world, and for the higher joy of wider service in the world to come." Mrs. E. G. White, *Education*, p. 13.

To achieve this broad aim of education, the College provides an environment in which the student may develop a personal fellowship with Christ. In common with other institutions of higher learning, the College has for its objective the highest possible scholastic and intellectual attainment for each student. Recognizing the value of health, it encourages the students to respect their physical powers and accept the responsibility for healthful living.

As a liberal arts college, the institution stresses a thorough general education in the humanities, mathematics, science, social science and the Christian heritage, as well as competence and depth in a specified field. It is believed that such studies provide the best foundation for higher learning and for developing leaders with a world vision.

The College also serves students with interests and abilities in industrial and vocational skills. Instruction is, therefore, offered which develops both understanding and proficiency in a number of technical and industrial areas. The institution believes in the value and dignity of practical work.

While serving primarily the Seventh-day Adventist youth of the Pacific Northwest, the College accepts students from other states and countries who are qualified to do college work and who are willing to abide by the Christian principles enjoined on the campus.

Dale Wagner, ex officio chairman

Donald Warren, ex officio

Claude Barnett, N. 1971

Edna Grove, N. 1971

Gordon Hare, N. 1971

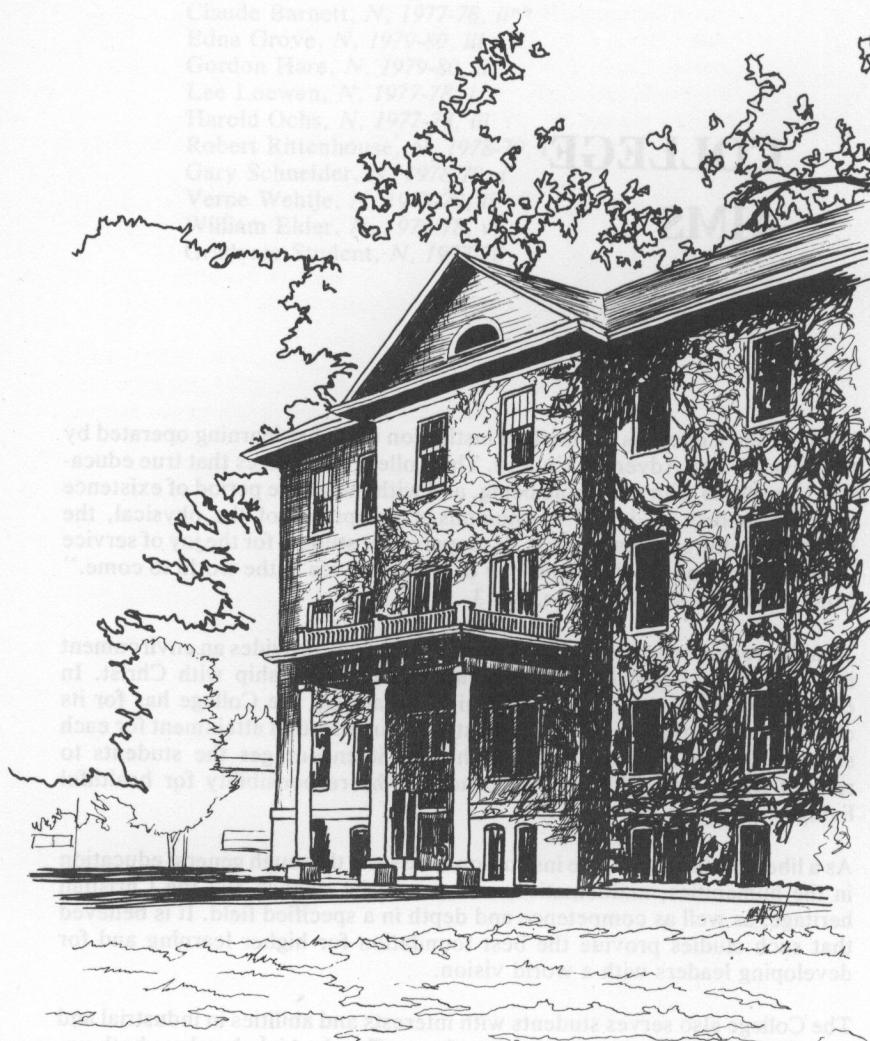
Lee Loewen, N. 1971

Harold Ochs

Robert Ritter

Gary Schmitz

Verne Wehr



ADMINISTRATION BUILDING

THE COLLEGE CAMPUS

Walla Walla 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 directly to the site of the old mission which was conducted by Marcus Whitman from 1836 to 1847. It has recently been reconstructed by the federal government as the Whitman Mission National Historic Site. The scenic Blue Mountains to the east and the Snake and Columbia Rivers to the north and west are but a few minutes' drive from the campus, and offer unusual opportunities for recreation and relaxation.

The College, in successful operation since December 7, 1892, was established in harmony with a resolution unanimously adopted at the General Conference of Seventh-day Adventists held in Battle Creek, Michigan, in 1891.

The college buildings are situated on a 55-acre campus dotted with maple and sycamore trees. Other buildings belonging to the College are located on adjoining lots of land, totaling 22 additional acres.

ADMINISTRATION BUILDING. The Administration Building is a three-story structure located in the center of the campus. This building houses the administrative offices and a number of classrooms, laboratories and teacher offices.

BOWERS HALL. The department of chemistry is housed in Bowers Hall, a two-story brick building. The accommodations include two classrooms, five laboratories, two research laboratories, a library-seminar room, three offices, a stockroom and a photographic darkroom.

COLLEGE CHURCH. The College Church is a large, brick structure done in modern architecture. It seats 2,500 worshipers and 150 choir members. The Casavant-Freres organ is a three-manual, five-division instrument with almost 5,000 pipes. In addition to the church itself, there are a youth chapel and several large rooms for youth and children's Sabbath Schools.

COLUMBIA AUDITORIUM. Columbia Auditorium, a reinforced concrete auditorium with a seating capacity of over 2,000 persons, serves the college and College Place community.

CONARD HALL. Conard Hall offers comfortable accommodations for 400 women, together with such features as a large worship room done in church style, a recreation room and attractive parlors.

EDUCATIONAL COMPUTER CENTER. Walla Walla College offers computer services to a wide variety of college users through its Education Computer Center. Computer services are available for instructional use by all faculty, staff and students from all segments of the campus including both the sciences and the humanities, using over two dozen terminals located primarily in large conveniently located terminal pools. These facilities are used as laboratories in classes teaching computer concepts and languages, as tools in classes requiring data manipulation, and as instructional aids in any discipline offering tutorial assistance and testing. The Center also serves the records office by supporting its activities in admission, registration and record keeping, and allows accurate and up-to-date information from its data base to be obtained by authorized users.

The novice user may communicate with the computer in easy, Englishlike language or use stored sophisticated routines requiring no knowledge of specialized computer languages. The more experienced user may use any of a large number of standard languages including BASIC, FORTRAN, RPG II, COBOL in addition to powerful assemblers, editors and utility languages. Time sharing allows large numbers of users to simultaneously use the computer. Each may choose any of the available languages independent of which language others are using. A batch mode is also available for noninteractive use.

The current facilities include a Hewlett-Packard 3000 Series II computer with 256 thousand bytes of central memory, 47 million bytes of disk storage (for long-term storage of programs and data), card reader, magnetic tape drives, plotter and two printers. The HP3000 computer is similar to that on two other SDA college campuses and at another local college which allows convenient sharing of programs and data.

FINE ARTS CENTER. A two-story reinforced concrete structure with brick and marblecrete exterior, completed in 1966, houses the departments of art and music. The building occupies the site of the old Johnson Memorial Conservatory. An auditorium seating 300 persons is a central feature of the building around which departmental offices, teaching studios, choral and instrumental rehearsal rooms, practice rooms, etc., are grouped. There are two classrooms, a reception room and foyers. A central feature of the main foyer is a large seven-piece mural depicting creation week, appropriately entitled, "In the beginning God."

The building is furnished with a three-manual, 36-rank Casavant organ with exposed pipework, a nine-foot Steinway concert grand piano, listening facilities and recording equipment, many pianos and other instruments.

The building houses the department of art, where classroom and work areas

provide facilities for drawing, painting, design, printmaking and sculpture. A display area for art is provided by the Clyde and Mary Harris Art Gallery which was completed in January 1974.

FOREMAN HALL. Completed in October 1970, Foreman Hall houses 206 upper-division women students. Using a modular design, the building is unique in providing elevator service, individual floor parlors and carpeting throughout the building.

HALLMARK APARTMENTS. This 49-unit complex provides residence hall housing for single men and married students.

HEALTH SCIENCE COMPLEX. A new 40,000-square-foot addition to the Tausick Memorial Pool and Gymnasium includes classrooms and offices for the nursing, and health and physical education departments as well as areas for motor learning, weight lifting, gymnastics, first aid and physical therapy as well as four handball courts. The outdoor facilities include six tennis courts and a 400-meter, all-weather surface track.

INDUSTRIAL TECHNOLOGY CENTER. This building is to be completed during the current school term. It includes 71,000 feet of floor space providing new and modern facilities for the teaching of auto mechanics, electronics, graphics, industrial crafts, metals and woods.

KELLOGG HALL. Kellogg Hall, a brick and steel structure, completed in 1958, contains the college food service. The building also houses the Student Association's offices, lounge, *Mountain Ash* office and the *Collegian* office.

KRETSCHMAR HALL. This building, completed in 1963, is a reinforced concrete and masonry structure of 30,000 square feet, housing the departments of engineering, physics and mathematics. In addition to classrooms, laboratories and staff offices, the building contains a departmental library, computer room, radioactive isotope storage vault and a science demonstration lecture hall seating 150 persons.

LIFE SCIENCES COMPLEX. Departments housed in the Life Sciences Complex completed in 1967 are biology and home economics.

Facilities for biology include staff and graduate student offices, classrooms and teaching laboratories. In addition, specialized facilities are research laboratories, controlled environmental rooms and chambers, radioisotope laboratory, animal and greenhouse complexes, photographic darkroom, museum and a shop.

The department of home economics is housed in the east wing of the Life Sciences Complex. The accommodations include offices and classrooms, a dining room, lounge and laboratories for food preparation, advanced nutrition, experimental foods, animal studies, clothing construction, weaving and home furnishings.

MARINE STATION. This facility occupies 40 acres of beach and timberland at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. The physical plant includes five laboratory buildings, a kitchen and

assembly hall, shop and 29 cabins for student and staff housing.

PETERSON MEMORIAL LIBRARY. The library is a vital part of the educational program at Walla Walla College. The building was completed in 1944 and remodeled in 1964. Reading room accommodations, the open-shelf system, seminar and conference rooms, a periodical room and a listening/viewing facility, contribute to the study and enjoyment of learning materials. Microreaders make accessible microforms of scholarly material. The curriculum library, located in Smith Hall, contains a large selection of textbooks, children's literature books, a collection of mounted pictures, filmstrips, tapes and phonorecords. The library on the Portland campus serves specifically the students of nursing assigned there to obtain their clinical practice. The combined libraries contain approximately 130,000 volumes. An average of 4,500 volumes is accessioned annually. There are about 910 currently received periodicals. Periodical indexes and other bibliographical aids are also available. Resources in other libraries are available to graduate students and faculty members through the library's membership in the Pacific Northwest Bibliographic Center, which serves as a clearinghouse for interlibrary loans.

PORTLAND ADVENTIST MEDICAL CENTER. In addition to the College Place campus, Walla Walla College also utilizes the large plant of Portland Adventist Medical Center, located at Portland, Oregon, where the students in nursing obtain their clinical practice.

On the Portland campus is a residence hall for unmarried students located across the street from the Portland Adventist Medical Center. The nurses' home has a large parlor, sitting room, a modern kitchen and laundry facilities to provide for comfortable living in homelike surroundings as well as classrooms and a library.

SITTNER HALL. Erected in 1947 and expanded in 1960, Sittner Hall accommodates approximately 500 resident men. There are lounges, a recreation room and new health club facilities.

SMITH HALL. The department of education and psychology is housed in a three-story building which was completed in 1965. It contains classrooms, a counseling instructional center, an early childhood education laboratory, curriculum library, a lecture hall and offices for the department.

STUDENT HEALTH CENTER. A student health center with a full-time registered nurse as director is maintained on the campus. Clinical and hospital facilities, consultation rooms, treatment rooms and other necessary facilities are available for student use. Several physicians maintain regular office hours in the student health service.

VILLAGE HALL. This building seats approximately 600 people and is used for men's worship and campus dramatic productions. The guidance and counseling center is located on the lower level of the building.

WHITMAN LODGE. A men's residence hall adjoining the college campus which accommodates 45 junior and senior men.

STUDENT LIFE

The college is concerned with the education of the total person for happy and effective campus living. It provides a broad range of cultural, social, religious and recreational activities to add depth and maturity for a Christ-centered life.

STUDENT CONDUCT

In all matters pertaining to personal conduct, students are expected to act as responsible citizens and members of a Christian community conducted in accord with the ideals of the Seventh-day Adventist church. The College welcomes to its school family any individual, regardless of religious persuasion, race, color or sex, who wishes to obtain a quality education in an environment which is maintained in accord with these ideals. Those who do not, out of personal conviction, seek this type of educational environment are urged not to apply for admission. Any student whose activities interfere with the preservation of the College's unique character may be required to withdraw.

The standard of conduct expected by the College is presented in detail in the *Student Handbook*. Application to enroll in the College is viewed as evidence that the student has chosen to live by the practices and regulations which appear in official college publications, or as announced during the school year.

RELIGIOUS ACTIVITIES

CHAPEL. Chapel, held each Wednesday, is regarded as a vital part of the total education program at Walla Walla College, and all undergraduate students are required to attend.

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

Walla Walla College sponsors several organizations and activities which aid in training the students for Christian service.

CHURCH AND SABBATH SCHOOL. The Walla Walla College Church with a membership of approximately 1,500, provides opportunities for group worship and offers training in missionary endeavor and church organization.

The Sabbath School provides leadership training and teaching experiences for college students who wish to develop their abilities in religious education.

MISSIONARY VOLUNTEER SOCIETY. The Missionary Volunteer Society is a student-operated organization that promotes religious understanding and activity. Besides providing Friday evening programs, typical activities include: providing tutors for labor camps, arranging a variety of Sabbath afternoon service projects, conducting weekend lecture series and sponsoring student missionaries.

PRAAYER BANDS. The prayer bands under student leadership encourage the prayer life of the students. These groups meet regularly and foster the spiritual life of the individuals who participate.

HOUSING FOR STUDENTS

APARTMENTS. The College owns 50 units of one- and two-bedroom apartments which are available for married students. These apartments rent for reasonable amounts. There are also apartments in the community, furnished and unfurnished, in which married students may live. For information, write to the director of purchasing.

RESIDENCE HALLS. All unmarried students taking one class or more are required to live in one of the college residence halls and to board in the college cafeteria, unless they live with their parents.

Under special circumstances, students may make application to the Student Affairs Committee for permission to live off the campus in an officially approved home. Such applications are filed with the office of student affairs and will be processed only at the beginning of a quarter. Failure to secure official approval to reside in the community or to withdraw from a college residence hall will invalidate the registration of the student. Students who have received approval for off-campus living may be called into the college residence halls at any time.

ACADEMIC ADVISEMENT, COUNSELING, TESTING, PLACEMENT

FRESHMAN ADVISEMENT. The freshman advisement program is designed to assist freshmen toward making maximum use of their college experience beginning with freshman orientation and continuing throughout the school year. Each freshman student is assigned an adviser by the coordinator of the program prior to the beginning of freshman orientation.

ACADEMIC ADVISEMENT. All academic advisers are assigned by the department chairman. Students will consider the chairman of the department in which they major to be their faculty adviser in all matters relating to their academic program unless the chairman designates another faculty member as the academic adviser. Students planning to teach on either the elementary or secondary level should also consult with the chairman of the department of education and psychology.

PREPROFESSIONAL PROGRAMS. Certain faculty members have been appointed to serve as the academic advisers to students preparing for careers in various professional vocations (see the Preprofessional Program section of this bulletin).

COUNSELING SERVICE. The Counseling Center seeks to assist students toward effective use of their personal resources and opportunities. Counseling appointments for social, occupational, academic or personal concerns may be made through the center's secretary. Referral services to area professionals are also available.

TESTING SERVICE. Individual and group interest, aptitude and personality tests are administered by the Counseling Center. The College also serves as an official testing center for all professional school admissions tests such as the Medical College Admissions Test (MCAT), Dental Aptitude Test (DAT), Undergraduate Assessment Program (UAP) and the Graduate Record Examination (GRE), as well as the Law School Admissions Test (LSAT) and the Graduate Management Admissions Test (GMAT). Information and administration dates may be procured from the Counseling Center.

PLACEMENT. Services of the placement bureau include assistance for full-time career positions after graduation, continuing placement service for alumni, as well as appointments for interviews with various professional organizations. Seniors seeking employment assistance should apply for placement services at the beginning of the senior year. A placement bulletin is published yearly and is distributed to all personnel directors and educational administrators of Seventh-day Adventist institutions in North America. This bulletin includes a picture and personal résumé of each graduation candidate. Individual placement files are established and maintained by the placement bureau at the request of the student under the direction of the vice president for student affairs.

STUDENT ORGANIZATIONS AND ADVISERS

ASSOCIATED STUDENTS

The Associated Students is an organization whose membership consists of all faculty members and regularly enrolled students. The association has for its objective the promotion of Walla Walla College ideals and activities. The two official publications of the Associated Students are *The Collegian*, the weekly newspaper of the College, and the *Mountain Ash*, the yearbook.

ASWWC Center	Don Dawes, Beverly Beem
ASWWC Graduate Manager	D. D. Lake
ASWWC Nominating Committee	D. D. Lake
ASWWC Religious Activities Committee	Ron Carter
ASWWC Social Activities Committee	Donnie Rigby
<i>The Collegian</i>	Dave Schwantes
<i>The Mask</i>	Kenneth Gruesbeck
<i>The Mountain Ash</i>	Tom Emmerson
Missionary Volunteers	Ron Carter
Sabbath School	M. S. Lang
Student Missionary	Wilma Hepker
Temperance	E. G. Schneider

CAMPUS CLUBS AND ADVISERS

Canadian students; Canadian Club	J. D. V. Fitch
Dormitory women; Aleph Gimel Ain (AGA)	Alice Hoffman
Dormitory men; Residence Hall Advisory Council	Walter Meske
Foreign students; Cosmopolitan Club	Roy Hingley
Single village women; Chiquita Sola (CS)	Eileen Watson
Single village men; Aurora Duxes (AD)	R. K. Czeratzki
Married students; Epsilon Mu Sigma (EMS)	Dale Snarr

DEPARTMENT CLUBS

Amateur Radio Club
Beta Mu (Home Economics)
Biology Club
Business Administration Club
Chemistry Club
Delta Rho Theta (Speech)
Education Club
Engineering Club
Grammateis Club (Office Administration)
Gymkhana Club (Physical Education)
History Club
Industrial Technology Club
Mathematics Club
Music Guild
Pegasus Club (English)
Psychology
Society of Physics Students
Sociology Club
Theology Club

ADMISSION TO THE COLLEGE

A copy of this letter will be sent to the high school principal, teacher, and the student's parents to receive reactions and recommendations. The college's admissions committee will then forward to the student's advisor who will make quarterly reports to the general office, accounting and student affairs.

ADMISSION PROCEDURE

Formal application for admission to the College is required on a form supplied through the admissions office. A recent photograph and a \$10 fee must be included. The chief factors considered by the Admissions Committee are good character, scholastic achievement, financial support and good health. After the applicant's record of previous work and recommendations have been received by the College and approved by the Admissions Committee, prompt notification of acceptance is sent.

Applications should be made as early as possible prior to the quarter in which study is to commence. All records become the property of the College.

Transcripts, applications and other credentials submitted for admission will be destroyed after two years if the applicants do not enroll in the College.

LETTER OF ACCEPTANCE. Under no condition should an applicant consider himself accepted until he has received an official letter of acceptance. Applicants ought not to plan on residence or work on the campus until they have been formally accepted.

ROOM DEPOSIT. As soon after acceptance as possible, applicants should send a room deposit of \$50 to the accounting office. This will guarantee a room for the year. This fee is refundable any time until September 1 of each year. See section on Financial Information.

OFFICIAL TRANSCRIPT. While a student may receive acceptance on the basis of an unofficial or an incomplete transcript, no one will be permitted to complete registration unless there is an official transcript on file in the admissions office.

COLLEGE ENTRANCE EXAMINATION. All entering freshmen and transfer students with fewer than 30 quarter credits must submit scores from either the Washington Pre-College Test (WPCT), the College Entrance Examination Board Admission Testing Program (ATP), the American College Test (ACT) or their equivalents. Students without these test scores must take the WPCT which is administered on the Walla Walla College campus each quarter prior to registration.

MEDICAL EXAMINATION. The health services of the College are in charge of a registered nurse who functions under the direction of the college physician. In order to give efficient service and aid in cases of illness and accident, it is required that all new students present a certificate of a recent physical examination. Approved forms are available in the admissions office.

REGULAR ADMISSION

Applicants for admission to the College should have graduated from a recognized secondary school. All students with high school backgrounds must present the following for admission:

	Semester Periods
English	30
History	10
Science	10
Mathematics	10*

**Algebra and Geometry highly recommended.*

In addition to the above requirements for admission, the following semester periods are highly recommended for entrance into the college curriculum:

	Semester Periods
Foreign Language	20
Social Studies	20
Science (additional)	10
Mathematics (additional)	10

ENTRANCE REQUIREMENTS FOR CHOSEN CURRICULUMS. Certain major areas of study require specific subjects prior to admission into their curriculums. Please refer to the specific description and listing of the major. Applicants who are deficient in subjects required for entrance into their chosen curriculum will be (1) required to present secondary credit to cover the deficiency; or (2) successfully complete a waiver examination by the end of the first year of registration in that curriculum; or (3) take additional college course work in areas approved by the major adviser.

ADMISSION BY EXAMINATION

HIGH SCHOOL EQUIVALENCY. Mature persons who have not completed secondary school or who are unable to furnish a transcript of credits may be admitted to freshman standing on the basis of a high school equivalency diploma. Such students will have obtained an average standard score of 50 on

the five sections of the General Education Development (GED) Test, with no score less than 45 on any one section. The student must be at least 18 years of age when the test is taken and four years must have elapsed since the student's eighth grade graduation.

CALIFORNIA HIGH SCHOOL PROFICIENCY EXAMINATION. Applicants who are under 18 years of age, but have successfully passed the California High School Proficiency Examination, may be considered for admission provided that (1) a minimum of two years of high school has been completed; (2) a score equal to the average entering freshman on the Washington Pre-College Test (or an equivalent examination) has been obtained; (3) written parental permission has been given; (4) the application letter lists reasons, goals and objectives for acceleration. A copy of this letter will be sent to the high school principal and residence dean/counselor for their reactions and recommendations.

The college performance of those accepted will be reviewed by the freshman adviser who will make quarterly reports to the vice presidents for academic and student affairs.

NONMATRICULATED ADMISSION

SPECIAL ADMISSION. Mature individuals ineligible for regular admission may be admitted as special students, and may register for any course for which they have sufficient background. Special students are not eligible for a degree; however, by completing requirements for regular admission, special students may become degree candidates.

GUEST ADMISSION. Students who have been in residence at other institutions of higher learning and who are not candidates for a degree from Walla Walla College may be classified as guest students. The guest student must show evidence that he is in good and regular standing at the university or college to which the credits are to be transferred.

FOREIGN STUDENT ADMISSION

Applicants must have graduated from an accredited or approved four- or six-year secondary school (depending on the country involved) or have the competencies equivalent to high school graduation. If English is not the native language, the applicant must pass a proficiency test in English (TOEFL) with a minimum score of 500. Before final acceptance is given and an I-20 form sent to the applicant, the applicant must have a \$1,000 deposit sent to the College.

ADMISSION OF TRANSFER STUDENTS

ACCREDITED. Applicants who have attended other institutions of higher education, and who have on file in the office of admissions and records

official transcripts showing a minimum grade-point average of 2.00 on all course work taken, may be admitted to advanced standing. Failure to indicate that work has been taken at other institutions at the time of application invalidates any admission.

NONACCREDITED. Students transferring from nonaccredited institutions are given conditional status with tentative credit for previous work. A student who maintains at least a 2.00 grade-point average on a full course load for one year may be given regular status with such credits for advanced standing as the transcript evaluation warrants.

SENIOR. A transfer student with senior standing must be in residence three consecutive quarters and must complete a minimum of 36 quarter hours including nine quarter hours of upper-division work in the major and three upper-division quarter hours in the minor.

COMMUNITY COLLEGE. A maximum of 96 quarter hours may be transferred from a community or two-year college. This transferable credit may be accepted any time during the student's academic program (see Concurrent Registration, p. 46).

ACADEMIC INFORMATION AND POLICIES

Changes in academic policies made during the school year and announced to the students have the same application as those published in this bulletin. Exceptions to policy may be granted by petition to the Academic Standards Committee. Forms are available at the office of admissions and records.

The academic year is divided into four quarters. The summer session is regarded as the first quarter of the academic school year.

REGISTRATION

All students are required to register on designated days at the beginning of each quarter. Registration is not official until all procedures required by the College have been completed and all fees have been paid. Faculty advisers are available to assist students with registration and in the planning of academic programs.

FRESHMAN ORIENTATION. During the first week of the autumn quarter all entering freshmen are required to attend the orientation program. Counseling and instruction concerning study skills, registration and college regulations are given. Several tests designed to guide students in planning individual programs are also administered.

CHANGES IN REGISTRATION. Changes in registration may be made during the first week of instruction without charge. No course change is permitted after the first week without the permission of the instructor involved. A charge of \$1 for each course changed is made after the first week of instruction. Courses may not be added after the second week of any quarter.

LATE REGISTRATION. Students who register after the designated registration periods are charged a late registration fee of \$15. Students may not

register after the second week of a quarter without permission of the director of admissions and records and the instructors involved. Late registrants may expect a reduction in course load.

CONCURRENT REGISTRATION. Students registered at Walla Walla College are not permitted to enroll for courses in neighboring colleges without approval.

WITHDRAWALS

INDIVIDUAL COURSES. Students withdrawing from individual courses must submit a Change of Registration voucher to the records office signed by the instructor involved and the student's adviser. The final date for dropping a course is the Wednesday prior to test week.

ALL COURSES. Students withdrawing from all classes must submit an official Class Drop Voucher to the records office. It must be signed by: (1) Major Professor (2) Student Accounts and Employment Officer (3) Vice President for Student Affairs (4) Director of Admissions and Records.

Students withdrawing from all classes after midterm will receive NC (no credit).

COURSE LOAD

The academic study load at Walla Walla College is described in terms of quarter hours. A quarter hour normally represents one class meeting a week or three hours of laboratory work a week for the duration of the quarter. Thus, a three-quarter-hour class would meet three times each week. For each "quarter hour" of credit earned, a student is expected to spend two clock hours a week in outside preparation or three hours a week in supervised study or laboratory work.

The normal load is 16 hours per quarter. Sophomores, juniors and seniors may request to register for 18 quarter hours if their grade-point average for the previous quarter was 3.00 (B). In general, the full study load for graduate students is 12 quarter hours. Undergraduate students on scholastic probation ordinarily should carry a reduced course load.

Students in college residence halls are charged for and should register for a minimum of 12 hours per quarter, except seniors in their final quarter who need less than 12 quarter hours to graduate.

The following study loads will satisfy the authorities indicated:

Immigration Authorities	12 quarter hours
Social Security	12 quarter hours
Veterans	12 quarter hours

COURSE NUMBERING

The course numbering sequence is designed to reflect in varying degrees a progression in course content, level of approach and breadth of coverage.

The course description further delineates specific course content progression. This information provided by the course number, prefix and description should serve as a general guide to the student in selecting courses compatible with his own background and ability.

LOWER DIVISION. Course numbers 100 to 299 designate college courses which assume a limited background.

UPPER DIVISION. Course numbers 300 to 499 designate courses which require one or more college prerequisites, presume a broad background, or necessitate an advanced level of study.

ADMISSION TO UPPER DIVISION. In view of the course gradation reflected in the numbering system, a student should plan to take courses numbered 300 or 400 only after he has earned 84 quarter hours and completed the lower-division general studies requirements. However, a student may register for upper-division courses with the permission of his department chairman and the instructor of the course provided he has (1) completed ENGL 121, 122-College Writing; (2) completed 48 quarter hours of course work and is currently enrolled in College Writing; (3) transferred to Walla Walla College with two or more quarters of college course work and has either completed or is concurrently enrolled in College Writing.

GRADUATE. Course numbers 500 to 599 designate fifth-year college courses.

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

For admission to the graduate program, students should consult the *Graduate Bulletin*.

CLASSIFICATION OF STUDENTS

FRESHMAN. Applicants for admission to the College who fulfill the entrance requirements for their chosen course of study are listed as freshmen.

SOPHOMORE. Students who have met the entrance requirements of their chosen course of study and who have a minimum of 36 quarter hours with a grade-point average of at least 2.00 are listed as sophomores.

JUNIOR. Students who have a minimum of 84 quarter hours with a grade-point average of at least 2.00, who can complete degree requirements by the end of the following school year, are listed as juniors.

SENIOR. Students with a minimum of 136 quarter hours with a grade-point average of at least 2.00 and who can complete all degree requirements during the current school year are eligible for senior class membership.

POSTGRADUATE. Students who have completed a baccalaureate degree and are registered for work which does not ordinarily apply toward an advanced degree.

GRADUATE. Students who have applied for and have been accepted into one of the graduate programs.

SPECIAL. Students who do not meet college entrance requirements or who do not wish to qualify for a degree, but who wish to take certain courses on a credit or an audit basis.

AUDIT. Students who audit classes must register in the usual manner and will attend all class sessions and pay the full tuition but are not required to do class assignments or sit for tests. They receive no grades and no credit.

GRADING SYSTEM

The quality of student effort is measured by a system of grades and by computed grade-point averages. The grade-point average is computed by totaling the grade points for all courses and dividing by the total quarter hours for which grades are received. **Only the best grade of a repeated course will be calculated in the grade-point average.** The symbols S, I, X and NC are disregarded in computing the grade-point average. A report of grades earned is made to students at the end of each quarter. With the student's written permission, a copy of his/her quarterly scholarship record will be sent to the parents or guardian.

The following system of grades and point values is used:

A — Excellent	4 grade points per quarter hour
B — Above Average	3
C — Average	2
D — Below Average	1
F — Failure	0
S — Satisfactory*	

*Optional mark for work equal to a grade of C or better. Also applicable to satisfactory or passing work in courses for which a conventional letter grade is not available.

X — Unofficial Withdrawal

I — Incomplete**

**Given in case of incomplete work due to justifiable causes and must be made up three weeks before the close of the following quarter unless an official extension has been granted. If the Incomplete is not made up within the approved time, the Incomplete remains on the record. A student with an Incomplete should adjust his course load the following quarter so that the work may be completed without jeopardizing scholarship in other classes.

NC — No Credit***

***Indicates that credit was not earned because:

- (a) The student opted for an S/NC mark but performance was below level of a C grade (see Optional S/NC Grading Policy following); (b) The course was evaluated with a mandatory S/NC mark but performance did not meet the minimum standards for a satisfactory grade; (c) The course was dropped after the midterm date. Courses dropped in time to receive a 50 percent tuition refund will not appear on the student's record; (d) The course was taken on an audit basis only and no credit was sought; (e) The student withdraws from all classes.

S/NC GRADING POLICY. The purpose of this option is twofold (1) to encourage students to explore areas outside of their own areas without fear of lowering their grade-point averages; (2) to reduce the anxiety and pressures stemming from letter-grade competition in courses which are not particularly important for the individual.

In any course not used to satisfy major, minor, cognate, or teaching credential requirements, other than those specified as mandatory S/NC courses, a student may submit a written request to the records office for the grade to be recorded as S for satisfactory or NC for no credit. **The request for an optional S/NC evaluation may be made any time up to the Wednesday prior to test week of each quarter.** Printed forms are available in the records office for this purpose. This form also warns the student that he/she is responsible for any future complications that might arise due to his misuse of the S/NC option.

Teachers will report a letter grade for every student to the records office according to the conventional five-letter system. For students requesting an S/NC mark, the records office will record an S for any grade of C or above and NC for any grade less than C. Teacher signatures will not be required. However, with some programs, departments may want to give consideration to the advisability of having advisers approve the student options.

Students auditing a course or withdrawing after the midterm date will receive an automatic NC. Courses dropped prior to midterm will not appear on the student's record.

Quarter hours with an S-mark may count toward graduation requirements but will not be included in the computation of a student's grade-point average.

A student may elect to take as many courses as desired on an S/NC basis. However, the maximum credit with an S-mark which may be applied toward graduation requirements is 20 quarter hours for the baccalaureate degree and 10 quarter hours for an associate degree. These maximums are in addition to any mandatory S/NC courses that the student may be required to take for graduation or teacher certification.

A student wishing to transfer S/NC type grades from another institution may do so if such quarter hours are approved for major, minor, or other specific requirements — these will be regarded as mandatory S/NC credits. The maximum total of acceptable S/NC transfer credit permitted beyond the mandatory will be 20 quarter hours for the baccalaureate degree and 10 quarter hours for an associate degree.

Once a student has requested an S/NC option, an S-symbol may be changed to a conventional letter grade only if changes in the student's program make the quarter hours essential for major, minor, or teaching credential purposes. Such changes will be made only in the year of graduation.

When an Incomplete has been granted for any course which qualifies for the S/NC option, the student may request the option during the quarter in which the work is made up.

GRADING REGULATIONS

ERRORS AND CORRECTIONS. Grade reports are issued at the close of each quarter. Upon the receipt of a grade report, the student should carefully check it for correctness as to the courses recorded, quarter hours and grades.

SCHOLASTIC PROBATION. A student who fails to make satisfactory progress toward graduation will be placed on scholastic probation. A quarter of

cumulative grade-point average below 2.00 (C) is considered unsatisfactory and will bring the student's record under review by the vice president for academic affairs. Students whose cumulative grade-point average falls below 2.00 (C) are automatically placed on scholastic probation, and they remain so classified until the overall grade-point average is again 2.00 (C) or better.

DEAN'S LIST. The vice president for academic affairs maintains a list of those students who have registered for a minimum of 15 hours per quarter and achieved a grade-point average of 3.5 or better.

GRADUATION WITH HONORS. Candidates for the baccalaureate degree with a minimum grade-point average of 3.50 may be awarded the degree with honors, *cum laude*.

CREDIT BY EXAMINATION

Walla Walla College recognizes that students who have independently achieved college-level proficiency on the basis of work experience and study may receive credit for what they already know by challenging comparable classes offered by the College. Certain college classes may not be challenged.

COURSE CHALLENGE EXAMINATIONS. A challenge examination is a college-prepared or a standardized examination which, if successfully completed, will yield regular college credit. A student wishing to challenge a course must first obtain permission from the chairman of the department in which the course is offered and then the permission of the course instructor. The student must take the examination before enrolling for further study in the field of the examination. The challenge examination may not be repeated and must be taken *prior* to the final quarter of residence. A fee is charged as indicated under the heading "Special Fees" of the Financial section of this bulletin.

VALIDATION EXAMINATIONS. Students who have transcripts from nonaccredited colleges and /or transcripts showing nontransferable college courses may request to take validation examinations in courses which are comparable to those offered by Walla Walla College. Upon successful completion of the examination, the student will be given credit in the comparable college course. A student must first obtain permission from the chairman of the department in which the course is offered and then the permission of the course instructor. A fee is charged as indicated under the heading "Special Fees" of the Financial section of this bulletin.

ADVANCED PLACEMENT EXAMINATION (CEEB) and COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP). Regular college credit may also be established by successful completion of either an Advanced Placement examination or the College-Level Examination Program (CLEP) as outlined below.

Advanced Placement (CEEB). Secondary school students who have had special preparation via advanced placement courses should plan to take the College Entrance Examination Board (CEEB) advanced placement examination. This test is administered by various secondary schools in May of each year and is graded on a five-point scale: 1 = no recommendation; 2 = possibly

qualified; 3 = qualified; 4 = well qualified; 5 = extremely well qualified. Walla Walla College grants credit to students receiving a three or better on this test and accordingly waives further college general studies requirements in the course.

College-Level Examination Program (CLEP). There are two types of CLEP examinations—General and Subject. Walla Walla College grants credit for Subject Examinations only. The Guidance and Counseling Center administers these tests on the third week of each month. Candidates should consult with the center for application forms and other specific information.

In addition to the testing fee, a fee is charged for credit earned by CEEB and CLEP as indicated under the heading "Special Fees" of the Financial section of this bulletin.

Restrictions. The following restrictions apply to all credit earned by examination whether by a college-prepared examination, CEEB or CLEP:

1. Students must be currently enrolled before credit by examination can be recorded on the permanent record.
2. Credit by examination may be earned only if the student has not already earned credit in a similar lower or upper-division course.
3. A maximum of 24 quarter hours by examination may be counted toward a baccalaureate degree excluding validation examinations.
4. An "S" grade is recorded on the permanent record and the grade-point average is not affected. Students must earn a grade no lower than "B" on college prepared examinations in order to receive credit. Unsuccessful attempts are *not* recorded.
5. Challenge examinations, including CEEB and CLEP, may *not* be repeated.
6. Repeat course work is not open to credit by examination.
7. Credit by examination may not be established for remedial course work.
8. Credit by examination may not be earned to make up "F" grades.

COURSE WAIVER EXAMINATIONS. A student may meet an academic requirement, within specified limits, by passing a waiver examination at least equal in scope and difficulty to a final examination in a course. Successful completion of the examination waives the curricular requirement but does *not* result in credit earned. Thus, it does not reduce the total number of quarter hours required for a degree but will increase the available number of elective hours. The waiver examination is administered by the department in which the course is offered and may *not* be repeated. Waiver examinations must be taken *prior* to the final quarter of residence. A fee is charged as indicated under the heading "Special Fees" of the Financial section of this bulletin.

APPLICATION FORMS. Application forms for challenge, validation and/or waiver examinations may be obtained from the admissions and records office.

TRANSFER CREDIT BY EXAMINATION. Credit earned by examination may be transferred from other educational institutions provided such credit meets the guidelines used by Walla Walla College for credit by examination.

REPEAT COURSES

Students may repeat a course in which credit has been granted and grades have been received. This repeat work must be taken in a regularly offered class. Challenge examinations, independent or directed study arrangements are not allowed for repeat course work. Repeat course work for which an F has been received must be completed in residence unless permission to do otherwise is granted by the Academic Standards Committee.

CLASS REGULATIONS

Students are not officially registered for a course until the instructor has been informed by the records office. The student is responsible for punctual and regular attendance at all classes for which he is registered. It will be recognized that missing instruction for any reason may jeopardize the class standing and course grade. Students will not be permitted to register for two classes which meet concurrently.

CORRESPONDENCE WORK

The College will accept a maximum of 24 quarter hours of approved courses by correspondence toward a degree. Correspondence work will not meet upper-division requirements, nor can a student who has failed a course make this up by correspondence study. Students must obtain approval from their major department chairman in order to carry correspondence work while in college. Correspondence work may not apply on a major unless approved by the department chairman concerned. Transcript deadline for correspondence work for June graduates is May 15; for August graduates, July 15.

Under certain conditions, students whose scholarship has fallen too low for continuation in the degree program may be readmitted after having completed and having earned satisfactory grades in approved correspondence courses.

The Home Study Institute, Washington, D.C., is a member of the Seventh-day Adventist school system in the United States, and while we recommend this correspondence school, students may take correspondence from any accredited correspondence school. Further information may be obtained from the admissions and records office.

FINAL EXAMINATIONS

All students are expected to take final examinations as scheduled. Special administrations are arranged by petition to the office of the vice president for academic affairs three weeks prior to the close of the quarter. If approved, a special fee of \$5 for each examination is assessed.

TRANSCRIPTS

One transcript of a student's record is supplied without charge. A fee of \$1 per transcript is charged thereafter. Credit is not accepted or recorded after a student has ceased residence in the College.

THE ACADEMIC PROGRAM

Walla Walla College confers the degrees of Associate of Science (A.S.), Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Music (B. Mus.), Bachelor of Science in Business Administration (B.S.B.A.), Bachelor of Science in Engineering (B.S.E.), Bachelor of Social Work (B.S.W.), Master of Arts (M.A.), Master of Education (M.Ed.), Master of Science (M.S.).

Although Walla Walla College is essentially a liberal arts college, provisional, preprofessional and special two-year associate degree curricula, and certificate programs are available to students who may wish to pursue a terminal program of a vocational nature.

GRADUATE DEGREES

The College offers courses of study leading to the following graduate degrees:

Master of Arts

Education

- Counseling and Guidance
- Curriculum and Instruction
- Educational Foundations
- School Administration

Master of Education

Counseling and Guidance

Elementary Instruction

Junior High Instruction

School Administration

Secondary Instruction in:

- Biology, Biophysics, Business, Chemistry, English, History, Industrial Arts, Language Arts, Mathematics, Physical Education, Physics, Social Science

Master of Science

Biology

Students desiring information concerning graduate degree requirements (standards of admission, degree candidacy, curricula, etc.) should consult the *Graduate Bulletin* which is available at the office of admissions and records.

TEACHER EDUCATION PROGRAM

The Walla Walla College Department of Education and Psychology is authorized by the Washington State Board of Education to recommend both provisional and standard teaching and principal's credentials. Students who plan to enter the teaching profession with a denominational or state teaching credential should become thoroughly acquainted with the certification requirements as listed in the Education and Psychology section of this bulletin.

UNDERGRADUATE DEGREE PROGRAMS OFFERED

Majors offered:

Agriculture (minor)	Humanities
Applied Music	*English
Art	*Fine Arts
*Commercial Art	*History
*Fine Art	*Modern Languages
Automotive Technology	*Philosophy
Biblical Languages	Industrial Arts Education
Biology	Industrial Technology
Biomedical Electronics Technology	Interior Design (minor)
Biophysics	Journalism
Business Administration	Library Science (minor)
*Accounting	Mathematics
*Economics	Medical Technology
*Health Facility Administration	Medical Technology and Clinical Chemistry (double major)
*Information Science	Music Education
*Management	Music Performance
*Marketing	Music Theory
Business Education	Nursing
Chemistry	Office Administration
Communication Media	Plant Maintenance Technology
Computer Science (minor)	Physical Education
Electronics Technology	Recreational Education
Elementary Education	*Community Recreation
Engineering	*Correctional Recreation
*Civil	*Outdoor Education
*Electrical	*Therapeutic Recreation
*Mechanical	*Youth Services Leadership
English	Physics
Foods and Nutrition	Political Science (minor)
French	Psychology
German	Religion
Graphics Technology	Social Work
Health	Sociology
History	Spanish
Home Economics	Speech Communication
	Speech Pathology and Audiology
	Theology

*Concentration available

BACCALAUREATE DEGREES

The Bachelor of Arts degree consists of four years of course work that places the student's major field of study in the context of a liberal arts education. A minor is also required. Most Bachelor of Arts degree majors require that modern language study be included in the student's course of study. Specific levels of performance are listed on page 58.

The Bachelor of Science degree consists of four years of course work that places the student's major field of study in the context of a liberal arts education. The degree permits somewhat greater concentration in the field of study and less depth in the liberal arts than is required in the Bachelor of Arts degree. No minor is required.

The Bachelor of Music degree consists of four years of course work primarily in the major field of study and with reduced requirements in general studies. The degree is offered with a choice of two majors, Performance or Music Education. For general studies and specific requirements, see the Music section of this bulletin.

The Bachelor of Science in Business Administration degree consists of a four-year program with concentrations available in accounting, economics, health facility administration, information science, management and marketing. For specific requirements, see the Business section of this bulletin.

The Bachelor of Science in Engineering degree is a four-year program approved by the Engineers' Council for Professional Development, Inc., requiring 200 quarter hours of course work. It is designed to prepare students for entry into the profession of engineering and to provide an adequate foundation for graduate studies in civil, electrical or mechanical areas. This degree also permits greater specialization in the major and reduces requirements in general studies. For specific requirements, see the Engineering section of this bulletin.

The Bachelor of Social Work degree is a four-year program designed to meet the requirements of the Council on Social Work Education. It permits greater specialization in the area and qualifies students for job entry in a variety of social service agencies. For specific requirements, see the Sociology and Social Work section of this bulletin.

BACCALAUREATE DEGREE REQUIREMENTS

Preparation for a career involves both general and specialized education. Courses of study leading to both baccalaureate and associate degrees are designed to give the student a general understanding of the major areas of learning as well as an in-depth study in areas directly related to the field of the student's major interest.

The student should acquaint himself with the general studies program and the requirements for departmental specialization (hereinafter referred to as majors) as related to student's professional or vocational interests.

Although general studies are stressed during the first two years of study, the student should plan to include certain elementary and intermediate courses in the desired major during the freshman and sophomore years to permit successful completion of the major.

A student who is undecided as to a major field of study may, during the freshman year, explore several fields of knowledge without loss of credit if he plans his choices in consultation with an academic adviser. A major should be chosen no later than the end of the sophomore year. The selection of a minor (for Bachelor of Arts degree candidates) and appropriate electives must be made in consultation with and approved by the assigned academic adviser.

Candidates are expected to be fully informed concerning degree requirements and are responsible for their fulfillment. A student shall have the option of meeting degree requirements as published in the bulletin at the time of initial registration or any bulletin published while in regular attendance. Those not in regular attendance for one full school year must meet the requirements of the current bulletin upon resuming attendance. Students taking double majors must meet all the degree requirements for both majors, including the general studies program.

Degrees are formally conferred in June and in August of each year. Students completing all degree requirements may receive their degrees at the close of the quarter of completion of their studies and are eligible to participate in the June graduation exercises. All degrees received at times other than at the June and August presentation are granted *in absentia* and a special fee is required. The college president must approve all degrees granted *in absentia*.

GRADUATION REQUIREMENTS FOR THE BACCALAUREATE DEGREE

All candidates for a baccalaureate degree must complete the following residence and general requirements:

Residence Requirements:

1. A minimum of 36 quarter hours must be completed in residence at Walla Walla College during three consecutive quarters;
2. A minimum of 9 quarter hours of course work must be upper division. If a minor is required, 3 quarter hours must be taken from courses numbered 300 or above;
3. Degree candidates must be in residence the last three quarters preceding graduation.

General Requirements:

1. A minimum of 192 quarter hours including 60 quarter hours in courses numbered 300 or above, and a cumulative grade-point average of 2.0 (C) or above;
2. The completion of a major field of departmental specialization (minimum of 45 quarter hours) with a minimum grade-point average of 2.0 (C) except in engineering (see Engineering section of this bulletin). At least 21 quarter

hours in the major must be numbered 300 or above. The maximum allowed on a major for the Bachelor of Arts degree is 60 quarter hours unless the excess is beyond the 192 quarter hours required for the degree, except for the music major which is 66 quarter hours;

3. The completion of the general studies program as specified for the type of degree sought and as outlined below and detailed in the following section (86 quarter hours for the Bachelor of Arts degree, and 74 quarter hours for the Bachelor of Science degree);
4. The completion of a minor of at least 27 quarter hours for all Bachelor of Arts degrees with a minimum grade-point average of 2.0 (C) or above. Three hours must be in courses numbered 300 or above;
5. Degree candidates must file a copy of the proposed schedule of courses for the senior year and a formal application for a degree with the associate director of records not later than one week after the beginning of the first quarter of the senior year. Appropriate forms may be obtained from the records office. Students are not considered candidates for degrees or eligible for senior class membership until officially notified by the associate director of records. Candidates for degrees must be members of the senior class. The fee is fixed by the class and approved by the president of the College.
6. Satisfactory performance on the Undergraduate Assessment Program (standardized examinations designed by the Educational Testing Service); the area test (reflecting general studies background) and the appropriate field test (reflecting achievement in the major) are required before a degree may be conferred. Where UAP field tests are not available for specific majors, the academic department will provide a comprehensive examination.

Senior examinations are offered only once per quarter scheduled on Sundays. Each prospective senior must make proper arrangements at the Counseling Center at least six weeks in advance of the test dates. Students who do not satisfactorily complete the examination in the major field may not attempt another examination until one quarter has elapsed. Industrial technology majors will submit an appropriate project and /or report approved by the department chairman.

7. Seniors must have all transcripts for correspondence work on file in the records office by May 15 in order to graduate with the June class. Summer seniors must have all transcripts for correspondence work by July 15 in order to graduate with the August class.

General Studies Program for Baccalaureate Degrees:

The following is an outline of the general studies program for the baccalaureate degrees. For a full description and listing of general education courses, see the General Studies section of this bulletin which immediately follows this description of the academic program.

Areas	Hours Minimum/Maximum in specific subject areas	Hours Minimum/Maximum in general areas
Applied Arts		0 - 4
Health and Physical Education		2 - 6
Activity Courses	2-4	
Theory Courses	0-4	
History and Social Studies		12 - 20
History	8	
Social Studies	4-12	
Humanities		12 - 16
Fine Arts	0-8	
Literature	0-8	
Philosophy	0-8	
Language Arts		12 - 20
ENGL 121, 122	8	
Communications	0-8	
Foreign Language	0-12	
Mathematics and Natural Science		12 - 16
Mathematics	4-8	
Science	8-12	
Religion and Theology		16 - 20
Biblical, Theological and		
Doctrinal Studies	12-20	
Electives	0-8	
Select a minimum of 86 quarter hours for Bachelor of Arts degree		
Select a minimum of 74 quarter hours for Bachelor of Science degree		

Modern Language Requirement:

The following levels of modern language performance are required for the majors listed below:

Major	Language Level	Quarter Hours Required
Art	Elementary	12
English	Intermediate Reading	12
History	Intermediate Reading	12
Home Economics	Elementary	12
Journalism	Introduction	8
Music Performance (Voice)	Introduction to two Languages	8
Religion	Elementary	12
Sociology	Intermediate Reading	12
Speech Communication	Introduction	12
Theology	Greek	21

Second Baccalaureate Degree. Two baccalaureate degrees may be conferred concurrently or sequentially if the candidate has met all requirements, has completed a total of 237 quarter hours, and has spent a minimum of three quarters (36 hours) in residence.

of 45 quarter hours) with a minimum grade point average of 2.0 (C) except in engineering (see Engineering section of this bulletin). At least 11 quarter

Applied Music Credit Applicable Toward Baccalaureate Degree. Not more than 9 quarter hours in applied music (including 3 quarter hours of Ensemble) may be earned toward a baccalaureate degree without an equal number of quarter hours in music courses with prefixes MUCT, MUED or MUHL.

ASSOCIATE DEGREE

The two-year associate degree programs are intended to provide accredited technological and occupational preparation for students desiring to graduate with marketable skills while experiencing the full benefits of a residential Christian college.

Areas offered:

Agriculture	Graphics Technology
Automotive Technology	Medical Secretary
Aviation Technology	Office Secretary
Business	Plant Maintenance Technology
Dietetic Technology	Respiratory Therapy
Early Childhood Education	Secretarial Accounting
Electronics Technology	

GRADUATION REQUIREMENTS FOR THE ASSOCIATE DEGREE

All candidates for the associate degree must complete the following residence and general requirements:

Residence Requirements:

A minimum of 24 quarter hours and two quarters must be completed in residence.

General Requirements:

1. A minimum of 96 quarter hours for the degree;
2. A minimum grade-point average of 2.0 (C) must be maintained in coursework required for the degree;
3. The completion of the associate degree major as outlined under the respective Departments of Instruction of this bulletin;
4. The completion of the general studies program as outlined below. For a listing of the specific courses which may apply to the requirements, see the General Studies section of this bulletin.

General Studies Program for the Associate Degree:

Areas	Hours Minimum/Maximum in specific subject areas	Hours Minimum/Maximum in general areas
Applied Arts		0 - 2
Health and Physical Education		0 - 2
Activity Courses		
History and Social Studies		0 - 8
History	0-4	
Social Studies	0-4	

Areas	Hours	Areas	Hours
Minimum/Maximum		Minimum/Maximum	
in specific subject areas		in general areas	
Humanities			0 - 8
Fine Arts	.0-4		
Literature	.0-4		
Philosophy	.0-4		
Language Arts			8 - 12
ENGL 101, 102 or 121, 122	8		
Communications	.0-4		
Mathematics and Natural Science			0 - 8
Mathematics	.0-8		
Science	.0-8		
Religion and Theology			6 - 8
Biblical, Theological and			
Doctrinal Studies	6		
Electives	.0-2		

Select a minimum of 32 quarter hours for the Associate degree

CERTIFICATE PROGRAMS

These programs typically are one-year programs providing occupational preparation for students desiring immediately marketable skills. The following areas are offered:

Area	Department
Auto Mechanics	Industrial Technology
Aviation	Industrial Technology
Clerical (two years)	Office Administration
Electricity/Electronics	Industrial Technology
Plant Maintenance	Industrial Technology
Printing	Industrial Technology
Respiratory Therapy	Health, Physical and Recreational Education
Office Secretary (two years)	Office Administration
Offset Copy Preparation	Industrial Technology

For complete descriptions of the certificate programs, consult the department listed.

General Studies for the Certificate Program:

Language Arts	0 - 4
ENGL 100	.0-4
ENGL 101 (Recommended)	.0-4
ENGL 121	.0-4
SPCH 101	.0-4

Mathematics, Natural Science, and/or Business 0 - 4

Religion and Theology 4 - 6

Select a minimum of 10 quarter hours for the Certificate program.

TRANSITIONAL CURRICULUM

The transitional curriculum is designed for freshman students who have been accepted by the College with an inadequate background for attempting a full academic program. It consists of ENGL 100, MATH 100 and RDNG 100, in addition to courses within the regular college curriculum as approved by the Transitional Curriculum adviser.

Students are registered for courses within this curriculum on the basis of test scores from their entrance examinations and/or secondary school grades. Credit received from the courses in this curriculum are included in the 192 quarter hours for graduation.

A transitional curriculum coordinator closely advises and schedules regular academic counseling sessions for all students in this program. This counseling procedure continues throughout the freshman year although most transitional students are able to carry a full college load by the beginning of the winter quarter.

PREPROFESSIONAL PROGRAMS

Programs are offered in a wide variety of fields to prepare students for admission to professional schools or to enter upon technical careers. Students wishing to secure admission to such schools should familiarize themselves with the admission requirements of the school of their choice. Most preprofessional curriculums require two units of high school mathematics (algebra and geometry). The following preprofessional curricula are detailed in the Preprofessional Courses of Study section of this bulletin: (Numbers in parenthesis indicate the years of study required on the Walla Walla College campus before acceptance into a professional school.)

Chiropractic Medicine (2)	Optometry (2)
Dentistry (3)	Osteopathy (3)
Dental Assistant (1)	Pharmacy (2)
Dental Hygiene (2)	Public Health (4)
Law (4)	Physical Therapy (2)
Medicine (4)	Radiological Technology (1)
Medical Technology (3)	Veterinary Science (2)
Occupational Therapy (2)	

EXTENSION COURSE WORK

Extension courses are offered by Walla Walla College on a limited basis. These off-campus courses provide opportunity for academic enrichment, acceleration and continuing education.

The College accepts extension course credit from other institutions provided the institution offering the courses accepts similar credits toward a degree on its own campus.

QUARTER HOUR REQUIREMENTS

The general studies requirements will be met by selecting courses according to the following guidelines:

BACHELOR OF ARTS DEGREE:	Select 86 quarter hours
BACHELOR OF SCIENCE DEGREE:	Select 74 quarter hours
ASSOCIATE DEGREE:	Select 32 quarter hours
CERTIFICATE PROGRAM:	Select 10 quarter hours

The range of hours for each area indicates the minimum number of hours that must be chosen from that area and the maximum number of hours from that area that can count toward the total requirement. Some areas are subdivided with ranges for each subdivision indicating the minimum that *must* be taken from that subdivision and the maximum that can count toward that area requirement.

GENERAL AREAS

Areas	Hours Minimum/Maximum in specific subject areas	Hours Minimum/Maximum in general areas
APPLIED ARTS .....	.....	.0 - 4
Courses in the applied arts should introduce the student to basic manual and technical skills.		
HEALTH AND PHYSICAL EDUCATION .....	.....	.2 - 6
Courses should introduce the student to health principles and, by stressing both theory and activity, emphasize the pursuit of healthful living. (No more than 4 quarter hours from any one area will count toward the requirement.)		
Activity Courses .....	.....	2-4
Theory Courses in Health, Health-related, or Nutrition .....	.....	0-4
HISTORY AND SOCIAL STUDIES .....	.....	12 - 20
Courses in history and social studies should help the student understand the forces that have shaped the individual in his culture and society. History courses should interpret the sweep of cultures, instilling an appreciation for the development of civilization and an awareness of the unique place of the Christian church in time. Social studies courses should introduce the student to the methodology and contributions of the particular discipline.		
History .....	.....	8
Social Studies .....	.....	4-12
<i>If more than one course is selected from the areas listed below, courses chosen must be from two or more areas:</i>		
Business	Geography/Political Science	
Education	Psychology	
Engineering	Sociology	

Areas	Hours Minimum/Maximum in specific subject areas	Hours Minimum/Maximum in general areas
HUMANITIES		12 - 16
Courses in the fine arts, literature and philosophy should introduce the student to mankind's aesthetic and intellectual aspirations and achievements. Fine arts and literature courses should concentrate upon ideas and styles in their cultural context rather than upon the development of skills. Philosophy courses should in their manner and subject matter clearly make for an understanding of and appreciation for philosophy as a distinct mode of inquiry. (No more than 8 quarter hours from any one area will count toward the requirement.)		
Fine Arts	0-8	
Literature	0-8	
Philosophy	0-8	
LANGUAGE ARTS		12 - 20
Courses should introduce the student to the concepts and skills of the language arts by emphasizing the practice of effective written and oral communication. Courses in foreign language should emphasize the acquisition of such communicative skills as speaking, reading and writing a foreign language while introducing students to a foreign culture and its thought. ENGL 121, 122 is required.		
<i>If the communications area is chosen, the first 4 quarter hours must be selected from oral communication courses.</i>		
ENGL 121, 122 College Writing	8	
Communications	0-8	
Foreign Language	0-12	
MATHEMATICS AND NATURAL SCIENCE		12 - 16
Courses in mathematics should introduce the student to mathematical thought and practice and to the relationship of mathematics to other disciplines. Courses in science should introduce the student to methods of measurement and discovery and should help the student to understand through theory and practice how hypotheses are developed, tested and applied. (A minimum of 8 quarter hours should be taken from one course sequence in a science area.)		
Mathematics	4-8	
Science	8-12	

Areas	Hours Minimum/Maximum in specific subject areas	Hours Minimum/Maximum in general areas
RELIGION AND THEOLOGY	16 - 20	
Courses in religion and theology should emphasize an understanding and application of Biblical knowledge, foster continued spiritual growth and help the student develop a personal religious philosophy and prepare for active witnessing.		
Biblical, Theological and		
Doctrinal Studies	12-20	
Electives in Religion or Theology	0-8	

Religion requirement for transfer students from non-SDA colleges:

Transfer students will take the equivalent of three hours per quarter in residence, but with the understanding that a student who spends six or more quarters in residence is required to take only the minimum requirement of 16 hours.

SPECIFIC COURSES FOR GENERAL STUDIES

The following list of specific courses will satisfy the General Studies Requirements: *(Courses listed in more than one area of general studies may be applied in only one area for an individual student.)*

APPLIED ARTS	0 - 4
ACCT 121 or 125	Principles of Accounting
AGRI 263	Home Gardening
AGRI 266	Horticulture
AGRI 267	Turf and Landscaping
AGRI 361	Introduction to Soils
AUTO 124, 125, 126	Fundamentals of Automotive Technology
AUTO 236	Small Gasoline Engines
AUTO 344, 345	Automotive Service
AUTO 356	Air Conditioning
AVIA 142	Private Pilot Flight Training
AVIA 221, 222, 223	Commercial Pilot Flight Training I, II, III
CPTR 121	Computer Science I
CPTR 122	Computer Science II
CPTR 131	Data Processing
CPTR 235, 237	Programming for Business I, II
DRFT 121, 122	Technical Drawing
DRFT 226	Architectural Drawing
DRFT 236	Electrical and Electronic Drawing
ENGR 121, 122, 123	Introduction to Engineering
ELCT 221, 222	Survey of Electronics
ELCT 241, 242	Fundamentals of Electronics
ELCT 243	Electronic Circuits
ELCT 362	Digital Integrated Circuits

FDNT	101, 102	Principles of Food Science
FDNT	412	Foods in Cultures of the World
FDNT	422	Experimental Cookery
GRPH	154	Principles of Photography
GRPH	355	Applied Photography
HMEC	222	Art in Everyday Living
HMEC	241	Clothing Fundamentals
HMEC	242, 243	Clothing Selection and Construction
HMEC	302	Beginning Weaving
INCR	126	Bookbinding
INCR	224	Art Metals
INCR	225	Plastics
INCR	226	Leathers
INCR	264	Silk Screen Printing
INDS	134, 137	Gas Welding Laboratory/Theory
INDS	135, 138	Arc Welding Laboratory/Theory
INDS	136, 139	Specialized Welding Laboratory/Theory
INDS	221, 222, 223	Wood Products and Processes
INDS	241, 242, 243	Fabrication and Machining of Metals
INDS	345	Finishing Materials and Methods
INDS	386	Oil Hydraulics
LIBR	111	Introduction to Library Resources
NRSG	175	Nurse's Aide Skills
OFAD	111, 112, 113	Beginning Typewriting
OFAD	208	Basic Concepts in Office Machines
OFAD	221, 222, 223	Advanced Typewriting
OFAD	224	Mag Card Keyboarding
OFAD	232	IBM Key Punch
OFAD	234	Machine Transcription
OFAD	236	Business Machines
SPCH	231	Broadcast Techniques and Announcing

HEALTH and PHYSICAL EDUCATION 2 - 6

Activity Courses:

All PEAC 101 thru 199 PE Activity Courses

Theory Courses in Health, Health-related, or Nutrition:

FDNT	220	Human Nutrition
HLED	208	Drugs and Society
HLED	214	Introduction to Health
HLED	215	Contemporary Health Issues

HISTORY and SOCIAL STUDIES 12 - 20

History:

HIST	121, 122	History of Western Civilization
HIST	221, 222	History of the United States
HIST	325	History of Canada
HIST	374, 375	History of England
HIST	384, 385	History of Latin America

Social Studies:

ANTH	255	Cultural Anthropology
GBUS	361, 362, 363	Business Law
ECON	241, 242, 243	Principles of Economics
EDUC	110	Principles and Concepts of Christian Education
EDUC	210	Foundations of Education
ENGR	344	The Environment and Man
GEOG	358	World Geography
PLSC	224	American Government
PSYC	130	General Psychology
PSYC	230	Systems and Theories in Psychology
PSYC	444	Social Psychology
SOCI	204	General Sociology
SOCI	225	Marriage and Family Life
SPCH	401	Introduction to General Semantics

HUMANITIES 12 - 16**Fine Arts:**

ART	251	Introduction to Art
ART	324, 325, 326	History of Art
MUHL	124	Introduction to Music
MUHL	134	Art of Listening
MUHL	321, 322, 323	History of Music
SPCH	363	History of Dramatic Arts

Literature:

ENGL	204	Introduction to Literature
ENGL	205	Masterpieces of American Literature
ENGL	206	Masterpieces of English Literature
ENGL	207	Masterpieces of World Literature
ENGL	208	Afro-American Literature
ENGL	209	Religious Literature
ENGL	214	Themes in Literature
ENGL	215	Literature and Film
ENGL	454	Literature of the Bible
FREN	301, 302, 303	Survey of French Literature
GRMN	311, 312, 313	Survey of German Literature
SPAN	324, 325, 326	Survey of Spanish Literature

Philosophy:

PHIL	205	Introduction to Philosophy
PHIL	206	Introduction to Logic
PHIL	305	Moral Philosophy
PHIL	306	History of Philosophy I
PHIL	407	Philosophy of Science
PHIL	412	Philosophy of Religion

ELCT	241, 242	Introduction to Electronic Circuits
ELCT	243	Advanced Electronic Circuits
ELCT	362	Digital Integrated Circuits

LANGUAGE ARTS 12 - 20**English:**

ENGL 121, 122 or ENGL 131, 132	College Writing College Writing Honors
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Communications:

ENGL 324	Advanced Expository Writing
ENGL 325	Advanced Technical Writing
JOUR 245	Journalistic Writing
JOUR 341, 342	Magazine Article Writing
JOUR 382	Editorial Writing
JOUR 385	Religious Communications
SPCH 101	Fundamentals of Speech Communications
SPCH 207	Small Group Communications
SPCH 323	Advanced Public Address
SPCH 443	Persuasive Speaking

Foreign Language:

FREN 101	Introduction to French
FREN 102	Elementary Reading in French
FREN 103	Elementary Conversational French
FREN 202	Intermediate Reading in French
FREN 203	Intermediate Conversational French
GRMN 111	Introduction to German
GRMN 112	Elementary Reading in German
GRMN 113	Elementary Conversational German
GRMN 212	Intermediate Reading in German
GRMN 213	Intermediate Conversational German
SPAN 121	Introduction to Spanish
SPAN 122	Elementary Reading in Spanish
SPAN 123	Elementary Conversational Spanish
SPAN 222	Intermediate Reading in Spanish
SPAN 223	Intermediate Conversational Spanish

MATHEMATICS and NATURAL SCIENCE 12 - 16**Mathematics:**

MATH 111, 112	Mathematics for the Liberal Arts
MATH 115	Mathematics Through Statistics
MATH 116	Applied Statistics
MATH 117	Precalculus
MATH 121, 122	Fundamentals of Mathematics I, II
MATH 181, 281	Analytic Geometry/Calculus I, II
MATH 281, 283	Analytic Geometry/Calculus III, IV

Natural Science:

BIOL	101, 102, 103	General Biology
BIOL	121	Physical Geology
BIOL	201, 202	Anatomy and Physiology
CHEM	101, 102	Introductory Chemistry I
CHEM	141, 142, 143	General Chemistry
CHEM	204	Introductory Chemistry II
PHYS	211, 212, 213	General Physics
PHYS	241, 242, 243	General Astronomy
PHYS	251, 252, 253	Principles of Physics

RELIGION and THEOLOGY 16 - 20**Biblical, Theological and Doctrinal Studies:**

RELB	101, 102, 103	Bible Survey
RELB	104, 105, 106	Life and Teachings
RELB	111	Messages of the Old Testament
RELB	141, 142, 143	<u>Biblical Exegesis I</u>
RELB	216, 217, 218	Pauline Letters
RELB	221, 222	Biblical Exegesis II
RELB	223	Exegesis of Romans
RELB	301	Old Testament History
RELB	302	Writings
RELB	303	Pentateuch
RELB	304, 305, 306	Hebrew Prophets
RELB	312	Daniel
RELB	313	Revelation
RELB	434, 435, 436	Gospels
RELB	464, 465, 466	New Testament Epistles
RELT	201	The Christian Way of Salvation
RELT	202	Basic Christian Beliefs
RELT	314	Eschatology
RELT	315	Inspiration and the Bible Writers
RELT	316	Inspiration and Ellen White
RELT	408	Doctrine of the Sanctuary

Electives in Religion or Theology:

RELH	249	Religion in a Social Context
RELH	317	Denominational History
RELH	402	Modern Denominations
RELH	403	World Religions
RELH	405	Biblical Archaeology
RELH	406	History of the English Bible
RELT	112	Theology of Christian Witnessing
RELT	204	Contemporary Issues in Adventist Thought
RELT	230	Discipleship and Mission
RELT	310	Christian Ethics
RELT	404	A Scientific Approach to Biblical Interpretation
RELT	412	Philosophy of Religion
RELT	417, 418	Christian Dynamics
RELT	419	Studies in Christian Dynamics

DEPARTMENTS OF INSTRUCTION

GENERAL INFORMATION

This section contains a list of all courses offered by the College. The departments are arranged in alphabetical order.

In general the following guidelines have been used in course numbering:

The first numeral indicates academic level of the course:

- 100-199 Courses normally taken during the freshman year
- 200-299 Courses normally taken during the sophomore year
- 300-399 Courses normally taken during the junior year
- 400-499 Courses normally taken during the senior year
- 500-599 Graduate-level courses

If the second numeral is a 0 or 1 it indicates that the course is primarily a service course and generally will not apply toward the major.

The third numeral will indicate course sequencing. If the third numerals are 1, 2 and 3 it indicates that each course in the sequence is a prerequisite to the next.

The description of courses in each department includes the prefix and number of the course used in the college records, the title of the course, the number of quarter hours given, and a brief description of the course content.

The credit indicated in connection with each course is the "quarter hour," and one quarter hour represents one recitation period per week for one quarter.

The College will make every effort to consistently offer all courses at appropriate intervals. It does reserve the right, however, to alter the sequences or drop courses if unforeseen circumstances in class enrollments, teacher staffing, etc., so dictate. The CLASS SCHEDULE should be consulted for personal planning of course loads and schedules.

The College reserves the right to withdraw temporarily any course which

does not have an adequate enrollment. A course may not be offered for fewer than six students except in the case of seniors or graduate students.

UNIFORM COURSE NUMBERS

By general agreement certain course numbers are reserved for classes that are of such a general nature as to be found in many different departments. The prefix assigned to the number designates the discipline. The following are courses that carry uniform numbers through this bulletin:

200; 400 TOPICS

1-4; 6

Each academic department may offer topics courses in specialized or experimental areas on either the lower division or advanced level. These courses are conducted through regular class activities and are approved as a one-time offering by the Curriculum Committee. One to four hours per quarter.

274; 474 WORKSHOPS

1-4; 6

277; 477 INDEPENDENT STUDY

1-3; 6

Each academic department may offer directed, independent 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 and/or project showing competence in the study. Independent study requires an advance written proposal and subsequent evaluation. All independent study must be approved by the department chairman who in turn will assign an adviser for the completion of this study. Special instructional procedures for off-campus independent study are available at the office of the vice president for academic affairs. Course 477 is open only to majors and minors. One to three hours per quarter; maximum six hours.

370; 490 DIRECTED FIELD WORK/PRACTICUM/EXPERIENCE

2-15

471 GENERAL SECONDARY METHODS COURSE (see Education)

2

472, 473 DEPARTMENTAL METHODS COURSES

3

396; 496, 497, 498 SEMINAR

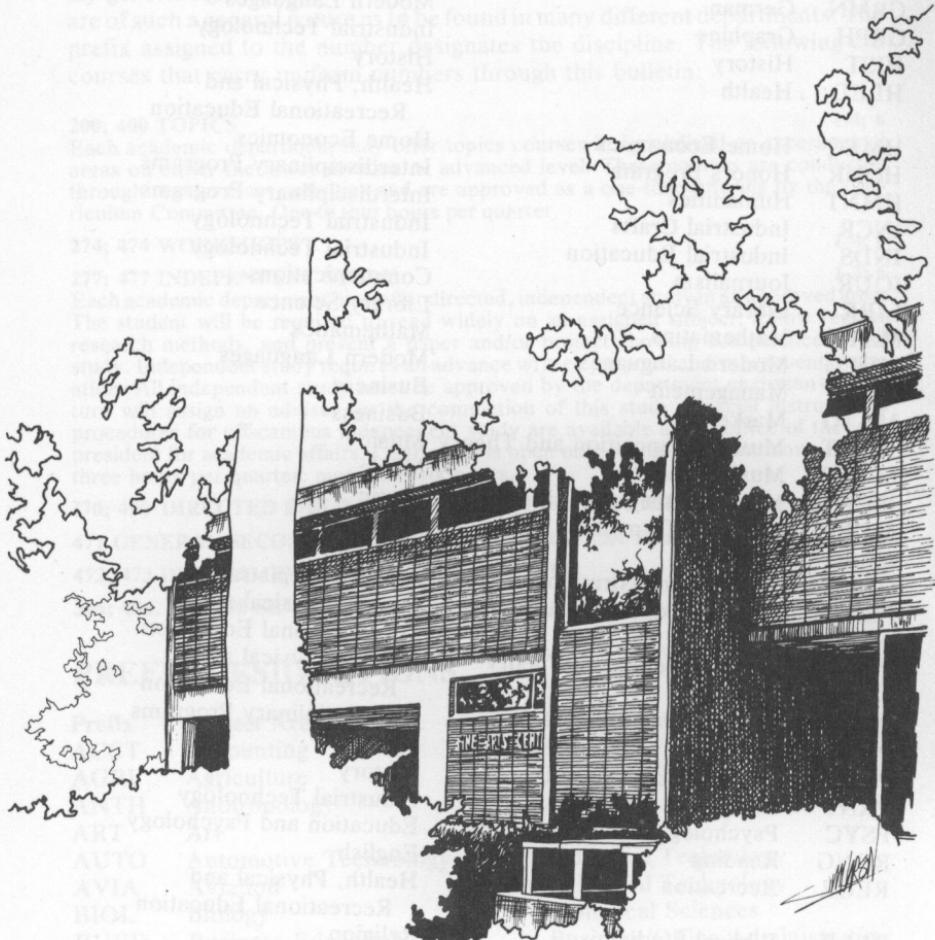
1-4; 4

PREFIX DESIGNATIONS

Prefix	Subject Area	Department
ACCT	Accounting	Business
AGRI	Agriculture	Biological Sciences
ANTH	Anthropology	Sociology and Social Work
ART	Art	Art
AUTO	Automotive Technology	Industrial Technology
AVIA	Aviation	Industrial Technology
BIOL	Biology	Biological Sciences
BUED	Business Education	Business/Office Administration
CFSC	Child/Family Education	Education/Home Economics
CHEM	Chemistry	Chemistry
CORR	Corrections	Sociology and Social Work
CPTR	Computer Science	Business/Engineering/ Interdisciplinary Studies
DRFT	Drafting and Technical Drawing	Industrial Technology
ECON	Economics	Business
EDUC	Education	Education and Psychology
ELCT	Electronics	Industrial Technology
ENGL	English	English

ENGR	Engineering	Engineering
FDNT	Foods and Nutrition	Home Economics
FINA	Finance	Business
FREN	French	Modern Languages
GBUS	General Business	Business
GEOG	Geography	History
GRMN	German	Modern Languages
GRPH	Graphics	Industrial Technology
HIST	History	History
HLED	Health	Health, Physical and Recreational Education
HMEC	Home Economics	Home Economics
HONR	Honors Program	Interdisciplinary Programs
HMNT	Humanities	Interdisciplinary Programs
INCR	Industrial Crafts	Industrial Technology
INDS	Industrial Education	Industrial Technology
JOUR	Journalism	Communications
LIBR	Library Science	Library Science
MATH	Mathematics	Mathematics
MDLG	Modern Languages	Modern Languages
MGMT	Management	Business
MKTG	Marketing	Business
MUCT	Music Composition and Theory	Music
MUED	Music Education	Music
MUHL	Music History and Literature	Music
MUPF	Music Performance	Music
NRSG	Nursing	Nursing
OFAD	Office Administration	Office Administration
PEAC	Physical Education Activity	Health, Physical and Recreational Education
PETH	Physical Education Theory	Health, Physical and Recreational Education
PHIL	Philosophy	Interdisciplinary Programs
PHYS	Physics	Physics
PLSC	Political Science	History
PRNT	Printing	Industrial Technology
PSYC	Psychology	Education and Psychology
RDNG	Reading	English
RECR	Recreation	Health, Physical and Recreational Education
RELB	Biblical Studies	Religion
RELH	Religious Historical Studies	Religion
RELL	Biblical Languages	Religion
RELM	Missions	Religion
RELP	Religious Professional Studies	Religion
RELT	Theological Studies	Religion
RESP	Respiratory Therapy	Health, Physical and Recreational Education
SOCI	Sociology	Sociology
SOWK	Social Work	Social Work
SPAN	Spanish	Modern Languages
SPCH	Speech	Communications
SPPA	Speech Pathology and Audiology	Communications

100, 400 TOPICS
Each section includes
a brief description of the topic
areas of interest, advanced
terminology, and a brief bibliography.
Illustrations, tables, and figures are included.



FINE ARTS CENTER — Art, Music

ART

K. MacKintosh, Chairman; T. Emmerson

The aim of the department is to cultivate an awareness, appreciation and understanding of the various forms of visual experience. Through instruction and practice, the student will develop his creative abilities for practical usage by following the concentration in Fine Art or Commercial Art. Commercial art is designed to develop skills in working with the printed word and visual communication; fine art will prepare the student as an artist or as a teacher.

MAJOR IN ART (Bachelor of Arts)

A student majoring in art must complete the core requirements, one concentration and the required cognates for that concentration, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Core Requirements:

ART 161, 162, 163	Design	9
ART 184, 185, 186	Introduction to Drawing	6
ART 194, 195, 196	Introduction to Painting	6
ART 264, or 5, or 6	Introduction to Sculpture	2
ART 294, 295, 296	Introduction to Printmaking	6
ART 324, 325, 326	History of Art	6
		35

Concentration: Fine Art

ART 264, or 5, or 6	Introduction to Sculpture	2
ART 304, 305, 306	Fine Arts Design	9
ART 244, 245, 246	Commercial Art	
ART 284, 285, 286	Introduction to Ceramics	
ART 307, 308, 309	Drawing	
ART 317, 318, 319	Printmaking	*14
ART 334, 335, 336	Painting	
ART 364, 365, 366	Sculpture	
*10 hours must be upper division		25

Required Cognates: Fine Art

ENGL 455	Classical Backgrounds	3
RELT 412	Philosophy of Religion	2
or		
RELT 310	Christian Ethics	2
RELH 405	Biblical Archaeology	2

Concentration: Commercial Art

ART 244, 245, 246	Commercial Art	6
ART 307, 308	Drawing	4
ART 314, 315, 316	Advertising Design	9
ART 317, 318, 319	Printmaking	6
		25

ART**Required Cognates: Commercial Art**

GRPH 154	Principles of Photography	2
GRPH 355	Applied Photography	3

MINOR IN ART

A student minoring in art must complete 33 quarter hours; ART 161, 162, 163; ART 184, 185, 186; ART 324, 325, 326 are required; 3 quarter hours must be upper division. Approval of art adviser required.

ART 161, 162, 163 DESIGN

3, 3, 3

An intensified study of the basic elements of design aiming to develop cognizance of visual organization.

ART 184, 185, 186 INTRODUCTION TO DRAWING

2, 2, 2

An experience in the use of line with representational and nonfigurative approaches through application to still life and portraiture.

ART 194, 195, 196 INTRODUCTION TO PAINTING

2, 2, 2

A first course in painting through various uses of acrylics.

ART 244, 245, 246 COMMERCIAL ART

2, 2, 2

An introduction to the various processes and media of commercial art, with emphasis on layout, new directions and craftsmanship.

ART 251 INTRODUCTION TO ART

4

The class is designed for the liberal arts students who wish to better understand and appreciate the visual arts of painting, sculpture, printmaking and the minor arts.

ART 264, 265, 266 INTRODUCTION TO SCULPTURE

2, 2, 2

The study and application of three-dimensional forms in space using varied media such as clay, plaster, plasticene and paper.

ART 284, 285, 286 INTRODUCTION TO CERAMICS

2, 2, 2

An introduction to pottery and ceramic sculpture using wheel-thrown and hand-built forms. Design will be stressed as it relates to form, function and glaze decoration. The student will also become acquainted with different methods of kiln firing.

ART 294, 295, 296 INTRODUCTION TO PRINTMAKING

2, 2, 2

A beginning course in the art of printmaking, relief method of printmaking—linoleum cut, woodcut and wood engraving with a basic introduction of the intaglio method included..

ART 301 ART IN THE ELEMENTARY SCHOOL

3

Principles of design and exploration of materials appropriate for primary and intermediate grade children. Methods for the intelligent use of art materials for the child of elementary school age.

ART 304, 305, 306 FINE ARTS DESIGN

3, 3, 3

Application of the basic principles and elements of design to be used in the fine arts field. Prerequisite: ART 161, 162, 163.

ART 307, 308, 309 DRAWING

2, 2, 2

A utilization of the basic principles of drawing with various experimental approaches, and advanced techniques. Prerequisite: ART 184, 185, 186.

ART 314, 315, 316 ADVERTISING DESIGN

3, 3, 3

Application of the basic principles and elements of design to be used in the commercial field of art. Prerequisite: ART 161, 162, 163; ART 244, 245, 246.

ART 317, 318, 319 PRINTMAKING

2, 2, 2

An advanced course in the various processes of intaglio printmaking, drypoint, engraving, etching and lithography. Open to majors and minors only. Prerequisites: ART 161, 162, 163; ART 184, 185, 186; ART 294, 295, 296.

ART 324, 325, 326 HISTORY OF ART**2, 2, 2**

The study of the great periods in history of art, their causes and developments; the relation between art and society and the implication of aesthetic understanding in each period.

ART 334, 335, 336 PAINTING**2, 2, 2**

To develop the aesthetic enjoyment and understanding in the application of paint, whether the media be oil, casein or tempera. Prerequisites: ART 184, 185, 186 or equivalent.

ART 364, 365, 366 SCULPTURE**2, 2, 2**

Application of basic three-dimensional design principles, using metal, fiber glass, wood and stone, emphasizing experimentation in direction, media and techniques. Prerequisite: ART 264, 265, 266.

Graduate work leading to the Master of Arts degree with a major in biology and graduate work leading to the Master of Science degree with a major in biology and minor in chemistry, physics, mathematics, or agriculture.

Graduate work leading to the Master of Science degree is also offered. For further information, see the *Graduate Bulletin*.

Exceptional opportunities for study in the biological sciences are possible during the summer at the Marine Station at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. For further information, see the bulletin of the Marine Station.

The Field School of Biology travels to various parts of North America and offers courses in botany and zoology.

BIOLOGY BACHELOR (Bachelor of Science)

A student majoring in biology must complete 18 quarter hours in the major, the required courses, and 12 quarter hours in the program of his choice, as outlined in this bulletin. Students for this degree who plan on graduate work in biology should take the advanced courses, as well as considering the need of a minor in biology. One summer course in field biology is required.

BIOLOGY COURSES

BIOE 101	General Biology	4
BIOE 103	Genetics	4
BIOE 106	Principles of Experimental Biology	4
BIOE 110	Principles of Anatomy	4
BIOL 101, 102, 103	Research Methods I, II, III	4
BIOL 102	Cell Physiology	4
BIOL 140	General Ecology	4
BIOL 483	Philosophy of Origins and Speciation	3
BIOL 495	Colloquium	3

Required each quarter of juniors and seniors while in residence.

Electives (must be upper division)

Electives must be chosen in consultation with and approved by the academic advisor assigned by the department committee. One course each in zoology and botany are required.

THE SCIENCE COURSES — Biology, Home Economics, Chemistry, Computer Science

ART 101 DRAWING I (Prerequisite: ART 100) An introduction to drawing using oil, watercolor, and charcoal media. The study of choice has the greatest number of hours. **GRAPH 355** Applied Photography **BORIS**

ART 102 DRAWING II An introduction to drawing using oil, watercolor, and charcoal media. The study of choice has the greatest number of hours. **GRAPH 355** Applied Photography **BORIS**

ART 103, 104, 105, 106 DESIGN

An intensified study of the basic elements of design, leading to developing a significance of visual organization. **ART 104, 105, 106**

ART 104, 105, 106 INTRODUCTION TO DESIGN 2, 2, 2 An experience in the use of line, form, color, and space in a formal and nonfigurative approach through application to still life and portraiture. **ART 104, 105, 106**

ART 104, 105, 106 INTRODUCTION TO DESIGN 2, 2, 2 A first course in design theory. **ART 104, 105, 106**

ART 204, 205, 206 An introduction to design through application to layout, new directions, and composition. **ART 204, 205, 206**

ART 204, 205, 206 An introduction to design through application to layout, new directions, and composition. **ART 204, 205, 206**

ART 204, 205, 206 The design of the environment. **ART 204, 205, 206**

ART 204, 205, 206 The study of design in the environment. **ART 204, 205, 206**

ART 204, 205, 206 The study of design in the environment. **ART 204, 205, 206**

ART 204, 205, 206 The study of design in the environment. **ART 204, 205, 206**

ART 301 ART IN THE ELEMENTARY SCHOOL 2, 2, 2 Principles of design and elements of design to be used in the field of art in the intermediate grade children. Methods for the application of the basic principles and elements of design to be used in the field of art in the intermediate grade children. **ART 101, 102, 103**

ART 304, 305, 306 FINE ARTS DESIGN 2, 2, 2 Application of the basic principles and elements of design to be used in the fine arts field. Prerequisite: ART 101, 102, 103. **ART 104, 105, 106**

ART 307, 308, 309 DRAWING 2, 2, 2 A continuation of the basic principles of drawing with various experimental approaches and advanced techniques. Prerequisite: ART 104, 105, 106. **ART 102, 103**

ART 314, 315, 316 ADVERTISING DESIGN 2, 2, 2 Application of the basic principles and elements of design to be used in the commercial field of art. Prerequisite: ART 101, 102, 103; ART 104, 105, 106. **ART 104, 105, 106**

ART 317, 318, 319 PRINTMAKING 2, 2, 2

LIFE SCIENCES COMPLEX — Biology, Home Economics, Educational Computer Center

BIOLOGICAL SCIENCES

D. Rigby, Chairman; R. Barnes, D. Clayton, J. Dassenko, L. Dickson, L. Fisk, J. Galusha, A. Grable, L. McCloskey.

The objectives of the department are to develop an understanding of the principles of biology which will better acquaint students with the world in which they live; to create an atmosphere which is conducive to individual investigation; to prepare department majors for graduate and professional education, teaching and certain careers in the biological sciences.

The department offers a Bachelor of Science degree with a major in biology, and jointly with the department of physics, a Bachelor of Science degree with a major in biophysics. Minors are offered in Biology and Agriculture. Graduate work leading to the Master of Science degree is also offered. For further information, see the *Graduate Bulletin*.

Exceptional opportunities for study in the biological sciences are possible during the summer at the Marine Station at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. For further information, see the bulletin of the Marine Station.

The Field School of Biology travels to various parts of North America and offers courses in botany and zoology.

MAJOR IN BIOLOGY (Bachelor of Science)

A student majoring in biology must complete 56 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. Candidates for this degree who plan on graduate work in biology should counsel with the assigned academic adviser concerning the need of a foreign language. One summer term at the Marine Station is required.

Major Requirements:

BIOL 101, 102, 103	General Biology	12
BIOL 261	Genetics	4
BIOL 266	Developmental Biology	4
BIOL 350	Biostatistics	4
BIOL 351, 352, 453	Research Methods I, II, III	4
BIOL 392	Cell Physiology	4
BIOL 446	General Ecology	4
BIOL 483	Philosophy of Origins and Speciation	3
BIOL 495	Colloquium	0

Required each quarter of juniors and seniors while in residence.

Electives (must be upper division)

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. One course each in zoology and botany are required.	17
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BIOLOGICAL SCIENCES

Required Cognates:

MATH 121, 122	Fundamentals of Mathematics I, II	8
MATH 181	Analytical Geometry & Calculus I	4
CHEM 141, 142, 143	General Chemistry	12
CHEM 321, 322, 323	Organic Chemistry	12
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3

MAJOR IN BIOPHYSICS (Bachelor of Science)

A student majoring in biophysics must complete 32 quarter hours in biology and 38 quarter hours in physics, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. One summer term at the Marine Station is required. Specific course requirements are outlined in the Interdisciplinary section.

AGRICULTURE—APPLIED BIOLOGY (Associate of Science Degree)

A student specializing in agriculture must complete 38 quarter hours in the area, the required cognates, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

BIOL 101, 102, 103	General Biology	12
BIOL 261	Genetics	4
AGRI 266	Horticulture	4
AGRI 267	Turf and Landscaping	2
AGRI 361	Introduction to Soils	4
AGRI 363	Animal Science	3
AGRI 364	Crop Production	4
Electives		5

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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Required Cognates:

CHEM 141, 142, 143	General Chemistry	12
MATH 121, 122	Fundamentals of Mathematics, I, II	8
ECON 341 or ACCT 121	Principles of Economics	3-4
	Principles of Accounting	

MINOR IN AGRICULTURE

This minor is designed to provide the student with a practical knowledge of a science relating to the basic needs of mankind. The student must complete 30 quarter hours. The following courses are required:

AGRI 262	Fruit Growing	2
AGRI 263	Home Gardening	3
AGRI 266	Horticulture	4
AGRI 361	Introduction to Soils	4
AGRI 362	Farm Management	3
AGRI 363	Animal Science	3

BIOLOGICAL SCIENCES

Electives	11
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.	30

Required Cognates:

BIOL 101, 102, 103	General Biology	12
CHEM 101, 102	Introductory Chemistry	8

BIOLOGY MINOR

A student minoring in biology must complete 27 quarter hours; 8 quarter hours must be upper division; BIOL 101, 102, 103 is required. Approval of biology adviser required.

AGRICULTURE (AGRI)

All AGRI courses offered alternate years.

AGRI 262 FRUIT GROWING 2

Varieties of fruit, propagation, managing soil in orchards, fertilization, pest control, harvesting.

AGRI 263 HOME GARDENING 3

Planning home gardens, preparing soil for planting, growing transplants, transplanting, fertilizing, irrigation, planting for different seasons. One laboratory per week.

AGRI 266 HORTICULTURE 4

This course treats plant growth and development, propagation, fertilizers, transplanting and horticulture crops. One laboratory per week.

AGRI 267 TURF AND LANDSCAPING 2

Production of cut flowers, production of potted plants, care of plants in the home, laying out of lawns, shrubbery arrangements, tree planting, fertilizers, cultivation. One laboratory per week.

AGRI 361 INTRODUCTION TO SOILS 4

Types of soil, plant food; irrigation, soil testing; conservation; pollution. Prerequisite: CHEM 101, 102, 103. One laboratory per week.

AGRI 362 FARM MANAGEMENT 3

Labor efficiency, credit, marketing, farm account records, causes of variation in farm income, measuring profits in farming, rates of crop and animal production are included in this course. Special project is required.

AGRI 363 ANIMAL SCIENCE 3

Breeds of livestock, nutrition and feeding, sanitation, judging, management and economics of beef and dairying, breeding, genetics. Prerequisite: BIOL 101, 102, 103.

AGRI 364 CROP PRODUCTION 4

Grain production, forage production, pasture management, fertilizers, weed control, marketing. Field trips and farm visitations are included. Prerequisite: BIOL 101, 102, 103.

BIOLOGY (BIOL)

College Place campus:

BIOL 101, 102, 103 GENERAL BIOLOGY 4, 4, 4

A study of the basic principles of biology. Topics such as anatomy, physiology, cytology, genetics, taxonomy, ecology and embryology are considered with reference to both plants and animals. Must be taken in sequence. One laboratory per week.

BIOL 101, 102, 103 is a prerequisite for all upper-division courses.

BIOLOGICAL SCIENCES

BIOL 121 PHYSICAL GEOLOGY

A study of the earth, its materials, structures and the processes and forces that effect changes upon and within it. Laboratory training includes the recognition of common rocks and minerals, the use of topographic and geologic maps, and identification and interpretation of events recorded in the rocks. One laboratory per week. One weekend field trip required. 4

BIOL 201, 202 ANATOMY AND PHYSIOLOGY

An integrated course of human (organ-system) anatomy and physiology with reference to cellular, genetic and developmental relationships. Typically, the first quarter begins with cellular and genetic relationships and moves through the circulatory, respiratory and digestive systems. Second quarter picks up with a brief review of first quarter and moves through the excretory, nervous, endocrine and reproductive systems. One laboratory per week. Will not apply to biology major. 4, 4

BIOL 222 MICROBIOLOGY

The nature of bacteria and disease-producing organisms with their habits and methods of reproduction and control are studied, together with the relation of these organisms to disease in the human body. Two half laboratories per week. Recommended prerequisite: CHEM 101, 102. 5

BIOL 261 GENETICS

A study of the principles of inheritance in plants and animals. One laboratory per week. Prerequisites: BIOL 101, 102, 103. 4

BIOL 266 DEVELOPMENTAL BIOLOGY

Principles of development of plants and animals. Emphasis is placed on problems of growth, differentiation and morphogenesis. Laboratory work consists of both descriptive and experimental analysis of development. Two laboratories per week. Prerequisite: BIOL 101, 102, 103. 4

BIOL 350 BIOSTATISTICS

Practice and theory of statistical methods in quantitative biology. Prerequisite: MATH 121, 122. 4

BIOL 351, 352 RESEARCH METHODS I, II

An investigative laboratory experience designed to introduce the ideology, techniques and technology of basic research and the scientific method. Specifically designed to aid the student in selecting and conducting a research problem suitable for a senior thesis. One laboratory-lecture combination per week. First two quarters of a three-quarter sequence required of all majors (see BIOL 453). Must be taken in sequence. 1, 1

BIOL 360 SURVEY OF THE PLANT KINGDOM

A study of the life histories, internal anatomy and physiology of the various members of the plant kingdom. One laboratory per week. 4

BIOL 374 ANIMAL BEHAVIOR

A foundation course in the field of Animal Behavior with emphasis on the historical perspective and classical experiments. Contributions from diverse disciplines such as neurophysiology, ecology, endocrinology, sociology, anatomy and medicine are drawn together to illustrate the dependence of ethology and psychology (i.e., Animal Behavior) on the other life sciences. One laboratory per week. (College Place campus—4 quarter hours; Marine Station—5 quarter hours.) 4 or 5

BIOL 389 NATURAL HISTORY OF VERTEBRATES

A study of vertebrates with emphasis on natural history, ecology and taxonomy. One laboratory per week. 4

BIOL 392 CELL PHYSIOLOGY

An investigation of the chemical and physical phenomena of plant and animal cells. This course will seek to integrate function with the various cellular organelles. One laboratory per week. Physics and organic chemistry strongly recommended. 4

BIOLOGICAL SCIENCES

BIOL 393 ANIMAL PHYSIOLOGY

The study of animal physiology with emphasis on vertebrate organ systems. This course is based on concepts developed in BIOL 392. One laboratory per week. Prerequisite: BIOL 392. Physics and organic chemistry strongly recommended.

BIOL 401 PLANT PHYSIOLOGY

A course designed to cover the principles of physiology of plants in general. One laboratory per week. Prerequisites: BIOL 360; BIOL 392.

BIOL 403 ORNITHOLOGY

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

BIOL 405 GENERAL ENTOMOLOGY

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

BIOL 407 PHILOSOPHY OF SCIENCE (or PHIL 407)

A study of the scientific method as it relates to primary origins and present-day distributions of living things. Evidences from archeology, the physical and biological sciences are examined. Will not apply on biology major.

BIOL 412 PLANT ANATOMY

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

BIOL 424 HERPETOLOGY

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

BIOL 426 SYSTEMATIC BOTANY

A study of the principles of plant classification, together with a systematic survey of vascular plants, with emphasis on natural history and ecology. Two laboratories per week. (College Place campus - 4 quarter hours; Marine Station - 5 quarter hours.)

BIOL 429 LIMNOLOGY

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

BIOL 432 INTRODUCTION TO PALEOBIOLOGY

Study of earth history as exhibited by the fossils with particular emphasis on paleobiological relationships. Two laboratories per week.

BIOL 444 MAMMALOGY

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

BIOL 446 GENERAL ECOLOGY

The 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. Biostatistics, genetics and a minimum of one field natural history course recommended.

BIOL 447 PARASITOLOGY

A systematic study of the morphology, life cycle and host-parasite relationships of protozoan, helminth and arthropod parasites. Two laboratories per week. Prerequisite or corequisite: CHEM 321, 322, 323.

BIOL 449 VERTEBRATE HISTOLOGY

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

BIOLOGICAL SCIENCES

BIOL 451 INVERTEBRATE ZOOLOGY

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

BIOL 453 RESEARCH METHODS III

Methods of writing and orally presenting a scientific paper. Students present the results of their senior thesis research in a seminar, and submit a completed written senior thesis. Third quarter of a three-quarter sequence required of all majors (see BIOL 351, 352).

BIOL 458 PSYCHOBIOLOGY

A course emphasizing 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 human behavior. One laboratory per week. Prerequisites: BIOL 101, 102, 103 or BIOL 201, 202 and PSYC 130 or permission of instructor. Recommended prerequisite: BIOL 374.

BIOL 465 BACTERIOLOGY

A presentation of the basic principles necessary for an understanding of morphology and function of bacteria. Laboratory work, including unknowns, points out techniques employed in their study. Two laboratories per week. Prerequisite or corequisite: CHEM 321, 322, 323.

BIOL 472 METHODS OF TEACHING BIOLOGY

This course deals with the basic principles of teaching biology in the secondary school. Observation, demonstration and class presentation are required of the students as a part of this course. Not applicable to a major or minor. Taught alternate years.

BIOL 483 PHILOSOPHY OF ORIGINS AND SPECIATION

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

BIOL 490 TECHNIQUES IN FIELD BIOLOGY

A study of the techniques used in the collection and preservation of biological specimens for museum purposes. Emphasis is placed on the recording and preservation of ecological data obtained with the collections of specimens. The topic for a given year will depend on the instructor offering the course and credit will be given at the rate of one quarter hour for each week spent working in the field.

BIOL 495 COLLOQUIUM

A lecture series designed to expose students to modern scientific research and researchers. 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 topic 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 hour 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 advisers for alternate options.

BIOL 511 BIOSYSTEMATICS

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

BIOLOGICAL SCIENCES

BIOL 518 SYSTEMATIC ENTOMOLOGY

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

BIOL 521 PRINCIPLES OF ECONOMIC ENTOMOLOGY

An evaluation of the various methods of controlling economically important species. Prerequisite: BIOL 405. **3**

BIOL 522 CELLULAR BIOLOGY

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

READING COURSES

A maximum of six quarter hours may be selected from Reading Courses.

BIOL 525 READINGS IN PHYSIOLOGY

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 526 READINGS IN INVERTEBRATE ZOOLOGY

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 527 READINGS IN ENTOMOLGY

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 528 READINGS IN ECOLOGY

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 529 READINGS IN SYMBIOSIS

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 530 READINGS IN BIOSYSTEMATICS

Analysis of classical and current literature in the field by means of reports and conferences with staff. Two quarter hours; maximum, four. **2; 4**

BIOL 545 THESIS

Preparation and defense of the master's thesis based upon an original biological research project. The research topic is selected upon consultation with the student's major professor and graduate committee. **8**

Marine Station:

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

BIOL 460 MARINE ECOLOGY

A study of interspecific, intraspecific and community relationships demonstrated by marine organisms. **5**

BIOL 462 ICHTHYOLOGY

A systematic study of the fishes found in Puget Sound, with a survey of the fishes of other waters. **5**

BIOL 463 MARINE BOTANY

A systematic study of plants found in Puget Sound, with a survey of marine plants from other areas. **5**

BIOL 467 INTRODUCTION TO OCEANOGRAPHY

A physical, chemical and geological study of the oceans and ocean basins as a habitat for life, emphasizing the mutual interaction between the oceanic biosphere and its environment. **5**

BIOLOGICAL SCIENCES

BIOL 468 COMPARATIVE PHYSIOLOGY

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

BIOL 470 MARINE BIOPHYSICS

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

BIOL 475 MARINE INVERTEBRATES

A study of the biology of selected groups of marine invertebrates.

BIOL 508 PHYSIOLOGY OF THE ALGAE

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

BIOL 514 SYMBIOSIS

A study of sharply defined associations between organisms. Selected examples of the viruses, bacteria, plants and animals are used to illustrate varying degrees of relationships. Prerequisite: Course work in one group of animals or plants or microbes or parasitology. Chemistry courses through organic are highly recommended. Two laboratories per week.

BIOL 516 BEHAVIOR OF MARINE ORGANISMS

A study of inter- and intraspecific behaviors of marine animals and their behavioral responses to the physical environment. Laboratory experiences, field observations and a research project are requirements. Prerequisite: BIOL 374 or BIOL 458; or PSYC 130 and background in organismal biology and permission of instructor.

BIOL 525 COLLOQUIUM

Biological Seminars are regular meetings of the students to furnish opportunities for exchange of information and discussion of topics of interest to students or to minor, senior and graduate biology. Conference studies on interesting topics.

BIOL 532 RESEARCH IN BIOLOGY

Individual work in a topic of original research carried out under the direction of one of the instructors. Two to four hours per quarter, maximum, eight months. Prerequisite: BIOL 403. Graduate students may substitute previous experience in BIOL 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 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BUSINESS

P. Joice, Chairman; R. Kappel, J. Mehling, W. Messer, J. Paulman, L. Reynolds.

The courses and programs offered by the department are designed to prepare students for business careers with the church, government and industry.

The objectives of this department are:

1. To provide the student with the basic business skills required for initial job placement.
2. To give the student a broad background of knowledge of the free enterprise system developed through the several disciplines of business.
3. To assist the student in developing a sound Christian philosophy toward our modern political economy and changing business world.
4. To encourage Seventh-day Adventist students to prepare for positions of business leadership and service within organizations sponsored by this denomination.

Admission requirements. Business students are expected to have completed two units of mathematics other than business or general mathematics. Deficiencies should be made up during the first quarter of enrollment. Although no foreign language is required for any business degree, students should consider the study of foreign culture and communication as a desirable facet of their total educational preparation. Students who accept foreign mission appointments or who become employed in international trade would profit from at least one year of foreign language study.

Degrees offered. The department offers a Bachelor of Science in Business Administration degree (BSBA) with opportunity to concentrate in the areas of accounting, computer science, economics, health facility administration, management or marketing. No minor is required.

A Bachelor of Arts degree with a major in business administration is also available to the student who wishes a broader liberal arts preparation than that provided by the BSBA. A minor is required for the BA degree.

An Associate of Science degree is also available for those students who, for a variety of reasons, may find it impossible to complete a four-year program without an interruption. Such a program provides an opportunity for students to gain the basic knowledge and skills required for initial job placement. Minors are also available in either business or economics.

Students who plan to teach business subjects at the high-school level should consult with the department chairman or follow the Business Education program listed in the department of office administration. Students may emphasize either business or office occupation skills.

In cooperation with the department of education and psychology, a graduate program is offered leading to the Master of Education degree. For further information, see the graduate bulletin.

General Studies. The Applied Arts requirement is met in the completion of

BUSINESS

OFAD 113 and OFAD 208. The Language Arts requirement is met by the completion of ENGL 121, 122 and SPCH 101. The Mathematics and Natural Science requirement is met by the completion of MATH 111, 112 or MATH 121, 122 and MATH 181; it is suggested that the science requirement be fulfilled by completing BIOL 201, 202 since it is required for the concentration in health facility administration. To complete the History and Social Studies requirement, it is recommended that students complete HIST 221, 222 and PSYC 130. Any remaining quarter hours can be completed by the business core requirements in economics and business law. All business students can profit by completion of PLSC 224 and SOCI 204.

BUSINESS (Bachelor of Science in Business Administration Degree)

A student majoring in business must complete in the core requirements, the required cognates, one concentration, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Core Requirements:

ACCT 121, 122, 123	Principles of Accounting	10
ACCT 327, 328, 329	Managerial Cost Accounting	6
CPTR 131	Data Processing	4
ECON 241, 242, 243	Principles of Economics	9
FINA 351	Business Finance	4
GBUS 261	Quantitative Analysis for Management	4
GBUS 264	Business Statistics	5
GBUS 361, 362, 363	Business Law	9
GBUS 496	Business Seminar	2
MGMT 171	Principles of Management	4
MKTG 381	Marketing	4
		61

Required Cognates:

MATH 111, 112 or MATH 121, 122 and	Mathematics for the Liberal Arts	8-12
MATH 181	Fundamentals of Mathematics, I, II	
OFAD 113	Analytical Geometry and Calculus I*	
OFAD 208	Beginning Typewriting (or equivalent)	2
OFAD 362	Basic Concepts in Office Machines	2
PSYC 130	Business Communications	4
SPCH 101	General Psychology	4
	Fundamentals of Speech	4

*Recommended for students planning on graduate or professional schools.

BUSINESS**Concentration: Accounting**

ACCT 321, 322, 323	Intermediate Accounting	9
ACCT 325	Federal Income Tax	5
ACCT 421	Advanced Accounting	4
ACCT 429	Auditing Procedures	5
Electives		<u>12</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 35

Concentration: Computer Science

CPTR 235	Programming for Business I (RPG)	4
CPTR 237	Programming for Business II (COBOL)	4
CPTR 431	Computerized Information Systems	3
CPTR 122	Computer Science II (FORTRAN)	2
CPTR 334	Computer Science III	3
ENGR 354	Digital Logic Circuits	3
MATH 289	Linear Algebra and Its Applications	3
Electives		<u>13</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 35

Concentration: Economics

ECON 341	Price Theory	4
ECON 343	Aggregate Economic Analysis	4
Electives		<u>27</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 35

Concentration: Health Facility Administration

ACCT 427	Fundamentals of Accounting	4
BIOL 201, 202	Anatomy and Physiology	8
ECON 341	Price Theory	4
MGMT 271	Personnel Management	4
MGMT 273	Introduction to Health Care Organizations	2
MGMT 475	Health Care Organization and Management	2
MGMT 476	Human Relations in Management	4
SOCI 447 or SOCI 354	Sociology of Health & Illness	3
Electives	Social Gerontology	<u>4</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 35

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Concentration: Management

ECON 341	Price Theory	4
MGMT 271	Personnel Management	4
MGMT 476	Human Relations in Management	4
MGMT 479	Business Policies	4
Electives		<u>19</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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Concentration: Marketing

ECON 341	Price Theory	4
MKTG 383 or MKTG 483	Principles of Advertising Purchasing	4
MKTG 385 or MKTG 485	Selling and Sales Management Retail Store Operation and Management	4
Electives		<u>23</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

35

MAJOR IN BUSINESS ADMINISTRATION (Bachelor of Arts)

A student majoring in business must complete 55 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

ACCT 121, 122, 123	Principles of Accounting	10
ECON 241, 242, 243	Principles of Economics	9
GBUS 361, 362, 363	Business Law	9
GBUS 496	Business Seminar	2
Electives (16 must be upper division)		<u>25</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

55

Required Cognates:

MATH 111, 112 or MATH 121, 122 and MATH 181	Mathematics for the Liberal Arts Fundamentals of Mathematics, I, II Analytical Geometry and Calculus I*	8-12
OFAD 113	Beginning Typewriting (or equivalent)	2
OFAD 208	Basic Concepts in Office Machines	2
OFAD 362	Business Communications	4
PSYC 130	General Psychology	4
SPCH 101	Fundamentals of Speech	4

*Recommended for students planning on graduate or professional schools.

BUSINESS**BUSINESS (Associate of Science Degree)**

A student specializing in business must complete 58 quarter hours in the area, the required cognates, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

ACCT 121, 122, 123	Principles of Accounting	10
ECON 241, 242, 243	Principles of Economics	9
GBUS 361, 362, 363	Business Law	9
FINA 101	Personal Finance	2
CPTR 131	Data Processing	4
MGMT 275	Management of Small Businesses	4
Electives		<u>20</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 58

Required Cognates:

OFAD 208	Basic concepts in Office Machines	2
Typing proficiency is required		

MINOR IN BUSINESS

A student minoring in business must complete 30 quarter hours; 4 quarter hours must be upper division; ACCT 121, 122, 123 and ECON 241, 242, 243 are required. Approval of business adviser required.

MINOR IN ECONOMICS

A student minoring in economics must complete 30 quarter hours; 4 quarter hours must be upper division; ECON 241, 242, 243; ECON 341 and ECON 343 are required. Approval of economics adviser required.

ACCOUNTING (ACCT)

ACCT 121, 122, 123 or 125, 126 PRINCIPLES OF ACCOUNTING	4, 3, 3
A study of accounting concepts and procedures required in the accumulation and presentation of data needed by management for decision making. Must be taken in sequence. May be taken in a two- or three-quarter sequence; the two-quarter sequence (125, 126) is 5 hours per quarter. See the <i>Class Schedule</i> .	

ACCT 321, 322, 323 INTERMEDIATE ACCOUNTING	3, 3, 3
A study of the construction, analysis, and interpretation of financial statements and reports prepared from accounting records. Basic accounting procedures employed in balance sheet evaluation and determination of profit. Prerequisite: ACCT 123 or ACCT 126.	

ACCT 325 FEDERAL INCOME TAX	5
A study of tax regulations and accounting records necessary to facilitate proper tax accounting and reporting for individuals, partnerships and corporations.	

ACCT 327, 328, 329 MANAGERIAL COST ACCOUNTING	2, 2, 2
Standards and budgets for control; cost-volume-profit relationships; discretionary and committed costs; application of overhead and analysis of variances; accounting systems for accumulating cost data; responsibility centers and controllable costs; long-range planning; capital budgeting; quantitative techniques and computer problems applied to cost accounting. Prerequisite: ACCT 123 or ACCT 126.	

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ACCT 421 ADVANCED ACCOUNTING 4
Special accounting problems relating to partnership accounting, preparation of financial statements for consolidations and combinations involving branch offices and subsidiaries; accounting for trusts and estates. Prerequisite: ACCT 323 and ACCT 329.

ACCT 423 CPA REVIEW 4
A comprehensive review of problems covering accounting principles, procedures and presentations as found in the practice section of the CPA examination. Prerequisites: ACCT 421.

ACCT 425 ACCOUNTING THEORY 4
Advanced study of assets, equities and income measurement by a review of the current literature and materials from the theory portion of the CPA examination. Prerequisite: ACCT 323; ACCT 329; ACCT 421 recommended

ACCT 427 FUND ACCOUNTING 4
A study of the application of fund accounting principles to various governmental entities, school, hospital and church accounting systems. Prerequisite: ACCT 123 or ACCT 126. Offered alternate years.

ACCT 429 AUDITING PROCEDURES 5
Public accounting practice including such topics as ethics, auditing standards and techniques, internal control, advisory services, computer system techniques, audit working papers and legal liability. Prerequisite: Eight hours of accounting beyond ACCT 323. Offered alternate years.

COMPUTER SCIENCE (CPTR)

CPTR 121 COMPUTER SCIENCE I 2
See the Engineering section of this bulletin.

CPTR 122 COMPUTER SCIENCE II 2
See the Engineering section of this bulletin.

CPTR 131 DATA PROCESSING 4
The essential characteristics, applications and design of a data processing system. A review of punched card data processing system, computer hardware development, computer arithmetic, ethical and legal considerations relating to the data bank. Prerequisite: OFAD 113 or equivalent.

CPTR 232 IBM KEY PUNCH 1
See the Office Administration section of this bulletin. (OFAD 232)

CPTR 235 PROGRAMMING FOR BUSINESS I 4
Principles of analyzing and solving practical business programming problems applicable to any computer or language; emphasis on standard flow charts peculiar to the problems commonly encountered in business situations; functional use of one programming language; experience in the use of a computer. Prerequisite: CPTR 131 or CPTR 121; recommend GBUS 261.

CPTR 237 PROGRAMMING FOR BUSINESS II 4
Programming of business problems in a language or languages not covered in Programming for Business I; emphasis on program writing, documentation, testing and debugging. Prerequisite: CPTR 131 or CPTR 121; recommend GBUS 261.

CPTR 334 COMPUTER SCIENCE III 3
See the Engineering section of this bulletin.

CPTR 431 COMPUTERIZED INFORMATION SYSTEMS 3
A study of information processing concepts; management considerations of the information system; data base concepts; systems analysis, design, evaluation, and implementation; programming applications to a variety of business-oriented problems. Prerequisites: CPTR 122 and CPTR 235 or CPTR 237.

ECONOMICS (ECON)

ECON 241, 242, 243 PRINCIPLES OF ECONOMICS	3, 3, 3
A study of the organization, operation and control of the American economy and of the principles and analytical concepts pertaining thereto. Must be taken in sequence.	
ECON 341 PRICE THEORY	4
A study of the structure of markets, the determination of prices, the relations of price and cost, income and its functional distribution in a capitalistic economy. Prerequisite: ECON 243.	
ECON 343 AGGREGATE ECONOMIC ANALYSIS	4
Analysis of the determinants of the aggregate level of employment output, and income of an economy. Prerequisite: ECON 243. Offered alternate years.	
ECON 345 ECONOMIC HISTORY OF THE UNITED STATES	4
A comprehensive study of the economic development of the United States from the colonial period to the present. Recommended prerequisite: ECON 243. Offered alternate years.	
ECON 441 MONEY AND BANKING	4
A study of the functional activities of the institutions which comprise our financial system; emphasizing the nature and functions of money, credit and banking. Prerequisite: ECON 243 Offered alternate years.	
ECON 443 COMPARATIVE ECONOMIC SYSTEMS	4
A study of the theoretical basis of capitalism; socialism and communism followed by a comparison of the modern systems in their response to basic economic problems. Prerequisite: ECON 243. Offered alternate years.	
ECON 445 ECONOMICS OF FOREIGN TRADE	4
Examines the role of trade in world development and stability. Develops the principles of trade and foreign exchange; considers the effects of tariffs and other trade policies; describes international organizations dealing with trade and exports. Prerequisite: ECON 243. Offered alternate years.	

FINANCE (FINA)

FINA 101 PERSONAL FINANCE	2
A course designed to provide an individual with the techniques to manage his personal finances more efficiently.	
FINA 351 BUSINESS FINANCE	4
A study of the fundamental principles of financial policy in the organization and management of corporate enterprises. Prerequisites: ACCT 123 or ACCT 126 and ECON 243.	
FINA 451 INVESTMENTS	4
A study of the principles of making sound investments in the securities markets, managing investment portfolios, evaluating securities, the function of the speculation, the hedging operation and the evaluation of market risks. Offered alternate years.	
FINA 453 CREDIT ADMINISTRATION	4
A study of loan and collection problems from the viewpoint of the credit administrator. Offered alternate years. Prerequisite: ACCT 123 or ACCT 126.	
FINA 455 PUBLIC FINANCE	4
Governmental expenditures, taxation, public data and public financial administration; public policies on expenditures, taxation and debt management and their relation to business fluctuations. Prerequisites: ACCT 123 or ACCT 126 and ECON 243.	

BUSINESS

GENERAL BUSINESS (GBUS)

GBUS 261 QUANTITATIVE ANALYSIS FOR MANAGEMENT

4

A study of the quantitative methods needed for solving problems in management and other sub-disciplines of business. Includes the value of money; probability concepts; cost-volume-profit analysis; inventory and production management; linear programming; network analysis and other advanced techniques. Prerequisites: MATH 112 or MATH 117 or MATH 122.

GBUS 264 BUSINESS STATISTICS

4

Methods of collecting, analyzing and presenting statistical data; probability and sampling distributions, techniques of sampling. Bayesian and classical decision theory, hypothesis testing, correlation and regression, index numbers and time series analysis. Prerequisite: GBUS 261.

GBUS 361, 362, 363 BUSINESS LAW

3, 3, 3

Fundamentals of law which affect business transactions. Emphasis on contracts, agencies, negotiable instruments, landlord and tenant relationship, personal property and corporations.

GBUS 365 PRINCIPLES OF INSURANCE

4

A study of insurance contracts, underwriting organizations and insurance representation and procedures. Offered alternate years.

GBUS 367 REAL ESTATE

4

A survey course in the basic principles and problems of real estate management and appraisal.

GBUS 496 SEMINAR

2

A course in orientation, research, problems and trends in business and economics. Students will do independent study and research. A formal paper is required. Open only to students majoring in the department. To be taken during senior year.

MANAGEMENT (MGMT)

MGMT 171 PRINCIPLES OF MANAGEMENT

4

A study of the functions of management in terms of administrative organization, planning and control. The course deals with the setting of business objectives and policies, how executives make decisions and the problems that arise in the delegating of authority and responsibility.

MGMT 271 PERSONNEL MANAGEMENT

4

A study of the problems of employee procurement, training, motivation, job evaluation, wage administration, employee benefits and negotiating with labor unions. Recommended prerequisite: MGMT 171.

MGMT 273 INTRODUCTION TO HEALTH CARE ORGANIZATIONS

2

Introduction to the history, concepts and activities of health care systems. The course will focus on the basic elements, the changing nature of the system and issues confronting the future health care system. Recommended prerequisite: ACCT 123 or ACCT 126.

MGMT 275 MANAGEMENT OF SMALL BUSINESSES

4

A comprehensive and practical approach to assimilate, clarify and interrelate various concepts peculiar to the small business enterprise. Recommended prerequisite: ACCT 123 or ACCT 126.

MGMT 371 JOB ANALYSIS

2

Techniques and practice in analyzing requirements of various types of work positions and writing descriptions needed by the personnel department. Recommended prerequisite: MGMT 171. Offered alternate years.

MGMT 375 SUPERVISION	2
The theory and practice of work-group supervision with emphasis on small-group dynamics and the supervisor's leadership role. Appraisal interviewing, on-the-job training, individual counseling, employee development, conference leadership and employee-management relations. Recommended prerequisite: MGMT 171. Offered alternate years.	
MGMT 475 HEALTH CARE ORGANIZATION AND MANAGEMENT	2
Analysis of health care organization with emphasis on organizational functions, structure, financial planning and controls. Prerequisites: ACCT 123 or ACCT 126, and MGMT 171 and MGMT 273.	
MGMT 476 HUMAN RELATIONS IN MANAGEMENT	4
A survey of the human relations problems found in various types of organizations. Recommended prerequisite: MGMT 171.	
MGMT 478 DENOMINATIONAL POLICY	2
A survey of the various types of policies of the Seventh-day Adventist Church organization as found in the Working Policies of the General Conference. Permission of the instructor required. Offered alternate years.	
MGMT 479 BUSINESS POLICIES	4
An integration of various subject areas in terms of policy-level decision making. The duties and responsibilities of top management in establishing policies, objectives and future plans for business organizations. Prerequisites: completion of business core and MGMT 476.	
AGRI 362 FARM MANAGEMENT	3
See the Biology section of this bulletin.	
MARKETING (MKTG)	
MKTG 381 MARKETING	4
A study of the nature and operation of the market structure. Methods of marketing agricultural products, raw materials, and manufactured goods. Attention is given to marketing functions, institutions and costs. Prerequisites: ACCT 123 or ACCT 126 and ECON 243.	
MKTG 383 PRINCIPLES OF ADVERTISING	4
The principles, functions, forms and techniques of advertising. Advertising media, personnel and institutions. Persuasive mass communications in marketing and including problem analysis and solution planning, budgeting, research, the use of media and creative techniques. Prerequisite: MKTG 381. Offered alternate years.	
MKTG 385 SELLING AND SALES MANAGEMENT	4
Basic principles in selling, selling techniques and sales management. Development of sales manuals and effective sales presentation methods, controlling the sales force. Offered alternate years.	
MKTG 481 PUBLIC RELATIONS	4
The broad field of public relations as a promotional activity of the firm; analysis of the techniques used to create and maintain goodwill. Offered alternate years.	
MKTG 483 PURCHASING	4
All phases of governmental, industrial and institutional purchasing including organization procedures, price policies, value analysis, legal aspects and newer approaches to purchasing systems using data processing and PERT control. Offered alternate years.	
MKTG 485 RETAIL STORE OPERATION AND MANAGEMENT	4
A study of the various types of retail institutions and their role in the distribution system. Problems of planning and control as they apply to the retail store. Special	

BUSINESS

attention given to Adventist Book Center operation and school bookstores. Prerequisite: MKTG 381. Offered alternate years.

JOUR 387 ADVERTISING COPYWRITING 3
See the Communications section of this bulletin.

JOUR 465 PROMOTIONAL CAMPAIGNS 2
See the Communications section of this bulletin.

BUSINESS EDUCATION (BUED)

BUED 472 METHODS OF TEACHING ACCOUNTING, BASIC BUSINESS, AND DISTRIBUTIVE EDUCATION 3

Methods, procedures of instruction, and analysis of instructional materials peculiar to such secondary courses as accounting, business law, consumer economics, economics, general business, management and distributive education.

GRADUATE COURSES

Admission to the following courses may be granted by the department chairman to those students who have demonstrated by course completion or successful teaching experience that they can profit from these advanced courses. It is assumed that such students have completed all undergraduate degree requirements or have been admitted to graduate study. These courses will be offered only during the **summer quarter**.

Students pursuing the Master of Education degree should arrange their program with the department chairman at an early date, so that deadlines can be met with no conflicts. Please consult the current graduate bulletin for specific details.

BUED 474 WORKSHOP IN BUSINESS EDUCATION 2

A study of a major program or area of business education in terms of plans, procedures, materials, research and individual projects. Techniques and methods are studied and practiced which are designed to improve instructional competency. May be repeated.

BUED 491 PRINCIPLES OF BUSINESS EDUCATION 2
A study of the problems, trends and recent developments in business education.

BUED 495 BUSINESS CURRICULUM 2
Planning and procedures in business curriculum development and revision. Analysis of various types of instructional aids, courses of study and text materials. Covers all academic levels—elementary school through college.

BUED 496 SEMINAR IN BUSINESS EDUCATION 2
An in-depth study of a specific topic pertinent to business education. Topics will be different each time the course is offered. Topics may include such subjects as: consumer economic education, school and community relations, tests and measurements

CHEMISTRY

W. B. Rippon, Chairman; J. Chambers, C. Chinn. R. Rittenhouse.

MAJOR IN CHEMISTRY (Bachelor of Arts)

A student majoring in chemistry must complete 48 quarter hours in the major, the required cognates, and the general studies program for the baccalaureates degree as outlined in this bulletin. Any minor may be chosen for the Bachelor of Arts degree.

Major Requirements:

CHEM 141, 142, 143	General Chemistry	12
CHEM 264, 265, 266	Elementary Quantitative Analysis	10
CHEM 321, 322, 323	Organic Chemistry	12
CHEM 351, 352, 353	Physical Chemistry	12
Electives		<u>2</u>

Electives must be chosen in consultation and approved by the academic adviser assigned by the department chairman.

Required Cognates:

MATH 181, 281	Analytic Geometry and Calculus I, II	8
PHYS 211, 212, 213	General Physics	
PHYS 214, 215, 216	General Physics Laboratory	
or		
PHYS 251, 252, 253	Principles of Physics	12
PHYS 254, 255, 256	Principles of Physics Laboratory	

MAJOR IN CHEMISTRY (Bachelor of Science)

A student majoring in chemistry must complete 65 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. No minor is required for the Bachelor of Science degree, but minors in both mathematics and physics are recommended.

Major Requirements:

CHEM 141, 142, 143	General Chemistry	12
CHEM 264, 265, 266	Elementary Quantitative Analysis	10
CHEM 321, 322, 323	Organic Chemistry	12
CHEM 351, 352, 353	Physical Chemistry	12
CHEM 477	Independent Study in Chemistry	3
Electives		<u>16</u>

Electives must be chosen in consultation and approved by the academic adviser assigned by the department chairman.

CHEMISTRY

Required Cognates:

ENGR 121	Computer Science I	2
MATH 181, 281,	Analytical Geometry and Calculus I, II,	8
MATH 282, 283	Analytical Geometry and Calculus III, IV	8
PHYS 211, 212, 213	General Physics	
PHYS 214, 215, 216	General Physics Laboratory	
or		
PHYS 251, 252, 253	Principles of Physics	
PHYS 254, 255, 256	Principles of Physics Laboratory	12

MINOR IN CHEMISTRY

A student minoring in chemistry must complete 27 quarter hours; 3 quarter hours must be upper division. Approval of chemistry adviser required.

CHEMISTRY (CHEM)

CHEM 101, 102 INTRODUCTORY CHEMISTRY I

4, 4

An introductory course in chemistry covering the fields of inorganic, organic and biochemistry. Completion of this course plus CHEM 203 Introductory Chemistry II will meet basic science requirement but does not apply on a major or minor. Must be taken in sequence. Two lectures, one laboratory per week.

CHEM 141, 142, 143 GENERAL CHEMISTRY

4, 4, 4

The structure and states of matter; atomic and molecular theory, including valency, and periodicity and bonding; solutions and equilibria, stoichiometry, kinetics and thermodynamics, and the descriptive chemistry of metals and nonmetals. Must be taken in sequence. Prerequisite or corequisite: MATH 121, 122 or equivalent. Three lectures and one laboratory per week.

CHEM 203 INTRODUCTORY CHEMISTRY II

3

This course is a continuation of CHEM 101, 102, emphasizing organic and biochemistry. Will not apply on major or minor. Three lectures per week.

CHEM 264, 265, 266 ELEMENTARY QUANTITATIVE ANALYSIS

4, 3, 3

Fundamental principles and laboratory practices in both gravimetric and volumetric analysis are presented in CHEM 264. The remaining time is spent on ionic equilibrium and simple instrumental methods of analysis. Prerequisite: CHEM 143; CHEM 264 is prerequisite for CHEM 265, 266; MATH 121. Two lectures, two laboratories per week autumn; two lectures, one laboratory per week winter and spring.

CHEM 321, 322, 223 ORGANIC CHEMISTRY

4, 4, 4

A study of the preparation, reaction and constitution of the aliphatic and aromatic compounds of carbon. Prerequisite: CHEM 141, 142, 143. Three lectures and one laboratory per week.

CHEM 351, 352, 353 PHYSICAL CHEMISTRY

4, 4, 4

An introductory course in thermodynamics, kinetics, quantum chemistry, spectroscopy, structure, electrochemistry and radiochemistry. Laboratory includes experiments on the various physical properties of matter, including electronics and computer techniques. Prerequisites: CHEM 264, 265, 266; PHYS 211, 212, 213; 214, 215, 216 or PHYS 251, 252, 253; 254, 255, 256 and MATH 121, 122; MATH 181; MATH 281, or permission from the instructor. Three lectures, one laboratory per week.

CHEM 427, 428 ADVANCED ORGANIC CHEMISTRY

2, 2

A study of the current theories in the field of aliphatic and aromatic chemistry. Prerequisite: CHEM 321, 322, 323.

CHEMISTRY

CHEM 431, 432 BIOCHEMISTRY

4. 3

CHEM 431, 432 BIOCHEMISTRY 4, 5
A study of the chemistry of foods, digestion and body metabolism. Prerequisite: CHEM 321, 322, 323. The spring quarter, 431, consists of three lectures and one laboratory per week; it is prerequisite to the autumn course, 432, which is three lectures per week and no laboratory. Four quarter hours, spring; three quarter hours, autumn.

CHEM 442, 443 ADVANCED INORGANIC CHEMISTRY

22

CHEM 442, 443 ADVANCED INORGANIC CHEMISTRY
A review of the modern theories of chemistry, including selected topics such as nuclear chemistry, coordination chemistry, synthetic inorganic chemistry and instrumentation. Prerequisite: CHEM 141, 142, 143.

CHEM 461, 462 ADVANCED ANALYTICAL CHEMISTRY

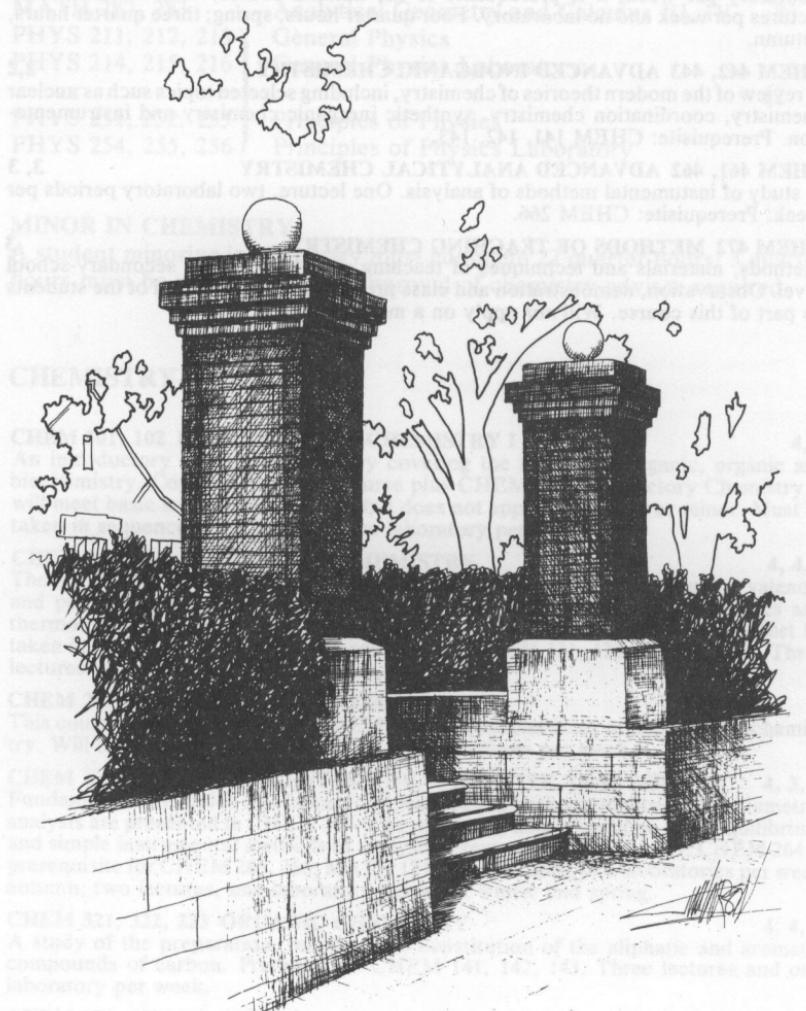
3.3

CHEM 461, 462 ADVANCED ANALYTICAL CHEMISTRY 3, 3
A study of instrumental methods of analysis. One lecture, two laboratory periods per week. Prerequisite: CHEM 266.

CHEM 472 METHODS OF TEACHING CHEMISTRY

3

CHM 472 METHODS OF TEACHING CHEMISTRY 3
Methods, materials and techniques of teaching chemistry on the secondary-school level. Observation, demonstration and class presentation are required of the students as part of this course. Will not apply on a major or minor.



CHEN 421, 422 ADVANCED ORGANIC CHEMISTRY
A study of the current literature in organic chemistry and its applications to pharmaceuticals, polymers, and biomolecules

COMMUNICATIONS

L. Dickinson, Chairman; Donnie Rigby, D. Schwantes, Eileen Watson, C. Wood.

The programs of the department are directed toward the objectives of preparing students to become articulate Christian communicators, and to provide basic preparation for those interested in communications-related professions. The department offers four majors, and minors in general speech communication and journalism.

The communication media major is offered through the cooperation of a number of departments whose courses include mass communication areas. It trains, primarily, those interested in broadcasting, audiovisual production and promotional work. This major also provides a preprofessional foundation which enables students to take advanced work in a communications area including public relations.

The speech communication major emphasizes public, small group and interpersonal communication. It is designed for the student intending to teach oral communication, or is used as an adjunct to other preparations in which interpersonal and public speech communication skills are particularly important.

The speech pathology and audiology major trains students to become speech and hearing therapists. The curriculum is considered primarily preprofessional in that it provides the undergraduate foundation on which graduate work may be taken to more fully qualify the student to meet certification requirements held in most states and at the national professional level.

The journalism major aims to train students both for newspaper and magazine journalism and to provide understanding of the place of mass communication in today's world. The student must realize that if he would succeed in any branch of journalism there is no substitute for a foundation of literary and social studies. Against this background, professional courses provide the training necessary in competent writing and professional journalism.

MAJOR IN COMMUNICATION MEDIA (Bachelor of Arts)

A student majoring in communication media must complete 55 quarter hours in the major and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

SPCH 101	Fundamentals of Speech Communication	4
SPCH 231	Broadcast Techniques and Announcing	
or		3
SPCH 352	Survey of Broadcasting	
SPCH 401	Introduction to General Semantics	2
SPCH 443	Persuasive Speaking	3
SPCH 496	Seminar in Communication Media	2
JOUR 145	Mass Communication Media	3

COMMUNICATIONS

JOUR 245	Journalistic Writing	3
JOUR 246	Reporting Methods	3
PRNT 121	Introduction to Graphic Arts	2
PRNT 295	Printing Layout and Design	3
GRPH 154	Principles of Photography	2
ART 161, 162, 163 or ART 244, 245, 246	Design Commercial Art	6-9
Electives (12 to 14 must be upper division)		16-19

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 55

MAJOR IN SPEECH COMMUNICATION (Bachelor of Arts)

A student majoring in speech communication must complete 48 quarter hours in the major and the general studies program for the baccalaureate degree as outlined in this bulletin.

SPCH 101	Fundamentals of Speech Communication	4
SPCH 107	Voice and Articulation	3
SPPA 210	Survey of Speech Pathology and Audiology	3
SPCH 211	Oral Interpretation	3
SPPA 291	Anatomy/Physiology of Speech/Hearing	3
SPCH 323 or SPCH 443 or SPCH 453	Advanced Public Address Persuasive Speaking Rhetoric and Public Address	3
Electives (18 must be upper division)		29

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 48

MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY (Bachelor of Science)

A student majoring in speech pathology and audiology must complete 50 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

SPCH 101	Fundamentals of Speech Communication	4
SPCH 107	Voice and Articulation	3
SPPA 210	Survey of Speech Pathology/Audiology	3
SPPA 275	Phonetics	3
SPPA 291	Anatomy/Physiology of Speech/Hearing	3
SPPA 299	Normal Language Development	3
SPPA 384	Audiology I	3
SPPA 385	Language Disorders in Childhood	4
SPPA 386	Organic Speech Pathologies	4
SPPA 387	Stuttering: Theories and Therapies	3

COMMUNICATIONS

SPPA 388	Aural Rehabilitation	3
SPPA 390	Directed Clinical Observation	2
SPPA 393	*Clinical Practicum	4
SPCH 401	Introduction to General Semantics	2
SPPA 441	Audiology II	3
SPPA 461	Diagnosis in Speech Pathology	3
		50

*Majors are expected to be active in the clinic each quarter of their junior and senior years and must have a minimum of 100 clock hours of client contact prior to registration for SPPA 484 and for graduation.

Required Cognates:

BIOL 201, 202	Anatomy and Physiology	8
SOCI 204	General Sociology	4
PSCY 350	Elementary Statistics	4
PSYC 430	Psychological Testing	3
PSYC 435, 436	Child Psychology and Laboratory	4
PSYC 446	Psychology of Personality	3

MAJOR IN JOURNALISM (Bachelor of Arts)

A student majoring in journalism must complete 52 quarter hours for the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

JOUR 145	Mass Communication Media	3
JOUR 245	Journalistic Writing	3
JOUR 246	Reporting Methods	3
JOUR 247	News Editing and Production	3
JOUR 495	Senior Project	1
Electives in Journalism		15
Electives (approximately equal hours in two nonjournalism areas; 20 of the 39 <u>elective</u> quarter hours must be upper division)		24
		52

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates:

PRNT 121	Introduction to Graphic Arts	2
PRNT 295	Printing Layout and Design	3
GRPH 154	Principles of Photography <i>or</i> working knowledge of photography	2
OFAD 113	Beginning Typewriting <i>or</i> proficiency in typing	2
SPCH 101	Fundamentals of Speech	4

MINOR IN SPEECH COMMUNICATION

A student minoring in speech communication must complete 27 quarter hours; 9 quarter hours must be upper division; SPCH 101 is required. Approval of speech communication adviser required.

COMMUNICATIONS

MINOR IN JOURNALISM

A student minoring in journalism must complete 27 quarter hours; 3 quarter hours must be upper division. Approval of journalism adviser required.

SPEECH COMMUNICATION (SPCH)

SPCH 101 FUNDAMENTALS OF SPEECH COMMUNICATION	4
An introduction to the procedure of public speaking with emphasis on the acquirement of ease before an audience, a conversational attitude and reasonable facility in pronunciation, articulation and voice production.	
SPCH 107 VOICE AND ARTICULATION	3
To aid in understanding and improving the speaking voice, with emphasis on the function of the speech mechanism. Instruction and practice to improve the quality and effectiveness and to develop clear and correct pronunciation, enunciation and articulation.	
SPCH 207 SMALL GROUP COMMUNICATION	2
A study of the nature of group and interpersonal processes; includes leadership and participation in group discussion.	
SPCH 211 ORAL INTERPRETATION	3
A course in reading from the printed page with fluency and effectiveness, including reading from the Scriptures. A study of the various types of interpretative literature with a view toward its understanding for the purpose of public presentation.	
SPCH 231 BROADCASTING TECHNIQUES AND ANNOUNCING	3
Instruction covering studio and control room operation including microphone techniques. Emphasis on voice, articulation and interpretation of copy. Includes preparation for the FCC Radio Telephone Third Class Operator's Permit (for U.S. citizens). On-the-air experience on KGTS-FM.	
SPCH 252 PLAY PRODUCTION	1-3
A course concerned with the analysis, rehearsal and performance of a play chosen by the instructor. May be taken only by permission of the instructor.	
SPCH 275 COMMUNICATION THEORY	2
An examination of contemporary thought on the nature and process of communication.	
SPCH 323 ADVANCED PUBLIC ADDRESS	3
A course stressing the practical application of speech to the student's major field of interest. It includes the study of speeches for social and business occasions with practice in the classroom. Prerequisite: SPCH 101.	
SPCH 341 LOGIC	2
The study of evidence and reasoning toward the goal of critical thinking. Application of logic to analysis of contemporary issues and cogent thinking; includes theory and practice.	
SPCH 342 DEBATE	3
The structure and presentation of evidence and forms of logic in debating the national collegiate debate topic. Prerequisite: SPCH 341.	
SPCH 352 SURVEY OF BROADCASTING	3
Study of organization and operation of stations, networks and world systems of broadcasting as well as study of legal and regulatory control of radio-television.	
SPCH 363 HISTORY OF DRAMATIC ARTS	3
The study of the history and development of the theater from the Greek to the 20th century.	

SPCH 365 PLAY DIRECTION 3

Fundamentals of play direction. Producing and directing a one-act play or one act from a longer play for public performance.

SPCH 381, 382, 383 PULPIT ADDRESS 2, 2, 2

Preparation and delivery of sermons and other types of public speeches. Adequate opportunity for practice is provided by the laboratory facilities of the department and through numerous speaking appointments.

SPCH 401 INTRODUCTION TO GENERAL SEMANTICS 2

A course stressing the use of language to influence human behavior; language in problem solving and as a means of resolving conflicts. Prerequisites: SPCH 101 or equivalent or permission of instructor.

SPCH 443 PERSUASIVE SPEAKING 3

The study of motivation and human behavior as applied by the public speaker in the process of persuasion. The analysis of persuasive speeches for emotional, ethical and logical proof. Practice in composing and delivering speeches to stimulate and convince. Prerequisite: SPCH 101.

SPCH 453 RHETORIC AND PUBLIC ADDRESS 3

Study of the principles of rhetoric proposed by Aristotle, Quintillian, Cicero and others. The relationship of the principles of rhetoric to modern speechmaking. Prerequisite: SPCH 101.

SPCH 472 METHODS OF TEACHING SPEECH COMMUNICATION 3

The basic principles and practices of teaching speech on the junior high and secondary levels. Special attention will be given to the contemporary methods of presentation in classroom and therapy situation. Observations, demonstration and class participation are required.

SPCH 496 SEMINAR IN COMMUNICATION MEDIA 2

Studies of selected topics and review of current literature in communication media. Individual research projects included.

SPEECH PATHOLOGY AND AUDIOLOGY (SPPA)**SPPA 100 INDIVIDUALIZED SPEECH INSTRUCTION** 1-3

Provides services to students who wish appraisals and remedial service for speech and hearing problems. Maximum one hour per quarter; by permission of the speech clinic director.

SPPA 210 SURVEY OF SPEECH PATHOLOGY AND AUDIOLOGY 3

A survey of communication disorders common to the elementary school setting; major emphasis will be given to the etiologies, symptomatologies, and the recognition of speech, language, voice and hearing disorders.

SPPA 275 PHONETICS 3

The theory, history, development and application of the international phonetic alphabet, its application to speech correction and to adequate pronunciation.

SPPA 291 ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING 3

A comprehensive study of the anatomy, physiology and neuroanatomy of the speech and hearing mechanisms. Recommended prerequisite: BIOL 201, 202.

SPPA 299 NORMAL LANGUAGE/DEVELOPMENT 3

Study of the normal development of speech and language in children; acquisition of phonology, syntax, morphology and semantics; current theories of language acquisition.

SPPA 384 AUDIOLOGY I 3

A study of the history of audiology, rehabilitation of the acoustically handicapped, and basic clinical techniques used in air, bone and impedance audiometry. Prerequisite: SPPA 210.

COMMUNICATIONS

SPPA 385 LANGUAGE DISORDERS IN CHILDHOOD

An introductory study of etiological theories, evaluation and management of childhood language disorders. Prerequisite: SPPA 210. 4

SPPA 386 ORGANIC SPEECH PATHOLOGIES

A study of the etiologies, symptomatologies and treatment of organic disorders including cleft palate, cerebral palsy, aphasia, organic voice, dysarthria, oral-facial anomalies and mental retardation. Prerequisite: SPPA 385. 4

SPPA 387 STUTTERING: THEORIES AND THERAPIES

A study of the theories of stuttering and an evaluation of therapeutic techniques employed. Case histories are studied in detail. Prerequisite: SPPA 385; 386. 3

SPPA 388 AURAL REHABILITATION

Rehabilitation of hearing impairment; use of amplification, auditory training and speech reading. 3

SPPA 390 DIRECTED CLINICAL OBSERVATION

A course designed to provide the student opportunity to observe and evaluate speech, voice, language and hearing therapy in progress in various therapy environments. 2

SPPA 393 CLINICAL PRACTICUM

Provides clinical experience in evaluation and treatment of the various speech, language and hearing disorders. Responsibility commensurate with experience. Maximum 2 hours per quarter. Prerequisite: SPPA 386; SPPA 387. 1-6

SPPA 441 AUDIOLOGY II

Psychophysical methods of auditory testing; specialized audiometric techniques; theory and practice determining types of hearing abilities; the interpretation of test results; hearing aid evaluation; follow-up procedures for the acoustically handicapped. Prerequisite: SPPA 384. 3

SPPA 461 DIAGNOSIS IN SPEECH PATHOLOGY

Diagnosis and appraisal procedures of communicative disorders. Includes the use of speech and language tests, associated behavior and instrumentation techniques. Prerequisite: SPPA 210. 3

SPPA 473 CLEFT PALATE SPEECH

A study of the etiology of cleft palate and the techniques employed during therapy. Case histories are studied in detail. Prerequisite: SPPA 386. 3

SPPA 475 VOICE DISORDERS

Study of the etiological, diagnostic and therapeutic approaches to functional and organic disorders of voice; consideration of the acoustic characteristics of aberrant voice and mechanical faults of voice production. Prerequisite: SPPA 385. 3

SPPA 484 PUBLIC SCHOOL PRACTICUM

Professional laboratory experience for the speech pathology and audiology major. A weekly seminar will be conducted for students working in the Walla Walla area. Application for the autumn quarter must be made during the preceding spring quarter; application for the winter and spring quarters must be made during the first week of the autumn quarter. By permission of the Student Teaching Committee. Prerequisite: EDUC 465. 14

JOURNALISM (JOUR)

JOUR 145 MASS COMMUNICATION MEDIA

An introductory course in the organization, operation and control of the mass media in America, with emphasis on the social functions of mass communication and the characteristics of media audiences. 3

Prerequisite: JOUR 144 or permission of the instructor. A minimum grade of C is required in this course.

JOUR 245 JOURNALISTIC WRITING

A practical course in the journalistic principles and practices of writing for various mass media audiences. Includes a review of grammar, spelling, sentence structure and punctuation. Prerequisite: ENGL 121, 122.

JOUR 246 REPORTING METHODS

Basic training in the use of interviewing and other social research techniques for the gathering and reporting of news. Prerequisite: JOUR 245.

JOUR 247 NEWS EDITING AND PRODUCTION

Instruction and practice in copy editing and headline writing for newspapers. Two class periods per week, with a three-hour lab in which students are involved in evaluation, display, makeup and processing of written and pictorial matter under time pressure.

JOUR 257 PHOTOJOURNALISM

A practical course in the taking and use of photographs for publication. Attention is given to composition, cropping, caption writing and picture-page layout. Students are expected to have their own cameras. Prerequisite: GRPH 154 or equivalent.

JOUR 325 PUBLIC AFFAIRS REPORTING

Newspaper reporting of governmental bodies, civil and criminal courts, political activities and other specialized news. Prerequisite: JOUR 246.

JOUR 341, 342 MAGAZINE ARTICLE WRITING

Fact writing with analysis of magazine markets, fundamentals of gathering materials for articles and preparation of manuscripts for publication.

JOUR 382 EDITORIAL WRITING

The writing of editorials, interpretive articles and critical reviews, with a study of these types as found in today's newspaper.

JOUR 385 RELIGIOUS COMMUNICATIONS

A course intended primarily for the nonjournalism student who wants to communicate his religious convictions, directly or indirectly. Areas of study include internal and external church public relations, religious writing and evangelistic advertising.

JOUR 387 ADVERTISING COPY WRITING

A practical study of the writing of creative communication designed to sell products, services and ideas offered by advertisers. Students will write advertisements for both print and broadcast media. Recommended prerequisite: MKTG 383.

JOUR 412 SCRIPT WRITING

A course in the writing of broadcast narratives. Students will prepare scripts for commercial, educational and religious markets. Emphasis is placed on the visualization of completed scripts. Recommended prerequisite: ENGL 121, 122; Prerequisite: ENGL 334, 335.

JOUR 451, 452 MAGAZINE EDITING

A course in the practical aspects of editing magazines, including working out a successful editorial formula, selecting articles and illustrations and planning makeup. Each student will do a term project consisting of planning a new magazine, with prospectus and dummy copy.

JOUR 465 PROMOTIONAL CAMPAIGNS

A practical application of advertising and public relations theory to media planning and campaign execution. Prerequisite: MKTG 383 or JOUR 387.

JOUR 485 PUBLIC OPINION AND PROPAGANDA

An analysis of the mass media's role in forming public opinion and the reciprocal influence of public opinion on mass media decision makers. Includes research in attitude change processes and source, message, channel and receiver variables in the mass communication process.

JOUR 490 PRACTICUM IN JOURNALISM

Practical experience in news and public relations functions with participating institutions. The student works under the cooperative direction of professionals and the communications department.

1-4

COMMUNICATIONS

JOUR 495 SENIOR PROJECT		1
A student-selected, department-approved project to demonstrate one's ability to perform in his major field of instruction. Satisfactory completion of this course constitutes the department comprehensive requirement for the bachelor's degree.		
MKTG 383 PRINCIPLES OF ADVERTISING		4
See the Business section of this bulletin.		
MKTG 481 PUBLIC RELATIONS		4
See the Business section of this bulletin.		
ENGL 324 ADVANCED EXPOSITORY WRITING		3
See the English section of this bulletin.		
ENGL 325 ADVANCED TECHNICAL WRITING		3
See the English section of this bulletin.		
ENGL 335 CREATIVE WRITING: NARRATIVE		3
See the English section of this bulletin.		
SPFA 341 AUDIOLOGY II		
Technological methods of auditory testing, including pure tone audiometry, speech audiometry, and electroacoustic measures. Includes discussion of hearing aid evaluation, follow-up procedures, and the use of hearing aids in the classroom. Prerequisite: SPFA 340.		
SPFA 342 PROMOTIONAL COMMUNICATION		
Techniques of producing promotional materials for various audiences. A study of the promotional process, including the planning, production, and distribution of promotional materials. Prerequisite: SPFA 340.		
SPFA 375 VOICE DISORDERS		
Normal and abnormal vocal function, including the causes and treatment of voice disorders. Prerequisite: SPFA 340.		
SPFA 484 PUBLIC SCHOOL PRACTICUM		
Professional laboratory experience for the teacher candidate, for the classroom, office, and library. Includes observation of classroom and library activities, and a visitation to a public school. A minimum of 150 hours of practical experience is required. Prerequisite: SPFA 340. Recommended: SPFA 375. A minimum of 150 hours of practical experience is required. Prerequisite: SPFA 340. Recommended: SPFA 375.		
SPFA 485 PROMOTIONAL CAMPAIGN		
A practical application of advertising principles and techniques. Prerequisite: SPFA 340.		
JOURNALISM (JOUR)		
BOOK AND PUBLIC RELATIONSHIP		
An analysis of the relationship between books and the public. An examination of the book market and its relationship to the public, and the relationship between the book market and the public. An analysis of the book market and its relationship to the public, and the relationship between the book market and the public.		
TOPICS IN JOURNALISM		
A topics course in journalism. Prerequisite: JOUR 340.		

EDUCATION AND PSYCHOLOGY

D. O. Wagner, Chairman; Edna Grove, Gloria Hicinbothom, R. Hingley, R. Hunter, D. Johnson, H. Ochs, H. Phillips, Jean Prest, V. Shafer.

The department offers programs leading to a Bachelor of Science degree with a major in elementary education or psychology and an Associate of Science degree in Early Childhood Education. Minors are available in either education or psychology, and preparation is provided for state and denominational certification in elementary and/or secondary teaching. With careful planning, a bachelor's degree and the first teaching certificate may be earned in four years of study.

The psychology curriculum is sufficiently flexible to meet the needs of students preparing for a wide range of careers in the behavioral sciences or in related professions that involve working with people. More emphasis is placed on the applied dynamics of human behavior and relationships than on animal or laboratory psychology.

The major requirements and cognate courses are intended to provide a scientific base on which a balanced program of electives may be built in accordance with the individual needs and interests of each student.

Although specific requirements for admission to graduate programs in most universities will be met by the general major, the student should realize that his graduate work may be impeded or prolonged in certain areas of psychology if special preparation is not obtained at the undergraduate level. For this reason, students who plan to continue academic work in psychology beyond the bachelor's degree are urged to consult with their advisers very early in their college careers.

The Associate of Science degree (offered cooperatively between the departments of education and psychology and home economics) with a specialization in early childhood education requires the completion of 96 quarter hours. The degree is designed to be completed in two years.

The purpose of the degree is to prepare the student for employment in nursery schools, day care centers, Head Start programs, parent cooperatives and in other early childhood education programs.

For work leading to a master's degree in education, see the *Graduate Bulletin*.

MAJOR IN ELEMENTARY EDUCATION (Bachelor of Science)

A student majoring in elementary education must complete 48 quarter hours in the major, as well as completing (1) a second major which is highly recommended; or (2) an approved concentration with a minimum of 45 quarter hours; or (3) a minor as offered by other departments of the college plus 27 quarter hours of academic support in content areas. If option three (3) is chosen, the student will select a sequence of course offerings which supports areas of known need. This program is to be formalized when the student has completed 80 quarter hours and will become a part of the re-

EDUCATION AND PSYCHOLOGY

quirements for graduation. Any course graded lower than a C cannot apply in the content courses. In addition, the student must complete the general studies program for the baccalaureate degree as outlined in this bulletin. Program approval must be obtained from the academic adviser assigned by the department chairman.

Major Requirements:

EDUC 105	Introduction to Teaching	2
EDUC 210	Foundations of Education	3
PSYC 220	Educational Psychology	4
EDUC 347	School Exploratory Experience—Elementary	1
EDUC 361	Language Arts in the Elementary School	3
EDUC 362	Reading in the Elementary School	4
EDUC 365	Social Studies and Religion in Elementary School	4
EDUC 369	Science and Health in the Elementary School	3
EDUC 373	Mathematics in the Elementary School	3
EDUC 375	Classroom Management	2
PSYC 435	Child Psychology	3
EDUC 464	Microteaching Laboratory—Elementary	2
EDUC 480	Directed Teaching—Elementary	14
		48

Prior to student teaching, elementary education majors must pass proficiency examinations as required by the department. For specific details, the student should consult with his adviser.

MAJOR IN PSYCHOLOGY (Bachelor of Science)

A student majoring in psychology must complete 50 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

PSYC 130	General Psychology	4
PSYC 225	Psychological Experiments	2
PSYC 230	Systems and Theories in Psychology	4
PSYC 350	Elementary Statistics	4
PSYC 375	Experimental Problems	3
PSYC 430	Psychological Testing	3
Electives (15 must be upper division)		30

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates:

A minimum of 20 quarter hours must be completed. An entire course sequence must be taken in at least one area. Courses should be chosen from the following (advanced courses may be substituted):

MATH 121, 122	Fundamentals of Mathematics I, II	8
BIOL 101, 102, 103	General Biology	12
BIOL 201, 202	Anatomy and Physiology	8

EDUCATION AND PSYCHOLOGY

BIOL 261	Genetics	4
CHEM 101, 102	Introductory Chemistry I	8
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3

CERTIFICATION

The Walla Walla College Department of Education and Psychology is authorized by the Washington State Board of Education to recommend the following elementary and secondary teaching certificates:

- Provisional
- Standard
- Principal's

Those who intend to enter the teaching profession and to qualify for teaching certification in the state of their anticipated future employment should initiate the following steps early in their academic program (preferably not later than the sophomore year):

- Consult with the assigned academic adviser regarding specific requirements for the major chosen. Special attention should be given requirements within the major, minor or certification which present difficulties when taken out of sequence.
- Schedule regular consultation with the department of education and psychology. This will facilitate the proper scheduling of professional education experiences.

Courses applying toward specific certification requirements require a grade of C or above.

The following majors, minors and areas of concentration approved for provisional elementary certification are offered. For details regarding specific requirements, consult with the department chairman.

Majors:

Art	Mathematics
Biology	Modern Language (only one)
Business Education	Music Education
English	Physical Education
History	Speech Pathology and Audiology
Home Economics	

Minors:

Art	Library Science
Biology	Mathematics
Business or Economics	Modern Language (only one)
Chemistry	Music Teaching
Communications	Office Administration
English	Physical Education
Health	Physics
History	Political Science
Home Economics	Psychology
Industrial Arts Education	Religion
Journalism	Sociology

EDUCATION AND PSYCHOLOGY

Areas of Concentration:

Biology	Mathematics
English	Music Teaching
Home Economics	Physical Education
Industrial Arts Education	Science

Secondary certification will normally require an area major plus the following courses:

EDUC 110	Principles and Concepts of Christian Education	2
EDUC 210	Foundations of Education	3
PSYC 220	Educational Psychology	4
EDUC 367	Tutoring - Secondary	1
EDUC 390	Educational Evaluation	3
PSYC 440	Adolescent Psychology	3
*472	Departmental Methods (winter quarter)	3
EDUC 465	Microteaching Laboratory - Secondary (spring quarter, junior year; autumn or winter quarter, senior year)	2
	A course in Human Relations or Group Procedures approved by the Teacher Education Council	3
EDUC 481	Directed Teaching - Secondary	14
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The following courses are highly recommended:

EDUC 348	School Exploratory Experience - Secondary	1
EDUC 461	Methods of Audiovisual Education	2
EDUC 490	Teaching of High School Reading	3

*Secondary methods courses are listed under respective departments as course number 472 with the appropriate prefix. Consult the appropriate department for details.

EARLY CHILDHOOD EDUCATION (Associate of Science Degree)

A student specializing in early childhood education must complete 50 quarter hours in the area, the required cognates, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

PSYC 130	General Psychology	4
FDNT 220	Human Nutrition	4
CFSC 282	Child Development	3
EDUC 251	Laboratory Experiences in Preschool Education	12
EDUC 295	Early Childhood Education	3
EDUC 351	Parent Education for Preschool Teachers	3

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PSYC 431	Psychology of Exceptional Children	3
PSYC 435	Child Psychology	3
PSYC 437	Childhood Learning Disorders	3
Electives		12

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 50

Required Cognates:

HLED 215	Contemporary Health Issues	2
SOCI 204	General Sociology	4
SOCI 325	Social Psychology of Family Life	3
SPPA 210 } or SPPA 299 }	Survey of Speech Pathology and Audiology	3
ENGL 374 } or LIBR 365 }	Normal Language Development Literature in the Elementary School	3
	Library Materials for Children	

MINOR IN EDUCATION

A student minoring in education must complete 30 quarter hours in professional education courses; 3 quarter hours must be upper division; approval of education adviser required.

MINOR IN PSYCHOLOGY

A student minoring in psychology must complete 28 quarter hours; 3 quarter hours must be upper division; PSYC 130; PSYC 225; PSYC 230 are required; approval of psychology adviser required.

EDUCATION (EDUC)

EDUC 105 INTRODUCTION TO TEACHING 2
Orientation to the role of the school, an analysis of professional preparation for teaching, and opportunity for self-evaluation as potential teacher is provided.

EDUC 110 PRINCIPLES AND CONCEPTS OF CHRISTIAN EDUCATION 2
A study of the ideals and principles of Christian education, especially as interpreted by the Seventh-day Adventist church.

EDUC 210 FOUNDATIONS OF EDUCATION 3
A study of social and philosophical foundations underlying the current organization and objectives of American education.

EDUC 251 LABORATORY EXPERIENCES IN PRESCHOOL EDUCATION 2, 4; 12
Observation and participation in various early childhood education centers. The first two quarters will be spent in the Walla Walla College Child Development Center. Two of the remaining four quarters scheduled in other early childhood education centers in the community. Open only to majors. Two or four hours each quarter; maximum, 12.

EDUC 295 EARLY CHILDHOOD EDUCATION 3
An introduction to the principles of early childhood education focusing on procedures, media, curriculum design and materials. Laboratory experiences are provided in the Child Development Center.

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ART 301 ART IN THE ELEMENTARY SCHOOL	3
See Art section of this bulletin.	
MUED 344 ELEMENTARY SCHOOL MUSIC LITERATURE	2
See Music section of this bulletin.	
EDUC 347/348 SCHOOL EXPLORATORY EXPERIENCE	1
— ELEMENTARY /SECONDARY	
Opportunity to participate in professionally structured experiences prepared for elementary or secondary school faculties prior to the opening activities in the organizational period of the school year. Time involved: two to three weeks. (With permission, this may be applied toward the fourteen-hour directed teaching requirement.) Students taking elementary will register for EDUC 347; students taking secondary will register for EDUC 348.	
EDUC 351 PARENT EDUCATION FOR PRESCHOOL TEACHERS	3
Identifies the teacher's role in parent education, develops skills in how to establish rapport with parents, and includes working with parents in small groups.	
EDUC 361 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL	3
A study of issues currently important in language arts education, with emphasis on research and its 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 365 SOCIAL STUDIES AND RELIGION IN THE ELEMENTARY SCHOOL	4
Examination and application of current media and practices used in teaching social sciences and religion in the elementary school. Actual classroom observation and teaching will be required.	
LIBR 365 LIBRARY MATERIALS FOR CHILDREN	3
See the Library Science section of this bulletin.	
EDUC 366/367 TUTORING — ELEMENTARY/SECONDARY	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 or secondary school classroom. By permission of the instructor. Students taking elementary will register for EDUC 366; students taking secondary will register for EDUC 367. One to three quarter hours; maximum, three.	
EDUC 369 SCIENCE AND HEALTH IN THE ELEMENTARY SCHOOL	3
Procedures of teaching science and health in the elementary school with attention to recent media and trends. Classroom experience provided.	
EDUC 373 MATHEMATICS IN THE ELEMENTARY SCHOOL	3
Survey of the content, media and processes used in teaching mathematics in the elementary school; emphasis on newer approaches.	
ENGL 374 LITERATURE IN THE ELEMENTARY SCHOOL	3
See the English section of this bulletin.	
ENGL 375 LITERATURE IN THE SECONDARY SCHOOL	3
See the English section of this bulletin.	
EDUC 375 CLASSROOM MANAGEMENT	2
Attention will be given to varied structuring of the learning environment and the special considerations required as small schools and multigrade classrooms. Explores the human relations within the teaching profession.	
EDUC 390 EDUCATIONAL EVALUATION	3
A practical introduction to principles and techniques of evaluating classroom activities in elementary and secondary schools.	

EDUCATION AND PSYCHOLOGY

EDUC 404 HISTORY OF EDUCATION	2
A survey of the history of education.	
EDUC 426 EDUCATIONAL GUIDANCE	3
The philosophy, functions, organization, personnel and evaluation of the school guidance program.	
INDS 428 HANDWORK ACTIVITIES IN THE ELEMENTARY SCHOOL	3
See the Industrial Technology section of this bulletin.	
SOCI 444 SOCIOLOGY OF EDUCATION	3
See the Sociology and Social work section of this bulletin.	
EDUC 452 DIRECTED TEACHING—In-Service	6
Directed laboratory experience for a teacher desiring to improve his professional skills. Training in methods of analysis of teaching and practice in methods of self-analysis will be included. Registration only by permission of the Student Teaching Committee after completion of the required courses in professional education. Maximum: six quarter hours.	
EDUC 461 METHODS OF AUDIOVISUAL EDUCATION	2
A 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 471 GENERAL SECONDARY METHODS	2
A study of the role of the secondary teacher in the classroom, school and community. Topics examined include methods of instruction, planning, ethics, legal aspects, professional growth and general principles for success in the role of a secondary teacher. Prerequisite: PSYC 220. Prerequisite or corequisite: EDUC 367.	
HLED 472 METHODS OF SCHOOL HEALTH INSTRUCTION	3
See the Health, Physical Education and Recreation section of this bulletin.	
PETH 472 METHODS OF TEACHING SECONDARY PHYSICAL EDUCATION	3
See the Health, Physical and Recreational Education section of this bulletin.	
PETH 473 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL	3
See the Health, Physical and Recreational Education section of this bulletin.	
EDUC 478/479 MICROTEACHING—Elementary/Secondary	2
Students taking elementary will register for EDUC 478; students taking secondary will register for EDUC 479.	
<i>Elementary:</i> A teaching laboratory to prepare elementary teachers in skills necessary to effective teaching. Students present brief demonstration lessons to a small class of children. Self-evaluation is supplemented by evaluation of supervisors, practicing teachers and peers, along with video recordings. Prerequisite: at least two methods courses.	
<i>Secondary:</i> Teaching procedures which are applicable at any level are considered. Laboratory practice in certain teaching skills will be provided following the microteaching model. The class will meet one night each week and each student will participate weekly in an afternoon teaching laboratory. Prerequisite: one methods course in the student's major or minor area of study.	
EDUC 480/481 DIRECTED TEACHING—Elementary/Secondary	14
Application for the autumn quarter is to be made during the preceding spring quarter; application for the winter and spring quarters should be made during the first week of the autumn quarter. By permission of the Student Teaching Committee.	
Students taking elementary will register for EDUC 480; students taking secondary will register for EDUC 481.	
<i>Elementary:</i> A practicum providing professional teaching experience for students preparing to teach on the elementary level. Prerequisite: EDUC 478.	

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Secondary: Professional laboratory experience for students preparing to teach at the secondary level. A seminar will be conducted for students teaching in the Walla Walla area. Prerequisite: EDUC 479. Maximum: fourteen quarter hours. (S/NC only)	
EDUC 490 TEACHING HIGH SCHOOL READING	3
Basic principles of reading instruction; methods, materials and organization of the developmental and corrective reading programs in high school.	
EDUC 492 EDUCATION OF THE GIFTED	3
Emphasis is placed upon the design of learning opportunities for gifted children in the light of psychological characteristics of such children.	
EDUC 493 SYSTEMS OF THOUGHT	3
An intensive study of various aspects of philosophical thinking and their bearing upon education. Especially valuable in comprehending much current writing in education. (Ideally should precede or be taken concurrently with EDUC 522.)	
EDUC 495 ELEMENTARY SCHOOL GUIDANCE	3
A study of the rationale for elementary school guidance with emphasis upon current research and issues. Attention will be focused upon the tools and techniques of both classroom and out-of-class guidance functions and services.	
EDUC 500 GRADUATE SEMINAR	1; 3
Discussion periods in which faculty and students explore significant issues through the examination and analysis of research and appropriate literature in the area of education. One quarter hour; maximum, three.	
EDUC 504 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 508 SECONDARY SCHOOL CURRICULUM	3
Overview of the secondary school curriculum, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the courses of study; evaluation of the secondary school curriculum.	
EDUC 522 PHILOSOPHY OF EDUCATION	3
A study of the basic philosophies and development of educational thinking resulting in the formulation of aims and objectives of education for today's schools.	
EDUC 525 EDUCATION IN THE TWENTIETH CENTURY	3
Intended to help a 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 origins and disbursement of school funds.	
EDUC 527 SCHOOL PLANNING AND CONSTRUCTION	3
A survey of how to plan and build schools, including the involvement of the lay citizen. Selection of site, trends in design, function of buildings and plant, costs and obligations will be studied. Professional architects and engineers will be guest lecturers.	
EDUC 535 CORRECTIVE READING	3
Analysis, correction and prevention of reading problems are studied along with refinement of group and informal testing. Supervised practicum with pupils having mild disabilities in reading. Prerequisite: EDUC 362; corequisite: EDUC 366.	
EDUC 539 SUPERVISION	3
For principals, classroom teachers or those planning to be supervisors. Identifies duties of both teacher and supervisors, and suggests methods for the improvement of teachers in service through a comprehensive supervision program.	
EDUC 544 ADMINISTRATION OF THE ELEMENTARY SCHOOL	3
Organization, supervision and administration of elementary schools.	

EDUCATION AND PSYCHOLOGY

EDUC 550 SCHOOL LAW	3
Utilizing the case study method, this course is designed to acquaint the student with the legal basis for public and parochial school operation in the United States.	
EDUC 551 ADMINISTRATION OF THE SECONDARY SCHOOL	3
Problems and procedures in the organization and administration of secondary schools.	
EDUC 556 CURRICULUM PLANNING	3
The relation of curricular materials to educational outcomes in terms of personal and social values. A brief review of curriculum investigations and their significance in the selection and evaluation of school materials and activities. Current practices in curriculum revision.	
EDUC 558 SCHOOL ACTIVITIES	3
Designed to acquaint the student with the range of the school activities program; to define the purpose of such activities; to provide him with the valid basis for evaluating existing or proposed activities; and to provide opportunity for intensive study of one activity.	
EDUC 560 ADMINISTRATIVE PRACTICUM	5
Professional laboratory experience for candidates for an administrative credential. The course is designed to involve each candidate in a variety of practical administrative experiences and to assist in his successful induction into school leadership. By permission of the department chairman.	
EDUC 561 METHODS OF RESEARCH	3
Procedures in the selection and evaluation of research projects and techniques in the analysis of research data.	
EDUC 567 COMPARATIVE EDUCATION	3
A comparison of systems and philosophies of education in various parts of the world; emphasis on the role of cultural impacts.	
EDUC 575 READINGS IN EDUCATION	2-4
Advanced study confined to topic areas where the student can demonstrate a considerable degree of expertise due to previous formal studies and/or experience. To be done under the guidance and direction of a faculty member. The student will engage in an analysis of current literature. Written and/or oral reports will be required. By permission of the department chairman.	
EDUC 581 PROFESSIONAL PROJECT	2, 4, 6; 6
Selected areas of advanced study involving reading and research. Formal report required. Prerequisite: consent of department chairman and graduate standing. Two, four or six hours any quarter; maximum, six.	
EDUC 590 THESIS	4, 8; 8

PSYCHOLOGY (PSYC)

PSYC 130 is prerequisite to all other courses in psychology.

PSYC 130 GENERAL PSYCHOLOGY	4
An eclectic survey of the major areas of psychology emphasizing the scientific bases of psychological investigation. Designed to acquaint the student with the fundamental vocabulary, methodologies, established facts and sound principles of psychology as a prerequisite to advanced courses.	
PSYC 220 EDUCATIONAL PSYCHOLOGY	4
Application of psychological principles to the art of teaching. A laboratory will be included.	
PSYC 225 PSYCHOLOGICAL EXPERIMENTS	2
A laboratory course providing undergraduate students with elementary experience in designing and conducting experimental research in the field of psychology.	

EDUCATION AND PSYCHOLOGY

PSYC 230 SYSTEMS AND THEORIES IN PSYCHOLOGY	4
Acquaints the student with the historical development of the various systems and theories in psychology with emphasis on learning theory.	
PSYC 350 ELEMENTARY STATISTICS	4
Fundamental procedures for summarizing and interpreting quantitative data from tests and research in the social sciences.	
PSYC 360 SMALL GROUP PROCEDURES	3
A 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	3
An advanced course which enables the student to develop skills in experimental design and to apply such skills to an individual research project. Prerequisite: PSYC 350 or equivalent.	
PSYC 405 PSYCHOLOGY OF ORGANIZATIONAL CHANGE	3
An exploration 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	3
A study of the principles and processes of learning with special emphasis on the shaping and changing of human behavior.	
PSYC 415 DYNAMICS OF BEHAVIOR	3
An introduction to the dynamic mechanisms of human adjustment and behavior.	
PSYC 420 INTRODUCTION TO CLINICAL PSYCHOLOGY	3
Introduction to the application of psychological theories and techniques as used in the clinical setting. Special attention will be given to a survey of various approaches to treatment of emotional problems in clinical practice, hospital and community settings.	
PSYC 425 PSYCHOLOGY AND RELIGION	3
An examination of psychological concepts and human behavior from a Biblical and theological perspective.	
PSYC 430 PSYCHOLOGICAL TESTING	3
Principles of test selection, administration and interpretation are considered together with the contributions and limitation of the major types of standardized tests and inventories used in the behavioral sciences.	
PSYC 431 PSYCHOLOGY OF EXCEPTIONAL CHILDREN	3
Characteristics and problems of exceptional children with consideration of essential educational adaptation.	
PSYC 435 CHILD PSYCHOLOGY	3
Principles of growth as related to various phases of human development during the preadolescent years: physical, mental and emotional.	
PSYC 436 CHILD PSYCHOLOGY LABORATORY	1
Prerequisite or corequisite: PSYC 435.	
PSYC 437 CHILDHOOD LEARNING DISORDERS	3
An introduction to play therapy and psychoeducational 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 435.	
PSYC 440 ADOLESCENT PSYCHOLOGY	3
Principles of growth as related to various phases of human development during the adolescent years—physical, mental and emotional.	
PSYC 442 MOTIVATION	3
A study of basic drives and causes of behavior in organisms with emphasis upon human behavior. This course includes a laboratory.	

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PSYC 444 SOCIAL PSYCHOLOGY	3
The dynamics of social interaction and interpersonal behavior with application to contemporary society.	
PSYC 445 SOCIAL PSYCHOLOGY LABORATORY	1
Prerequisite: PSYC 444.	
PSYC 446 PSYCHOLOGY OF PERSONALITY	3
Theories concerning personality development, assessment and adjustment will be considered.	
PSYC 449 MENTAL HEALTH	3
Physiological and psychological factors related to emotional maturity. Individual mental health, classroom climate, patterns of acceptance and rejection.	
PSYC 464 COUNSELING RELATIONSHIPS	3
A practical introduction to psychological theory and skills essential for developing effective and helping relationships with individuals and groups.	
PSYC 489 VOCATIONAL DEVELOPMENT THEORY	3
Theories of vocational choice and methods of studying occupations and occupational information are considered as they relate to educational and vocational guidance.	
PSYC 490 ABNORMAL PSYCHOLOGY	3
A study of behavioral disturbances, therapeutic measures and theories.	
PSYC 501 STATISTICS IN RESEARCH	3
An introduction to sampling theory, probability and statistical inference as applied to research analysis and hypothesis testing. Includes simple multivariate techniques and selected distribution-free tests of significance. Prerequisite: PSYC 350 or equivalent.	
PSYC 515 COUNSELING THEORIES AND TECHNIQUES	3
A study and application of the theories and techniques for counseling. Professional relationships and ethics are considered.	
PSYC 518 GROUP COUNSELING	2
Theories and techniques of counseling in group situations. Prerequisite: PSYC 515.	
PSYC 521 PSYCHOLOGY OF LEARNING	3
The physiological and psychological bases for functional learning are discussed, and the experimental evidence supporting psychological hypotheses is reviewed.	
PSYC 532 INDIVIDUAL TESTING—Intelligence	4
Supervised experience in the administration, interpretation and writing of psychological reports. Several intelligence instruments will be reviewed. Major emphasis, however, will center on Binet and Wechsler Intelligence Scales. Prerequisite: PSYC 430 and permission of the instructor.	
PSYC 534 ASSESSMENT OF THE INDIVIDUAL	2
Methods applicable to comprehensive assessment for describing behavior. Experience in the collection and analysis of data will be provided. Prerequisite: PSYC 532.	
PSYC 563 FIELD EXPERIENCE	3
Designed to provide a broad spectrum of experience in actual field settings under supervised direction. Permission of the instructor required.	
PSYC 565 PRACTICUM IN COUNSELING	2; 6
Professional experience in the counseling function.	

College. Each affiliated campus has an engineering coordinator who has been appointed to provide the necessary guidance to insure a smooth transition from the affiliated campus to Walla Walla College. Details of this program can be obtained from the Dean of the School of Engineering.

Admission to engineering studies will be made early in September, except for certain advanced students. Satisfactory progress is contingent upon attendance at the orientation meeting on the first Friday in September.

PSTC 330 METHODS AND THEORIES IN PSYCHOLOGY FOR TEACHERS
An introduction to the basic methods and theories of psychology, with emphasis on the application of psychological theories to psychology with emphasis on learning theory.

PSTC 335 ELEMENTARY PSYCHOLOGICAL LABORATORY
Fundamental procedures for summarizing and interpreting quantitative research in the social sciences.

PSTC 340 THE PSYCHOLOGY OF PERSONALITY
A study of small group process by the use of simulation, confrontation techniques, games, playing, research, music for teachers, and other methods.

PSTC 350 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 355 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

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An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 460 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 465 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 470 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 475 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 480 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 485 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 490 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

PSTC 495 PSYCHOLOGY OF PERSONALITY
An advanced course in the application of psychological methods to the study of personality. An advanced knowledge of psychology is required to apply such skills to an individual.

KRETSCHMAR HALL — Engineering, Mathematics, Physics

ENGINEERING

C. Bell, Dean; F. Bennett, J. Cole, E. Cross, R. Heisler, G. Masden, O. McNiell, R. Noel, R. Sutton, R. Wood.

Professional engineering is defined as the art and science of applying the principles of mathematics, science, economics, ethics and humanistic-social relationships to the problems of research, development, design and construction of devices, machines, structures and systems that will be of use to mankind.

The College offers a curriculum leading to the degree of Bachelor of Science in Engineering, approved by the Engineers' Council for Professional Development. Its aim is to prepare students to enter the practice of professional engineering, and also to provide undergraduate instruction which will serve as an adequate foundation for graduate studies.

The engineering course offerings are drawn from the fields of engineering science, civil engineering, electrical engineering and mechanical engineering. All engineering students will take a group of core courses intended to develop an understanding of basic engineering principles. Thereafter, by choosing appropriate electives in conference with the Dean of the School of Engineering, the student may concentrate his efforts in the areas related to civil, electrical or mechanical engineering. Flexibility in this program may be obtained by limited substitutions, individually chosen in consultation with an adviser and approved by the school to form an integral engineering program. Should the student then wish to follow a specialized career in fields such as architectural engineering, aeronautical engineering, bioengineering, electronics engineering, highway engineering, sanitary engineering or other areas, he is prepared so to do through subsequent professional experience or graduate study.

Aside from the entrance requirements stated earlier in this bulletin, it is emphasized that entering freshmen should have a strong background in mathematics, physics and/or chemistry, history and English. Entrance deficiencies, if any, must be removed before the beginning of the sophomore year. Students who provide a transcript of successful studies at another approved college or university are given advanced standing.

North American Seventh-day Adventist colleges and universities are affiliated with Walla Walla College under a program which provides the opportunity for the student to complete the first one or two years of engineering instruction at any participating institution. After the conclusion of these initial studies, the student completes degree requirements at Walla Walla College. Each affiliated campus has an engineering coordinator who has been appointed to provide the necessary guidance to insure a smooth transition from the affiliated campus to Walla Walla College. Details of this program can be obtained from the Dean of the School of Engineering.

Admission to engineering studies will be made only in September, except for certain advanced students. Satisfactory progress is contingent upon attendance for the full year and the maintenance of a C average grade. Since there

ENGINEERING

is no designated major or minor, the grade of D in any subject will be evaluated as follows: a grade of D will be accepted for credit toward the degree provided that there are no more than two such in a given quarter, and further provided that the grade-point average for that quarter is not lower than 2.00. When these conditions are not met, all required courses for which a grade below C was received must be repeated.

In the senior year, the following noncourse requirements must be met: Senior Inspection Trip, Graduate Record Examination. Also, at or near the time of graduation, seniors will sit for the State of Washington Engineer-in-Training examination.

ENGINEERING (Bachelor of Science in Engineering Degree)

A student majoring in engineering must complete a total of 200 quarter hours which includes the core requirements, the required cognates, one concentration; ENGL 121, 122; 3 quarter hours of PEAC courses; and 33 quarter hours of humanities, religion and social studies electives chosen in consultation with and approved by the academic adviser assigned by the Dean of the School of Engineering; ENGR 344 to be included for the civil engineering concentration.

Core Requirements:

ENGR 121, 122, 123	Introduction to Engineering	6
ENGR 221	Statics	4
ENGR 222	Dynamics	5
ENGR 224	Circuit Analysis I	4
ENGR 321	Mechanics of Materials	5
ENGR 322	Engineering Materials	5
ENGR 324	Instrumentation	3
ENGR 326	Engineering Administration	5
ENGR 331	Fluid Mechanics I	4
ENGR 332	Engineering Thermodynamics I	4
ENGR 431	Electric Energy Conversion I	4
ENGR 496, 497, 498	Seminar I, II, III	3
		52

Required Cognates:

CHEM 141, 142, 143	General Chemistry	12
CPTR 121, 122	Computer Science I, II	4
MATH 181, 281	Analytical Geometry and Calculus I, II	8
MATH 282, 283	Analytical Geometry and Calculus III, IV	8
MATH 289	Linear Algebra and Its Applications	3
MATH 311	Probability and Statistics	4
MATH 312	Ordinary Differential Equations	4
PHYS 251, 252, 253	Principles of Physics	9
PHYS 254, 255, 256	Principles of Physics Laboratory	3
*PHYS 311	Modern Physics	3
*PHYS 312	Modern Physics Laboratory	1

*Students choosing the civil engineering concentration may substitute a BIOL or CHEM elective with approval of the Dean of the School of Engineering.

ENGINEERING**Concentration: Civil Engineering**

ENGR 341	Soil Mechanics	3
ENGR 342	Hydrology	3
ENGR 343	Hydroenvironmental Engineering I	3
ENGR 346	Surveying	4
ENGR 348	Structures I	4
ENGR 364	Fluid Mechanics Laboratory	1
ENGR 441, 442, 443	Structures II, III, IV	12
ENGR 444, 445, 446	Hydroenvironmental Engineering II, III, IV	11
ENGR 448	Transportation and Systems	<u>4</u>
		<u>45</u>

Concentration: Electrical Engineering

ENGR 351	Circuit Analysis II	3
ENGR 352	Feedback and Control Systems	4
ENGR 354	Digital Logic Circuits	3
ENGR 356, 357	Engineering Electronics I, II	10
ENGR 432	Electric Energy Conversion II	5
ENGR 451, 452	Electromagnetic Fields I, II	8
ENGR 455	Signals and Systems	4
ENGR 457	Circuit Analysis III	4

Required Cognate: (Electrical Engineering)

MATH 341 or MATH 423	Numerical Analysis I	4
	Introduction to the Theory of Complex Variables	
		<u>45</u>

Concentration: Mechanical Engineering

ENGR 333	Engineering Thermodynamics II	4
ENGR 351	Circuit Analysis II	3
ENGR 352	Feedback and Control Systems	4
ENGR 364	Fluid Mechanics Laboratory	1
ENGR 365	Thermodynamics Laboratory	1
ENGR 366	Vibrations	4
ENGR 461, 462, 463	Machine Design	12
ENGR 464	Fluid Mechanics II	4
ENGR 465	Heat Transfer	4
ENGR 466	Mechanical Design	4
ENGR or MATH	Elective (as approved)	<u>4</u>
		<u>45</u>

COMPUTER SCIENCE (CPTR)**CPTR 121 COMPUTER SCIENCE I****2**

An introduction to problem solving using the computer. Instruction emphasizes use of the BASIC language in a time-sharing interactive environment. Course covers computer characteristics, problem analysis, algorithm development, flow charting, coding, debugging and documentation. Prerequisite: Elementary concepts of algebra. A or W or S

ENGINEERING

CPTR 122 COMPUTER SCIENCE II

A continuation of Computer Science I with emphasis on the FORTRAN language. Input-output and format statements, arrays, functions, subroutines, algorithm development, debugging and documentation. Prerequisite: CPTR 121 or equivalent. A or W or S

CPTR 334 COMPUTER SCIENCE III

An introduction to computer architecture, machine and assembly languages; binary arithmetic; instruction execution; symbolic assembly language and the assembly process; simple data structures, arrays, stacks; input-output programming. Prerequisite: CPTR 122 or equivalent. S

ENGINEERING (ENGR)

*ENGR 121, 122, 123 INTRODUCTION TO ENGINEERING

2, 2, 2

Engineering communications, with emphasis upon sketching, conventional engineering drafting practices, pictorial representation; principles of descriptive geometry; introduction to the design process and elements of professional engineering. Must be taken in sequence. AWS

*ENGR 221 STATICS

4

Two and three dimensional equilibria employing vector algebra; friction; centroids and centers of gravity; moments of inertia. Corequisite: MATH 282. A

*ENGR 222 DYNAMICS

5

One and two dimensional kinetics and kinematics of rigid bodies by vector calculus; dynamics of rotation, translation and plane motion; relative motion; work and energy; impulse and momentum. Prerequisite: ENGR 221. Corequisite: MATH 283. W

*ENGR 224 CIRCUIT ANALYSIS I

4

Circuit variables and parameters; Kirchoff's laws and circuit solution; sinusoidal steady-state; phasors and impedance; frequency characteristics; Thevenin's theorem and maximum power theorem; transients and complete response. Laboratory covers basic measurements using DC and AC meters, potentiometers, recorders and bridges. Prerequisites: MATH 282; PHYS 252. S

*ENGR 321 MECHANICS OF MATERIALS

5

Stresses, deformations and deflections of posts, shafts, beams, columns; combined stresses; elasticity. Laboratory. Prerequisite: ENGR 221. A

*ENGR 322 ENGINEERING MATERIALS

5

Study of the science of engineering materials, metallic and nonmetallic; uses, properties and their modification and behavior in service environments. Laboratory. Prerequisite: ENGR 321. W

*ENGR 324 INSTRUMENTATION

3

Theory and application of modern instrumentation. Validation of experimental data. Laboratory. Prerequisite: ENGR 224 or permission of the instructor. A

*ENGR 326 ENGINEERING ADMINISTRATION

5

Business, economic and ethical aspects of engineering practice. Contracts and specifications; professional engineer/public/owner/contractor relationships; elementary principles of engineering design, under individual or team organization. Prerequisite: junior standing in engineering. S

*ENGR 331 FLUID MECHANICS I

4

An introduction to fluid statics and the dynamics of fluid motion. Conservation of mass, momentum and energy in flowing systems using the control volume formulations; dimensional analysis and similitude; inviscid and viscous flow in pipes and open channels. Prerequisites: ENGR 222; CPTR 122; MATH 283; MATH 289. A

*Core requirement

*ENGR 332 ENGINEERING THERMODYNAMICS I	4
An introduction to the nature of energy and further study of energy conservation in closed and flowing systems; properties and state of gases and vapors; enthalpy, entropy and cycle systems. Prerequisites: ENGR 331; PHYS 253. Corequisite: MATH 312. W.	
ENGR 333 ENGINEERING THERMODYNAMICS II	4
Detailed analysis of power and reversed cycle systems; thermodynamics of nonreacting and reacting mixtures; equilibrium; introduction to compressible fluid flow. Prerequisites: ENGR 332.	
ENGR 341 SOIL MECHANICS	3
Testing, classification and interpretation of soil tests; geology; fundamental principles of stress distribution and deformation characteristics of soils; flow of water through soils. Laboratory work required. Prerequisite: CHEM 143. Corequisites: ENGR 321; ENGR 331. A	
ENGR 342 HYDROLOGY	3
Occurrence, measurement and storage of ground and surface waters; statistical models. Prerequisites: ENGR 341; MATH 311. W	
ENGR 343 HYDROENVIRONMENTAL ENGINEERING I	3
Analysis and design of water and wastewater handling and treatment systems. Physical, chemical and biological processes and their integration; water distribution; sewage and stormwater collection; receiving-water investigation. Prerequisites: ENGR 342; ENGR 344; ENGR 364; MATH 312. S	
ENGR 344 THE ENVIRONMENT AND MAN	3
Interdisciplinary consideration of current topics involving the interrelations between man and his environment. W	
ENGR 346 SURVEYING	4
Use of basic surveying instruments; computational methods for traverses, routes and earthwork, mapping. Prerequisite: ENGR 123. S	
ENGR 348 STRUCTURES I	4
Graphical and algebraic analysis of determinate and indeterminate structures and their elements as applied to timber; basic design concepts of beams, girders, columns, trusses and connections. Includes computation laboratory. Prerequisites: ENGR 322. S	
ENGR 351 CIRCUIT ANALYSIS II	3
Network equations and theorems; Laplace transforms; impulse functions and convolution theorem; system functions and their frequency behavior. Prerequisite: ENGR 224. A	
ENGR 352 FEEDBACK AND CONTROL SYSTEMS	4
An introduction to classical feedback and control analysis and design; signal flow graph; root locus and classical frequency response techniques. Prerequisite: ENGR 351 or permission of instructor. Corequisite: MATH 312. W	
ENGR 354 DIGITAL LOGIC CIRCUITS	3
Introduction to theory and application of digital logic circuits, logic functions. Logic gates; flip-flops; counters; state machines; modern integrated logic families. S	
ENGR 356 ENGINEERING ELECTRONICS I	5
Characteristics and applications of discrete solid-state electronic devices and circuits; large signal analysis; biasing; small signal analysis; low and high frequency models; feedback amplifiers. Laboratory work required. Prerequisite: ENGR 351. W	
ENGR 357 ENGINEERING ELECTRONICS II	5
Characteristics and applications of integrated electronic circuits; theory and applications of operational amplifiers; analog to digital conversion; digital logic families. Laboratory work required. Prerequisite: ENGR 356. Corequisite: ENGR 354 or permission of instructor. S	

*Core requirement

ENGINEERING

ENGR 364 FLUID MECHANICS LABORATORY

Laboratory instruction in fluid mechanics. Incompressible and elementary compressible fluid flow with special application of momentum principles; fluid flow measurements, turbomachinery, and real fluid phenomena in pipeline and open channel flows. Prerequisite: ENGR 331. W

ENGR 365 THERMODYNAMICS LABORATORY

Laboratory instruction in thermodynamic analysis of heat-power systems with special application to static and dynamic measurements of compressible fluid flow, internal combustion engine systems, steam power plants and reversed cycle systems. Applications of current interest in the energy field. Corequisite: ENGR 333. S

ENGR 366 VIBRATIONS

Periodic motion; free and forced vibrations of single-degree-of-freedom systems, damping, transient response; multidegree-of-freedom systems, discrete and continuous systems. Prerequisites: ENGR 222; ENGR 351 or permission of instructor; CPTR 122; MATH 289; MATH 312. S

***ENGR 431 ELECTRIC ENERGY CONVERSION I**

A study of transformers, three phase systems, characteristics of DC machines, induction motors, synchronous motors, single-phase motors; emphasis on performance, control and applications. Laboratory. Prerequisite: ENGR 224. W

ENGR 432 ELECTRIC ENERGY CONVERSION II

A continuation of ENGR 431 with particular emphasis on the development of circuit models which allow analysis of electric energy systems. Transmission lines; load flow analysis; symmetrical components; other selected topics. Laboratory work in electromechanical energy conversion. Prerequisites: ENGR 352; ENGR 431.

ENGR 441, 442, 443 STRUCTURES II, III, IV

Analysis and design of foundations (with laboratory autumn quarter); reinforced and prestressed concrete and steel determinate and indeterminate structures; industrial and multistory buildings, bridges, rigid frames, arches; elastic, plastic, limit and ultimate strength design procedures; general, matrix and introductory finite element analysis. Includes computation laboratory. Must be taken in sequence. Prerequisite: ENGR 348. AWS

ENGR 444, 445, 446 HYDROENVIRONMENTAL

ENGINEERING II, III, IV

4, 4, 3
A continuation of ENGR 343. Laboratory work required. Must be taken in sequence. Prerequisite: ENGR 343. AWS

ENGR 448 TRANSPORTATION AND SYSTEMS

4
Use of soils and construction materials in the design of highways, waterway and airway terminals and railways; introduction to traffic engineering; analog computing concepts as applied to transportation and other civil engineering systems. Laboratory work. Prerequisites: ENGR 442; ENGR 445. S

ENGR 451, 452 ELECTROMAGNETIC FIELDS I, II

4, 4
A study, by vector calculus, of static and dynamic electric and magnetic fields. Free space and bounded fields; material properties; energy and potential; Maxwell's equations; plane wave propagation with boundaries; energy propagation along transmission lines and wave-guides; dipole radiation. Must be taken in sequence. Prerequisites: MATH 312; PHYS 253. AW

ENGR 455 SIGNALS AND SYSTEMS

4
Introduction to continuous and discrete signal and system analysis; Fourier series; convolution; Fourier transforms; discrete Fourier transforms. Prerequisites: ENGR 351; MATH 312. A

ENGR 457 CIRCUIT ANALYSIS III

4
Topics in analog and digital systems with applications. Prerequisites: ENGR 351; ENGR 354; ENGR 356. S

*Core requirement

ENGR 461, 462, 463 MACHINE DESIGN

4, 4, 4

Practical application of kinematics, materials, mechanics and mechanical processes to the design of machines and machine elements, with due regard to the selection of materials, construction, lubrication, safety and cost. Calculations, layouts and detail drawings as required. Must be taken in sequence. Prerequisites: ENGR 322; ENGR 366 or permission of instructor. AWS

ENGR 464 FLUID MECHANICS II

4

Introduction to the general vector-tensor differential equations of motion for multi-component laminar and turbulent flows of homogeneous Newtonian fluids; treatment of transport properties and processes such as species and thermal diffusion and convection. Specializations to one and two dimensional gas dynamics and compressible and incompressible boundary layers. Prerequisites: ENGR 332; MATH 312; ENGR 333 or permission of instructor. A.

ENGR 465 HEAT TRANSFER

4

Single and multidimensional steady-state and transient heat conduction; thermal radiation involving black and gray bodies and gas-filled enclosures; solar radiation; free and forced convection through ducts and over exterior surfaces; heat exchangers; combined heat transfer problems. Prerequisites: ENGR 332; MATH 312; ENGR 464 or permission of instructor. W

ENGR 466 MECHANICAL DESIGN

4

Studies in design of mechanical systems and controls, particularly related to buildings and power generation. Prerequisites: ENGR 333; ENGR 364; ENGR 365; ENGR 465. S

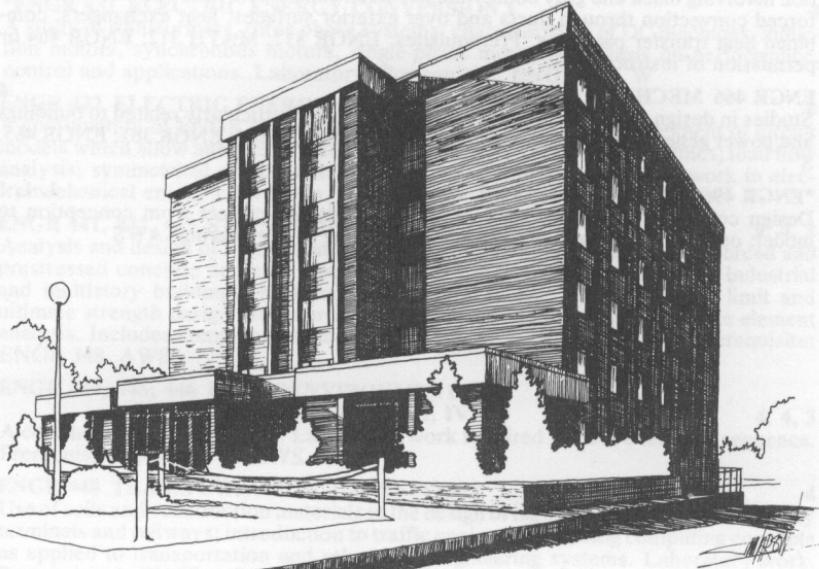
***ENGR 496, 497, 498 SEMINAR I, II, III**

1, 1, 1

Design concepts and problems; team building; design project from conception to model; optimization. Prerequisite: Senior standing in engineering. AWS

ENGL 360 to 376	English Literature (choose one course)	12
ENGL 364 to 366	American Literature (choose one course)	4
ENGL 444	Major Author (choose period not covered in ENGL 364 to ENGL 366)	3
ENGL 445	Shakespeare	3
ENGL 454 to 466	Genre or Special Area	3
ENGL 496	Seminar	3
Electives		15
Electives must be chosen in consultation with and approved by the academic advisor assigned by the department chairman.		47
Required Courses		8
ENGL 111	History of England	8

*Core requirement



ENGR 451, 651: ELECTROMAGNETIC FIELD THEORY
A study of vector calculus, tensors and the theory of time-varying and stationary fields. Free space and bounded fields, wave propagation, wave impedance and reflection coefficient, wave equation, plane wave propagation, wave scattering, wave propagation in dielectric media, waveguides, line and surface impedance, wave reflection, wave reflection in semimetal, free-electron magnetism, and wave propagation in plasmas.

FOREMAN HALL — Women's Dormitory

ENGLISH

V. Wehtje, Chairman; Beverly Beem, R. Emmerson, L. French, D. Hepker, N. Moore, Carolyn Stevens, G. Wiss.

The English faculty seek to address the different needs and interests of their students by distinguishing between the relatively broad purposes of general education courses and the more narrowly academic and professional purposes of courses taught for the English major or minor. Building upon the student's secondary school background, general education courses in writing are intended to develop the competence in effective writing essential to success both in college studies generally and in postcollege careers. General education courses in literature are intended to foster the habit of reading with critical understanding and discrimination from a variety of literary forms and traditions and to provide an introduction to literature as an art which addresses significant and enduring issues.

Students choosing a major or minor in English will find much flexibility in structuring a curriculum. In consultation with their advisers, they can select a pattern of courses in literature, language and writing which will prepare them for teaching, for entry into such schools as those of law, medicine and librarianship, for writing professionally, or for entering a variety of vocations for which the major in English provides a strong cultural and practical background.

MAJOR IN ENGLISH (Bachelor of Arts)

A student majoring in English must complete 47 quarter hours in the major, the required cognate, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

ENGL 234	Literary Analysis and Research	4
ENGL 324	Advanced Expository Writing	3
or		
ENGL 334, 335, 336	Creative Writing	
ENGL 344 to 356	English Literature (choose three courses)	12
ENGL 364 to 366	American Literature (choose one course)	4
ENGL 444	Major Author (choose period not covered in ENGL 344 to ENGL 366)	3
or		
ENGL 445	Shakespeare	3
ENGL 454 to 466	Genre or Special Area	3
ENGL 496	Seminar	3
Electives		15
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		47

Required Cognate:

HIST 374, 375	History of England	8
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ENGLISH

Teacher Certification:

Students wishing teaching credentials must complete the certification requirements as listed in the Education section of this bulletin in addition to the requirements listed below:

ENGL 374	Literature in the Elementary School	3
or		
ENGL 375	Literature in the Secondary School	
ENGL 384	English Grammars and Linguistics	4
ENGL 472	Methods of Teaching High School English	4

MINOR IN ENGLISH

A student minoring in English must complete 30 quarter hours; 3 quarter hours must be upper division; ENGL 234 is required. Approval of English adviser required.

GENERAL STUDIES WRITING (ENGL)

The following courses do not apply toward an English major or minor.

ENGL 100 ENGLISH COMPOSITION

An intensive one-quarter review of grammar and structure, with some writing practice. Required of students who do not achieve a passing score on the departmental placement test.

ENGL 101, 102 TECHNICAL AND BUSINESS WRITING

4, 4

Study and practice in the basic skills necessary for associate degree programs. In the first quarter, basic grammar, mechanics, business letters and informal technical reports; in the second quarter, formal, technical and business reports. Completion of ENGL 102 is prerequisite for ENGL 122.

ENGL 111, 112 ENGLISH AS A SECOND LANGUAGE

3, 3

Study and practice of English in its written form, designed for students whose native language is not English. Language laboratory may be required. The student who reaches a performance level adequate to enter ENGL 122 may petition for waiver of ENGL 121.

ENGL 121, 122 COLLEGE WRITING

4, 4

Study and practice in the basic skills necessary for all college writing. In the first quarter, the basic modes of expository writing, applied expository techniques, analysis and argument; in the second quarter, research techniques and writing with emphasis on the research paper. Prerequisite: passing score on the departmental placement test or satisfactory completion of ENGL 100 or ENGL 102.

ENGL 131, 132 COLLEGE WRITING HONORS

4, 4

An honors course designed for students who demonstrate superior ability in composition. Extensive reading and writing are required. Admission: satisfactory writing skills and superior score on the departmental placement test.

GENERAL STUDIES LITERATURE (ENGL)

ENGL 204 INTRODUCTION TO LITERATURE

4

An introduction to the art of reading and studying literature, emphasizing the methods of analyzing poetry, stories and drama.

ENGL 205 MASTERPIECES OF AMERICAN LITERATURE

4

A study of literary masterpieces selected from representative American authors.

ENGL 206 MASTERPIECES OF ENGLISH LITERATURE

4

A study of selected English literary masterpieces of poetry, prose and drama.

ENGLISH

ENGL 207 MASTERPIECES OF WORLD LITERATURE 4

A study of selected literary masterpieces from classical times to the present, emphasizing the literature of the Western world.

ENGL 208 AFRO-AMERICAN LITERATURE 4

A study of selected literary works of Black Americans from the colonial period to the present.

ENGL 209 RELIGIOUS LITERATURE 4

A study of the works of major Christian writers.

ENGL 214 THEMES IN LITERATURE 4

A study of selected works that develop a particular literary theme. Specific themes to be studied vary from quarter to quarter; see class schedule.

ENGL 215 LITERATURE AND FILM 4

An introduction to the basic techniques of film expression leading to a comparative study of works of literature and their film versions; intended to broaden the student's critical appreciation of literature and to encourage responsible, mature criteria for judging film literature.

WRITING (ENGL)

ENGL 101, 102 or 121, 122 are prerequisites to all other writing courses.

ENGL 224 RESEARCH WRITING IN RELIGION 3

A course designed to develop skills in research and writing in the area of religion. Instruction in the use of library materials and in the effective planning and writing of upper-division research papers. This course is prerequisite to all upper-division theology seminars.

ENGL 234 LITERARY ANALYSIS AND RESEARCH 4

An introduction to bibliography and research in literature, emphasizing critical approaches to literature, analyses of major genres and the preparation of critical essays.

ENGL 324 ADVANCED EXPOSITORY WRITING 3

Techniques of writing expository prose that is clear, effective and beautiful, with emphasis on revision and intensive practice in developing and refining a variety of sentence patterns. Designed to aid students to write essays, theses and seminar papers.

ENGL 325 ADVANCED TECHNICAL WRITING 3

Techniques of researching, organizing and writing technical proposals and reports. Designed to aid students in writing papers in their major fields and in their professional careers. Will not apply on English major.

ENGL 334, 335, 336 CREATIVE WRITING 3, 3, 3

Techniques of writing in several creative forms, with analysis and discussion of student work. Designed to develop a critical appreciation of the art of writing. Poetry (334), Narrative (335), Drama (336).

LITERATURE AND LANGUAGE (ENGL)

Unless otherwise stated, ENGL 234 or permission of instructor is prerequisite to all upper-division literature courses.

ENGL 311, 312, 313 WESTERN THOUGHT II HONORS 4, 4, 4

See the honors program listed under the Interdisciplinary section of this bulletin.

ENGL 344 MEDIEVAL LITERATURE 4

A study of English literature from its origins to about 1500. Literature in Old and Middle English to be read in translation; Chaucer's works to be read in the original Middle English.

ENGL 345 RENAISSANCE LITERATURE 4

A study of the major authors and literary movements of the English Renaissance.

ENGLISH

ENGL 346 RESTORATION AND NEOCLASSIC LITERATURE	4
A study of selected works of important seventeenth- and eighteenth-century English authors, including Dryden, Swift, Pope and Johnson.	
ENGL 354 ROMANTIC ENGLISH LITERATURE	4
A study of major romantic English authors, including Wordsworth, Coleridge, Byron, Shelley and Keats.	
ENGL 355 VICTORIAN LITERATURE	4
A study of nineteenth-century English authors, including Tennyson, Browning and Arnold.	
ENGL 356 TWENTIETH-CENTURY ENGLISH LITERATURE	4
A study of English literature since 1914; significant works studied in relation to intellectual and historical developments.	
ENGL 364 ROMANTIC AMERICAN LITERATURE	4
A study of major romantic American authors, including Emerson, Thoreau, Hawthorne and Melville.	
ENGL 365 AMERICAN REALISM AND NATURALISM	4
A study of major American authors who typify nineteenth-century realism and naturalism.	
ENGL 366 TWENTIETH-CENTURY AMERICAN LITERATURE	4
A study of American literature since 1914; significant works studied in relation to intellectual and historical developments.	
ENGL 384 ENGLISH GRAMMARS AND LINGUISTICS	4
A course taught especially for prospective teachers of English, with emphasis on traditional and transformational grammars.	
ENGL 394 DIRECTED READING	1-3
A course designed for upper-division students who wish to continue broadening their knowledge of literature by extensive reading; admission only by departmental approval. Prerequisite: General studies literature or ENGL 234.	
ENGL 444 MAJOR AUTHOR	3
An advanced study of the work of a major author or group of authors of English, American and world literature. Specific authors to be studied vary from quarter to quarter; see class schedule.	
ENGL 445 SHAKESPEARE	3
An advanced study of selected plays and poems of Shakespeare.	
ENGL 454 LITERATURE OF THE BIBLE	4
A study of Biblical poetry and prose from a literary perspective. Prerequisite: General studies literature or ENGL 234.	
ENGL 455 CLASSICAL BACKGROUNDS	3
An introduction to classical legend and thought as developed in major Greek, Roman and medieval literary works. Intended as background for the study of Renaissance and modern literature and art. Prerequisite: ENGL 234 or ART 231, 232, 233.	
ENGL 464 DEVELOPMENT OF ENGLISH DRAMA	3
A survey of the development of English drama from the medieval mystery plays to the twentieth century.	
ENGL 465 DEVELOPMENT OF THE ENGLISH NOVEL	3
A survey of major English novels, primarily of the eighteenth and nineteenth centuries. Authors represented generally include Fielding, Austen, the Brontes, Dickens, Eliot, Hardy and Conrad.	
ENGL 466 PHILOSOPHICAL AND CRITICAL PROSE	3
A study of such major prose authors as Johnson, Carlyle, Mill, Arnold, Newman and Eliot, emphasizing ideas on society, culture and the creation and uses of literature.	

ENGL 484 HISTORY OF THE ENGLISH LANGUAGE 3
 A study of the historical development of the English language from its Indo-European origins to Modern English. Intended to provide a broad, comprehensive understanding of present-day English.

ENGL 496 SEMINAR 3
 An integrating course required of English majors in the senior year. The study includes practice in bibliography and research methods, problems in areas of special interest to class members, group conferences and reports.

ENGL 501 INDEPENDENT STUDY IN ENGLISH 1
 A course designed to allow in-depth study of a problem of limited scope in the field of English. Prerequisite: undergraduate major in English or permission of the department chairman.

ENGL 506 LITERARY CRITICISM 3
 A survey of the theories of literary criticism with emphasis on their application to typical literatures of the different genres. Prerequisite: undergraduate major in English or permission of the department chairman.

ENGLISH EDUCATION (ENGL)

The following courses do not apply toward an English major or minor.

ENGL 276 TEACHING ENGLISH AS A FOREIGN LANGUAGE 2
 Specialized approaches and materials useful for teaching oral and written English to speakers of other languages. Prerequisite: ENGL 101, 102 or ENGL 121, 122.

ENGL 374 LITERATURE IN THE ELEMENTARY SCHOOL 3
 The philosophy of the selection and study of literature on the elementary school level, emphasizing appropriate content, good style and suitability for various age groups. Extensive reading of children's literature is required.

ENGL 375 LITERATURE IN THE SECONDARY SCHOOL 3
 The philosophy of the selection and study of literature on the secondary level, emphasizing choosing literature related to student problems and goals as well as literature appreciation. Extensive reading of literature for adolescents is required.

ENGL 472 METHODS OF TEACHING HIGH SCHOOL ENGLISH 4
 A study of objectives for and methods of teaching grammar, composition and literature in grades seven through twelve. Students prepare and present lessons, evaluate student-written themes, and collect and organize a file of teaching materials. Preferably, students should have taken ENGL 374 and ENGL 375.

READING (RDNG)

RDNG 100 DEVELOPMENTAL READING 2
 Speed and comprehension in reading are stressed. The latest reading techniques are taught and some of the best equipment is available for classroom use. This course is specifically designed for students who have poor reading habits.

HLRD 308	Community Health Education	2
HLRD 328	Basic Therapy	2
HLRD 370	Field Training	3
HLRD 384	School Health Programs	3

ENGL 346 RESTORATION AND 18TH-CENTURY ENGLISH LITERATURE Mr. JOHN
MAGNUEN. A study of major English authors of the Restoration and the 18th century, including Aphra Behn, John Dryden, John Bunyan, Daniel Defoe, Samuel Richardson, and Laurence Sterne.

ENGL 354 ROMANTIC ENGLISH LITERATURE

A study of major romantic English authors, including Wordsworth, Blake, Keats, Shelley, and Scott. A study of the English writers in the time of Queen Victoria, including Dickens, Tennyson, and Hardy. A study of nineteenth-century English writers, including George Eliot, Oscar Wilde, and Arnold.

ENGL 361 19TH-CENTURY ENGLISH LITERATURE

A study of English literature since 1850, including works written in the context of intellectual and historical developments.

ENGL 364 ROMANTIC AMERICAN LITERATURE

A study of major American authors of the 19th century, including Emerson, Thoreau, Melville, and Whitman.

ENGL 365 AMERICAN REALISM AND NATURALISM

A study of major American authors who typify the movement of realism.

ENGL 366 TWENTIETH-CENTURY AMERICAN LITERATURE

A study of American writers who typify the movement of modernism, including Hemingway, Frost, and Frost.

ENGL 367 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Yeats, Eliot, and Auden.

ENGL 368 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 369 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 370 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 371 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 372 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 373 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 374 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 375 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 376 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 377 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

ENGL 378 LITERATURE OF THE 20TH CENTURY

A study of major English writers of the 20th century, including Auden, Beckett, and Pinter.

TAUSICK MEMORIAL POOL

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

B. Napier, Chairman; G. Bruns, G. Hamburg, E. Schneider, Patti Velez, J. Waterbrook, H. Weir, E. Winter.

The purpose of the department is to provide a total program which will develop a physical life style harmonious with the "whole-man concept" of healthful living, intramural and recreational opportunities for students, and preparation of health, physical and recreational education leaders for the church and the community. The aim of the department is to promote those activities which stimulate habits of regular exercise and develop interests and skills which may be enjoyed throughout life.

The department seeks to give the student a good scientific and practical background into the understandings of the health and functions of the human body. The student is taught how to put this knowledge into practice for himself and how to share this knowledge with others.

The health program attempts to provide the student with the training necessary to work in overseas missions, intercity work, public health work and with the background necessary for further study in a Master of Public Health program. The program is designed to give the students several options. The health major fulfills the basic study requirements in physical therapy, radiological technology, respiratory therapy, or occupational therapy.

The respiratory therapy program aims to prepare the student to work as an allied health specialist employed in the treatment, management, control and care of patients with deficiencies and abnormalities associated with breathing. The student will learn skills involved in the administration of medical gases including air and oxygen. The program is designed to be completed in two years, at which time the student will be eligible to take his registry examination with the American Association of Respiratory Therapy.

MAJOR IN HEALTH (Bachelor of Science)

A student majoring in health must complete 86 quarter hours of interdisciplinary courses as listed below, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

HLED 214	Introduction to Health	3
HLED 215	Contemporary Health Issues	2
HLED 217	First Aid	2
HLED 238	Health Behavior Change	2
HLED 308	Community Health Education	3
HLED 328	Basic Therapy	2
HLED 370	Field Training	3
HLED 384	School Health Programs	3

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

HLED 472	Methods of School Health Instruction	3
PETH 426	Physiology of Exercise	4
BIOL 101, 102, 103	General Biology	12
BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	Microbiology	5
CHEM 101, 102 or CHEM 141, 142, 143	Introductory Chemistry I	8-12
FDNT 220	General Chemistry	4
PSYC 435 or PSYC 440	Human Nutrition Child Psychology	3
SPCH 101	Adolescent Psychology	4
Electives	Fundamentals of Speech Communication	4
		15
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		86

MAJOR IN PHYSICAL EDUCATION (Bachelor of Science)

A student majoring in physical education must complete the core requirements, one concentration, the required cognates for that concentration, and the general studies program for the baccalaureate degree as outlined in this bulletin. Students pursuing the teaching of physical education must also complete the certification requirements as listed in the Education section of this bulletin.

Core Requirements:

PETH 214	Introduction to Physical and Recreational Education	2
PETH 225	Prevention of Injuries	2
PETH 324	Adaptive Physical and Recreational Education	3
PETH 325	Kinesiology	3
PETH 425	Motor Learning	3
PETH 494	History of Health, Physical and Recreational Education	3
PETH 496, 497	Seminar	2
		18

Concentration: Elementary Teaching of Physical Education

HLED 208	Drugs and Society	2
HLED 215	Contemporary Health Issues	2
HLED 238	Health Behavioral Change	2
HLED 384	School Health Programs	3
PETH 370	Practicum in Movement Education	2

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

PETH 473	Physical Education in the Elementary School	3
PEAC 101-276	Physical Activity Courses	10
Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		
Electives		
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		
Required Cognate:		
BIOL 201, 202	Anatomy and Physiology	8
Concentration: Secondary Teaching of Physical Education		
HLED 215	Contemporary Health Issues	2
PETH 205	<u>Water Safety Instructor's Course</u>	2
PETH 262	Officiating of Sports Activities	6
PETH 274	Programming of Intramural and Recreational Activities	3
PETH 363	Analysis of Team Activities	6
PETH 426	Physiology of Exercise	4
PETH 472	Methods of Teaching Secondary Physical and Recreational Education	3
PETH 484	Administration of Health, Physical and Recreational Education	3
PEAC 101-276	Physical Activity Courses	15
Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		
Electives		
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		
Required Cognate:		
BIOL 201, 202	Anatomy and Physiology	8
Concentration: Biomechanical Basis		
RECR 278	Programming Intramural and Recreational Activities	3
PETH 426	Physiology of Exercise	4
PETH 477	Independent Study in Physical Education	3
PETH 484	Administration of Health, Physical and Recreational Education	3
BIOL 201, 202	Anatomy and Physiology	8
BIOL 350 or PSYC 350	Biostatistics	4
PSYC 350	Elementary Statistics	10
Electives		
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		
Required Cognates: Biomechanical Basis		
CHEM 141, 142, 143	General Chemistry	12

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

CPTR 121; 122; 334	Computer Science I, II, III	
or		
FREN 102; 202	Elementary/Intermediate Reading in French	7-8
or		
GRMN 112; 212	Elementary/Intermediate Reading in German	
MATH 181, 281	Analytic Geometry and Calculus I, II	8
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3

Concentration: Physiological Basis

RECR 278	Programming Intramural and Recreational Activities	3
PETH 426	Physiology of Exercise	4
PETH 477	Independent Study in Physical Education	3
PETH 484	Administration of Health, Physical and Recreational Education	3
BIOL 201, 202	Anatomy and Physiology	8
BIOL 393	Animal Physiology	4
Electives		10

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Physiological Basis

BIOL 101, 102, 103	General Biology	12
BIOL 392	Cell Physiology	4-7
or		
CHEM 431, 432	Biochemistry	
CHEM 141, 142, 143	General Chemistry	12
CHEM 321, 322, 323	Organic Chemistry	12
BIOL 350	Biostatistics	
or		
PSYC 350	Elementary Statistics	4
MATH 117	Precalculus	5-8
or		
MATH 121, 122	Fundamentals of Mathematics I, II	
CPTR 121; 122; 334	Computer Science I, II, III	
or		
FREN 102; 202	Elementary/Intermediate Reading in French	7-8
or		
GRMN 112; 212	Elementary/Intermediate Reading in German	

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

MAJOR IN RECREATIONAL EDUCATION (Bachelor of Science)
 A student majoring in recreation must complete the core requirements, one concentration, the required cognates for that concentration, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Core Requirements:

PETH 214	Introduction to Physical and Recreational Education	2
RECR 278	Programming of Intramurals and Recreational Activities	3
RECR 356	Recreation, Leisure and Society	3
RECR 364	Recreation Programs	3
PETH 484	Administration of Health, Physical and Recreational Education	3
RECR 484	Leadership in Recreation	2
PETH 496, 497	Seminar	2
RECR 494	Practicum in Recreation	<u>12</u>
		30

Concentration: Community Recreation

RECR 234	Youth Camp Leadership	2
PETH 205	Water Safety Instructor's Course	2
RECR 387	Youth Services Leadership	3
SPCH 207	Small Group Communication	2
MKTG 481	Public Relations	3
PEAC 101-276	Physical Activity Courses	8

Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Electives

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Community Recreation

BIOL 101, 102, 103	General Biology	12
MGMT 171	Principles of Management	4

Concentration: Correctional Recreation

HLED 227	First Aid	2
PETH 261, 262, 263	Officiating Team Sport Activities	6
PETH 324	Corrective and Adaptive Physical and Recreational Education	3
PETH 425	Motor Learning	3
RECR 387	Youth Services Leadership	2
RECR 475	Recreation for Special Populations	3
PEAC 101-276	Physical Activity Courses	10

Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Electives

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

MINOR IN PHYSICAL EDUCATION
 A student minoring in physical education must complete 30 quarter hours.

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

Required Cognates: Correctional Recreation

SPCH 207	Small Group Communications	2
SOCI 204	General Sociology	4
PLSC 224	American Government	4

Concentration: Outdoor Education

HLED 227	First Aid	2
RECR 234	Youth Camp Leadership	2
RECR 374	Practicum in Outdoor Education	4
RECT 389	Camp Administration	2
RECR 474	Environmental Interpretation	3
PETH 205	Water Safety Instructor's Course	2
PETH 354	Camping, Survival and Wilderness Living	3
PEAC 101-276	Physical Activity Courses	4

Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Electives

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Outdoor Education

BIOL 101, 102, 103	General Biology	12
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Concentration: Therapeutic Recreation

PETH 324	Adaptive Physical and Recreational Education	3
PETH 325	Kinesiology	3
PETH 425	Motor Learning	3
RECR 387	Youth Services Leadership	3
RECR 475	Recreation for Special Populations	3
PEAC 101-276	Physical Activity Courses	10

Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Electives

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Therapeutic Recreation

PSYC 437	Childhood Learning Disorders	3
PSYC 442	Motivation	3

Concentration: Youth Services Leadership

PETH 205	Water Safety Instructor's Course	2
RECR 234	Youth Camp Leadership	2
RECR 375	Camping, Survival and Wilderness Living	3
RECR 387	Youth Services Leadership	3

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

RECR 389	Camp Administration	2
HLED 217	First Aid	2
PEAC 101-276	Physical Activity Courses	6

Physical activity courses must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Electives	23
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.	43

Required Cognates: Youth Services Leadership

BIOL 407	Philosophy of Science	4
SOCI 449	Sociology of Religion	3
SPCH 207	Small Group Communication	2
PSYC 440	Adolescent Psychology	4

RESPIRATORY THERAPY (Associate of Science)

A student specializing in respiratory therapy must complete the area requirements, the required cognates, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

RESP 121	Respiratory Therapy I	5
RESP 122	Respiratory Therapy II	4
RESP 123	Clinical Application II	1
RESP 131	Respiratory Therapy III	4
RESP 132	Clinical Application III	2
RESP 141	Respiratory Therapy IV	4
RESP 142	Clinical Application IV	2
RESP 221	Respiratory Therapy V	4
RESP 222	Clinical Application V	1
RESP 231	Respiratory Therapy VI	5
RESP 232	Clinical Application VI	1
RESP 241	Respiratory Therapy VII	3
RESP 242	Clinical Application VII	1
RESP 251	Cardiopulmonary Physiology	4
RESP 252	Pharmacology	3
RESP 253	Clinical Pulmonary Diseases	4
RESP 296	Seminar in Respiratory Therapy	4

52

Required Cognates:

BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	Microbiology	5
CHEM 101, 102	Introductory Chemistry I	8
NRSG 175	Nurse's Aide Skills	2

An introductory physics course

4

MINOR IN HEALTH

A student minoring in health must complete 27 quarter hours; 6 quarter hours must be upper division; HLED 215 and HLED 308 are required. Approval of health adviser required.

MINOR IN PHYSICAL EDUCATION

A student minoring in physical education must complete 30 quarter hours;

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

PETH 214; PETH 261, 262, 263 and PETH 484 are required. Approval of physical education adviser required.

MINOR IN RECREATION

A student minoring in recreation (youth services, outdoor education and community recreation) must complete 30 quarter hours; PETH 214, PETH 274, RECR 234, RECR 356 and RECT 494 are required. Approval of recreation adviser required.

HEALTH EDUCATION (HLED)

HLED 208 DRUGS AND SOCIETY

A study of the effects of drugs, including narcotics and alcohol, their relationship to social problems.

HLED 214 INTRODUCTION TO HEALTH

A basic course to help the student develop a total philosophy of health. The spiritual, mental and physical aspects of health are studied and integrated.

HLED 215 CONTEMPORARY HEALTH ISSUES

A detailed study of current health issues and problems emphasizing modern preventive measures.

HLED 217 FIRST AID

Standard and advanced American Red Cross first aid including the civil defense medical self-help course. This course prepares the student to deal effectively with minor emergencies and injuries. Lecture and laboratory.

HLED 238 HEALTH BEHAVIOR CHANGE

A study of behavioral change in health practices. Utilization of group processes and basic behavioral science concepts, relating them to learning and motivation in the health field.

HLED 265 SCHOOL SAFETY

Prevention of accidents found in various school situations with special emphasis on care of injuries associated with playground and gymnasium activities.

HLED 308 COMMUNITY HEALTH EDUCATION

The role of the health educator in the community, including his relationship to both public and private health agencies; emphasis given to the prevention of disease and the promotion of health through organized community effort.

HLED 328 BASIC THERAPY

Simple, nondrug, therapeutic practices are taught. Also considered are legal implications and quackery.

HLED 366 HEALTH EDUCATION IN CHURCH PROGRAMS

The planning, implementation and evaluation of church-sponsored health programs.

HLED 370 FIELD TRAINING

Supervised field experience in community and church health education. Prerequisite: HLED 308 or HLED 366.

HLED 384 SCHOOL HEALTH PROGRAMS

The purpose of this course is to develop a sound philosophy of the entire school health program and a concern for its attainment. Recognition of health problems and how to deal with them is emphasized.

HLED 472 METHODS OF SCHOOL HEALTH INSTRUCTION

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

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

PHYSICAL ACTIVITY COURSES (PEAC)

PEAC 101-199 PHYSICAL ACTIVITY COURSES

1

Motor skills and physiological development; adaptive programs as needed.

PEAC 101	Canoeing I	PEAC 147	Tennis II
PEAC 102	Canoeing II	PEAC 148	Tennis III
PEAC 103	Springboard Diving I	PEAC 149	Handball I
PEAC 104	Springboard Diving II	PEAC 150	Handball II
PEAC 105	Kayaking and Rafting I	PEAC 151	Paddleball I
PEAC 106	Kayaking and Rafting II	PEAC 152	Paddleball II
PEAC 107	Lifesaving	PEAC 153	Western Horsemanship I
PEAC 108	Sailing I	PEAC 154	Western Horsemanship II
PEAC 109	Sailing II	PEAC 155	English Horsemanship I
PEAC 110	Scuba I	PEAC 156	English Horsemanship II
PEAC 111	Scuba II	PEAC 157	Backpacking
PEAC 112	Introductory Swimming	PEAC 159	Cycling
PEAC 113	Beginning Swimming	PEAC 160	Cycle Touring
PEAC 114	Intermediate Swimming	PEAC 161	Orienteering
PEAC 115	Advanced Swimming	PEAC 162	Mountaineering
PEAC 116	Synchronized Swimming I	PEAC 164	Downhill Skiing I
PEAC 117	Synchronized Swimming II	PEAC 165	Downhill Skiing II
PEAC 118	Water Skiing	PEAC 166	Cross-Country Skiing I
PEAC 121	Adaptive	PEAC 167	Cross-Country Skiing II
PEAC 122	Body Mechanics	PEAC 170	Baseball
PEAC 123	Conditioning	PEAC 171	Basketball
PEAC 124	Gymnastics I	PEAC 172	Field Hockey
PEAC 125	Gymnastics II	PEAC 173	Flagball
PEAC 126	Modern Gymnastics	PEAC 174	Soccer
PEAC 127	Tumbling	PEAC 175	Softball
PEAC 131	Movement Skill	PEAC 176	Track and Field
PEAC 132	Developmental Movement	PEAC 177	Volleyball
PEAC 133	Aerobic rhythm	PEAC 178	Power Volleyball
PEAC 134	Rhythms	PEAC 179	Team Handball
PEAC 135	Singing Games	PEAC 180	Water Polo
PEAC 136	Ice Skating I	PEAC 181	Fencing I
PEAC 137	Ice Skating II	PEAC 182	Fencing II
PEAC 138	Roller Skating I	PEAC 183	Judo I
PEAC 139	Roller Skating II	PEAC 184	Judo II
PEAC 141	Archery	PEAC 185	Karate I
PEAC 142	Badminton I	PEAC 186	Karate II
PEAC 143	Badminton II	PEAC 187	Self-Defense
PEAC 144	Golf I	PEAC 190	Independent
PEAC 145	Golf II	PEAC 195	Gymnastics Team
PEAC 146	Tennis I	PEAC 197	Modern Gymnastics team
		PEAC 198	
		PEAC 199	

PEAC 241-247 PROFESSIONAL INDIVIDUAL ACTIVITIES

1

PEAC 241	Archery	PEAC 245	Gymnastics II
PEAC 242	Badminton	PEAC 246	Tennis
PEAC 243	Golf	PEAC 247	Track and Field
PEAC 244	Gymnastics I		

PEAC 270-276 PROFESSIONAL TEAM ACTIVITIES

1

PEAC 270	Baseball	PEAC 274	Soccer
PEAC 271	Basketball	PEAC 275	Softball
PEAC 272	Field Hockey	PEAC 276	Volleyball
PEAC 273	Flagball		

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

PHYSICAL EDUCATION THEORY (PETH)

PETH 205 WATER SAFETY INSTRUCTOR'S COURSE	2
This course prepares students to meet the requirements of the National Red Cross Certificate to instruct swimming and supervise swimming areas. Prerequisite: Lifesaving.	
PETH 214 INTRODUCTION TO PHYSICAL/RECREATIONAL EDUCATION	2
A theory course outlined to provide a basic orientation to the field of physical education. A brief survey of the philosophy and objectives as well as the professional opportunities and responsibilities of the physical educator.	
PETH 225 PREVENTION OF INJURIES	2
This course is designed for prospective physical therapists, health and physical educators to aid in prevention, evaluation, recognition and immediate care and rehabilitation of injuries. Lecture and laboratory.	
PETH 261, 262, 263 OFFICIATING OF SPORTS ACTIVITIES	2, 2, 2
The basic science of officiating in a variety of activities covered in the service areas. Students will be required to act as officials in the intramural activities sponsored by the department. Lecture and laboratory.	
PETH 268 SKI INSTRUCTOR'S COURSE	2
A course to provide the advanced skiing student with the methods and skills involved in skiing instruction. The student will be required to assist in conducting the various ski classes and will also be eligible for employment as a ski instructor in succeeding years. Lecture and laboratory.	
PETH 324 ADAPTIVE PHYSICAL EDUCATION AND RECREATION	3
A study of common abnormalities found in students which may be corrected or helped by proper exercise. Extent and limitations of the teacher's responsibility in this phase of education. Lecture and laboratory.	
PETH 325 KINESIOLOGY	3
Study of joint and muscular mechanism action of muscles involved in fundamental movements. Effect of gravity and other forces on motion. Prerequisite: BIOL 201, 202. Lecture and laboratory.	
PETH 363, 364, 365 ANALYSIS OF TEAM ACTIVITIES	2, 2, 2
Materials, methods, strategy and teaching progressions; autumn, flagball and soccer; winter, basketball and volleyball; spring, track and field and softball.	
PETH 370 PRACTICUM IN MOVEMENT EDUCATION	2
A practical learning experience in movement activities for the preschool and elementary child. Lecture and laboratory.	
PETH 425 MOTOR LEARNING	3
Analysis of selected variables which influence the learning of motor skills. Lecture and laboratory.	
PETH 426 PHYSIOLOGY OF EXERCISE	4
The physiological basis for motor fitness; factors limiting human performance in athletic competition; discussion of pertinent research from the sports medicine literature; laboratory techniques used in analysis of motor fitness. One laboratory per week. Prerequisite: BIOL 201, 202. Lecture and laboratory.	
PETH 472 METHODS OF TEACHING SECONDARY PHYSICAL EDUCATION	3
A study of the methods and techniques of teaching physical education in the secondary school, indoors and outdoors, individual as well as group activities are stressed. Students are required to observe and demonstrate in class. Lecture and laboratory.	
PETH 473 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL	3
This course deals with the planning of the curriculum in the elementary school and the organization of a balanced activities program. Participation in the elementary school physical education program is required.	

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

PETH 484 ADMINISTRATION OF HEALTH, PHYSICAL AND RECREATIONAL EDUCATION 3

The student will become conversant with techniques of scheduling, organizing and planning suitable activities. Study is given to purchasing of supplies and equipment, planning and use of facilities, comparative cost and budgeting for the entire health and physical education program as it relates to either the elementary or secondary school depending on the need of the student.

PETH 494 HISTORY OF HEALTH, PHYSICAL AND RECREATIONAL EDUCATION 3

History and theory of health, physical and recreational education. A practical study of the reasons physical education should be included in the school program and the unique contribution it makes to education.

PETH 496, 497 SEMINAR 1, 1

A study of the modern trends in physical and recreational education. Group discussion and presentation of current material in the field. Prerequisite: senior standing.

RECREATIONAL EDUCATION (RECR)

RECR 201 CERAMICS 2

This course is offered to help plan the leisure time activity of young people as well as to prepare for a hobby.

RECR 205 LAPIDARY 2

This course is offered to help plan the leisure time activity of young people as well as to prepare for a hobby.

RECR 234 YOUTH CAMP LEADERSHIP 2

Principles and techniques in the role of camp counseling; involving campers, counselors, cabin groups, and understanding problems of discipline and morale. Lecture and laboratory.

RECR 278 PROGRAMMING INTRAMURAL AND RECREATIONAL ACTIVITIES 2

The mechanics of programming the intramural and recreational activities in the school and community.

RECR 314 ADVANCED CERAMICS 2

An advanced course in ceramics with special emphasis on teaching methods, preparation of teaching aids, sources of materials, cost, etc.

RECR 315 ADVANCED LAPIDARY 2

An advanced course in lapidary with special emphasis on teaching methods, preparation of teaching aids, sources of material, cost, etc.

RECR 356 RECREATION, LEISURE AND SOCIETY 3

This course deals with concepts promoting the most effective and widespread education for the worthy and creative use of leisure. The primary purpose is to make awareness of the advancement of recreation programs of the highest quality at all levels of human endeavor and the preparation of people in modern society.

RECR 364 RECREATIONAL PROGRAMS 3

A course intended to fill the need for leadership in planning a balanced recreational program in the church or community for all age groups. Lecture and laboratory.

RECR 374 PRACTICUM IN OUTDOOR EDUCATION 4

A four-week program providing controlled application of outdoor skills in a natural wilderness setting under qualified leadership. This program, known as Mission Possible (MiPo), places emphasis on self-discovery and reassessment of the individual's approach to life with assistance from persons trained in counseling.

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

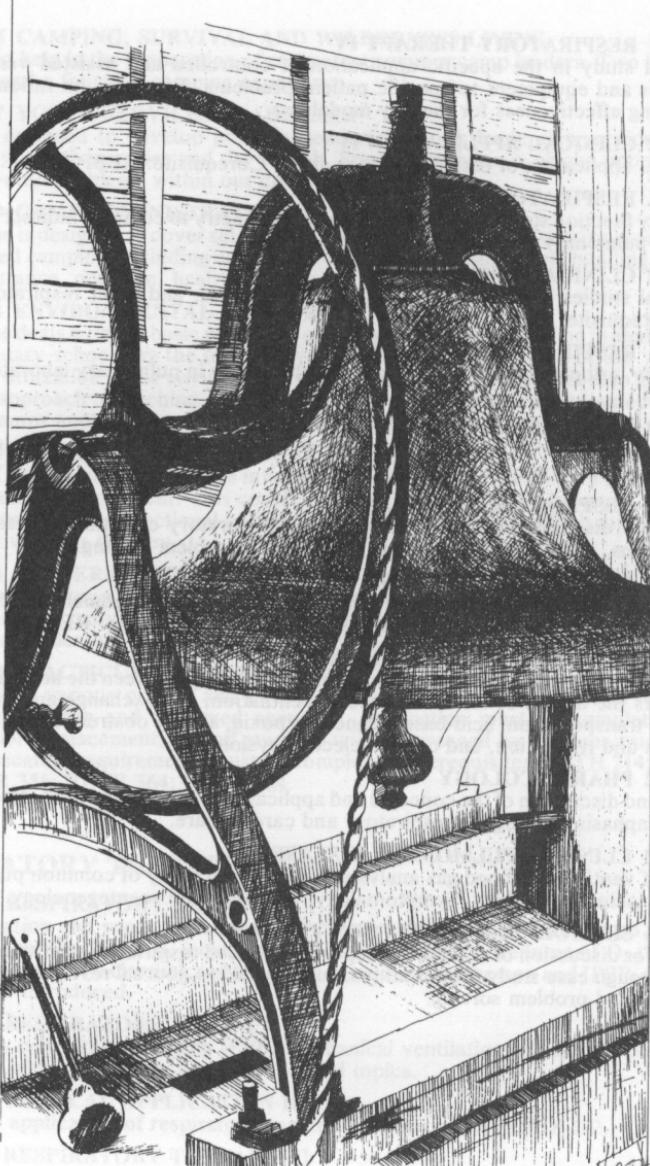
RECR 375 CAMPING, SURVIVAL AND WILDERNESS LIVING	3
A course to help in the preparation of competent summer camp leaders. Two lectures per week and a four-day camping experience.	
RECR 387 YOUTH SERVICES LEADERSHIP	3
A course designed to develop potential leaders in youth leadership service to the community, youth agencies and the church. Special emphasis is placed upon understanding youth problems within our contemporary society.	
RECR 389 CAMP ADMINISTRATION	2
This course is designed to cover selected organizational and administrative procedures in organized camping, including committee work, budget, campsites, building, equipment, insurance, nutrition, health and safety.	
RECR 474 ENVIRONMENTAL INTERPRETATION	3
This course deals with the basic principles of teaching outdoor education in elementary and secondary schools by the interpretive method. It teaches some of the "hows" relating to utilization of the environment and the classroom. The course also gives the naturalist approach to teaching, enabling the participant to work in outdoor education centers, camps and educational settings. Lecture and laboratory.	
RECR 475 RECREATION FOR SPECIAL POPULATIONS	3
A study of principles and practices involving the utilization of recreation programs in the therapeutic environment. This course includes investigation of hospitals, nursing homes, educational, correctional and other specialized programs which utilize recreational activities as therapy.	
RECR 484 LEADERSHIP IN RECREATION	2
Leadership and group work as techniques for meeting program objectives, individual and group needs, individual development, human relations and the learning process of recreational leadership.	
RECR 490 PRACTICUM IN RECREATION	12
Field work at various private and public recreation agencies under supervision of qualified leadership and approved agencies. Application must be completed two months prior to placement, and all students will be screened by the department. All general education requirements must be completed. Prerequisites: PETH 214; PETH 484; RECR 356; RECR 364; RECR 484.	

RESPIRATORY THERAPY (RESP)

RESP 121 RESPIRATORY THERAPY I	5
The application and procedures involving the use of equipment common to current respiratory care techniques, including the equipment and procedures of O ₂ therapy, aerosol and humidity, cleaning and sterilization, special gas therapy and IPPB. Clinical applications introduced.	
RESP 122 RESPIRATORY THERAPY II	4
Respiratory care skills including IPPB, mechanical ventilation, cardiopulmonary resuscitation, electrical safety and other related topics.	
RESP 123 CLINICAL APPLICATION II	1
In-hospital application of respiratory care skills. Corequisite: RESP 122.	
RESP 131 RESPIRATORY THERAPY III	4
Respiratory care skills including advanced airway management, controlled and assisted ventilatory support, equipment operation and maintenance; special considerations in pediatric care and basic spirometry.	
RESP 132 CLINICAL APPLICATION III	2
In-hospital application of respiratory care skills. Corequisite: RESP 131.	

HEALTH, PHYSICAL AND RECREATIONAL EDUCATION

RESP 141 RESPIRATORY THERAPY IV	4
Continued study in the specific application of controlled and assisted ventilation techniques and equipment to specific patient problems. Emphasis on rationale and determining effectiveness for therapy modalities.	
RESP 142 CLINICAL APPLICATION IV	2
In-hospital application of respiratory care skills. Corequisite: RESP 141.	
RESP 221 RESPIRATORY THERAPY V	4
Pulmonary function studies leading from basic spirometry to complex indirect studies, including pulmonary gas analysis.	
RESP 222 CLINICAL APPLICATION V	1
In-hospital studies in pulmonary function, gas analysis, and other respiratory care skills. Corequisite: RESP 221.	
RESP 231 RESPIRATORY THERAPY VI	5
Emergency, critical and postcritical care; further study in pulmonary laboratory procedures.	
RESP 232 CLINICAL APPLICATION VI	1
In-hospital studies in respiratory care skills, with emphasis on emergency, critical and postcritical care. Corequisite: RESP 231.	
RESP 241 RESPIRATORY THERAPY VII	3
A forum for discussion of current concepts of respiratory care through case study presentations, guest speakers, journal reviews and problem solving.	
RESP 242 CLINICAL APPLICATION VII	1
In-hospital studies of all respiratory care skills and special assignments to complete clinical essentials. Special projects may be assigned. Corequisite: RESP 241.	
RESP 251 CARDIOPULMONARY PHYSIOLOGY	4
A lecture course which stresses the functional relationship between the heart and lung, and covers the details of the mechanics of ventilation, gas exchange and diffusion, blood gas transportation, acid-base balance, hypoxia, airway obstruction, pulmonary distention and restriction, and cardiac electrophysiology.	
RESP 252 PHARMACOLOGY	3
Lecture and discussion of the concepts and application of drug action and effects, with special emphasis on drugs in respiratory and cardiac care.	
RESP 253 CLINICAL PULMONARY DISEASES	4
Testing of ventilation, blood gas analysis, and in-depth study of common pulmonary diseases, including etiology, symptomatology, diagnosis and roentgenology.	
RESP 296 SEMINAR IN RESPIRATORY THERAPY	4
A forum for discussion of current concepts in advanced respiratory care and function testing through case study presentations, guest speakers, journal reviews, equipment evaluation and problem solving.	



Keep your car some mechanicals and always make sure to have a good mechanic, service, equipment, operation and maintenance. This is the best way to ensure your car's safety and reliability.

RESP 132 CLASSICAL APPLICATION IN

Re-sound application of resonator car hills. Correspond: RESP 131

THE WALLA WALLA COLLEGE BELL

HISTORY

R. Henderson, Chairman; R. Blaich, L. Glaim, C. Schwantes.

The purpose of the work in history is fourfold: to promote a better understanding of the past and an appreciation of the present; to broaden the cultural outlook and formulate a constructive philosophy of history of life; to train in skills of research and evaluation; to prepare students for teaching, graduate and professional schools and government service.

The objectives of the courses in political science are to present techniques and materials with which to analyze governmental systems, diplomacy and international relations and theories of political power. Students are prepared for careers in teaching, law, government and church service.

The department offers a major in history as well as minors in history and political science.

MAJOR IN HISTORY (Bachelor of Arts)

A student majoring in history must complete 52 quarter hours in the major, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

HIST 121, 122	History of Western Civilization	8
HIST 221, 222	History of the United States	8
HIST 396	Introduction to Historical Research	1
HIST 496	Seminar	3
Electives (17 must be upper division)		32
8 quarter hours must be European; 8 quarter hours must be American; electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		52

MINOR IN HISTORY

A student minoring in history must complete 28 quarter hours; 3 quarter hours must be upper division; HIST 121, 122 and HIST 221, 222 are required. Approval of history advisor required.

MINOR IN POLITICAL SCIENCE

A student minoring in political science must complete 28 quarter hours; PLSC 224; PLSC 324 and PLSC 475 are required. Approval of political science adviser required.

HISTORY (HIST)

HIST 121, 122 HISTORY OF WESTERN CIVILIZATION 4, 4
A survey of European history from antiquity emphasizing the period since the Renaissance.

HISTORY

HIST 131, 132, 133 WESTERN THOUGHT I (HONORS) 4, 4, 4

An integration of Western Civilization and World Literature with added emphasis on philosophical concepts and their relationships to events. Corollary reading will emphasize the history and philosophy of science. (8 quarter hours are considered to be equivalent to HIST 121, 122; 4 quarter hours are considered to be equivalent to ENGL 207).

HIST 221, 222 HISTORY OF THE UNITED STATES

4, 4

A survey of the colonial period, followed by a more detailed study of the national period.

HIST 396 INTRODUCTION TO HISTORICAL RESEARCH

1

An orientation to the methods, materials and problems of historical research. Students will choose the topic for their senior papers, and commence research. To be taken during the junior year.

HIST 496 SEMINAR

3

A class devoted to the preparation of the senior thesis. Open only to senior history majors. Prerequisite: HIST 396.

EUROPEAN HISTORY (HIST)

HIST 374, 375 HISTORY OF ENGLAND

4, 4

The development and expansion of the English nation from the earliest times to the present.

HIST 435 HISTORY OF MODERN GERMANY

4

A survey of German history since 1870. Diplomatic, political, socioeconomic and ideological developments in Imperial, Weimar, Nazi and post-World War II Germany, with special emphasis on the German Question resulting from World War II. Prerequisite: HIST 121, 122.

HIST 463 THE MIDDLE AGES

4

A survey of the main institutions and ideas in European civilization from the decline of the Roman Empire to the Italian Renaissance, 300-1500. Prerequisite: HIST 121, 122.

HIST 465 RENAISSANCE AND REFORMATION

4

The transformation of Europe from a medieval to a modern society, 1300-1648, with special emphasis on the artistic, intellectual and religious sector.

HIST 467 ENLIGHTENMENT AND REVOLUTION

4

The influence of the Enlightenment on the French Revolution and the Napoleonic Imperium. Prerequisite: HIST 121, 122. Alternate years; taught fall, 1977.

HIST 468 THE MODERN TRANSITION, 1815-1919

4

Europe against the backdrop of nineteenth century industrialization. Prerequisite: HIST 121, 122. Alternate years; taught winter, 1978.

HIST 469 CONTEMPORARY EUROPE, 1918 TO THE PRESENT

4

Europe from division to proposed unity. Prerequisite: HIST 121, 122.

AMERICAN HISTORY (HIST)

HIST 325 HISTORY OF CANADA

4

A survey of Canadian development from the beginnings of the French regime to the present.

HIST 384, 385 HISTORY OF LATIN AMERICA

4, 4

A survey of the colonial period, followed by a more detailed study of the development of the individual Latin American nations and their world relationship.

HISTORY

HIST 424 THE AMERICAN FRONTIER 4

The exploration, settlement and development of the American west with consideration given to economic, social, cultural and political factors.

HIST 445 THE CIVIL WAR AND THE RISE OF INDUSTRIAL AMERICA, 1850-1900 4

The sectional crisis, war and its impact on postwar political, economic and social developments. Special attention will be given to industrialism and the development of the American labor movement. Prerequisite: HIST 221, 222.

HIST 446 HISTORY OF THE PACIFIC NORTHWEST 4

A course in regional history from the age of discovery to contemporary times including the fur traders, the missionaries, international rivalries, the territorial period and developments since statehood. A study of the State Manual of Washington is included.

HIST 448 TWENTIETH CENTURY AMERICA 4

A study of maturing America from 1900 to the present, with emphasis on the problems of prosperity, depression and the role of the United States in world affairs. Prerequisite: HIST 221, 222.

HIST 457 SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES 4

An analysis of the major social and intellectual trends in United States history, including Puritanism, the Enlightenment, Transcendentalism, Social Darwinism and Pragmatism. Prerequisite: HIST 221, 222. Alternate years; taught fall, 1977.

GENERAL

GEOG 358 WORLD GEOGRAPHY 4

A survey course of the major groups of natural regions. Essentially human geography, but with adequate attention to economic and physical aspects. Will not apply to a history minor.

HIST 472 METHODS OF TEACHING SOCIAL SCIENCE 3

Methods and techniques of teaching social studies on the secondary school level. Observation, demonstration and class presentation are required of the students as a part of this course. Will not apply on a major or minor in history or political science.

POLITICAL SCIENCE (PLSC)

PLSC 224 AMERICAN GOVERNMENT 4

Principles, organization and development of American national, state and local government.

PLSC 324 COMPARATIVE GOVERNMENTS 4

A comparative study of political institutions, ideologies and processes in modern and developing areas. Will include intensive analytical and critical study of theories of authority, with particular emphasis on problems of values in the political thought of communist, fascist, Catholic, socialist and democratic theories.

PLSC 424, 425 WESTERN POLITICAL THOUGHT (or PHIL 424, 425) 4, 4

Political thought from classical Greece to the Renaissance and from the Enlightenment to the present. May apply in history as well as political science. Alternate years; taught winter/spring, 1978-79.

PLSC 426 AMERICAN POLITICAL THOUGHT 4

The genesis and development of political thought in the United States. May apply in history as well as political science. Alternate years; taught fall, 1978.

PLSC 427 AMERICAN DIPLOMATIC HISTORY 4

The relation of the United States to world politics; analysis of problems involved in the formulation of foreign policies from colonial times to the present. May apply in history as well as political science.

HISTORY

PLSC 434 INTERNATIONAL RELATIONS

Systematic analysis of the nature of international society, and of the motivating and conditioning factors which explain interaction among states and other international entities.

4

PLSC 475 CONSTITUTIONAL HISTORY

Theory and practice of constitutional government in the United States. Formation of the constitution, federal court system, separation of powers, judicial review, congressional and presidential authority; exclusive national and concurrent state powers; emphasis on nature of legal reasoning and judicial practice.

4

HIST 310 HISTORY OF THE UNITED STATES

Survey of the history of the United States from the colonial period to the present. Prerequisite: HIST 306.

HIST 311 HISTORY OF THE UNITED STATES

HIST 311 HISTORY OF THE UNITED STATES

Continuation of HIST 310. Prerequisite: HIST 306.

HIST 312 HISTORY OF THE UNITED STATES

Continuation of HIST 311. Prerequisite: HIST 311.

HIST 313 HISTORY OF THE UNITED STATES

Continuation of HIST 312. Prerequisite: HIST 312.

HIST 314 HISTORY OF THE UNITED STATES

Continuation of HIST 313. Prerequisite: HIST 313.

HIST 315 HISTORY OF THE UNITED STATES

Continuation of HIST 314. Prerequisite: HIST 314.

HIST 316 HISTORY OF THE UNITED STATES

Continuation of HIST 315. Prerequisite: HIST 315.

HIST 317 HISTORY OF THE UNITED STATES

Continuation of HIST 316. Prerequisite: HIST 316.

HIST 318 HISTORY OF THE UNITED STATES

Continuation of HIST 317. Prerequisite: HIST 317.

HIST 319 HISTORY OF THE UNITED STATES

Continuation of HIST 318. Prerequisite: HIST 318.

HIST 320 HISTORY OF THE UNITED STATES

Continuation of HIST 319. Prerequisite: HIST 319.

HIST 321 HISTORY OF THE UNITED STATES

Continuation of HIST 320. Prerequisite: HIST 320.

HIST 322 HISTORY OF THE UNITED STATES

Continuation of HIST 321. Prerequisite: HIST 321.

HIST 323 HISTORY OF THE UNITED STATES

Continuation of HIST 322. Prerequisite: HIST 322.

HIST 324 HISTORY OF THE UNITED STATES

Continuation of HIST 323. Prerequisite: HIST 323.

HOME ECONOMICS

Mary Schwantes, Chairman; June Bishop, Gloria Hicinbothom, Merlene Olmsted, Evelynne Wright.

The major in home economics leading to a Bachelor of Arts degree is designed for the general college student and for those preparing to teach. Students who wish to teach should also plan to meet certification requirements.

The major in foods and nutrition leading to a Bachelor of Science degree is designed to prepare the student for health-science job opportunities, for graduate and professional schools.

The program in dietetic technology with an emphasis in nutrition care leads to an Associate of Science degree and is designed to be completed in two years. It aims to prepare the student to assume the responsibilities of a dietetic technician, working under the direction of a registered dietitian. Successful completion of this Associate of Science degree program qualifies one for work in hospitals, community services and clinical or therapeutic dietetic programs.

If, after satisfactory completion of the Associate of Science degree program, the student wishes to continue working toward a Bachelor of Science degree in dietetics on the undergraduate coordinated program, or a major in foods and nutrition, credit earned in the two-year program may be applied toward the four-year program.

The program in early childhood education is offered cooperatively between the departments of education and psychology and home economics. It leads to an Associate of Science degree and is designed to prepare the student for employment in nursery schools, day care centers, Head Start programs, parent cooperatives and other early education facilities. For a complete listing of requirements, see the education and psychology section of this bulletin.

The department offers minors in home economics, interior design, and foods and nutrition.

MAJOR IN HOME ECONOMICS (Bachelor of Arts)

A student majoring in home economics must complete 50 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

HMEC 100	Introduction to Home Economics	2
FDNT 101, 102	Principles of Food Science	8
FDNT 103	Meal Management and Table Service	3
FDNT 220	Human Nutrition	4
HMEC 222	Art in Everyday Living	3
HMEC 223	Introductory Interior Design	3

HOME ECONOMICS

HMEC 242, 243	Clothing Selection and Construction	6
CFSC 282	Child Development	3
HMEC 301	Consumer Education	4
HMEC 346	Household Management	3
HMEC 472	Methods of Teaching Home Economics	3
HMEC 496	Seminar	1
Electives(must be upper division)		10

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates:

CHEM 101, 102	Introductory Chemistry I	8
SOCI 324	Human Development and the Family	4
SOCI 325	Social Psychology of Family Life	3

MAJOR IN FOODS AND NUTRITION (Bachelor of Science)

A student majoring in foods and nutrition must complete 60 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

FDNT 101, 102	Principles of Food Science	8
FDNT 103	Meal Management and Table Service	3
HMEC 201	Household Equipment	3
FDNT 220	Human Nutrition	4
CFSC 282	Child Development	3
FDNT 286	Institution Food Preparation	3
HMEC 301	Consumer Education	4
FDNT 412	Foods in Cultures of the World	3
FDNT 422	Experimental Cookery	3
FDNT 437, 438	Community Nutrition	3
FDNT 441, 442	Advanced Nutrition	4
FDNT 443	Diet in Disease	3
FDNT 447	Institution Food Purchasing	3
FDNT 448	Institution Food Management	4
HMEC 472	Methods of Teaching Home Economics	3
HMEC 496	Seminar	1
Electives		5

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates:

BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	Microbiology	5
CHEM 141, 142, 143	General Chemistry	12
CHEM 321, 322, 323	Organic Chemistry	12
CHEM 431, 432	Biochemistry	7
MGMT 171	Principles of Management	4

DIETETICS (Bachelor of Science)

Students pursuing careers in therapeutic or administrative dietetics must meet requirements as specified by the American Dietetics Association (ADA). The first two years or 96 quarter hours are to be completed on the Walla Walla College campus. The remaining two years are to be completed in an undergraduate coordinated program approved by ADA. Consult with the department chairman for a complete course outline. The degree is *not* awarded by Walla Walla College.

DIETETIC TECHNOLOGY (Associate of Science Degree)

A student specializing in dietetic technology with an emphasis in nutrition care must complete 38 quarter hours in the area, the required cognates and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

FDNT 101, 102	Principles of Food Science	8
FDNT 103	Meal Management and Table Service	3
FDNT 151; 152	Orientation to Nutrition Care I, II	4
FDNT 153	Nutrition Care Experience I	2
FDNT 220	Human Nutrition	4
FDNT 251; 252; 253	Nutrition Care Experience II, III, IV	6
FDNT 437, 438	Community Nutrition	3
FDNT 441, 442	Advanced Nutrition	4
FDNT 443	Diet in Disease	3
HMEC 496	Seminar	1
		<u>38</u>

Required Cognates:

BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	Microbiology	5
MGMT 171	Principles of Management	4
CHEM 101, 102	Introductory Chemistry I	8
PSYC 130	General Psychology	4
SOCI 204	General Sociology	4
SOCI 234	Current Social Problems	3
HLED 215 or HLED 238 or HLED 308	Contemporary Health Issues Health Behavior Change Community Health Education	2-3

EARLY CHILDHOOD EDUCATION (Associate of Science Degree)

This program is offered cooperatively between the departments of education and psychology and home economics. See the Education and Psychology section of this bulletin for a complete list of requirements.

applied in the fundamental principles of design and the various aspects of the home, clothing and everyday living. Problems in selecting and designing.

HOME ECONOMICS

MINOR IN FOODS AND NUTRITION

A student minoring in foods and nutrition must complete 30 quarter hours; FDNT 101, 102; FDNT 103; FDNT 220; FDNT 286; FDNT 412 and FDNT 437, 438 are required. Approval of foods and nutrition adviser required.

MINOR IN HOME ECONOMICS

A student minoring in home economics must complete 30 quarter hours; HMEC 100; HMEC 222; HMEC 242; HMEC 301; FDNT 101, 102; FDNT 103 and FDNT 220 are required. Approval of home economics adviser required.

MINOR IN INTERIOR DESIGN

A student minoring in interior design must complete 30 quarter hours; HMEC 222; HMEC 223; HMEC 242; HMEC 269; HMEC 301 and HMEC 424, 425 are required. Approval of interior design adviser required.

FOODS AND NUTRITION (FDNT)

FDNT 101, 102 PRINCIPLES OF FOOD SCIENCE

4, 4

Basic principles and techniques of food preparation, purchasing and selection, with emphasis on nutrition, economic values and food quality. Sanitary handling and storage in food preparation. Prerequisite: FDNT 101 or equivalent for FDNT 102.

FDNT 103 MEAL MANAGEMENT AND TABLE SERVICE

3

Managerial aspects of planning, preparing and serving food for family meals and special occasions. Prerequisite: FDNT 101, 102 or equivalent.

FDNT 151 ORIENTATION TO NUTRITION CARE I

2

Practical experience and tours of health care institutions as an introduction to the kinds of knowledge and skills necessary for dietitians and for dietetic technicians in the health care environment. Permission of instructor required.

FDNT 152 ORIENTATION TO NUTRITION CARE II

2

A continuation of the practical experience acquainting the student with supply and/or service operations. Evaluation of a variety of types of community nutrition services; patient interviews. Prerequisite: FDNT 151.

FDNT 153 NUTRITION CARE EXPERIENCE I

2

Practical experience in preparation and serving food in health care institutions, in educating and helping patients plan and/or select modified diets, in the development and use of audiovisual material in nutrition education situations. Prerequisites: FDNT 151; FDNT 152.

FDNT 220 HUMAN NUTRITION

4

A study of the principles of nutrition and the diet essential for promoting a high degree of physical fitness. A valuable course for the general student, especially those preparing for the ministry, teaching health sciences or physical education.

FDNT 251 NUTRITION CARE EXPERIENCE II

2

Practical experience in providing high quality nutrition care to patients in harmony with individual requests and diet prescriptions. Opportunity to assist with various community nutrition programs. Prerequisite: FDNT 153.

FDNT 252 NUTRITION CARE EXPERIENCE III

2

Continued experience in diet office work and patient education with increasing responsibility in supervisory work. Further experience in community nutrition education situations, such as nutrition and weight control clinics, cooking classes, day care centers, etc. Prerequisite: FDNT 251.

FDNT 253 NUTRITION CARE EXPERIENCE IV 2
 Student will demonstrate ability to maintain the smooth on-going operations of the diet office for short periods of time under supervision. Field and community experience in nutrition instruction of individuals and/or groups in institutional and home situations. Prerequisite: FDNT 252.

FDNT 286 INSTITUTION FOOD PREPARATION 3
 Instruction and laboratory experience in large quantity food preparation and food cost control. Check with instructor before registering for this class.

FDNT 412 FOODS IN CULTURES OF THE WORLD 3
 Preparation of regional and national foods emphasizing cultural ethnic and environmental factors. Application of scientific principles in specialized food preparation. Prerequisite: Adequate background in food preparation.

FDNT 422 EXPERIMENTAL COOKERY 3
 Development of experimental methods, their application of investigations in cookery and the skills involved; acquaintance with the literature in this field; preparation of the student for independent investigations in foods. Prerequisites: FDNT 101, 102; FDNT 103; and CHEM 101, 102 or CHEM 141, 142, 143 or equivalent.

FDNT 437, 438 COMMUNITY NUTRITION 2, 1
 Survey of current community nutrition problems and of programs designed to alleviate the problems; food habits of population groups which have a high incidence of malnutrition; implications of fad diets. Field experience spring quarter. Prerequisite: FDNT 220 or permission of instructor.

FDNT 441, 442 ADVANCED NUTRITION 2, 2
 A scientific study of nutrition involving digestion and metabolic processes and products; selection of an optimum diet for health; review of current nutritional literature and preparation of the student for independent investigations in nutrition research. Prerequisites: FDNT 220; CHEM 101, 102 or CHEM 141, 142, 143.

FDNT 443 DIET IN DISEASE 3
 Recent development in the dietary treatment of disease in which nutrition plays a major role. Experience in independent use of journal literature in the field. Class presentation of research project in the field. Laboratory experience in dietary care of patients in hospital setting. Prerequisite: FDNT 220 or equivalent.

FDNT 447 INSTITUTION FOOD PURCHASING 3
 Marketing operations, buying procedures, food selection and care. Inspection of merchandise at markets and wholesalers. Check with instructor before registering for this course.

FDNT 448 INSTITUTION FOOD MANAGEMENT 4
 Principles of organization, qualifications for institution managers, planning of work and budget analysis. This course offers practical work in the school cafeteria for those who are interested in being managers in institution food services. Field experience is included in this course. Prerequisite: FDNT 286 or permission of instructor.

HOME ECONOMICS (HMEC)

HMEC 100 INTRODUCTION TO HOME ECONOMICS 2
 Orientation in the areas of home economics and a study of the field in terms of history, philosophy and professional opportunities.

HMEC 201 HOUSEHOLD EQUIPMENT 3
 Selection, operation and care of household appliances, electricity in the home and kitchen planning.

HMEC 222 ART IN EVERYDAY LIVING 3
 Introduction in the use of art elements giving consideration to line, form and color as applied in the fundamental principles of design and the various aspects of the home, clothing and everyday living. Problems in selecting and designing.

HOME ECONOMICS

HMEC 223 INTRODUCTORY INTERIOR DESIGN	3
A study of the basic principles of design as it relates to the home and its decor. Prerequisite: HMEC 222.	
HMEC 241 CLOTHING FUNDAMENTALS	3
A course presenting the fundamental processes of hand and machine sewing; construction and selection of simple garments.	
HMEC 242, 243 CLOTHING SELECTION AND CONSTRUCTION	3, 3
Aims to develop good taste in dress and to give an appreciation in selection of clothing from standpoint of beauty, health and economy; pattern alterations, fitting problems and use of commercial patterns: construction of garments using natural and synthetic materials. Construction of lingerie articles in spring quarter. Prerequisite: HMEC 241 or equivalent.	
HMEC 269 TEXTILES	3
A study of basic fibers, weaves and textile fabrics including characteristics, construction, use, selection and care of fabrics used in clothing and home furnishings.	
HMEC 301 CONSUMER EDUCATION	4
A study of the consumer in the current world, his responsibilities and protection. Field trips arranged.	
HMEC 302 BEGINNING WEAVING	3
Principles, techniques and development of handweaving. Construction of handwoven articles.	
HMEC 346 HOUSEHOLD MANAGEMENT	3
Fundamental concepts in the management of family resources, time, energy, income and the use of credit. A theory course supplemented with a practical problem in the community.	
HMEC 403 ADVANCED WEAVING	3
Application of basic principles of weaving to original designs through the use of hand spinning, dyeing and weaving. Prerequisite: HMEC 302 or equivalent.	
HMEC 424, 425 INTERIOR DESIGN	3, 3
A study of period furniture and the decorative arts of the past as a background for an understanding of what is good, true and beautiful in home decoration; instruction in and application of the principles governing the selection of furnishings for the home and their arrangement with appropriate backgrounds. Must be taken in sequence unless by permission of instructor.	
HMEC 461, 462 TAILORING	2, 2
Custom tailoring techniques involved in the construction of coats and suits using wool and synthetic materials. Prerequisite: HMEC 242, 243 or equivalent.	
HMEC 472 METHODS OF TEACHING HOME ECONOMICS	3
The principles and practice of teaching home economics on the elementary and secondary levels, as well as adult education classes. Special attention will be given to the newer methods of presentation in classroom, laboratory and community demonstrations. Observation, demonstration and class presentation are required of the students as a part of this course.	
HMEC 486 ADVANCED INTERIOR DESIGN	3
Advanced study in interior decoration with advice, estimates and actual work on decorating problems. Prerequisites: HMEC 222; HMEC 223; HMEC 424, 425 or equivalent.	
HMEC 496 SEMINAR	1
Reading and discussion of recent literature and research; various aspects of professional ethics considered in areas of home economics.	

CHILD AND FAMILY SCIENCES (CFSC)**CFSC 282 CHILD DEVELOPMENT** Monday to Friday, 9:00 a.m. to 12:00 noon, 12:30 p.m. to 3:00 p.m. **3**

A study of the care and development of young children, with special reference to home education and nutrition.

SOCI 225 MARRIAGE AND FAMILY LIFE **2**

See the Sociology and Social Work section of this bulletin.

SOCI 324 HUMAN DEVELOPMENT AND THE FAMILY **4**

See the Sociology and Social Work section of this bulletin.

SOCI 325 SOCIAL PSYCHOLOGY OF FAMILY LIFE **3**

See the Sociology and Social Work section of this bulletin.

The teacher of industrial arts is associated with the managerial, engineering, technical and supervisory activities of the industrial world. He is technically broadly oriented with a broad preparation for manufacturing management in industry. Possessing much of the "know why" of engineering and science, and the "know-how" of industry, the industrial technologist is able to work with and contribute to the ideas of professional engineers and scientists, as well as supervise and manage the utilization of materials and machines for producing, developing and testing industrial products.

The teacher of industrial arts possesses a broad background in the products and processes of industry. He has developed a degree of skill in several areas of industrial technology and is equipped to pass on to his students the benefits of America's industrial heritage.

Courses in industrial technology will provide the teacher with the opportunity of developing his technical skills and a second major or strengthening his basic studies in order to better fit him for teaching industrial subjects.

Associate of Science degrees are offered in **Industrial Technology**, **Electronics Technology**, **Aviation Technology**, **Plant Maintenance Technology**, **Automotive Technology**, **Industrial Maintenance Technology**, **Graphics Technology**, **Adhesive Technology**, **Biomedical Technology** and **Computer Technology**.

The industrial technology degree is offered in conjunction with the Associate of Science degree, and a minor in one of the following areas:

Associate of Science degrees are offered in **Adhesive Technology**, **Aviation Technology**, **Electronics Technology**, **Graphics Technology**, **Plant Maintenance Technology**. Each curriculum is designed to prepare graduates for employment in that particular field. In each case, a broad technical background is offered balancing theory with laboratory experience. These programs are especially designed to serve the student who wishes to complete his technical training in a Christian environment with minimal general studies and tiene requirements. The programs are planned in such a way that continuance in the baccalaureate program may occur with minimal loss of credit. The Associate of Science degree requires the completion of 96 quarter hours.

The certificate programs are designed for completion in one year with almost total emphasis on the technical specialty. The following programs offer the

RETIROO HALL — 1000 Service Associate Association Course

See the [topic page](#) for more information on the [Prairie](#).

TEXILES
Weaves and textile fabrics, such as carpets, curtains, upholstery, etc., constitute a large item of the cost of living and care of fibres used in them is important.

Highly developed numeracy is a key skill in the current world of work and in personal finance and protection. PISA 2012 results show that the United States is one of the best performing countries in the world in mathematics.

Fig. 3. The complex techniques and development of hand-woven basketry in the Americas. *Construction of hand-woven*

HMPC M6 HOUSEHOLD

and the cost of energy, income, and the cost of credit are represented with a practical problem in the

and the use of

An architectural rendering of a proposed school addition. The design features a modern, multi-story structure with a prominent wooden facade and large glass windows. The addition is connected to the existing school building, which has a similar architectural style. The rendering shows the building in a perspective view, with trees and a clear sky in the background.

18. *Leucosia* *leucosia* (L.) *leucosia* (L.) *leucosia* (L.)

and as adult education classes. Special attention will be given to methods of presentation in classroom, laboratory and community demonstrations. Observation, demonstration and class presentation are required of the students as a part of this course.

KELLOGG HALL — Food Service, Student Association Center

INDUSTRIAL TECHNOLOGY

E. Liske, Chairman; C. Blake, L. Canaday, D. Cowin, D. Dawes, G. Fisher, T. Graham, K. Gruesbeck, A. Perry, C. Trautwein, D. Visger.

The Industrial Technology department provides quality technological instruction in a Christian environment. Various fields of technology are presented with the express purpose of preparing students as teachers of industrial arts or for careers in industry as industrial technologists.

The four-year industrial technology college graduate is associated with the managerial, engineering, scientific and supervisory activities of the industrial world. He is technoscientifically oriented with a broad preparation for manufacturing management in industry. Possessing much of the "know-why" of engineering and science, and the "know-how" of industry, the industrial technologist is able to work with and contribute to the ideas of professional engineers and scientists, as well as supervise and manage the utilization of materials and machines for producing, distributing and servicing industrial products.

The teacher of industrial arts possesses a broad background in the products and processes of industry. He has developed a degree of skill in several areas of industrial technology and is equipped to pass on to his students the benefits of America's industrial heritage.

Courses in industrial technology also provide the nonmajor with the opportunity of developing occupational skills in a second field or strengthening his background in the applied arts to better fit him for life in today's highly technologically oriented society.

Programs leading to the Bachelor of Science degree are Industrial Arts Education, Automotive Technology, Biomedical Electronics Technology, Electronics Technology, Graphics Technology, Industrial Technology, Plant Maintenance Technology.

The industrial technology department also offers majors leading to the Associate of Science degree and a number of certificate programs.

Associate of Science degrees are offered in Automotive Technology, Aviation Technology, Electronics Technology, Graphics Technology, Plant Maintenance Technology. Each curriculum is designed to prepare graduates for employment in that particular field. In each case, a broad technical background is offered balancing theory with laboratory experience. These programs are especially designed to serve the student who wishes to complete his technical training in a Christian environment with minimal general studies and time requirements. The programs are planned in such a way that continuance in the baccalaureate program may occur with minimal loss of credit. The Associate of Science degree requires the completion of 96 quarter hours.

The certificate programs are designed for completion in one year with almost total emphasis on the technical specialty. The following programs offer the

INDUSTRIAL TECHNOLOGY

opportunity of quality short-term technical training in a Christian environment: Auto Mechanics, Aviation, Electricity/Electronics, Plant Maintenance, Printing, Offset Copy Preparation.

These programs are planned in such a way that continuance in a degree program may occur with minimal loss of credit. To qualify for a certificate, the student must maintain a cumulative grade-point average of 2.0. The certificate program requires the completion of 48 quarter hours.

MAJOR IN INDUSTRIAL ARTS EDUCATION (Bachelor of Science)

A student majoring in industrial arts education must complete 63 quarter hours in the major, certification requirements as listed in the education section of this bulletin for the provisional Washington State secondary teaching certificate, and the general studies program for the baccalaureate degree as outlined in this bulletin. It is recommended that a minor be chosen from instructional areas taught on the secondary level.

Major Requirements:

DRFT 121, 122	Technical Drawing	6
INDS 124	Introduction to Industry	1
GRPH 126	Lettering	2
INDS 221, 222, 223	Wood Products and Processes	6
DRFT 226 or DRFT 236	Architectural Drawing	3
	Electrical and Electronics Drawing	
Minimum of six quarter hours in each of three areas chosen from		
Automotive, Electronics, Graphic Arts, Industrial Crafts,		
Metal Machining, Welding		18
INDS 324	Industrial Design	3
INDS 364	Industrial Safety	2
INDS 374	Foundations of Industrial Arts	2
INDS 376	Technical Facility Planning	3
INDS 472	Methods of Course Organization	4
INDS 477	Independent Study (in supervision)	2
INDS 499	Senior Problem	1
Electives (8 must be upper division)		10
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		63

MAJOR IN AUTOMOTIVE TECHNOLOGY (Bachelor of Science)

A student majoring in automotive technology must complete 63 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

AUTO 124, 125, 126	Fundamentals of Automotive Technology	6
INDS 124	Introduction to Industry	1
ELCT 221, 222	Survey of Electronics	6
AUTO 236	Small Gasoline Engines	2

INDUSTRIAL TECHNOLOGY

AUTO 324	Automatic Transmissions	3
AUTO 325	Engine Repair and Maintenance	3
AUTO 326	Engine Diagnosis and Tune-Up	3
AUTO 344, 345	Automotive Service	6
AUTO 356	Air Conditioning	2
INDS 364	Industrial Safety	2
AUTO 365	Diesel Engines	3
INDS 376	Technical Facility Planning	3
INDS 386	Oil Hydraulics	3
INDS 477	Independent Study (in automotive)	3
INDS 499	Senior Problem	1
Electives		16

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates:

MATH 111, 112 ACCT 121, 122, 123 MGMT 171 MGMT 275 ACCT 327, 328, 329 or CPTR 131 and MGMT 375 MKTG 381 or MGMT 466	Mathematics for the Liberal Arts	8
	Principles of Accounting	10
	Principles of Management	4
	Management of Small Businesses	4
	Managerial Cost Accounting	
CPTP 131 and MGMT 375 MKTG 381 or MGMT 466	Data Processing	6
	Supervision	
	Marketing	
CPTP 131 and MGMT 375 MKTG 381 or MGMT 466	Human Relations in Management	4

MAJOR IN BIOMEDICAL ELECTRONICS TECHNOLOGY (Bachelor of Science)

A student majoring in biomedical electronics technology must complete 86 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

ELCT 241, 242	Fundamentals of Electronics	10
ELCT 243	Electronic Circuits	5
INDS 241, 242	Fabrication and Machining of Metals	4
ELCT 297, 298	Electronics Fabrication	2
ELCT 326	Hospital Safety	2
ELCT 331, 332, 333	Medical Electronics	9
ELCT 361	Linear Integrated Circuits	5
ELCT 362	Digital Integrated Circuits	5
ELCT 381, 382, 383	TV Systems and Circuits Analysis	9
ELCT 466	Computer Circuits and Systems	5
ELCT 490	Directed Hospital Experience	<u>30</u>
		86

INDUSTRIAL TECHNOLOGY

Required Cognates:

MATH 117	Precalculus	5-8
or		
MATH 121, 122	Fundamentals of Mathematics I, II	
BIOL 201, 202	Anatomy and Physiology	8
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3
CPTR 121	Computer Science I	2
PHYS 352, 353	Radioisotope Techniques	4

MAJOR IN ELECTRONICS TECHNOLOGY (Bachelor of Science)

A student majoring in electronics technology must complete 63 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. It is recommended that a minor in Business, Communications, Computer Science or Mathematics be chosen.

Major Requirements:

INDS 124	Introduction to Industry	1
ELCT 241, 242	Fundamentals of Electronics	10
ELCT 243	Electronic Circuits	5
DRFT 236	Electrical and Electronic Drawing	3
ELCT 297, 298	Electronics Fabrication	2
ELCT 351, 352	Radio Communications	8
ELCT 361	Linear Integrated Circuits	5
ELCT 362	Digital Integrated Circuits	5
ELCT 381, 382, 383	TV Systems and Circuit Analysis	9
ELCT 466	Computer Circuits and Systems	5
INDS 277/477	Independent Study (in electronics)	3
INDS 499	Senior Problem	1
Electives		6

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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Required Cognate:

MATH 117	Precalculus	5-8
or		
MATH 121, 122	Fundamentals of Mathematics	

MAJOR IN GRAPHICS TECHNOLOGY (Bachelor of Science)

A student majoring in graphics technology must complete 63 quarter hours in the major, the required cognates (choose either the commercial art or business emphasis), and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

PRNT 121, 122, 123	Introduction to Graphics Arts	6
INDS 124	Introduction to Industry	1
GRPH 154	Principles of Photography	2
PRNT 221, 222, 223	Offset Lithography	9

INDUSTRIAL TECHNOLOGY

PRNT 271, 272, 273	Machine Composition	6
PRNT 295	Printing Layout and Design	3
PRNT 321, 322	Advanced Letterpress Printing	6
PRNT 326	Printing Estimating	3
GRPH 355	Applied Photography	3
INDS 364	Industrial Safety	2
INDS 376	Technical Facility Planning	3
PRNT 421, 422	Advanced Lithography	6
INDS 277/477	Independent Study (in graphics)	2
INDS 499	Senior Problem	1
Electives		10

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: (choose commercial art or business emphasis)

Commercial Art Emphasis:

ART 161, 162, 163	Design	9
ART 184, 185, 186	Drawing	6
ART 244, 245, 246	Commercial Art	6
ART 314, 315, 316	Advertising Design	9

Business Emphasis:

ACCT 121, 122, 123	Principles of Accounting	10
MGMT 171	Principles of Management	4
MGMT 275	Management of Small Businesses	4
ACCT 327, 328, 329	Managerial Cost Accounting	
or		
CPTR 131		
and		
MGMT 375		
MKTG 381		
or		
MGMT 476		
	Data Processing	6
	Supervision	
	Marketing	4
	Human Relations in Management	

MAJOR IN INDUSTRIAL TECHNOLOGY (Bachelor of Science)

A student majoring in industrial technology must complete 63 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. This program offers considerable latitude in selection of courses, and is designed to provide the student with a broad background in industry and business.

Major Requirements:

DRFT 121, 122	Technical Drawing	6
INDS 124	Introduction to Industry	1
INDS 221, 222, 223	Wood Products and Processes	6
DRFT 226	Architectural Drawing	
or		
DRFT 236	Electrical and Electronic Drawing	3
INDS 241, 242, 243	Fabrication and Machining of Metals	6
INDS 364	Industrial Safety	2

INDUSTRIAL TECHNOLOGY

INDS 499	Senior Problem	1
Electives (22 must be upper division)		38

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 63

Required Cognates:

ACCT 121, 122, 123	Principles of Accounting	10
MGMT 171	Principles of Management	4
MGMT 275	Management of Small Businesses	4
ACCT 327, 328, 329 or CPTR 131 and MGMT 375	Managerial Cost Accounting	
MKTG 381 or MGMT 476		
	Data Processing	6
	Supervision	
	Marketing	4
	Human Relations in Management	

MAJOR IN PLANT MAINTENANCE TECHNOLOGY (Bachelor of Science)
A student majoring in plant maintenance technology must complete 63 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

DRFT 121	Technical Drawing	3
AUTO 124, 125, 126	Fundamentals of Automotive Technology	6
INDS 124	Introduction to Industry	1
INDS 134; 135; 137; 138	Welding	4
ELCT 221, 222	Survey of Electronics	6
INDS 221, 222, 223	Wood Products and Processes	6
DRFT 226	Architectural Drawing	3
INDS 241, 242, 243	Fabrication and Machining of Metals	6
INDS 324	Industrial Design	3
INDS 328	Applied Maintenance	6
AUTO 356	Air Conditioning	2
INDS 376	Technical Facility Planning	3
INDS 386	Oil Hydraulics	3
INDS 499	Senior Problem	1
Electives (8 must be upper division)		10

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 63

Required Cognates:

ACCT 121, 122, 123	Principles of Accounting	10
MGMT 171	Principles of Management	4
MGMT 275	Management of Small Businesses	4

INDUSTRIAL TECHNOLOGY

ACCT 327, 328, 329 or CPTR 131 and MGMT 375 MKTG 381 or MGMT 476	}	Managerial Cost Accounting	of Science & AIAA
		Data Processing	6
		Supervision	6
		Marketing	4
		Human Relations in Management	4

AUTOMOTIVE TECHNOLOGY (Associate of Science Degree)

A student specializing in automotive technology must complete 55 quarter hours in the area, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

AUTO 124, 125, 126	Fundamentals of Automotive Technology	6
INDS 124	Introduction to Industry	1
ELCT 221, 222	Survey of Electronics	6
AUTO 236	Small Gasoline Engines	2
INDS 277	Independent Study	3
AUTO 324	Automatic Transmissions	3
AUTO 325	Engine Repair and Maintenance	3
AUTO 326	Engine Diagnosis and Tune-Up	3
AUTO 344, 345	Automotive Service	6
AUTO 356	Air Conditioning	2
INDS 364	Industrial Safety	2
AUTO 365	Diesel Engines	3
INDS 386	Oil Hydraulics	3
Electives		12

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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AVIATION TECHNOLOGY (Associate of Science Degree)

A student specializing in aviation technology must complete 55 quarter hours in the area, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

INDS 124	Introduction to Industry	1
AVIA 124	Introduction to Aviation	2
AVIA 141	Private Pilot Lectures	4
AVIA 142	Private Pilot Flight Training	5
AVIA 161, 162, 163	Commercial Pilot Lectures	6
AVIA 221, 222, 223	Commercial Pilot Flight Training	13
AVIA 236	Meteorology	3
AVIA 244	Advanced Aerodynamics and Performance	3

INDUSTRIAL TECHNOLOGY

AVIA 256	Principles of Aircraft Maintenance	3
INDS 277	Independent Study	3
AVIA 321	Instrument Pilot Lectures	4
AVIA 322	Instrument Pilot Flight Training	5
AVIA 335	Advanced Navigation	3
		55

ELECTRONICS TECHNOLOGY (Associate of Science Degree)

A student specializing in electronics technology must complete 55 quarter hours in the area, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

INDS 124	Introduction to Industry	1
ELCT 241, 242	Fundamentals of Electronics	10
ELCT 243	Electronic Circuits	5
DRFT 236	Electrical and Electronic Drawing	3
INDS 277	Independent Study	3
ELCT 297, 298	Electronics Fabrication	2
ELCT 361	Linear Integrated Circuits	5
ELCT 362	Digital Integrated Circuits	5
ELCT 381, 382, 383	TV Systems and Circuits Analysis	9
ELCT 466	Computer Circuits and Systems	5
Electives		7

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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GRAPHICS TECHNOLOGY (Associate of Science Degree)

A student specializing in graphics technology must complete 55 quarter hours in the area, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

PRNT 121, 122, 123	Introduction to Graphic Arts	6
INDS 124	Introduction to Industry	1
GRPH 154	Principles of Photography	2
PRNT 221, 222, 223	Offset Lithography	12
PRNT 271, 272, 273	Machine Composition	9
PRNT 295	Printing Layout and Design	3
PRNT 321, 322	Advanced Letterpress Printing	8
GRPH 355	Applied Photography	3
INDS 364	Industrial Safety	2
INDS 376	Technical Facility Planning	3
Electives		6

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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INDUSTRIAL TECHNOLOGY

PLANT MAINTENANCE TECHNOLOGY (Associate of Science Degree)

A student specializing in maintenance technology must complete 55 quarter hours in the area, and the general studies program for the associate degree as outlined in this bulletin.

Area Requirements:

DRFT 121	Technical Drawing	3
AUTO 124, 125, 126	Fundamentals of Auto Technology	6
INDS 124	Introduction to Industry	1
INDS 134; 135; 137; 138	Welding	4
ELCT 221, 222	Survey of Electronics	6
INDS 221, 222, 223	Wood Products and Processes	6
DRFT 226	Architectural Drawing	3
INDS 241, 242, 243	Fabrication and Machining of Metals	6
INDS 324	Industrial Design	3
INDS 328	Applied Maintenance	6
AUTO 356	Air Conditioning	2
INDS 386	Oil Hydraulics	3
Electives		6

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

AUTO MECHANICS (Certificate)

A student taking auto mechanics must complete 38 quarter hours in the area, and the general studies program for the certificate program as outlined in this bulletin.

Area Requirements:

AUTO 124, 125, 126	Fundamentals of Automotive Technology	6
INDS 124	Introduction to Industry	1
INDS 134; 135; 137; 138	Welding	4
ELCT 221, 222	Survey of Electronics	6
AUTO 236	Small Gasoline Engines	2
AUTO 325	Engine Repair and Maintenance	3
AUTO 326	Engine Diagnosis and Tune-Up	3
AUTO 344, 345	Automotive Service	6
Electives		7

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

AVIATION (Certificate)

A student taking aviation must complete 38 quarter hours in the area and the general studies program for the certificate program as outlined in this bulletin.

Area Requirements:

AVIA 141	Private Pilot Lectures	4
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INDUSTRIAL TECHNOLOGY

AVIA 142	Private Pilot Flight Training	5
AVIA 161, 162, 163	Commercial Pilot Lectures	6
AVIA 221, 222, 223	Commercial Pilot Flight Training	13
AVIA 321	Instrument Pilot Lectures	4
AVIA 322	Instrument Pilot Flight Training	5
Electives		<u>1</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 38

ELECTRICITY/ELECTRONICS (Certificate)

A student taking electricity/electronics must complete 38 quarter hours in the area, and the general studies program for the certificate program as outlined in this bulletin.

Area Requirements:

INDS 124	Introduction to Industry	1
ELCT 241, 242	Fundamentals of Electronics	10
ELCT 243	Electronic Circuits	5
DRFT 236	Electrical and Electronic Drawing	3
INDS 277	Independent Study	2
ELCT 297, 298	Electronics Fabrication	2
INDS 328	Applied Maintenance	3
Electives		<u>12</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 38

OFFSET COPY PREPARATION (Certificate)

A student taking offset copy preparation must complete 38 quarter hours in the area, and the general studies program for the certificate program as outlined in this bulletin.

Area Requirements:

PRNT 121, 122, 123	Introduction to Graphic Arts	6
INDS 124	Introduction to Industry	1
GRPH 154	Principles of Photography	2
PRNT 221, 222	Offset Lithography	8
PRNT 271, 272, 273	Machine Composition	9
PRNT 295	Printing Layout and Design	3
GRPH 355	Applied Photography	3
Electives		<u>6</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department. 38

PLANT MAINTENANCE (Certificate)

A student taking plant maintenance must complete 38 quarter hours in the area, and the general studies program for the certificate program as outlined in this bulletin.

INDUSTRIAL TECHNOLOGY

Area Requirements:

DRFT 121	Technical Drawing	3
AUTO 124, 125, 126	Fundamentals of Automotive Technology	6
INDS 124	Introduction to Industry	1
INDS 134, 135 137, 138	Welding	4
INDS 221, 222, 223	Wood Products and Processes	6
DRFT 226	Architectural Drawing	3
INDS 241, 242, 243	Fabrication and Machining of Metals	6
INDS 328	Applied Maintenance	3
Electives		<u>6</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 38

PRINTING (Certificate)

A student taking printing must complete 38 quarter hours in the area, and the general studies program for the certificate program as outlined in this bulletin.

Area Requirements:

PRNT 121, 122, 123	Introduction to Graphic Arts	6
INDS 124	Introduction to Industry	1
PRNT 221, 222, 223	Offset Lithography	12
PRNT 271, 272	Machine Composition	4
PRNT 295	Printing Layout and Design	3
PRNT 321, 322	Advanced Letterpress Printing	8
Electives		<u>4</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 38

MINOR IN AVIATION

A student minoring in aviation must complete 30 quarter hours; 3 quarter hours must be upper division; AVIA 124; AVIA 141 and AVIA 142 are required. Approval of aviation adviser required.

MINOR IN INDUSTRIAL ARTS EDUCATION

A student minoring in industrial arts education must complete 30 quarter hours; DRFT 121, 122; INDs 124; INDs 221, 222, 223; INDs 374 or INDs 428; INDs 472 and INDs 477 are required. Approval of industrial technology adviser required.

MINOR IN INDUSTRIAL TECHNOLOGY

A student minoring in industrial technology must complete 30 quarter hours; 3 quarter hours must be upper division; DRFT 121 and INDs 124 are required. Approval of industrial technology adviser required.

INDUSTRIAL TECHNOLOGY

AUTOMOTIVE (AUTO)

AUTO 124, 125, 126 FUNDAMENTALS OF AUTOMOTIVE TECHNOLOGY 2, 2, 2
A study of the automobile with emphasis on construction details and service procedures. Live engines and dry units are used in the laboratory. Autumn: engine units; winter: fuel and electrical system units; spring: power train and chassis units. One lecture and one laboratory per week.

AUTO 236 SMALL GASOLINE ENGINES 2

A study of construction details and operation of small two- and four-stroke cycle engines. Live engines are used to study mechanical features and service of fuel, lubrication, ignition and cooling systems. One class and one laboratory per week.

AUTO 324 AUTOMATIC TRANSMISSIONS 3

Instruction in the operation of planetary gears, fluid drives and hydraulic controls as used in automatic transmissions. Dry units will be used in the laboratory to learn disassembly, reassembly and adjustments of typical automatic transmissions. Two lectures and one laboratory per week. Prerequisite: AUTO 126.

AUTO 325 ENGINE REPAIR AND MAINTENANCE 3

A study of engine rebuilding operations through disassembly and reassembly. Machining operations such as cylinder reconditioning, valve train servicing, lubrication system servicing and cooling system servicing will be covered. Engine designs and valve timing will also be considered. Two lectures and one laboratory per week. Prerequisite: AUTO 124.

AUTO 326 ENGINE DIAGNOSIS AND TUNE-UP 3

Instruction in engine tune-up and diagnosis using meters and the oscilloscope. Compression tests, battery testing, electrical system testing and fuel system checking will be emphasized using Sun and Allen test equipment. Two lectures and one laboratory per week. Prerequisite: AUTO 124.

AUTO 344, 345 AUTOMOTIVE SERVICE 3, 3

Instruction in service operations as performed in service stations and repair garages. The automotive chassis including the power train, brake systems, suspension and wheel alignment and general services are included. Two lectures and one laboratory per week.

AUTO 356 AIR CONDITIONING 2

Instruction in the principles of refrigeration and requirements of air conditioning for body comfort. The operation and servicing of the compressor, condenser, expansion valve, evaporator and system controls will be emphasized. System purging, evacuation and refrigerant replacement will be covered.

AUTO 365 DIESEL ENGINES 3

Instruction in diesel engine theory including types of engines, fuel injection systems, air induction systems, exhaust systems, cooling systems, starting and controls. Prerequisites: AUTO 124, 125, AUTO 325.

AVIATION (AVIA)

AVIA 124 INTRODUCTION TO AVIATION 2

A study of aviation history and the development into the National Air Transportation System. Seventh-day Adventist uses and needs in the field of aviation with an introduction to the mission flying program of the church.

AVIA 141 PRIVATE PILOT LECTURES 4

Basic concepts of aircraft performance, navigation, principles of flight and meteorology. Interpretation and application of Federal Aviation Regulations, uses of airman's publications and services.

AVIA 142 PRIVATE PILOT FLIGHT TRAINING 5

Flight and ground instruction to prepare the student to take the Private Pilot flight test and meet requirements for the private certificate.

INDUSTRIAL TECHNOLOGY

AVIA 161 COMMERCIAL PILOT LECTURES I	2
Basic meteorology, aviation weather, airports and charts, commercial pilot maneuvers and advanced radio procedure.	
AVIA 162 COMMERCIAL PILOT LECTURES II	2
Navigation procedures, analysis of maneuvers and advanced aircraft systems.	
AVIA 163 COMMERCIAL PILOT LECTURES III	2
Advanced aircraft performance, FAA regulations pertinent to commercial operations, review for FAA written.	
AVIA 221 COMMERCIAL PILOT FLIGHT TRAINING I	4
An introduction to commercial maneuvers and advanced procedures in flying and navigation.	
AVIA 222 COMMERCIAL PILOT FLIGHT TRAINING II	4
Procedures in cross country flying and night operations.	
AVIA 223 COMMERCIAL PILOT FLIGHT TRAINING III	5
Training to develop a superior pilot by perfecting coordination, judgment and flying ability. Prepares student for the commercial flight test.	
AVIA 236 METEOROLOGY	3
The nature of the atmosphere, winds, moisture, temperature, air masses and fronts. Weather forecasting with emphasis on aviation weather. Designed for pilots but open to any student.	
AVIA 244 ADVANCED AERODYNAMICS AND AIRCRAFT PERFORMANCE	3
Aircraft performance, design characteristics and federal certification of aircraft. Performance optimization.	
AVIA 256 PRINCIPLES OF AIRCRAFT MAINTENANCE	3
A study of the routine maintenance and inspections that can be performed by the pilot.	
AVIA 321 INSTRUMENT PILOT LECTURES	4
A review of aerodynamics, performance, weight and balance, meteorology and computer usage especially as they apply to instrument flight. A detailed study of IFR charts, regulations and procedures.	
AVIA 322 INSTRUMENT PILOT FLIGHT TRAINING	5
A course to prepare the student to meet the experience, knowledge and skill requirements for the FAA instrument rating.	
AVIA 335 ADVANCED NAVIGATION	3
A study of advanced systems and procedures used in aerial navigation.	
AVIA 357 FLIGHT INSTRUCTOR—AIRPLANE LECTURES	2
A course designed to prepare the student to pass the Federal Aviation Administration (FAA) Flight Instructor written examination. The student will learn the fundamentals of instructing and the analysis and performance of maneuvers. Concepts of aircraft performance and the interpretation and application of pertinent FAA regulations are also emphasized.	
AVIA 358 FLIGHT INSTRUCTOR—AIRPLANE FLIGHT TRAINING	3
A course designed to prepare the student to successfully meet the experience, knowledge and skill requirements for the Federal Aviation Administration Flight Instructor Certificate (airplane rating). The minimum standards for acceptable performance are found in the FAA Flight Instructor Practical Test Guide.	
AVIA 457 FLIGHT INSTRUCTOR—INSTRUMENT LECTURES	2
A course designed to prepare the student to pass the Federal Aviation Administration (FAA) Flight Instructor Instrument written examination. The student will learn the fundamentals of instrument instruction.	
AVIA 458 FLIGHT INSTRUCTOR—INSTRUMENT FLIGHT TRAINING	3
A course designed to prepare the student to successfully meet the experience, knowledge and skill requirements for an FAA Flight Instructor Certificate (instrument rating).	

INDUSTRIAL TECHNOLOGY

DRAFTING (DRFT)

DRFT 121, 122 TECHNICAL DRAWING

3, 3

Care and use of instruments; technical sketching, geometry; orthographic, auxiliary and sectional views; production drawings, pictorial views and developments and intersections—application to practical problems with emphasis on visualization and analysis. Must be taken in sequence. One lecture and three two-hour laboratories per week.

DRFT 226 ARCHITECTURAL DRAWING

3

The fundamentals of designing and drawing house plans including architectural drafting techniques, area planning, floor plans, elevations, sections, schedules and specifications. One lecture and three two-hour laboratories per week.

DRFT 236 ELECTRICAL AND ELECTRONIC DRAWING

3

A specialized course in drafting with emphasis on basic concepts and techniques of delineation of electrical and electronic circuits. Instruction includes schematics, assembly drawings, production illustrations, printed circuitry, interconnection diagrams, graphs and charts. One lecture and three two-hour laboratories per week.

ELECTRONICS (ELCT)

ELCT 221, 222 SURVEY OF ELECTRONICS

3, 3

An introduction to electricity and electronics. Includes study of electrical fundamentals, operation of electric motors and generators, vacuum tubes, transistors and basic electrical and electronic circuits. At the option of the student, laboratory projects may be altered to include preparation for the novice class amateur radio license examination. Students who plan to teach electronics are advised to take ELCT 241, 242; ELCT 243 in lieu of ELCT 221, 222. Two lecture-laboratories per week.

ELCT 241, 242 FUNDAMENTALS OF ELECTRONICS

5, 5

A comprehensive course in the fundamentals of electronics technology designed for both preparatory electronics teachers and technology majors. Included in the study are DC and AC circuits, resonance, filters, electronic measurements and an introduction to solid-state devices. ELCT 221, 222 may be substituted for ELCT 241. Four lectures and one laboratory per week.

ELCT 243 ELECTRONIC CIRCUITS

5

A study of power supply, amplifier and oscillator circuits. Basic circuit design, analysis and troubleshooting. Four lectures and one laboratory session per week.

ELCT 297, 298 ELECTRONICS FABRICATION

1, 1

Individualized study in the techniques of electronics fabrication including chassis construction, printed circuit board construction and electronic packaging. One laboratory per week. May enroll in ELCT 297 and ELCT 298 concurrently. Prerequisite: ELCT 222 or ELCT 241.

ELCT 326 HOSPITAL SAFETY

2

Study of codes and regulations pertaining to hospital safety. Equipment and techniques involved in leakage current tests, conductivity testing in operating rooms, testing of pressure safety devices, radiation safety checks and the correct handling of explosive gases. Prerequisite: ELCT 243. Preferred prerequisite ELCT 333.

ELCT 331, 332, 333 MEDICAL ELECTRONICS

3, 3, 3

The use, calibration and maintenance of electromechanical equipment used in the diagnostic and therapeutic phases of medicine and in the clinical laboratory. Areas of study include patient care and monitoring equipment, cardiovascular measurements, measurements of physical variables, biotelemetry and computer applications in medicine. Prerequisite: ELCT 243. Preferred corequisites: ELCT 361, ELCT 362.

INDUSTRIAL TECHNOLOGY

ELCT 351, 352 RADIO COMMUNICATIONS 4, 4

A study of electronics, radio communications theory and Federal Communications Commission regulations, designed to help the student qualify for FCC licenses through radio-telephone first class with endorsement for radar. Study is given to testing and maintenance of studio and communications equipment. Three lectures and one laboratory per week. Prerequisite: ELCT 243 or equivalent.

ELCT 361 LINEAR INTEGRATED CIRCUITS 5

Applications of linear integrated circuits including I.C. fabrication, differential amplifiers, operational amplifiers, voltage regulators, and special purpose linear I.C. devices. Four lectures and one laboratory per week. Prerequisite: ELCT 243.

ELCT 362 DIGITAL INTEGRATED CIRCUITS 5

Basic principles and applications of digital I.C.'s. Topics include characteristics of logic families, and application of I.C. gates, clocks, counters, registers, displays and memories. Laboratory experience emphasizes application of IC devices commonly used in industry. Four lectures and one laboratory per week.

ELCT 381, 382, 383 TELEVISION SYSTEMS AND CIRCUIT ANALYSIS 3, 3, 3

A study of television transmission principles, the theory and operation of monochrome and color television receiver circuits, community antenna television systems and closed-circuit television systems. Special emphasis is given to the use of logical systems and circuit analysis techniques in troubleshooting. Must be taken in sequence. Two lectures and one laboratory per week. Prerequisite: ELCT 243.

ELCT 466 COMPUTER CIRCUITS AND SYSTEMS 5

Theory and application of digital and analog systems. Included in study will be computer circuitry, interface devices and physical systems control. Laboratory activity emphasizes construction and troubleshooting techniques. Four lectures and one laboratory per week. Prerequisite: ELCT 362.

ELCT 490 DIRECTED HOSPITAL EXPERIENCE 15; 30

Full-time work experience with supplementary training in the biomedical electronics department of an approved hospital; taken only after completion of all course work required for the biomedical electronics program. Application must be made during the first two weeks of the quarter prior to the actual field experience.

GRAPHICS (GRPH)

GRPH 126 LETTERING 2

Basic principles of proportion and design applied to the formation of the letters of the alphabet for display purposes, with special emphasis on a wide variety of methods and materials. Three lecture-laboratory sessions per week.

GRPH 154 PRINCIPLES OF PHOTOGRAPHY 2

Basic principles involved in both color and black-and-white. Theory and practice of exposure, development, contact printing and enlarging. Study of various types of equipment.

GRPH 355 APPLIED PHOTOGRAPHY 3

Composition, photochemistry, optics and advanced study of printing, enlarging and processing of chromatic and monochromatic mediums with manipulative experience. Two lectures and one laboratory per week. Prerequisite: GRPH 154 or equivalent.

GRPH 358 PHOTO ASSIGNMENTS 1

Individualized assignments to provide a variety of experience in commercial and publication photography, embodying shooting, processing and finishing black and white prints. One laboratory per week. Prerequisite: GRPH 355 or equivalent.

GRPH 358. One laboratory per credit per week. One or two hours any quarter, maximum, two.

INDUSTRIAL TECHNOLOGY

INDUSTRIAL CRAFTS (INCR)

INCR 126 BOOKBINDING

Practical basic course in the art and craft of bookbinding, designed to afford the student a comprehensive knowledge of the steps in the process of rebinding books and allied crafts. One lecture and one laboratory per week.

INCR 224 ART METALS

Utilization of semiprecious metals to develop skills in metal spinning and craft work in copper, brass, aluminum and pewter with processes applied to projects of practical value and artistic merit. Taught alternate years. One lecture and one laboratory per week.

INCR 225 PLASTICS

An introduction to a variety of operations in plastics involving technical information and experimentation in fundamental manufacturing processes. Taught alternate years. One lecture and one laboratory per week.

INCR 226 LEATHERS

Technical information and fundamental operations including tooling, carving, stamping, lacing, modeling, forming and finishing. Taught alternate years. One lecture and one laboratory per week.

INCR 264 SILK SCREEN PRINTING

Basic screen printing including various methods of stencil preparation, types of materials used and preparation of equipment. One lecture and one laboratory per week.

GENERAL/METALS/PROFESSIONAL/WOODS (INDS)

INDS 124 INTRODUCTION TO INDUSTRY

A study of organization in industry, union-management relationships, vocational and industrial arts teaching patterns, the place of the Seventh-day Adventist in industry. Limited field trips will be included to both industry and schools.

INDS 134 GAS WELDING LABORATORY

Laboratory course involving basic instruction and experience in gas welding. Recommended corequisite: INDS 234. One laboratory per week.

INDS 135 ARC WELDING LABORATORY

Laboratory course involving basic instruction and experience in arc welding. Recommended corequisite: INDS 235. One laboratory per week.

INDS 136 SPECIALIZED WELDING LABORATORY

Laboratory course involving basic instruction and experience in specialized welding including metallic inert gas (MIG) and tungsten inert gas (TIG). Recommended corequisite: INDS 236. Prerequisite: INDS 135. One laboratory period per week.

INDS 137 GAS WELDING THEORY

Individualized units in gas welding theory. Prerequisite or corequisite: INDS 134.

INDS 138 ARC WELDING THEORY

Individualized units in arc welding theory. Prerequisite or corequisite: INDS 135.

INDS 139 SPECIALIZED WELDING THEORY

Individualized units in specialized welding theory including metallic inert gas (MIG) and tungsten inert gas (TIG). Prerequisites: INDS 135, INDS 138. Prerequisite or corequisite: INDS 136.

INDS 221, 222, 223 WOOD PRODUCTS AND PROCESSES

An introduction to wood products and processes incorporating uses of basic tools and machines as found in the wood industries. Includes planning and construction of simple furniture. One lecture and one laboratory per week.

INDUSTRIAL TECHNOLOGY

INDS 241, 242, 243 FABRICATION AND MACHINING OF METALS 2, 2, 2

An overview study of metals and metal operations utilizing both theory and practice of:

INDS 241—Various assembly methods including forging, heat treatment, molding, pouring, filing, bending and offhand grinding, and

INDS 242—basic lathe and drill press operations involving metal cutting and measurement, and

INDS 243—associated and succeeding operations such as threading, spinning, tapering, testing, reaming, riveting and use of jigs.

Projects selected incorporate the operations taught and involve "running" of various pieces of equipment common to a basic machine laboratory. One lecture and one laboratory per week.

INDS 324 INDUSTRIAL DESIGN 3

Principles of design as applied to the various industrial arts, including theory of color and study of major periods and styles of furniture.

INDS 328 APPLIED MAINTENANCE 1-6

Practical, on-the-job experience for students of Plant Maintenance Technology in the following areas: power plant, painting, carpentry-cabinetmaking, plumbing, electrical, refrigeration, air conditioning, locksmithing-door hardware, heavy equipment and motor pool. Selected in consultation with adviser. One laboratory per week per quarter. One or two hours per quarter; maximum, six.

INDS 341, 342, 343 FURNITURE DESIGN AND CONSTRUCTION 3, 3, 3

Design and fabrication of complex furniture including cabinet, door and drawer construction, special machine operations, jigs and fixtures, and machine adjustment. Prerequisites: INDS 223 and INDS 324. INDS 324 may be taken concurrently. Two lectures and one laboratory per week. Taught alternate years.

INDS 345 FINISHING MATERIALS AND METHODS

Composition and application of finishing materials, including selection and care of equipment. Two lectures and one laboratory per week. Taught alternate years.

INDS 364 INDUSTRIAL SAFETY 2

An introduction to federal, state and local safety codes applying to materials, material handling and equipment commonly encountered by the industrial technologist. Codes from Occupational Safety and Health Act (OSHA), Washington Industrial Safety and Health Act (WISHA), National Fire Protective Association (NFPA) and Department of Transportation (DOT) will be used as instructional resource material.

INDS 374 FOUNDATIONS OF INDUSTRIAL ARTS 2

The underlying foundations of Industrial Arts in both public and Seventh-day Adventist secondary schools. Emphasis on management, professional growth, legislation and basic organization of industry.

INDS 376 TECHNICAL FACILITY PLANNING

Technical facility planning involving space considerations, structures, environment, service systems, storage and production flow patterns.

INDS 381, 382, 383 MACHINE TOOL OPERATION

Advanced processes of turning and handwork together with operations involving milling, shaping, planing, grinding, cutter sharpening, gear calculations and gear cutting assigned exercises. Prerequisite: INDS 243 or equivalent. Two individualized study units and one arranged laboratory per week.

INDS 386 OIL HYDRAULICS

A study of the principles of pressure and flow, operation of basic hydraulic components, how the various components perform, fundamental hydraulic equipment design, and use and maintenance.

INDS 398 MACHINE AND TOOL MAINTENANCE

Methods of care and maintenance of tools, machines and supplementary equipment. Selection may be made in any field offered. Prerequisite: adequate background in chosen fields. One laboratory per credit per week. One or two hours any quarter; maximum, two.

INDUSTRIAL TECHNOLOGY

INDS 428 HANDWORK ACTIVITIES IN THE ELEMENTARY SCHOOL 3
Study of handwork activities as applied to the elementary grades K-8. Emphasis is on methods of application, materials and processes. Taught alternate years.

INDS 472 METHODS OF COURSE ORGANIZATION 4
Procedures of systematic course preparation including analysis of course of study outline, relation of lesson units and methods of teaching unique to Industrial Arts. Required prior to directed teaching.

INDS 490 COOPERATIVE STUDY PROGRAM 1-6
Open to students who have completed courses in industrial technology and wish to develop proficiency beyond the scope of the laboratory experience. The course will consist of a systematic study contract with periodic job-site visits by the departmental supervisor. Admission only by permission of the department chairman. Application must be made during the first two weeks of the quarter immediately preceding the cooperative study program.

INDS 499 SENIOR PROBLEM 1
A student-selected, departmental-approved research, experiment, project or a problem to demonstrate ability to perform in the major field of instruction that has been followed, and from which graduation is sought. Satisfactory completion of this course constitutes the department's comprehensive degree requirement for those majors in which it is required. Approximately two quarters are required for completion. The student must arrange for this course with his departmental adviser during the first two weeks of the quarter prior to the quarter in which he plans to do his senior project.

PRINTING (PRNT)

PRNT 121, 122, 123 INTRODUCTION TO GRAPHIC ARTS 2, 2, 2
Basic introduction to all the principal methods of printing, with special emphasis on providing a comprehensive background in composition, typographical design and simple presswork. One lecture and one laboratory per week.

PRNT 221, 222, 223 OFFSET LITHOGRAPHY 3, 3, 3/4, 4, 4
Copy preparation, offset photography, plate making and presswork. Two lectures and one laboratory per week. An option designed primarily for those in the associate degree and certificate programs provides four hours per quarter by attending two lectures and two laboratories per week. Prerequisite: PRNT 123.

PRNT 271, 272, 273 MACHINE COMPOSITION 2, 2, 2/3, 3, 3
Care and operation of computerized phototypesetting machines with an introduction to strike-on and hot-metal composers. Main emphasis on the Compuwriter II, but includes practice on Varityper, IBM, Linotype and Intertype machines. One lecture and one laboratory per week. An option designed primarily for those in the associate degree and certificate programs provides three hours by attending one lecture and two laboratories per week. Prerequisite or corequisite: PRNT 123 or equivalent. Also must be able to demonstrate a typing proficiency of at least 35 words per minute.

PRNT 295 PRINTING LAYOUT AND DESIGN 3
Basic principles of design as applied to composition, layout and arrangement in printing. Lectures, demonstrations and assigned individual and group projects. Prerequisite: PRNT 121. (PRNT 123 recommended).

PRNT 321, 322 ADVANCED LETTERPRESS PRINTING 3, 3/4, 4
Hand-fed and automatic presswork, including imposition, markeready, care and operation of equipment for numbering, perforating, scoring, die cutting, folding and other processes of printing production. Two lectures and one laboratory per week. An option designed primarily for those in the associate degree and certificate programs provides four hours per quarter by attending two lectures and two laboratories per week. Prerequisite: PRNT 123 or equivalent.

INDUSTRIAL TECHNOLOGY

PRNT 326 PRINTING ESTIMATING ~~PRNT 326~~ **3**
Supplies, inventory control, pricing and estimating as applied to a commercial printing plant. Prerequisites: PRNT 223 and PRNT 322.

PRNT 421, 422 ADVANCED LITHOGRAPHY **3, 3**
Opportunity for advanced projects in lithographic printing with emphasis on duotones, posterization and process color work. Prerequisite: PRNT 223 or equivalent.

The Biophysics major is offered cooperatively by the departments of biology and physics.

MAJOR IN BIOPHYSICS (Bachelor of Science)

A student majoring in biophysics must complete 32 quarter hours in biology and 38 quarter hours in physics, the required cognates, and the general studies program for the baccalaureate degree as outlined in this section. One summer term at the Marine Station is required.

Biology Requirements:

BIOL 101, 102, 103 General Biology
BIOL 261 Genetics

or
BIOL 264

BIOL 265 General Physiology
BIOL 266 Animal Physiology

BIOL 267 Plant Physiology
BIOL 268 Ecology

BIOL 269 Biochemistry
BIOL 270 Molecular Biology

BIOL 271 Cell Biology
BIOL 272 Cell Biology

BIOL 273 Cell Biology
BIOL 274 Cell Biology

BIOL 275 Cell Biology
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BIOL 395 Cell Biology
BIOL 396 Cell Biology

BIOL 397 Cell Biology
BIOL 398 Cell Biology

BIOL 399 Cell Biology
BIOL 400 Cell Biology



Physics Requirements:

PHYS 111, 112, 113 Introduction to Experimentation **2**
PHYS 114, 115, 116 Relativity of Physics **3**

PHYS 117, 118, 119 Principles of Physics **3**
PHYS 120, 121, 122 Modern Physics **3**

PHYS 123, 124, 125 Modern Physics Laboratory **3**
PHYS 126, 127, 128 Modern Physics Laboratory **3**

PHYS 129, 130, 131 Thermodynamics **3**
PHYS 132, 133, 134 Optics **3**

PHYS 135, 136, 137 Optics Laboratory **3**
PHYS 138, 139, 140 Physics Seminar I **3**

PHYS 141, 142, 143 Simulation and Modeling **3**
PHYS 144, 145, 146 Physics Seminar II **3**

PHYS 147, 148, 149 Fundamentals of Physics **3**
PHYS 150, 151, 152, 153 Physical Chemistry **3**

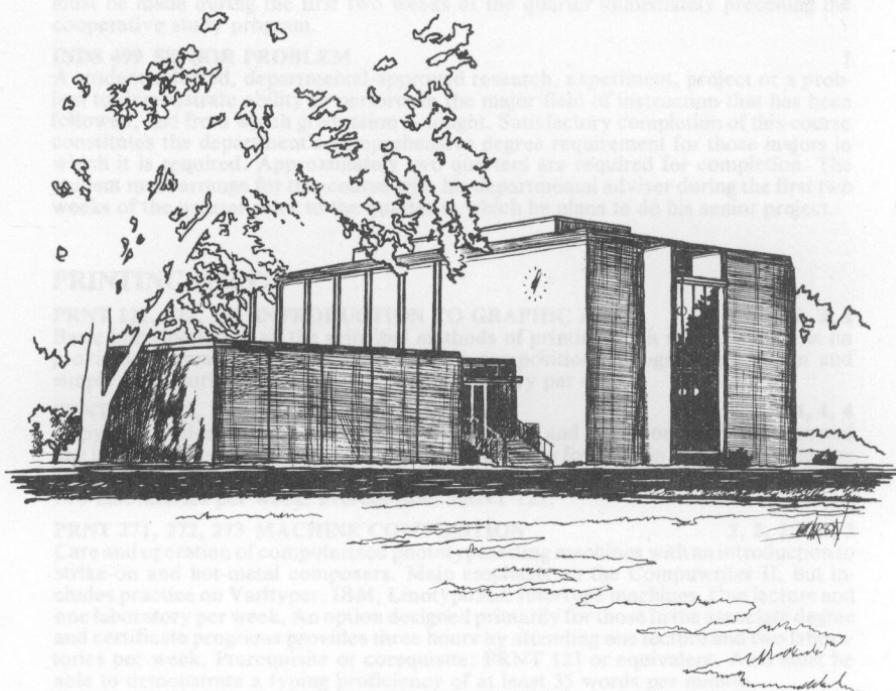
PHYS 154, 155, 156, 157 Physics Seminar III **3**
PHYS 158, 159, 160, 161 Physics Seminar IV **3**

PHYS 162, 163, 164, 165 Physics Seminar V **3**
PHYS 166, 167, 168, 169 Physics Seminar VI **3**

PHYS 170, 171, 172, 173 Physics Seminar VII **3**
PHYS 174, 175, 176, 177 Physics Seminar VIII **3**

PHYS 178, 179, 180, 181 Physics Seminar IX **3**
PHYS 182, 183, 184, 185 Physics Seminar X **3**

PHYS 186, 187, 188, 189 Physics Seminar XI **3**
PHYS 190, 191, 192, 193 Physics Seminar XII **3**



SMITH HALL — Education, Psychology, Child Development Center

INTERDISCIPLINARY PROGRAMS

BIOPHYSICS

C. C. Barnett, D. W. Rigby, Academic Advisers

The biophysics major is offered cooperatively by the departments of biology and physics.

MAJOR IN BIOPHYSICS (Bachelor of Science)

A student majoring in biophysics must complete 32 quarter hours in biology and 38 quarter hours in physics, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin. One summer term at the Marine Station is required.

Biology Requirements:

BIOL 101, 102, 103	General Biology	12
BIOL 261 } or	Genetics	4
BIOL 266 } BIOL 392 } BIOL 393 } or	Developmental Biology Cell Physiology Animal Physiology	4
BIOL 401 } or	Plant Physiology	4
BIOL 468 }	Comparative Physiology	
BIOL 351, 352, 453	Research Methods I, II, III	4
BIOL 446	General Ecology	4
BIOL 495	Colloquium*	0
<i>*Required each quarter of juniors and seniors while in residence.</i>		32

Physics Requirements:

PHYS 115, 116	Introduction to Experimentation	2
PHYS 251, 252, 253	Principles of Physics	9
PHYS 254, 255, 256	Principles of Physics Laboratory	3
PHYS 311	Modern Physics	3
PHYS 312	Modern Physics Laboratory	1
PHYS 313	Thermodynamics	4
PHYS 321, 322	Optics	6
PHYS 323	Optics Laboratory	1
PHYS 317, 318, 319	Physics Seminar I	3
PHYS 371	Simulation and Modeling	3
PHYS 417, 418, 419	Physics Seminar II	3
		38

Required Cognates:

CHEM 141, 142, 143	General Chemistry	12
CHEM 321, 322, 323 } or	Organic Chemistry	12
CHEM 351, 352, 353 }	Physical Chemistry	
CPTR 121	Computer Science I	2

INTERDISCIPLINARY PROGRAMS

ENGR 224 and ENGR 324 or BIOL 470	Circuit Analysis I Instrumentation	5-7
MATH 181, 281	Marine Biophysics	
MATH 282, 283	Analytic Geometry and Calculus I, II	8
MATH 311	Analytic Geometry and Calculus III, IV	8
	Probability and Statistics	4

COMPUTER SCIENCE

C. C. Barnett, chairman (Physics); C. V. Bell (Engineering), G. B. Hare (Mathematics), P. W. Joice (Business)

The interdisciplinary program in computer science is coordinated by the Computer Science Committee (membership as listed above). The program is designed to provide the student with a basic competency in computer science as a basis for further study and/or to complement an area of study leading to a computer-science career.

MINOR IN COMPUTER SCIENCE

A student minoring in computer science must complete 30 quarter hours; CPTR 121 or CPTR 131; CPTR 122; CPTR 235 or CPTR 237; CPTR 334; CPTR 431; ENGR 354; MATH 181 and MATH 289 are required. Approval of a computer science adviser required.

COMPUTER SCIENCE (CPTR)

CPTR 121 COMPUTER SCIENCE I	2
See the Engineering section of this bulletin.	
CPTR 122 COMPUTER SCIENCE II	2
See the Engineering section of this bulletin.	
CPTR 131 DATA PROCESSING	4
See the Business section of this bulletin.	
CPTR 232 IBM KEY PUNCH	1
See the Office Administration section of this bulletin. (OFAD 232)	
CPTR 235 PROGRAMMING FOR BUSINESS I	4
See the Business section of this bulletin.	
CPTR 237 PROGRAMMING FOR BUSINESS II	4
See the Business section of this bulletin.	
CPTR 334 COMPUTER SCIENCE III	3
See the Engineering section of this bulletin.	
CPTR 431 COMPUTERIZED INFORMATION SYSTEMS	3
See the Business section of this bulletin.	

HONORS PROGRAM

L. E. Glaim, Chairman; T. L. Anderson, R. K. Emmerson, R. W. Gardner, M. S. Lang, Donnie Rigby, V. V. Whetje, G. A. Winslow.

The general studies honors program is a grouping of interdisciplinary courses stressing independent research, writing and discussion. Honors courses,

exclusive of HONR 351, 352, 353 will satisfy general studies requirements for the baccalaureate degree. Although a separate track in general studies, the honors program is a part of general studies and not a major or minor in itself. Students who complete a minimum of 30 quarter hours of honors courses will be designated as "General Studies Honors Graduates."

Financial Incentive. Upon completion of the 30 quarter hours of general studies courses, students will be awarded a six-quarter-hour tuition grant. The chairman of the Honors Committee will be responsible for verifying each student's completion of the program and notifying the vice president for academic affairs.

Admission Requirements. Students with a secondary school grade-point average of 3.3 or higher (on basics and on overall classes) may apply for admission to the Honors Committee to participate in the honors curriculum. Others may petition for entrance to the program by presenting alternative supporting data such as National Merit Scholar scores, if they have yet to complete 30 of the scheduled quarter hours. The Honors Committee will review all applications and supporting data and notify those students who are accepted. In addition to grade-point average, admissions criteria include recommendations from teachers and others qualified to speak to a student's academic ability; Washington Pre-College Test scores or equivalent; a statement of purpose in seeking admission to the honors program as well as submission of other evidence of special ability if available; and an interview at the discretion of the Honors Committee.

Withdrawal from the Program. Students may withdraw from the curriculum at any time. They may not opt for Satisfactory/No Credit (S/NC) grades for any honors course. The grade-point average for honors students opting for S/NC grades in other courses will be figured on the basis of the letter grades submitted by the teacher. An honors student who receives a grade-point average of less than 3.0 for two successive quarters in either the honors curriculum or the remainder of his curriculum must withdraw from the program.

GENERAL STUDIES HONORS PROGRAM

A student must complete at least 30 quarter hours of honors courses including HONR 351, 352, 353 and maintain a grade-point average of at least 3.0 in both honors and nonhonors courses. Approval of an honors adviser required.

ENGL 131, 132	College Writing Honors	8
HIST 131, 132, 133	*Western Thought I Honors	12
RELB 104, 105, 106	Life and Teachings of Jesus Honors	6
SOCI 249 or (RELH 249)	Religion in a Social Context	4
ENGL 311, 312, 313	**Western Thought II Honors	12
HONR 351, 352, 353	Colloquium	3

*equivalent to 8 quarter hours of HIST 121, 122 and 4 quarter hours of ENGL 207.

**equivalent to MUHL 124, ART 251 and ENGL 204.

INTERDISCIPLINARY PROGRAMS

HONORS COURSES

RELB 104, 105, 106 LIFE AND TEACHING OF JESUS	2, 2, 2
See the Religion section of this bulletin.	
ENGL 131, 132 COLLEGE WRITING HONORS	4, 4
See the English section of this bulletin.	
HIST 131, 132, 133 WESTERN THOUGHT I HONORS	4, 4, 4
See the History section of this bulletin.	
SOCI 249 RELIGION IN A SOCIAL CONTEXT (or RELH 249)	4
See the Sociology and Social Work section of this bulletin.	
ENGL 311, 312, 313 WESTERN THOUGHT II HONORS	4, 4, 4
Using a historical approach, this course shows interrelationships among the creative arts of the Western World and between those arts and the ideas generating them. Equivalent to MUHL 124; ART 251 and ENGL 204. Prerequisite: HIST 131, 132, 133.	
HONR 351, 352, 353 HONORS COLLOQUIUM	1, 1, 1
A research course designed to stimulate interdisciplinary independent study. Students will share the results of reading and research through formal presentation of papers.	

HUMANITIES

R. K. Emmerson, chairman (English); G. L. Caviness (Modern Languages); E. H. Lickey (Music), K. R. MacKintosh (Art)

The humanities major is an interdisciplinary study designed for those who especially enjoy the themes and values of the humanities—in history, the visual arts, music, philosophy and literature. It provides a content area for those interested in teaching at the secondary level and a second major for those wanting to teach in elementary school. The humanities major also is an excellent major for preprofessional students, especially those planning to study medicine or law.

MAJOR IN HUMANITIES (Bachelor of Arts)

A student majoring in humanities must complete the core requirements, the required cognates, one concentration which must be chosen in consultation with the humanities adviser and the chairman of the specific area, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Core Requirements:

HIST 121, 122	Western Civilization	8
MUHL 124	Introduction to Music	4
ENGL 205	Masterpieces of American Literature	
ENGL 206	Masterpieces of English Literature	8
ENGL 207	Masterpieces of World Literature	
ENGL	One upper-division literature course	4
PHIL 205	Introduction to Philosophy	4
ART 251	Introduction to Art	4
HIST 465	Renaissance and Reformation	4
HMNT 496	Seminar in Humanities	6
		42

stressing independent research, writing and discussion. Honors courses

INTERDISCIPLINARY PROGRAMS

Required Cognates:

ANTH 255 or SOCI 454	Cultural Anthropology	10
PSYC 444 or PSYC 446	History of Social Thought Social Psychology	10
RELH 403 or RELT 412	Psychology of Personality World Religions	3
BIOL 407 or ENGR 344	Philosophy of Religion Philosophy of Science	2-3
	Environment and Man	4

Concentration: English

ENGL 234	Literary Analysis and Research	4
ENGL 445	Shakespeare	3
ENGL 455	Classical Backgrounds	3
ENGL	Upper-division literature	10

Concentration: Fine Arts (8 quarter hours must be upper division)

MUHL 134	Art of Listening (recommended)	
MUHL 321, 322, 323	History of Music (recommended)	20
MUED 434	Philosophy of Music and Music Education (recommended)	
ART 324, 325, 326	History of Art (recommended)	
	Four quarter hours may be taken in applied music and studio art	

Concentration: History (12 quarter hours must be upper division)

HIST 221, 222	History of the United States	8
HIST 424, 425	Western Political Thought (recommended)	12
HIST 457	Social and Intellectual History of the United States (recommended)	

Concentration: Modern Languages

FREN 301, 302, 303	Survey of French Literature	
FREN 407	17th and 18th Century French Literature	
FREN 408	19th Century French Literature	
FREN 409	20th Century French Literature	
or		
GRMN 311, 312, 313	Survey of German Literature	14-20
GRMN 421	18th Century German Literature	
GRMN 422	19th Century German Literature	
GRMN 423	20th Century German Literature	
or		
SPAN 324, 325, 326	Survey of Spanish Literature	
SPAN 424, 425, 426	Contemporary Spanish Literature	
SPAN 431, 432, 433	Latin-American Literature	

INTERDISCIPLINARY PROGRAMS

FREN 427, 428, 429 or GRMN 314, 315 or SPAN 331	French Culture and Civilization German Civilization Spanish-American Culture and Civilization	0-6
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Concentration: Philosophy

PHIL 206	Introduction to Logic
PHIL 305	Moral Philosophy
PHIL 306	History of Philosophy I
PHIL 412	Philosophy of Religion
PHIL 424, 425	Western Political Thought
PHIL 407	Philosophy of Science

MEDICAL TECHNOLOGY

H. C. Weir, Academic Adviser

W. B. Rippon, Academic Adviser (*double major in Medical Technology/Clinical Chemistry*)

The major in medical technology involves three years of preclinical education on the Walla Walla College campus and 12 months of additional education in a clinical laboratory, generally in a school affiliated with Walla Walla College, such as the School of Allied Health of Loma Linda University, Loma Linda, California. Upon completion of the fourth year, the student may receive a Bachelor of Science degree from Walla Walla College.

Applicants to schools of medical technology are selected on the basis of such qualities as scholarship, integrity, dependability, manual dexterity and motivation for medical technology. To be competitive, an applicant for the clinical program should have a minimum grade-point average of 2.70. Above-average academic achievement in preclinical chemistry courses is especially significant.

Portland Adventist Medical Center has established a scholarship program for third- and fourth-year students in medical technology. Students wishing to participate in this program need to make application at the Student Financial Aids office in their sophomore year or during the last preclinical year before entering the clinical program.

MAJOR IN MEDICAL TECHNOLOGY (Bachelor of Science)

A student majoring in medical technology must complete 144 quarter hours of interdisciplinary courses including the general studies requirements for the baccalaureate degree as outlined in this bulletin (30 quarter hours must be upper division), in addition to a 12-month (48 quarter hours) clinical experience.

INTERDISCIPLINARY PROGRAMS

BIOL 101, 102, 103	General Biology	12
BIOL 222 or BIOL 465	Microbiology	5
BIOL 201, 202 or BIOL 392, 393	Bacteriology	
	Anatomy and Physiology	8
	Cell and Animal Physiology	
CHEM 141, 142, 143	General Chemistry	12
CHEM 264	Elementary Quantitative Analysis	4
CHEM 321, 322, 323	Organic Chemistry	12
HIST 121, 122 or HIST 221, 222	History of Western Civilization	8
MATH 121, 122 or MATH 181	History of the United States	
	Fundamentals of Mathematics, I, II	4-8
	Analytic Geometry and Calculus I	
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3
PSYC 130	General Psychology	4
		<hr/> 81

MAJOR IN MEDICAL TECHNOLOGY and CLINICAL CHEMISTRY
(double major) (Bachelor of Science)

A student majoring in clinical chemistry and medical technology must complete 101 quarter hours of interdisciplinary courses as listed below, and the general studies program for the baccalaureate degree as outlined in this bulletin in addition to a 12-month (48 quarter hours) clinical experience.

BIOL 101, 102, 103	General Biology	12
BIOL 222 or BIOL 465	Microbiology	5
BIOL 201, 202 or BIOL 392 and BIOL 393	Bacteriology	
	Anatomy and Physiology	
	Cell Physiology	8
	Animal Physiology	
CHEM 141, 142, 143	General Chemistry	12
CHEM 264, 265, 266	Elementary Quantitative Analysis	10
CHEM 321, 322, 323	Organic Chemistry	12
CHEM 351, 352, 353	Physical Chemistry	12
MATH 121, 122	Fundamentals of Mathematics I, II	8
MATH 181, 281	Analytic Geometry and Calculus I, II	8
PHYS 211, 212, 213	General Physics	9
PHYS 214, 215, 216	General Physics Laboratory	3
		<hr/> 101

INTERDISCIPLINARY PROGRAMS

PHILOSOPHY

C. C. Barnett, Chairman; R. K. Emmerson, D. M. Maxwell, H. E. Phillips, G. A. Winslow

Philosophy courses should, in their manner and subject matter, clearly make for an understanding of and appreciation for philosophy as a distinct mode of inquiry.

PHILOSOPHY (PHIL)

PHIL 205 INTRODUCTION TO PHILOSOPHY

4

Nature and place of philosophy in human thought; its traditional as well as its more recent concerns and approaches. (Readings from selected writings—classical and other—and practice in language analysis).

PHIL 206 INTRODUCTION TO LOGIC

4

Inquiry into the nature of argument, inference, proof, etc., and practice with formal and symbolic structures.

PHIL 305 MORAL PHILOSOPHY

4

A philosophical investigation of major moral concepts such as duty, the good, the right, the just and their application to problems concerning the individual and society. Readings will include the works of moral philosophers, both ancient and modern.

PHIL 306 HISTORY OF PHILOSOPHY I

4

An advanced study of major philosophers and philosophical movements from the Pre-Socratics to Modern Philosophy. Extensive reading in primary and secondary sources, including the works of Plato, Aristotle, Augustine and Aquinas.

PHIL 407 PHILOSOPHY OF SCIENCE

4

See the Biology Section of this bulletin. (BIOL 407)

PHIL 412 PHILOSOPHY OF RELIGION

4

See the Religion section of this bulletin (RELT 412)

PHIL 424, 425 WESTERN POLITICAL THOUGHT

4, 4

See the History section of this bulletin. (PLSC 424, 425)

academic achievement in pre-clinical courses and desire to engage in a four-year program.

Portland Adventist Medical Center has established a scholarship program for third- and fourth-year students in medicine. Incoming students who will participate in this program need to make application at the Admissions Office in their sophomore year in October or November. They will be interviewed during the clinical year.

MAJOR IN MEDICAL TECHNOLOGY
A student majoring in medical technology will receive a baccalaureate degree in a four-year program. This program consists of a pre-clinical phase (two years) leading to a baccalaureate degree in medical technology (four years). The pre-clinical phase (two years) consists of courses in the sciences, mathematics, and English. The clinical phase (two years) consists of courses in medical technology, including practical experience in hospitals and clinics.

LIBRARY SCIENCE

E. Mabley, Chairman; M. Gilliland, Shirley Graves, Carolyn Hazelton, L. Johnston, T. Ruhl.

The minor in library science is designed to provide the knowledge basic to the organization and management of learning resource centers in elementary and secondary schools, to provide training preparatory to employment as a library technician, or to provide a preprofessional curriculum as preparation for graduate work in library science.

MINOR IN LIBRARY SCIENCE

A student minoring in library science must complete 30 quarter hours; LIBR 111; LIBR 232; LIBR 261 and LIBR 385 are required. Approval of library science adviser required.

LIBRARY SCIENCE (LIBR)

LIBR 111 INTRODUCTION TO LIBRARY RESOURCES	2
Introduction to libraries and how to use their resources effectively for research purposes; a survey of procedures for the systematic search for information. Oriented to the general academic needs of lower- and upper-division students, and provides opportunity to emphasize the bibliography of their major or minor.	
LIBR 232 INFORMATION RESOURCES I	3
Evaluation and use of formal resource materials in meeting the information and educational needs of a library clientele; analysis of concepts and principles of bibliographic organization and control. Prerequisite: LIBR 111.	
LIBR 261 CATALOGING AND CLASSIFICATION I	4
An introduction to principles, techniques and practices of cataloging and classifying materials for use in instructional materials centers. Laboratory required.	
LIBR 288 STORYTELLING	2
Consideration of the place of storytelling in the educational process; selection, preparation and presentation of diversified materials.	
LIBR 333 INFORMATION RESOURCES II	3
A study of the literature, information sources and reference aids in various specialized fields of knowledge; analysis and solution of reference problems illustrating interdependence between various types of reference sources. Prerequisite: LIBR 232.	
LIBR 362 CATALOGING AND CLASSIFICATION II	2
Advanced principles, techniques and practices of cataloging and classifying book and nonbook materials. Prerequisite: LIBR 261. Laboratory required.	
LIBR 365 LIBRARY MATERIALS FOR CHILDREN	3
An overview designed to develop the ability to choose library materials according to the child's needs, interests and abilities. There will be extensive reading of children's literature from numerous subject areas.	
LIBR 376 HISTORY OF BOOKS AND PRINTING	2
Development of the book in its various forms from earliest times to the beginning of the twentieth century; a survey of early writing materials, history of the alphabet and writing, books in manuscript, history of printing, book illustration and binding, and modern fine printing.	

LIBRARY SCIENCE

LIBR 385 SELECTION AND ACQUISITION OF LIBRARY MATERIALS 3
Development of materials selection criteria and policies; overview of the process of building and maintaining library collections; appraisal of current and retrospective selection tools and reviewing media; survey of current publishing world; study of library acquisition procedures; and techniques of handling censorship.

LIBR 456 ADMINISTRATION OF SCHOOL LIBRARIES 3
General principles of administration; application of techniques to the organization and management of the school library.

LIBR 472 METHODS OF LIBRARY INSTRUCTION 3
Techniques of library orientation designed for teachers who plan to instruct students in the use of the school library; demonstration and class presentation are required.

LIBR 490 DIRECTED LIBRARY EXPERIENCE 4-6; 6
Practical experience in elementary or secondary school libraries under the supervision of qualified librarians. Application must be made during the first two weeks of the quarter prior to the actual library practice. Four to six hours any quarter except summer; maximum, six.

LIBR 496 SEMINAR IN SCHOOL LIBRARY PROBLEMS 3
Consideration of problems and responsibilities in the selection and use of instruction materials, finances, buildings and equipment, personnel, public relations and legal structure.

LIBR 385 SELECTION AND ACQUISITION OF LIBRARY MATERIALS
LIBR 456 ADMINISTRATION OF SCHOOL LIBRARIES
LIBR 472 METHODS OF LIBRARY INSTRUCTION
LIBR 490 DIRECTED LIBRARY EXPERIENCE
LIBR 496 SEMINAR IN SCHOOL LIBRARY PROBLEMS

LIBR 385 SELECTION AND ACQUISITION OF LIBRARY MATERIALS
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LIBR 472 METHODS OF LIBRARY INSTRUCTION
LIBR 490 DIRECTED LIBRARY EXPERIENCE
LIBR 496 SEMINAR IN SCHOOL LIBRARY PROBLEMS

MATHEMATICS

G. Hare, Chairman; M. Lang, R. May, W. Soper, T. Thompson.

The department of mathematics offers a program leading to the Bachelor of Arts or Bachelor of Science degrees. The mathematics entrance requirements are a year of algebra and a year of geometry. It is highly recommended that students have at least one additional year of mathematics on the secondary level including some trigonometry.

MAJOR IN MATHEMATICS (Bachelor of Arts)

A student majoring in mathematics must complete 45 quarter hours in the major and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

MATH 181, 281	Analytic Geometry and Calculus I, II	8
MATH 282, 283	Analytical Geometry and Calculus III, IV	8
ENGR 121	Computer Science I	2
MATH 331	Introduction to Algebra	4
MATH 451	Advanced Calculus	3
MATH 461	Modern Algebra	4
Electives		16
	Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.	45

MAJOR IN MATHEMATICS (Bachelor of Science)

A student majoring in mathematics must complete 55 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

MATH 181, 281	Analytic Geometry and Calculus I, II	8
MATH 282, 283	Analytic Geometry and Calculus III, IV	8
ENGR 121	Computer Science I	2
MATH 331	Introduction to Algebra	4
MATH 451	Advanced Calculus	3
MATH 461	Modern Algebra	4
Electives		26
	Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.	55

Required Cognates:

BIOL 101, 102, 103 or CHEM 141, 142, 143 PHYS 211, 212, 213 PHYS 214, 215, 216 or PHYS 251, 252, 253 PHYS 254, 255, 256	General Biology General Chemistry General Physics General Physics Laboratory Principles of Physics Principles of Physics Laboratory	12 12 12
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MATHEMATICS

MINOR IN MATHEMATICS

A student minoring in mathematics must complete 28 quarter hours; 4 quarter hours must be upper division. Approval of mathematics adviser required.

MATHEMATICS (MATH)

MATH 100 INTERMEDIATE ALGEBRA

A one-quarter review of intermediate algebra including topics such as sets; numbers; exponents; polynomials; factoring; rational algebraic expressions; graphs; and first- and second-degree equations and inequalities. A

MATH 111, 112 MATHEMATICS FOR THE LIBERAL ARTS

4

A course for nonscience students in which applications play a dominant role. Selected topics from algebra, trigonometry, linear programming, probability, statistics and elementary calculus are encountered and studied in connection with solutions of real-life problems. A brief introduction to computer programming will also be included. This course is designed to meet the general studies requirement for the baccalaureate degree but will not apply toward a major or minor in mathematics. AWS

MATH 115 MATHEMATICS THROUGH STATISTICS

4

A course in which computer programming and mathematical concepts are presented and interwoven with probability and statistics. Selected topics from algebra, probability, computer programming and statistics are studied. This course is designed to meet the general studies requirement for the baccalaureate degree but will not apply toward a major or minor in mathematics. AW

MATH 116 APPLIED STATISTICS

4

A continuation of MATH 115 including distributions, sampling, confidence intervals, hypothesis testing, nonparametric statistics and analysis of variance. Consultants from departments other than from mathematics will be contributing to the content of the course through relevant applications in their respective disciplines. This course is designed to meet the general studies requirement for the baccalaureate degree but will not apply toward a major or minor in mathematics. Prerequisite: MATH 115. S

MATH 117 PRECALCULUS

5

College algebra and trigonometry including topics such as equations and inequalities; functions and their graphs; logarithmic, exponential and trigonometric functions and complex numbers. AW

MATH 121, 122 FUNDAMENTALS OF MATHEMATICS I, II

4, 4

An integrated course in college algebra and trigonometry including a study of the integers; rational, real and complex numbers; equations and inequalities; polynomials; functions, relations and their graphs; exponential and logarithmic functions; trigonometry; the binomial theorem; matrices and determinants; progressions and mathematical induction. Prerequisite: two years of algebra or a year of algebra and a year of Euclidean geometry. AWS

MATH 130 FUNDAMENTALS OF ELEMENTARY MATHEMATICS

4

An elementary course in sets, number theory, geometry, numeration, computer programming, number systems, relations, graphs, probability, and the metric system. This course is designed primarily for elementary and junior high school teachers. This course along with MATH 111; MATH 115; MATH 117 or MATH 121 will meet the general studies requirement for the baccalaureate degree, but will not apply on a major or a minor in mathematics. Prerequisite: MATH 111; MATH 115; MATH 117 or MATH 121 or equivalent. S

**MATH 181, 281, 282, 283 ANALYTICAL GEOMETRY AND
CALCULUS I, II, III, IV**

4, 4, 4, 4

An integrated course in which topics of analytic geometry are introduced as needed in developing the topics in calculus. Prerequisite: MATH 117 or MATH 122 or a satisfactory score on a departmental qualifying examination. Each course in the sequence available every quarter. AWS

MATH 289 LINEAR ALGEBRA AND ITS APPLICATIONS

3

Vector spaces, linear transformations, matrices and determinants. Emphasis will be on applications. S

MATH 311 PROBABILITY AND STATISTICS

4

Probability, discrete and continuous probability density functions, moments, sampling, correlation, regression and testing of hypotheses. Prerequisite: MATH 283. A

MATH 312 ORDINARY DIFFERENTIAL EQUATIONS

4

Differential equations of first order, linear differential equations of order n, series solutions, applications. Prerequisite: MATH 283. W

MATH 321 GEOMETRY

4

Study of geometries including Euclidean, non-Euclidean, projective and affine geometries, as well as transformations and isometries. The approach is divided between examination of axiomatic foundations and qualitative study of the geometries. Permission of instructor required.

MATH 331 INTRODUCTION TO ALGEBRA

4

An introductory study of systems of linear equations, determinants, matrices, groups, rings, integral domains, fields and vector spaces. Prerequisite: MATH 281. S

MATH 341 NUMERICAL ANALYSIS I

4

Iterative and recursive numerical techniques as they relate to computer applications. Topics include error analysis, interpolation techniques, finite differences, solutions of linear and nonlinear equations, polynomials, systems of equations, numerical differentiation and integration, and numerical solutions of differential equations. Prerequisites: MATH 312 and ENGR 121. S

MATH 423 INTRODUCTION TO THE THEORY OF COMPLEX VARIABLES

4

Functions of a complex variable, the geometry of elementary functions, integration, power series, calculus of residues and conformal mapping. Prerequisite: MATH 283. S

MATH 442 NUMERICAL ANALYSIS II

4

Curve fitting, smoothing techniques, eigenvalues, linear programming, numerical solutions of ordinary and partial differential equations, multiple linear regression and other statistical techniques. Prerequisites: MATH 311 and MATH 341. A

MATH 451, 452, 453 ADVANCED CALCULUS

3, 3, 3

Functions, continuity, differentiation, integration, infinite series, differential geometry and vector calculus. Prerequisite: MATH 283. AWS

MATH 461, 462, 463 MODERN ALGEBRA

4, 4, 4

Groups, rings, fields, modules, vector spaces, dual spaces, matrices, matrix algebra, similarity and linear transformations. Permission of the instructor required. AWS

MATH 472 METHODS OF TEACHING MATHEMATICS

3

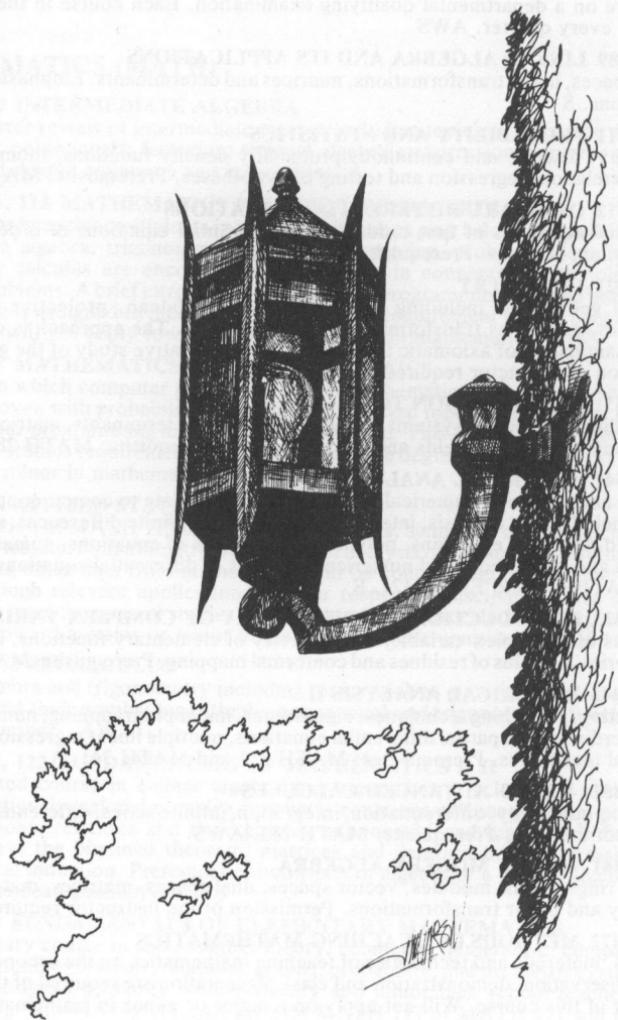
Methods, materials and techniques of teaching mathematics on the secondary school level. Observation, demonstration and class presentation are required of the students as a part of this course. Will not apply on a major or minor in mathematics. A

MINOR IN FRENCH, GERMAN OR SPANISH

A student minoring in French, German or Spanish must complete 24 quarter hours beyond FREN 101, 102, 103; GERMAN 101, 102, 103; or SPAN 101, 102, 103. 12 quarter hours must be upper division. Approval of the language advisor required. **NOT ALL LEARN 6040 LEVEL COURSES**

MINOR IN MATHEMATICS

MINOR IN MATHEMATICS



OLD VILLAGE HALL LAMP

MODERN LANGUAGES

G. Caviness, Chairman; R. Czeratzki, Solange Henderson.

The main objectives of the department are to develop competence in the ability to understand, speak, read and write a foreign language and to provide through the knowledge of foreign languages a deepened understanding and appreciation of the literature and culture of other people.

Walla Walla College is a member of the Adventist Colleges Abroad consortium and foreign language majors and minors who have not had residence in a country in which their language is spoken are urged to spend their sophomore or junior year in this way. ACA is not limited to foreign language majors, but will prove beneficial to any student who seeks to broaden his or her cultural awareness in the multilingual world community.

Majors and minors are offered in French, German and Spanish.

A student planning to teach should confer with his assigned academic adviser and with the department of education and psychology in regard to certification and teaching credentials.

MAJOR IN FRENCH, GERMAN or SPANISH (Bachelor of Arts)

A student majoring in French, German or Spanish must complete 45 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

FREN 202	Intermediate Reading in French	
FREN 203	Intermediate Conversational French	
or		
GRMN 212	Intermediate Reading in German	4
GRMN 213	Intermediate Conversational German	4
or		
SPAN 222	Intermediate Reading in Spanish	
SPAN 223	Intermediate Conversational Spanish	
Electives (21 must be upper division)		37
		45

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognate:

MDLG 472	Methods of Teaching Modern Languages	
or		3-4
ENGL 384	English Grammars and Linguistics	

MINOR IN FRENCH, GERMAN or SPANISH

A student minoring in French, German or Spanish must complete 24 quarter hours beyond FREN 101, 102, 103; GRMN 111, 112, 113; or SPAN 121, 122, 123; 15 quarter hours must be upper division. Approval of the language adviser required.

MODERN LANGUAGES

FRENCH (FREN)

FREN 101 INTRODUCTION TO FRENCH

4

The course provides a foundation for communication competence and for general reading skills. It introduces the student to descriptive and contrastive grammatical terminology, the sound system of French, basic grammar and vocabulary, all of which is integrated with practice in oral communication as well as in elementary level readings. Language laboratory required.

FREN 102 ELEMENTARY READING IN FRENCH

4

The course is designed to give students in the natural sciences, social studies and the humanities a basic knowledge of French with which they can begin to read independently specialized literature in their respective fields. Emphasis is placed on vocabulary building, language structure and reading comprehension. Prerequisite: FREN 101 or equivalent.

FREN 103 ELEMENTARY CONVERSATIONAL FRENCH

4

The course is designed to develop oral communication skills by students with a basic knowledge of French. Topics related to everyday life and situations which may be encountered in a French-speaking country. Language laboratory required. Prerequisite: FREN 101 or equivalent.

FREN 202 INTERMEDIATE READING IN FRENCH

4

A continuation of FREN 102 with greater individualized attention and practice within the area of concentration of the student. The natural sciences, social studies and humanities will be covered. Prerequisite: FREN 102 or equivalent.

FREN 203 INTERMEDIATE CONVERSATIONAL FRENCH

4

A continuation of FREN 103 with intensive training toward communicative competence in spoken and written French. Stress will be on increasing active vocabulary and proper use of idiomatic expressions. Language laboratory required. Prerequisite: FREN 103 or equivalent.

FREN 301, 302, 303 SURVEY OF FRENCH LITERATURE

3, 3, 3

A survey of French masterworks from *La Chanson de Roland* to the present. Introduction to literary analysis; lectures, reports, required library reading. Prerequisite: FREN 101, 102, 202 or equivalent.

FREN 304, 305, 306 ADVANCED FRENCH

3, 3, 3

Intensive training in oral and written French. Review of grammar and extensive prose reading. Exercises in composition and conversation. Laboratory required. Conducted in French. Must be taken in sequence. Prerequisite: FREN 101, FREN 103, FREN 203 or equivalent.

FREN 404 FRENCH DIRECTED READING

1-3; 6

The work consists of assigned reading and reports. Prerequisite: FREN 304, 305, 306. One to three hours per quarter; maximum, six.

FREN 407 17TH AND 18TH CENTURY FRENCH LITERATURE

4

Study of the classical writers such as Racine, Moliere and Corneille but also of the philosophers such as Voltaire, Montesquieu and Rousseau.

FREN 408 19TH CENTURY FRENCH LITERATURE

4

Study of the period from the end of the Revolution to World War I. Romanticism, Realism, Naturalism and the Parnasse.

FREN 409 20TH CENTURY FRENCH LITERATURE

4

Study of the period from World War I to the present.

FREN 427, 428, 429 FRENCH CULTURE AND CIVILIZATION

2, 2, 2

A historical study of the major aspects of French culture and civilization as they appear in painting, architecture, science, music, philosophy and history.

GERMAN (GRMN)**GRMN 111 INTRODUCTION TO GERMAN**

4

The course provides the foundation for communication competence and for scientific and literary readings. It introduces the student to descriptive and contrastive grammatical terminology, the German sound system, basic grammar and vocabulary, all of which is integrated with practice in oral communication as well as in elementary level readings. Language laboratory required.

GRMN 112 ELEMENTARY READING IN GERMAN

4

The course is designed to give students in the natural sciences, social studies and in the humanities a basic knowledge of German with which they can begin to read independently specialized literature in their respective fields. Emphasis is placed on vocabulary building, language structure and reading comprehension. Prerequisite: GRMN 111 or equivalent.

GRMN 113 ELEMENTARY CONVERSATIONAL GERMAN

4

Developing oral communication skills, the course is designed for students with a basic knowledge of German. Topics will be related to everyday life and situations a foreigner would encounter in a German-speaking country. Language laboratory required. Prerequisite: GRMN 111 or equivalent.

GRMN 212 INTERMEDIATE READING IN GERMAN

4

Continuation of GRMN 112, with greater individualized attention and practice within the three areas of concentration: natural sciences, social studies, humanities. Prerequisite: GRMN 112 or equivalent.

GRMN 213 INTERMEDIATE CONVERSATIONAL GERMAN

4

A continuation of GRMN 113, with intensive training toward communicative competence in spoken German. Stress will be on increasing basic everyday vocabulary as well as on the proper use of idiomatic expressions. Language laboratory required. Prerequisite: GRMN 113 or equivalent.

GRMN 311, 312, 313 SURVEY OF GERMAN LITERATURE

3, 3, 3

Development of German literature from the eighth century to the present, supplemented by readings from representative masterpieces of the language. Prerequisites: GRMN 111, GRMN 112, GRMN 212.

GRMN 314, 315 GERMAN CIVILIZATION

2, 2

The development of the cultural, social and political life in German-speaking lands as reflected in architecture, art, history, literature, music and philosophy. Lectures, films, reports.

GRMN 317, 318, 319 ADVANCED GERMAN

3, 3, 3

Intensive practice in oral and written German. Reading, analysis and discussion of selected prose.

GRMN 323 SCIENTIFIC GERMAN

2

An introduction to the reading of technical German in various scientific fields.

GRMN 411 GERMAN DIRECTED READING

1-3; 6

Individual supervision of readings selected for each student separately. Written and oral reports and quarter examination. Approval of instructor required. Prerequisite: GRMN 311, 312, 313. One to three hours per quarter; maximum, six.

GRMN 421 18TH CENTURY GERMAN LITERATURE

4

Emphasis on Lessing and the Enlightenment, the period of "Storm and Stress" and the rise of Weimar Classicism (Goethe, Schiller).

GRMN 422 19TH CENTURY GERMAN LITERATURE

4

Poetic theory and its application to Romantic lyric and prose; the transition from Romanticism to Realism and the reading of representative works of that period.

GRMN 423 20TH CENTURY GERMAN LITERATURE

4

Introduction to major authors and literary movements from 1880 to the present, e.g., Naturalism, Expressionism, Symbolism, including recent trends in postwar East- and West-German literature.

MODERN LANGUAGES

SPANISH (SPAN)

SPAN 121 INTRODUCTION TO SPANISH

4

The course provides the foundation for oral, written and reading communication. Students are introduced to basic Spanish grammar, as well as phonetics and phonology. Language laboratory required.

SPAN 122 ELEMENTARY READING IN SPANISH

4

The course is designed to give students the foundation whereby they can read independently specialized materials in their respective fields. Emphasis is placed on vocabulary building, language structure and reading comprehension. Language laboratory required. Prerequisite: SPAN 121.

SPAN 123 ELEMENTARY CONVERSATIONAL SPANISH

4

The course is designed to develop oral and written communication skills. Language laboratory required. Prerequisite: SPAN 121.

SPAN 222 INTERMEDIATE READING IN SPANISH

4

A continuation of SPAN 122, emphasizing vocabulary, language structure and reading comprehension. Prerequisite: SPAN 122.

SPAN 223 INTERMEDIATE CONVERSATIONAL SPANISH

4

A continuation of SPAN 123 with emphasis on communicative competence in spoken and written Spanish. Stress will be on increasing active vocabulary and proper use of idiomatic expressions. Language laboratory required. Prerequisite: SPAN 123.

SPAN 324, 325, 326 SURVEY OF SPANISH LITERATURE

3, 3, 3

A survey of the history of Spanish literature; lectures, reports, outside reading; the main currents of the development of the various genres of Spanish literature with a study of representative works.

SPAN 331 SPANISH-AMERICAN CULTURE AND CIVILIZATION

4

A study of the main aspects of Spanish-American culture from precolonial period to the present. Attention will be given to the arts, literature, history, sociology and the economic and political development of principal countries.

SPAN 341, 342, 343 ADVANCED SPANISH GRAMMAR

3, 3, 3

Intensive training in oral and written Spanish. Review of grammar and extensive prose reading. Exercises in composition and conversation. Conducted in Spanish. Prerequisite: SPAN 222, 223.

SPAN 414 SPANISH DIRECTED READING

1-3; 6

The work consists of assigned readings and reports. Prerequisite: SPAN 341, 342, 343. One to three hours per quarter; maximum, six.

SPAN 424, 425, 426 CONTEMPORARY SPANISH LITERATURE

2, 2, 2

An intensive study and analysis of Spanish literature from about 1898 to the latest writers who have achieved critical acclaim. Emphasis placed on development of literary critical ability and evaluation of modern Spanish literature from historical and social points of view.

SPAN 431, 432, 433 LATIN-AMERICAN LITERATURE

3, 3, 3

An introduction to Latin-American literature ranging from pre-Columbian Indian literature to the present. Certain works are read in their entirety.

GENERAL (MDLG)

MDLG 472 METHODS OF TEACHING MODERN LANGUAGES

3

The principles and practice of teaching modern languages. Students are introduced to the newer methods in both classroom and language laboratory; voice machine techniques, selection of material and equipment. Observation, demonstration and class presentation are required of the students as a part of this course. Will not apply on a major or minor in Modern Languages.

MUSIC

H. Lickey, Chairman; Sandra Camp, L. Collins, G. Ferguson, S. Hiscock, R. Hunter, L. Leno, G. Spring, R. Tupper.

The department offers instruction for those who wish to choose music as a career and for those who wish to develop a cultural appreciation of music. Two curriculums are offered in music: the Bachelor of Music degree and the Bachelor of Arts degree.

As a part of their work in private lessons, music majors will attend a regularly scheduled performance class. Each student performs for his/her fellow students and teacher(s) in a master class situation.

The department designates required attendance each quarter at a variety of musical functions—recitals (general, senior and faculty), and concerts (departmental, WWC lyceum, community concerts, etc.).

The Bachelor of Music degree is a professional degree with a choice of two majors: Music Education or Performance. Sincerity of purpose, application and aptitude must be demonstrated during the first year before full status as a major student is granted.

In fulfilling the musical organization requirement, voice majors must be in a choral group, string majors in the orchestra, and brass and woodwind majors in the band. Piano and organ majors may elect up to six quarter hours of Ensemble as partial fulfillment of the organization requirement.

The Bachelor of Arts degree offers a choice of two majors: Applied Music and Music Theory. Sincerity of purpose, application and aptitude must be demonstrated during the first year before full status as a major student is granted. This curriculum is not intended to prepare the student for a career in music, but in some circumstances may precede graduate study in this field.

Participation in a musical organization is required for two years but without credit. Majors in Applied Music will enroll for the following organizations: choral group for voice majors, orchestra for string majors, band for brass and woodwind majors. Piano and organ majors may elect one year of Ensemble as partial fulfillment of the organization requirement.

Transfer students majoring in music must take a minimum of 6 quarter hours in applied music at Walla Walla College.

MUSIC EDUCATION (Bachelor of Music Degree)

A student majoring in music education must complete 192 quarter hours which includes the general studies, core, and certification requirements as listed below; the student must also choose a concentration in either elementary or secondary school music. If properly planned, this curriculum will result in denominational and state teaching certification.

General Studies Requirements:

ENGL 121, 122	College Writing	8
HIST 121, 122	History of Western Civilization	8

MUSIC

EDUC 110	Principles and Concepts of Christian Education	2
PSYC 130	General Psychology	4
PEAC	Physical Activity Courses	3
Mathematics and Natural Science		12
RELB, RELH, RELT Religion and Theology		16
		53

Core Requirements:

MUHL 134	The Art of Listening	3
MUCT 121, 122, 123	Theory I	9
MUCT 131, 132, 133	Basic Musicianship-Aural I	3
MUCT 141, 142, 143	*Basic Musicianship-Keyboard I	3
MUCT 221, 222, 223	Theory II	9
MUCT 231, 232, 233	Basic Musicianship-Aural II	3
MUCT 241, 242, 243	Basic Musicianship-Keyboard II	3
MUHL 321, 322, 323	History of Music	12
MUCT 424	Form and Analysis	4
MUCT 425	Orchestration	3
MUPF 361, 362, 372	Conducting ¹	2-6
MUED 434	Philosophy of Music/Music Education	2
MUPF	Organization	11

*Keyboard majors will not register for this course.

67-71

¹Keyboard majors are required to take only Basic Conducting.

Certification Requirements: Music Education

EDUC 110	Principles and Concepts of Christian Education	2
EDUC 210	Foundations of Education	3
PSYC 220	Educational Psychology	4
EDUC 390	Educational Evaluation	3
*PSYC 435 } or { *PSYC 440 }	Child Psychology	3
EDUC 478/479	Adolescent Psychology	
EDUC 480/481	Microteaching—Elementary/Secondary	2
	Directed Teaching—Elementary/Secondary	14

*Selected for equivalent level. Dual certification requires both PSYC 435 and PSYC 440 with 7 quarter hours of directed teaching on each level. 31

Concentration: Elementary School Music

MUED 344	Elementary School Music Literature	2
MUED 472	Teaching Music in the Elementary School	2
MUPF	Major Performance ¹	15
MUPF	Minor Performance ²	6
Selected Topics, Independent Study, or Topics ³		2

¹Voice majors will complete MUED 251, 252, 253; MUED 354. Piano majors will complete MUED 334.

²To be chosen in consultation with the department chairman except for instrumental majors who will choose the four Instrumental Techniques and Methods courses.

³At least one quarter hour must be taken in the area of elementary voice techniques.

Concentration: Secondary School Music

MUED 473	Teaching Music in the Secondary School	2
MUPF	Major Performance ¹	22
MUPF	Minor Performance ²	6
MUPF	Voice ³	1

A joint (or solo) recital is required⁴

0

¹Usually a student will take a total of 22 quarter hours in one applied field. However, students who reach a high level of proficiency in less than 22 quarter hours may, with music faculty approval and guidance, complete the 22 quarter hours by electing courses which will strengthen their preparedness in other areas within the music field. In no case will the student take less than 15 quarter hours in one applied field. Voice majors will complete MUED 251, 252, 253; MUED 354. Piano majors will complete MUED 334.

²Students whose major performance area is organ will take piano and those whose major performance is piano will take organ. Students whose major performance area is instrumental will take all the Instrumental Techniques and Methods courses. Voice majors will, with departmental approval, elect their 6 quarter hours from other applied music areas including Instrumental Techniques classes and Piano.

³Required only of nonvoice majors.

⁴With the counsel of the music faculty, a music major may be allowed to substitute a conducting or research project for the senior recital upon evidence of equivalent competence in these areas.

MUSIC PERFORMANCE (Bachelor of Music Degree)

A student majoring in music performance must complete 192 quarter hours which includes the general studies and major requirements as listed below: (This curriculum does not result in denominational or state teaching certification.)

General Studies Requirements:

ENGL 121, 122	College Writing	8
FREN or GRMN	Foreign Language*	8-12
HIST 121, 122	History of Western Civilization	8
EDUC 110	Principles and Concepts of Christian Education	2
PEAC	Physical Activity Courses	3
RELB, RELH, RELT	Religion and Theology	16
		45

Major Requirements:

MUHL 134	The Art of Listening	3
MUCT 121, 122, 123	Theory I	9
MUCT 131, 132, 133	Basic Musicianship-Aural I	3
MUCT 141, 142, 143	*Basic Musicianship-Keyboard I	3
MUCT 221, 222, 223	Theory II	9
MUCT 231, 232, 233	Basic Musicianship-Aural II	3
MUCT 241, 242, 243	Basic Musicianship-Keyboard II	3
MUCT 424	Form and Analysis	4
MUHL 321, 322, 323	History of Music	12

MUSIC

MUPF 361, 362 or 372	Conducting	4
MUCT 334	Composition I	3
MUCT 425	Orchestration	3
MUCT 426	Counterpoint	3
MUPF	Musical Organization	12
MUPF	**Applied Performance Major	48
A recital is required during the junior and senior years		0
*Keyboard majors will not register for this course.		
**Voice majors will complete MUED 251, 252, 253; MUED 354. Piano majors will complete MUED 334.		
		122

MAJOR IN MUSIC THEORY (Bachelor of Arts)

A student majoring in music theory must complete 66 quarter hours in the major, and the general studies program for the baccalaureate degree as outlined in this bulletin. The music theory major will present a senior project for which approval must be obtained from the music faculty.

Major requirements:

MUHL 134	The Art of Listening	3
MUCT 121, 122, 123	Theory I	9
MUCT 131, 132, 133	Basic Musicianship-Aural I	3
MUCT 141, 142, 143	Basic Musicianship-Keyboard I	3
MUCT 221, 222, 223	Theory II	9
MUCT 231, 232, 233	Basic Musicianship-Aural II	3
MUCT 241, 242, 243	Basic Musicianship-Keyboard II	3
MUHL 321, 322, 323	History of Music	12
MUCT 334	Composition I	3
MUCT 424	Form and Analysis	4
MUCT 425	Orchestration	3
MUCT 426	Counterpoint	3
MUPF	Applied Music	8
		66

MAJOR IN APPLIED MUSIC (Bachelor of Arts)

A student majoring in applied music must complete 66 quarter hours in the major, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

MUHL 134	The Art of Listening	3
MUCT 121, 122, 123	Theory I	9
MUCT 131, 132, 133	Basic Musicianship-Aural I	3
MUCT 141, 142, 143	*Basic Musicianship-Keyboard I	3
MUCT 221, 222, 223	Theory II	9
MUCT 231, 232, 233	Basic Musicianship-Aural II	3
MUCT 241, 242, 243	Basic Musicianship-Keyboard II	3
MUHL 321, 322, 323	History of Music	12
MUCT 424	Form and Analysis	4

MUPF	Applied Music	17
A joint (or solo) senior recital is required		0
**Diction examination (for voice majors)		0
		<u>66</u>

*Keyboard majors will not register for Basic Musicianship-Keyboard I.

**Voice majors who are unable to pass a diction examination in Italian, German and French will be required to take MUED 251, 252, or 253.

MINOR IN MUSIC

A student minoring in music must complete 30 quarter hours; 3 quarter hours must be upper division; MUCT 121, 122, 123; MUCT 131; MUCT 141 and MUHL 124 are required; 6 quarter hours of applied music must be completed. Approval of music adviser required.

MINOR IN THE TEACHING OF MUSIC

A student minoring in the teaching of music must complete 30 quarter hours; MUCT 121, 122, 123; MUCT 131; MUCT 141; MUHL 124; MUHL 134; MUPF 361; MUED 434 and MUED 472 or MUED 473 are required; 8 quarter hours of applied music must be completed. Approval of music adviser required.

COMPOSITION AND THEORY (MUCT)

MUCT 121, 122, 123 THEORY I 3, 3, 3
 Introduction to the elements of notation, rhythm, scales, key signatures and terms. Traditional harmonic concepts through secondary dominants will be taught during the winter and spring quarters. Corequisites: MUCT 131, 132, 133 and MUCT 141, 142, 143.

MUCT 131, 132, 133 BASIC MUSICIANSHP-Aural I 1, 1, 1
 Intensive training in fundamental aural skills. Emphasis is on rhythmic, melodic and harmonic concepts. Corequisite: MUCT 121, 122, 123.

MUCT 141, 142, 143 BASIC MUSICIANSHP-Keyboard I 1, 1, 1
 Designed to develop basic skills including keyboard orientation, sightreading, scales, chord progressions, harmonization of simple melodies and transposition. Corequisite: MUCT 131, 132, 133.

MUCT 221, 222, 223 THEORY II 3, 3, 3
 A continuation of Theory I with emphasis on the melodic and harmonic developments of the late nineteenth and twentieth centuries. Prerequisites: MUCT 121, 122, 123; MUCT 131, 132, 133; MUCT 141, 142, 143. Corequisites: MUCT 231, 232, 233; MUCT 241, 242, 243.

MUCT 231, 232, 233 BASIC MUSICIANSHP—Aural II 1, 1, 1
 A continuation of MUCT 131, 132, 133. Normally taken concurrently with Theory II. Prerequisite: MUCT 131, 132, 133.

MUCT 234 INTRODUCTION TO ELECTRONIC MUSIC 2
 Lectures, demonstrations and practical experience in the use of tape recorders and synthesizers for the production of electronic music. Offered winter and spring quarters.

MUCT 241, 242, 243 BASIC MUSICIANSHP—Keyboard II 1, 1, 1
 A continuation of MUCT 141, 142, 143. Completion of this course satisfies the piano proficiency requirement. Prerequisite: MUCT 141, 142, 143 or permission of the instructor.

MUSIC

MUCT 334 COMPOSITION I	1-2; 6
A study of the art of composing in the smaller forms. Special emphasis is given to twentieth century techniques. Prerequisite: MUCT 221, 222, 223 and/or the permission of the instructor. One or two hours each quarter.	
MUCT 424 FORM AND ANALYSIS	4
A detailed study of musical structure.	
MUCT 425 ORCHESTRATION	3
Practical consideration of the techniques, capabilities and effective uses of orchestral instruments in various combinations. Scoring for small and large combinations of instruments is included. Prerequisite: MUCT 424.	
MUCT 426 COUNTERPOINT	3
A continuation of MUCT 424 with concentration on the more intricate forms of contrapuntal writing such as motet, canon and fugue. Prerequisite: MUCT 424.	
MUCT 434 COMPOSITION II	1-3; 3
Advanced composition in the larger forms. Prerequisite: MUCT 334 and/or permission of instructor. One to three hours per quarter; maximum, three.	

MUSIC EDUCATION (MUED)

MUED 251, 252, 253 SINGER'S DICTION	1, 1, 1
A study of correct pronunciation of Italian, German and French, enabling singers to perform the extensive literature available in these languages. Required of all voice majors who are unable to pass a diction examination in Italian, German and French.	
MUED 261, 262, 263 BRASS TECHNIQUES AND METHODS	1, 1, 1
Class instruction in the playing and teaching of brass instruments.	
MUED 271, 272, 273 WOODWIND TECHNIQUES AND METHODS	1, 1, 1
Class instruction in the playing and teaching of woodwind instruments.	
MUED 281, 282, 283 STRING TECHNIQUES AND METHODS	1, 1, 1
Class instruction in the playing and teaching of stringed instruments.	
MUED 294 PERCUSSION TECHNIQUES AND METHODS	1
Class instruction in the playing and teaching of percussion instruments.	
MUED 334 PIANO PEDAGOGY AND LITERATURE	3
A course conducted as an introduction to the teaching of piano including both the private and the class approaches. Combined with the problems of technique, sight reading, memorizing and interpretation will be a brief survey of literature as it applies to teaching situations.	
MUED 344 ELEMENTARY SCHOOL MUSIC LITERATURE	2
A study of the literature for classroom presentation and children's voices in grades one to eight.	
MUED 354 VOCAL TECHNIQUES AND METHODS	3
A study of the factors involved in correct voice production and artistic performance of vocal literature. Attention is given to pedagogy.	
MUED 364 MINISTRY OF MUSIC	4
A study of the purpose and use of music in religious services. Attention is given to the aesthetics of the church service, hymnology and group song leadership.	
MUED 434 PHILOSOPHY OF MUSIC AND MUSIC EDUCATION	2
The role of music in the life of the individual, society, the school and the church in the context of Seventh-day Adventist philosophy.	

MUED 472 THE TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 2
 Objectives, procedures and materials of music education for kindergarten level through grade six. Emphasis on classroom instruction for all students. Also open to nonmusic majors who have completed MUED 434 and who have had musical experience satisfactory to the instructor.

MUED 473 THE TEACHING OF MUSIC IN THE SECONDARY SCHOOL 2
 Objectives, procedures and materials of music education for grades seven through twelve. Emphasis on classroom instruction for all students.

MUSIC HISTORY AND LITERATURE (MUHL)

MUHL 124 INTRODUCTION TO MUSIC 4
 A survey course which seeks to develop a heightened awareness of the beauty and intrinsic value of music through the perception of its basic elements, a recognition of its primary forms and historical perspective relative to its development. Credit is not allowed toward a music major. Offered each quarter.

MUHL 134 THE ART OF LISTENING 3
 Designed to develop critical listening skills through study of the various elements of music as they are used in selected works from the standard repertoire.

MUHL 321, 322, 323 HISTORY OF MUSIC 4, 4, 4
 A study of music history from Gregorian Chant to the present with special attention to musical styles as evidenced through the development of musical forms, instrumentation and performance practice. Open to music majors; others accepted with permission of the instructor.

MUSIC PERFORMANCE (MUPF)

MUPF 225 CONCERT CHOIR 1
 Organized to provide a large ensemble for the performance of a major choral work each quarter. Open to all students and community singers.

MUPF 235 FOURTEEN FOR SINGING 1
 A fourteen-voice group which performs both sacred and secular music including madrigals, folk songs, hymn arrangements and religious works of the masters suitable for chamber choirs. Membership is by invitation and/or audition.

MUPF 245 SCHOLA CANTORUM 1
 A select ensemble for those with unusual vocal talent and musicianship. A challenging choice of specialized types of choral literature, both sacred and secular, is studied and performed. Regular appearances on and off campus are customary. Membership is by invitation and/or audition.

MUPF 255 CONCERT BAND 1
 A select organization which serves the College by performing concerts each year both on and off campus. The repertoire encompasses music of a wide range of styles and periods and includes both original band works as well as appropriate transcriptions. Members are selected on the basis of talent, musicianship, technical development and the need for a balanced instrumentation. Membership is by audition.

MUPF 265 STRING ORCHESTRA 1
 An organization which performs both on and off campus a cross-section of standard literature from the Baroque Era to the present. Membership is by audition.

MUPF 275 WALLA WALLA SYMPHONY ORCHESTRA 1
 A community symphonic orchestra which presents four subscription concerts per season. Membership is by audition.

MUSIC

MUPF 285 ENSEMBLE 1
Any vocal or instrumental duo, trio, quartet or larger group may study music peculiar to their ensemble under the direction of one of the music department staff. Piano and organ majors may elect up to six quarter hours of ensemble in lieu of belonging to one of the larger college organizations.

MUPF 361 BASIC CONDUCTING 2
A course specifically designed to lay the foundation for the development of the skill and the art of conducting musical ensembles of all kinds.

MUPF 362 INSTRUMENTAL CONDUCTING 2
Instruction and experience with conducting live performances of representative works of band and orchestral literature. Prerequisite: MUPF 361.

MUPF 372 CHORAL CONDUCTING 2
Instruction and experience with conducting live performances of representative works of choral literature. Prerequisite: MUPF 361.

MUSIC PERFORMANCE—Applied Music

One to four hours of applied music may be earned each quarter. One quarter hour of applied music presupposes four to six clock hours of practice per week.

MUPF 107 APPLIED MUSIC 1
Beginning.

MUPF 117 APPLIED MUSIC-CLASS INSTRUCTION 1
Teachers may offer instruction to groups in general or specialized areas of performance interest. Voice and piano classes are most common.

MUPF 127 APPLIED MUSIC 1-4
Intermediate.

MUPF 227 APPLIED MUSIC 1-4
Upper intermediate.

MUPF 327 APPLIED MUSIC 1-4
Lower advanced.

MUPF 427 APPLIED MUSIC 1-4
Advanced.

NURSING

Wynelle Huff, Dean; Rosalee Abrams, Wanda Anderson, Maxine Blome, Carol Brown, Florence Carrigan, Patricia Clarkson, Janice Chance, Donna Crawford, Edna Downing, Judy Farnsworth, Juanita Hunter, Myrna Jansen, Leona Jones, Margaret Kimpton, Anne Lindt, Annette Lofftus, Bonnie Meyer, Verlene Meyer, Ronald Mitchell, Wanda Newcomb, Carolyn Olson, Sharon Rawson, Joyce Riter, Ruth Schneider, Fred Troutman, Betty Wallace, Lois Whitchurch.

PHILISOPHY, PURPOSE AND OBJECTIVES

Walla Walla College School of Nursing, as part of a Seventh-day Adventist Church-sponsored educational system, builds its philosophy on the basic concept that the character of God is love and that the entire relationship of man-to-God and man-to-man should be one of unselfish love.

This gives rise to the concept of loving service which is seen as the motivating factor in the interaction between the Christian nurse and those in his/her care. This interacting service is directed to positive movement of the state of man toward an optimum level of wellness. This optimum level of wellness, which is reflected in his ability to function interdependently in his individual, familial and societal environment, is directly related to the extent to which his basic needs are met.

The Christian professional nurse possesses characteristics of compassion and concern which complements his/her abilities to promote, directly or indirectly, high-level wellness. A strong scientific foundation provides the basis for these abilities which include the application of descriptive, explanatory and predictive principles of the making of wise and independent judgments for the improvement of nursing services and adaptation to changing situations. Based on these judgments, the nurse makes decisions for action and accepts responsibility for the outcome of these actions.

The baccalaureate nursing education is based on a liberal education which provides for the possession of knowledge, understanding, abilities and attitudes which promote self-realization, as well as understanding of others. This aids in awareness of the forces affecting society, and understanding of how these forces affect the thoughts, feelings and actions of man on the wellness-illness continuum. For these reasons, the faculty believes that the study of professional nursing is established upon concepts from the humanities and from physical, biological, behavioral and social sciences, as well as upon the nursing major.

Professional nursing involves insights into the physical, mental, emotional, social and spiritual needs of persons of all ages and in all environments. The professional baccalaureate nurse will function in the specified roles as care provider, change agent, coordinator-communicator, leader-administrator, professional, researcher and teacher.

The purpose of the School of Nursing is to prepare professional practitioners

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to participate in delivery of health care and to provide a foundation for graduate study.

In cooperation with the commission of the Seventh-day Adventist Church to "Go ye into all the world, and preach the gospel . . ." Mark 16:15, it is the goal of the faculty to prepare nurses who are willing to commit themselves to Jesus Christ and tell others of His love and soon return. These nurses who have empathy and compassion are to minister to those in need of help, seeking with unselfish earnestness to lighten the woes of suffering humanity, thus revealing the true character of Christ.

A graduate of this program will be able to function in the following roles:

Care Provider: implements the nursing process for promotion of an optimum level of wellness for individuals, families and communities;

Change Agent: validates the need for and facilitates desirable change in individuals, families and communities;

Coordinator-Communicator: communicates effectively for the promotion of cooperative action among individuals and groups concerned with health;

Leader-Administrator: utilizes principles of leadership and management for achieving goal-directed behavior within the operational structure of health care systems;

Professional: contributes to the health profession by developing a personal philosophy reflecting involvement in, and accountability for, growth of self and organized nursing;

Researcher: demonstrates an attitude of scientific inquiry in developing and applying nursing theory;

Teacher: facilitates health-related learning by individuals and groups through the use of appropriate information and effective methodology.

COOPERATING INSTITUTIONS

Extended campus facilities are located in Portland, Oregon. Teachers' offices, classrooms and a library are currently housed in a facility of Portland Adventist Hospital.

In order to achieve the educational objectives of the program, observation and laboratory practice is selected according to planned experiences. The school of nursing has agreements with many health agencies and institutions which provide facilities for instruction of students. In the Walla Walla area these include the Veterans Administration Hospital, Walla Walla General Hospital and the Migrant Labor Camp. Agencies used by agreement in the Portland area include the Portland Adventist Medical Center, Woodland Park Hospital, Woodland Park Mental Health Center, Kaiser Permanente Clinic, Child Development and Rehabilitation Center, University of Oregon, Cedar Hills Psychiatric Hospital, Clackamas County Health Department, Multnomah County Health Department, Washington County Health Department and several public and parochial elementary and secondary schools. Other agencies may be used for the elective quarter.

ACCREDITATION AND LICENSURE

The school of nursing holds agency membership in the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing and is accredited by the Board of Review of that body. It is approved by the Washington State Board of Professional Nursing and is registered with the Board of Regents of the Department of Education of the General Conference of Seventh-day Adventists.

Upon successful completion of the four-year baccalaureate program, graduates are eligible for admission to the examination for licensure as registered nurses.

PROGRAM INFORMATION

The dean of the school of nursing maintains offices in College Place, Washington, and in Portland, Oregon. Students who need special information or assistance with program planning may correspond with the dean at 6014 Southeast Yamhill, Portland, OR 97215.

Admission: The nursing program is open to freshman students by a diploma of graduation from an accredited high school or academy; transfer students from other accredited colleges or universities; and Registered Nurse students

Applicants in all categories listed above must send their applications for admission to the Director, Admissions and Records, Walla Walla College, College Place, WA 99324.

Curriculum: The nursing program contains approximately equal quarter hours of general studies and professional courses and may be completed in 12 quarters. If summer sessions are utilized for nonnursing classes, the program may be accelerated. Students who wish to have certain quarters free for work, study, travel or relaxation, or who may wish to work on requirements for a minor, may plan an extended program. Students must plan their individual academic programs in consultation with the nursing advisers. Four to six quarters are spent on the Portland campus.

Students whose cumulative grade-point average falls below 2.00 (or C) on courses completed or who have received a grade lower than C in any nursing course will not be permitted to proceed with further course work within the nursing major. Preference for continuation is given to students whose grade-point average is 2.25 or above. Any high school deficiencies must be completed by the beginning of the sophomore year or the student may not proceed in the nursing courses.

Students are not permitted to be concurrently enrolled at Walla Walla College and another college or university. Exception must be approved by the dean and the Academic Standards Committee.

Registered Nurse Students. Graduates from approved diploma and associate degree programs may be admitted to the nursing program. The same high school prerequisites and general studies or equivalent courses are required of registered nurse applicants that are required of basic students. Nursing credit from diploma programs is nontransferable. Registered nurses from

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both associate degree and diploma programs are required to take NRSG 327 prior to Level IV Nursing for the baccalaureate program. The registered nurse from a diploma program may establish credit by validation examinations in NRSG 321, 322, 323. If satisfactory grades are earned, full credit is given. Any deficiencies indicated by the examinations must be made up before completing NRSG 327. The student may choose to have recorded Satisfactory/No Credit (S/NC) or the letter grade in the validation examinations. The registered nurse from an associate degree program must take placement examinations in NRSG 321, 322, 323. These examinations may indicate some deficiencies which need to be made up before completing NRSG 327.

Credit for nursing courses carrying numbers above 400 may not be established by validating examinations.

Transportation. Students are responsible for their own transportation to agencies and institutions used for educational experience. Because public transportation is not always available, the student needs access to a car during the sophomore and junior years. A valid driver's license and use of an automobile are mandatory during the senior year in which the student has community health nursing experiences. Transportation costs will vary from quarter to quarter.

MAJOR IN NURSING (Bachelor of Science)

A student majoring in nursing must complete 91 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

†NRSG 221, 222, 223	Level II Nursing	12
NRSG 321, 322, 323	Level III Nursing	39
NRSG 331	Introduction to Community Health and Epidemiology	4
NRSG 421, 422, 423	Level IV	36
†Must be successfully completed before transfer to the Portland campus.		91

Required Cognates:

*BIOL 201, 202	Anatomy and Physiology	8
*BIOL 222	Microbiology	5
*FDNT 220	Human Nutrition	4
*CHEM 101, 102	Introductory Chemistry I	8
*SOCI 204	General Sociology	4
*SOCI 324	Human Development and the Family	4
*PSYC 130	General Psychology	4

*Must be successfully completed with a grade of C or better before registration for NRSG 221.

All nursing courses are offered each quarter of the regular academic year with the exception of NRSG 331 which is offered winter and spring quarters only.

NURSING (NRSG)

NRSG 175 NURSE'S AIDE SKILLS

2

A laboratory course providing for learning and hospital practice of skills which a nurse's aide would need to perform in the care of adult patients who are either totally or partially dependent on others for help with daily activities of living. Does not apply toward the nursing major. Open to all students. Two three-hour laboratory sessions per week.

NRSG 221, 222, 223 LEVEL II NURSING

4, 4, 4

These courses include a study of human basic needs. Balanced interrelationships of these needs are emphasized as the student looks at whole persons throughout the life span. The nursing process (assessment, planning, implementation and evaluation) is practised for enhancement of the health status of individuals, families and communities. Students begin their roles as nurses in a variety of professional nursing settings. Prerequisites for NRSG 221: BIOL 201, 202; BIOL 222; CHEM 101, 102; PSYC 130; SOCI 204; SOCI 324. Prerequisite for NRSG 222: NRSG 221. Prerequisite for NRSG 223: FDNT 220. NRSG 222 and NRSG 223 may be taken concurrently.

NRSG 321, 322, 323 LEVEL III NURSING

13, 13, 13

Opportunity is provided for guided practice in planning, giving and evaluating nursing care of the ill person in a variety of settings including hospital and community. A study of the interacting psychosocial, biological, spiritual and cultural factors which adversely affect the health of the individual from conception to death. Learning experiences are organized to include observation and care of expanding and contracting families. The interaction of family members and behavior manifest in times of physical and emotional crisis provide a basis for planning interventions by the health-team approach. Emphasis is placed on identifying and developing the nurse's role. Prerequisites: NRSG 221, 222, 223.

NRSG 327 BRIDGE COURSE FOR REGISTERED NURSE STUDENTS

12

A course designed to assist the Registered Nurse student in the transition of learning from an associate degree or diploma program to the baccalaureate approach to nursing. This course contains both theory and laboratory experience in concepts essential in the preparation for Level IV Nursing. Prerequisites: Licensure as a Registered Nurse, completion of placement or validation examinations and any deficiencies indicated by examinations. Foreign students not yet licensed will be counseled on an individual basis. Taught only on the Portland Campus.

NRSG 331 INTRODUCTION TO COMMUNITY HEALTH AND EPIDEMIOLOGY

4

A study of the historical background and general organization and structure of community health. Includes study of selected communicable diseases to assist the student in understanding the cause, prevention and control of disease. Includes an introduction to the use of statistics. W, S

NRSG 421, 422, 423 LEVEL IV NURSING

12, 12, 12

Emphasis is placed on professional management and adaptation. This level involves the synchronization of nursing behaviors to assist the patient/client to adapt and manage his health care needs. This is accomplished by creating a collaborative climate of stability and continuity to reach an optimum level of wellness through application of the nursing roles. While the student is registered in any Level IV section, he/she will participate in a core class with content applicable to all sections, except during the elective quarter when similar content is studied in learning packages.

NRSG 42 COMMUNITY HEALTH— Application of knowledge of health principles, methods and nursing skills for meeting the needs of individuals, family units and groups in the community. Emphasis is on how communities meet their health needs including the promotion of wellness. Experiences are obtained in a variety of community settings and agencies. Prerequisites: NRSG 321, 322, 323; NRSG 331.

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NRSG 422 ELECTIVE—The student chooses an area of nursing where he/she will have guided in-depth study and practice. Principles, methods and practice in research related to nursing are included. Prerequisites: NRSG 321, 322, 323; NRSG 421 if student chooses community health elective; NRSG 423 if student chooses leadership elective.

NRSG 423 LEADERSHIP—An exploration is made of the principles of management in the health care system and their relationship to the science of administration and the art of leadership. The contemporary leader role, as well as the emerging patterns of leadership in nursing are discussed. Practical applications of the leadership principles are carried out in the hospital. Prerequisites: NRSG 321, 322, 323.

NRSG 451 CRITICAL CARE I

A course designed to develop nursing skills and techniques of intensive care of the critically ill patient. Covers cardiovascular, pulmonary, nervous system, psychosocial aspects of ICU and the nurse and current legal issues. Prerequisite: Licensure as a Registered Nurse or Level IV standing.

.NRSG 452 CRITICAL CARE II

A course designed to enhance nursing skills and techniques of intensive care of the critically ill patient. Major areas of study are GI and GU systems, burn patients and infections encountered in the ICU. Practice of specialized ICU procedures. Prerequisite: Licensure as a Registered Nurse or Level IV standing.

NRSG 455 PEDIATRIC INTENSIVE CARE

A course designed to develop nursing skills and techniques of intensive care of the critically ill pediatric patient. Covers almost all systems and emphasizes normal growth and development and body image relative to illness. Includes battered child and legal implications for ICU nurse. Prerequisite: Licensure as a Registered Nurse or Level IV standing.

NRSG 459 ACCOUNTABILITY IN NURSING ADMINISTRATION

This course is designed to increase the participant's ability to implement a philosophy of nursing, identify needs, set goals and priorities, develop strategies for managing personnel and other resources, evaluate patient care and develop a climate conducive to innovation. Both a project and pre- and poststatement discussing the participant's perceived accountability will be required. Prerequisite: Licensure as a Registered Nurse or Level IV standing with consent of instructor.

OFFICE ADMINISTRATION

Lee Loewen, Chairman; Nancy Cleveland, Virginia Mabley, E. Quiring.

The baccalaureate degree programs aim to train the student for an executive secretarial career and for the teaching profession. Administrative preparation on the collegiate level is integrated with a broad cultural education. The department also seeks to equip students with knowledge and skills necessary for stenographers and general office workers.

A student interested in the teaching of secretarial skills should complete the business education major in addition to the certification requirements as outlined in the Education section of this bulletin. A student planning to do graduate work should complete GBUS 264 or PSYC 350.

The department offers an Associate of Science degree with areas of specialization in office secretaryship, medical secretaryship and secretarial accounting. The program is designed to be completed in two years. It aims to prepare the student for the responsibilities of a secretarial career as compared with the more limited training of the stenographer, which depends upon the basic skills of typewriting and shorthand. While these skills are emphasized, the advanced students in this two-year program are given the opportunity for specialization in the business and professional areas of the secretarial field. If, after successful completion of this two-year program, the student wishes to continue for the Bachelor of Science degree with a major in office administration or business education, he/she may do so without loss of credit.

The two-year secretarial certificate program is designed for the student who is interested in obtaining basic secretarial skills and early job employment. After successful completion of this two-year program, the student may continue toward the Bachelor of Science degree with a major in office administration or business education.

A two-year clerical certificate program is offered which has the same requirements as the two-year secretarial certificate program except that the student may substitute elective courses in place of the shorthand requirement.

MAJOR IN OFFICE ADMINISTRATION (Bachelor of Science)

A student majoring in office administration must complete 51 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

OFAD 221, 222, 223	Advanced Typewriting	6
OFAD 224	Mag Card Keyboarding	1
OFAD 232	IBM Key Punch	1
OFAD 234	Machine Transcription	2
OFAD 236	Business Machines	2
OFAD 241, 242, 243	Advanced Shorthand and Transcription	9

OFFICE ADMINISTRATION

OFAD 251, 252	Secretarial Procedures	8
OFAD 362	Business Communications	4
OFAD 370	Applied Office Administration	1
OFAD 459	The Administrative Secretary	4
OFAD 466	The Contemporary Secretary in Business	3
OFAD 496	Office Administration Seminar	1
Electives (must be upper division)		9

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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Required Cognates:

ACCT 121, 122, 123	Principles of Accounting	10
CPTR 131	Data Processing	4
MGMT 171	Principles of Management	4
ECON 241, 242	Principles of Economics	6
GBUS 361	Business Law	3

Students preparing for medical and secretarial work should complete the following:

BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	Microbiology	5
OFAD 456	Medical Office Procedures	4
OFAD 457	Medical Terminology	5

MAJOR IN BUSINESS EDUCATION (Bachelor of Science)

A student majoring in business education must complete 56 quarter hours in the major; the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

OFAD 221, 222, 223	Advanced Typewriting	6
OFAD 224	Mag Card Keyboarding	1
OFAD 232	IBM Key Punch	1
OFAD 234	Machine Transcription	2
OFAD 236	Business Machines	2
OFAD 241, 242, 243	Advanced Shorthand and Transcription	9
OFAD 251, 252	Secretarial Procedures	8
OFAD 362	Business Communications	4
OFAD 459	The Administrative Secretary	4
OFAD 472	Methods of Teaching Business	4

Education Subjects

Electives (must be upper division)

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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Required Cognates:

ACCT 121, 122, 123	Principles of Accounting	10
CPTR 131	Data Processing	4
ECON 241, 242, 243	Principles of Economics	9
GBUS 361, 362, 363	Business Law	9

SECRETARSHIP (Associate of Science)

A student specializing in secretaryship must complete 22 quarter hours in the core, one area of concentration, the required cognates for that area, and the general studies program for the associate degree as outlined in this bulletin.

Core Requirements:

OFAD 161	Mathematics of Business	2
OFAD 221, 222, 223	Advanced Typewriting	6
OFAD 224	Mag Card Keyboarding	1
OFAD 232	IBM Key Punch	1
OFAD 234	Machine Transcription	2
OFAD 236	Business Machines	2
OFAD 264	Traditions and Practices of Business	3
OFAD 362	Business Communications	4
OFAD 370	Applied Office Administration	<u>1</u>
		22

Area Requirements: Office Secretary

OFAD 241, 242, 243	Advanced Shorthand and Transcription	9
OFAD 251, 252	Secretarial Procedures	8
OFAD 459	The Administrative Secretary	4
Electives		11

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Office Secretary

FINA 101	Personal Finance	2
ACCT 121	Principles of Accounting	4
CPTR 131	Data Processing	4

Area Requirements: Medical Secretary

OFAD 241, 242, 243	Advanced Shorthand and Transcription	9
OFAD 252 } or	Secretarial Procedures	4
OFAD 459 }	The Administrative Secretary	4
OFAD 456	Medical Office Procedures	4
OFAD 457	Medical Terminology	5
Electives		10

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Medical Secretary

FINA 101	Personal Finance	2
ACCT 121	Principles of Accounting	4
CPTR 131	Data Processing	4
BIOL 201, 202	Anatomy and Physiology	8
BIOL 222	*Microbiology	5

*Required only for those students planning to continue at another institution for Medical Records Librarianship.

OFFICE ADMINISTRATION

Area Requirements: Secretarial Accounting

ACCT 121, 122, 123	Principles of Accounting	10
OFAD 251, 252	Secretarial Procedures	8
OFAD 459	The Administrative Secretary	4
Electives		14

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognates: Secretarial Accounting

FINA 101	Personal Finance	2
CPTR 131	Data Processing	4

SECRETARIAL PROGRAM (Two-year Certificate)

A student completing the secretarial certificate program must complete 84 quarter hours as listed below plus the general studies requirements for the certificate program as outlined in this bulletin.

Secretarial Certificate Requirements:

OFAD 141, 142, 143	Shorthand Theory	9
OFAD 161	Mathematics of Business	2
OFAD 221, 222, 223	Advanced Typewriting	6
OFAD 224	Mag Card Keyboarding	1
OFAD 232	IBM Key Punch	1
OFAD 234	Machine Transcription	2
OFAD 236	Business Machines	2
OFAD 241, 242, 243	Advanced Shorthand and Transcription	9
OFAD 251, 252	Secretarial Procedures	8
OFAD 264	Traditions and Practices of Business	3
OFAD 370	Applied Office Administration	1
FINA 101	Personal Finance	2
Electives		38

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

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CLERICAL PROGRAM (Two-year Certificate)

A student completing the clerical certificate program must complete the same requirements as listed for the secretarial certificate except that electives may replace the OFAD 141, 142, 143 and OFAD 241, 242, 243 requirements. Approval of the academic adviser assigned by the department chairman required.

MINOR IN OFFICE ADMINISTRATION

A student minoring in office administration must complete 30 quarter hours; OFAD 221, 222, 223; OFAD 224; OFAD 232; OFAD 234; OFAD 236; OFAD 251 and OFAD 362 are required. Approval of office administration adviser required.

OFFICE ADMINISTRATION

OFFICE ADMINISTRATION (OFAD)

OFAD 111, 112, 113 BEGINNING TYPEWRITING	2, 2, 2
Introduction to touch typewriting with emphasis on basic theory, speed, accuracy. The first quarter (111) of this course will be offered each quarter and may be taken by anyone for personal-use typewriting. OFAD 111, 112 are not open to challenge examination. Does not apply toward a major or minor for the Bachelor of Science degree or as an elective for the Associate of Science degree.	
OFAD 141, 142, 143 SHORTHAND THEORY	3, 3, 3
The principles of Gregg shorthand are taught with emphasis on correct writing and transcribing of shorthand notes.	
OFAD 161 MATHEMATICS OF BUSINESS	2
Includes the study of payroll mathematics, interest, negotiable instruments, markup, discounts, depreciation, sinking funds, insurance and installment buying.	
OFAD 208 CONCEPTS IN OFFICE MACHINES	2
This laboratory course is designed to give students who are not office administration majors experience with the most frequently used office machines, duplicating processes, and voicerecognition equipment. The basic rules for filing will also be covered. Prerequisite: OFAD 111.	
OFAD 221, 222, 223 ADVANCED TYPEWRITING	2, 2, 2
A continuation of the study of touch typewriting with emphasis on increase of speed, accuracy and skill in the production of business papers. The course work is arranged to provide for individual differences due to the background of the student in typewriting.	
OFAD 224 MAG CARD KEYBOARDING	1
Gives students basic knowledge and skill in magnetic keyboarding. Supervised experience on the IBM Mag Card/A Typewriter qualifies students for positions in word processing.	
OFAD 232 IBM KEY PUNCH (or CPTR 232)	1
Gives basic knowledge and skill in punch card operation. Supervised experience on the IBM 029 Printing Card Punch is provided. Permission from the instructor required.	
OFAD 234 MACHINE TRANSCRIPTION	2
Laboratory practice in transcribing letters and reports from machine dictation. Emphasis is placed on progressively higher transcription rates with mailability of copy on increasingly difficult and technical materials. Laboratory practice is also given in the use of office duplication equipment.	
OFAD 236 BUSINESS MACHINES	2
This laboratory course is designed to develop acquaintance and proficiency with the most frequently used office machines and provides the basic skills used in fundamental calculations.	
OFAD 241, 242, 243 ADVANCED SHORTHAND AND TRANSCRIPTION	3, 3, 3
A review of the principles of Gregg shorthand and emphasis on speed in taking and transcribing business dictation. The criteria for this course is mailability of all business correspondence.	
OFAD 251, 252 SECRETARIAL PROCEDURES	4, 4
A preparation for the activities and procedures common to most stenographic jobs, including business English, records management, receptionist duties and office ethics.	
OFAD 264 TRADITIONS AND PRACTICES OF BUSINESS	3
Covers business law topics that have been recommended by the United States Office of Education for secretaries, stenographers and related office workers. Special emphasis is given to contracts and negotiable instruments. This course is for those students seeking the associate degree.	

OFFICE ADMINISTRATION

OFAD 354 THE DENOMINATIONAL SECRETARY	2
A course which deals with denominational vocabulary, reporting techniques and the work of the denominational secretary. Special emphasis is placed on an understanding of the Seventh-day Adventist denominational organization and activities.	
OFAD 362 BUSINESS COMMUNICATIONS	4
A behavioral science approach to the principles basic to effective communication with emphasis on the business writer as a communication strategist. Report writing is also stressed.	
OFAD 370 APPLIED OFFICE ADMINISTRATION	1-3
Supervised work experience in an office for actual on-the-job training. A minimum of 30 hours of satisfactory work for each credit hour.	
OFAD 454 THE LEGAL SECRETARY	4
A course designed to acquaint students with legal terminology, preparation of legal documents, court procedures and management of the legal office.	
OFAD 456 MEDICAL OFFICE PROCEDURES	4
Designed to acquaint students with the specialized duties of a medical office with emphasis given to the preparation of medical office records.	
OFAD 457 MEDICAL TERMINOLOGY	5
A study of the development of the basic medical vocabulary. Practice is given in the transcription of medical reports from voicescription machines. One laboratory per week. Prerequisite: BIOL 201, 202 or equivalent substitution with consent of department chairman.	
OFAD 459 THE ADMINISTRATIVE SECRETARY	4
The project method of training is used in this course. Emphasis is given to the organization and planning of work, setting priorities, making decisions, analyzing problems and providing solutions.	
OFAD 466 THE CONTEMPORARY SECRETARY IN BUSINESS	3
Considers the present and future problems facing the professional secretary. Emphasis is given to psychological principles that influence the behavior of people toward one another so the secretary can cope skillfully, efficiently and confidently with the fast-paced, ever-changing social and business framework in which we live.	
OFAD 467 CPS REVIEW	3
An advanced course for office personnel to prepare for the Certified Professional Secretary examination.	
OFAD 472 METHODS OF TEACHING BUSINESS EDUCATION SUBJECTS	4
A survey of the objectives, methods and techniques of teaching business education subjects in the secondary school. Observation, demonstration and class presentation are required.	
OFAD 496 OFFICE ADMINISTRATION SEMINAR	1-3
For office administration majors for discussion, research, special problems, analysis of new trends in the field and study of the major areas in office administration. One to three hours per quarter; maximum, three.	

PHYSICS

C. Barnett, Chairman; T. Anderson, G. Johnson.

The department offers a Bachelor of Arts degree and a Bachelor of Science degree with a major in physics, and jointly with the department of biology, a Bachelor of Science degree with a major in biophysics. The physics major who is preparing for secondary teaching will normally choose the Bachelor of Arts degree including the certification requirements as outlined in the education and psychology section of this bulletin. The Bachelor of Science degree is designed to prepare the student for graduate study and a career in applied or basic research and college teaching. The interdisciplinary major in biophysics should best fill the needs of the student who plans a career in medicine, or who plans on research and advanced study into the physics of living systems.

MAJOR IN PHYSICS (Bachelor of Arts)

A student majoring in physics must complete 45 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

PHYS 115, 116	Introduction to Experimentation	2
PHYS 251, 252, 253	Principles of Physics*	9
PHYS 254, 255, 256	Principles of Physics Laboratory	3
PHYS 311	Modern Physics	3
PHYS 312	Modern Physics Laboratory	1
PHYS 313	Thermodynamics	4
PHYS 314	Physical Electronics	3
PHYS 315	Physical Electronics Laboratory	1
PHYS 317, 318, 319	Physics Seminar I	3
PHYS 321, 322	Optics	6
PHYS 323	Optics Laboratory	1
PHYS 362, 363	Theoretical Mechanics	
PHYS 401, 402	Electricity and Magnetism	6
PHYS 411, 412, 413	Atomic and Nuclear Physics	
PHYS 417, 418, 419	Physics Seminar II	3
		45

Required Cognates:

CHEM 141, 142, 143	General Chemistry	12
CPTR 121	Computer Science I	2
INDS 324	Industrial Design†	3
MATH 181, 281	Analytic Geometry and Calculus I, II	8
MATH 282, 283	Analytic Geometry and Calculus III, IV	8
MATH 311	Probability and Statistics	4

*Students who have completed PHYS 211, 212, 213, may meet the PHYS 251, 252, 253 requirement by passing a departmental examination.

†Other courses involving manipulative skills may be substituted in consultation with the physics department chairman.

MAJOR IN PHYSICS (Bachelor of Science)

A student majoring in physics must complete 65 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

PHYS 115, 116	Introduction to Experimentation	2
PHYS 251, 252, 253	Principles of Physics*	9
PHYS 254, 255, 256	Principles of Physics Laboratory	3
PHYS 311	Modern Physics	3
PHYS 312	Modern Physics Laboratory	1
PHYS 313	Thermodynamics	4
PHYS 314	Physical Electronics	3
PHYS 315	Physical Electronics Laboratory	1
PHYS 317, 318, 319	Physics Seminar I	3
PHYS 321, 322	Optics	6
PHYS 323	Optics Laboratory	1
PHYS 362, 363	Theoretical Mechanics	6
PHYS 401, 402	Electricity and Magnetism	8
PHYS 411, 412, 413	Atomic and Nuclear Physics	9
PHYS 414, 415, 416	Experimental Physics	3
PHYS 417, 418, 419	Physics Seminar II	3
		65

Required Cognates:

CHEM 141, 142, 143	General Chemistry	12
CPTR 121	Computer Science I	2
ENGR 224	Circuit Analysis I	4
ENGR 324 } or ENGR 354 } INDS 324	Instrumentation	3
MATH 181, 281	Digital Logic Circuits	
MATH 282, 283	Industrial Design†	3
MATH 289	Analytic Geometry and Calculus I, II	8
MATH 311	Analytic Geometry and Calculus III, IV	8
MATH 312	Linear Algebra or equivalent	3
MATH 341 } or MATH 423 }	Probability and Statistics	4
MATH 312	Ordinary Differential Equations	4
MATH 341 } or MATH 423 }	Numerical Analysis I	4
	Intro. Theory of Complex Variables	

*Students who have completed PHYS 211, 212, 213, may meet the PHYS 251, 252, 253 requirement by passing a departmental examination.

†Other courses involving manipulative skills may be substituted in consultation with the department chairman.

MAJOR IN BIOPHYSICS (Bachelor of Science)

A student majoring in biophysics must complete 32 quarter hours in biology and 38 quarter hours in physics, the required cognates, and the general

studies program for the baccalaureate degree as outlined in this bulletin. One summer term at the Marine Station is required. Specific course requirements are outlined in the Interdisciplinary section of this bulletin.

MINOR IN PHYSICS

A student minoring in physics must complete 27 quarter hours; 3 quarter hours must be upper division. Approval of physics adviser required.

PHYSICS (PHYS)

PHYS 115, 116 INTRODUCTION TO EXPERIMENTATION	1, 1
Introduction to the principles and practice of hypothesis testing including physical measurement, experiment design and data analysis. Emphasis is placed on the use of the computer for data acquisition, graphical presentation and analysis of data and simple simulation. Prerequisite: CPTR 121 or CPTR 131. WS	
PHYS 211, 212, 213 GENERAL PHYSICS	3, 3, 3
An introductory course in mechanics, heat, sound, light, electricity, atomic and nuclear physics, elementary particles, quantum mechanics and special relativity, designed primarily for the nonphysics major to acquaint him with the ideas and methods of physics for possible application to problems in other areas of human endeavor. Prerequisites: MATH 121, 122 or equivalent. PHYS 211 prerequisite for PHYS 212 or PHYS 213. Corequisite: PHYS 214, 215, 216. AWS	
PHYS 214, 215, 216 GENERAL PHYSICS LABORATORY	1, 1, 1
Laboratory work integrated with PHYS 211, 212, 213. AWS	
PHYS 241, 242, 243 GENERAL ASTRONOMY	4, 4, 4
Introduction to modern astronomy with emphasis on the place of astronomy in man's cultural and scientific thought and experience: planets, moons, comets, meteors, the solar system as a unit; the sun, stars, galaxies and the sidereal universe. Laboratory or night observation once a week. This course will meet the basic science requirement for the baccalaureate degree. Taught alternate years. AWS	
PHYS 251, 252, 253 PRINCIPLES OF PHYSICS	3, 3, 3
An introductory course in mechanics, relativity, electromagnetism and wave motion, designed to provide the science and engineering major with an intuitive and a mathematical understanding of fundamental physical concepts. Must be taken in sequence. Prerequisites: MATH 181, 281. Corequisite: PHYS 254, 255, 256; MATH 282, 283. AWS	
PHYS 254, 255, 256 PRINCIPLES OF PHYSICS LABORATORY	1, 1, 1
Experimental exploration and study of the fundamental concepts of physics. AWS	
PHYS 251, 252, 253 or equivalent and MATH 181, 281, 283 prerequisite for all courses numbered PHYS 300 or above except PHYS 350; PHYS 352; PHYS 353; PHYS 472.	
PHYS 311 MODERN PHYSICS	3
Basic principles of quantum theory, atomic and nuclear structure. Corequisite: PHYS 314; MATH 311. A	
PHYS 312 MODERN PHYSICS LABORATORY	1
Experimental study of the characteristics of alpha, beta and gamma radiation, interaction of radiation with matter, neutron activation. Corequisite: PHYS 311. A	
PHYS 313 THERMODYNAMICS	4
An introduction to the physical theories of equilibrium thermostatics and irreversible thermodynamics based on elementary statistical mechanics. Prerequisite: PHYS 311; MATH 311. W	
PHYS 314 PHYSICAL ELECTRONICS	3
Physical principles of solid state, gaseous and vacuum electronic devices. Prerequisite: PHYS 313. Corequisite: PHYS 315. S	

PHYSICS

PHYS 315 PHYSICAL ELECTRONICS LABORATORY	1
Experiments in crystal and semiconductor physics, properties of ionized gases, measurement of fundamental physical constants. Corequisite: PHYS 314. S	
PHYS 317, 318, 319 PHYSICS SEMINAR I	1, 1, 1
Contemporary and classical topics in physics presented for discussion and study with emphasis placed on underlying principles and the interrelation of physical concepts. Major topics will not be repeated more often than biyearly. Regular use will be made of the current literature of physics. AWS	
PHYS 321, 322 OPTICS	3, 3
Classical theory of radiation and optics based on Maxwell's equations: reflection, refraction, dispersion, diffraction, interference, coherence, polarization, scattering, polychromatic waves. Corequisite: PHYS 323. AW	
PHYS 323 OPTICS LABORATORY	1
Experimental study of geometrical and physical optics. W	
PHYS 350 PHYSICS AND MODERN LIFE	4
A study of the relations of physics to modern life in such areas as technology, economics, sociology, fine arts, philosophy and religion. One area is selected for emphasis. No prerequisites. S	
PHYS 352, 353 RADIOISOTOPE TECHNIQUES	2, 2
Laboratory work accompanied by lectures appropriate to the techniques studied in the laboratory; radiation detection, instrumentation, radiological safety, interaction of radiation with matter, ionization chambers, proportional counters, Geiger counters, scintillation counters, spectrometers, monitoring and survey instruments, activation analysis, selected biological and chemical studies. Prerequisite: PHYS 211, 212, 213 or CHEM 141, 142, 143. WS	
PHYS 362, 363 THEORETICAL MECHANICS	3, 3
Statics and dynamics of particles, fluids and rigid bodies, harmonic and orbital motion, Lagrangian and Hamiltonian mechanics. WS	
PHYS 371 SIMULATION AND MODELING	3
Study of contemporary methods of simulation and modeling of deterministic and probabilistic systems using BASIC, FORTRAN and ISL (Integrated Simulation Language). Applications to biology, business, engineering and physics. Prerequisites: CPTR 121 or equivalent; MATH 181 and MATH 289 or equivalent; BIOL 350 or GBUS 261 or MATH 311 or equivalent. S	
PHYS 401, 402 ELECTRICITY AND MAGNETISM	4, 4
Electric and magnetic field theory, polarization, magnetization, solutions to the equations of Laplace and Poisson, Maxwell's equations, applications to plane waves, and dipole radiation. AW	
PHYS 411, 412, 413 ATOMIC AND NUCLEAR PHYSICS	3, 3, 3
Experimental and theoretical foundations of modern atomic and nuclear physics: special relativity, elementary quantum mechanics, atomic structure and spectra, nuclear structure, nuclear reactions, fundamental particles. Prerequisite: PHYS 311; PHYS 321. Corequisite: PHYS 414, 415, 416. AWS	
PHYS 414, 415, 416 EXPERIMENTAL PHYSICS	1, 1, 1
Experimental investigations in classical and modern physics. AWS	
PHYS 417, 418, 419 PHYSICS SEMINAR II	1, 1, 1
Contemporary and classical topics in physics presented for discussion and study, with emphasis placed on underlying principles and interrelation of physical concepts. Major topics will not be repeated more often than biyearly. Regular use will be made of the current literature of physics. AWS	
PHYS 472 METHODS OF TEACHING PHYSICAL SCIENCE	3
Materials, techniques and methods of teaching the physical sciences on the secondary level. Observation, demonstration and class presentation are required. Special attention is given to newer methods of teaching science to the secondary student.	

PREPROFESSIONAL PROGRAMS

The College offers courses which are prerequisite for admission to professional or technical schools. Students wishing to secure admission to such schools should familiarize themselves with the admission requirements of the school of their choice. Most preprofessional curriculums require two units of high school mathematics (algebra and geometry). Preprofessional courses of study are offered for the professions hereinafter listed.

All programs should be planned in consultation with and approved by the assigned academic adviser.

CHIROPRACTIC

W. B. Rippon, Academic Adviser

Two years of college preparation are generally required, including one year of biology and at least one year of chemistry. The student should obtain a bulletin from each chiropractic college to which he wishes to apply for information on entrance requirements. State requirements also vary, and such information is available from the chiropractic college. Of the dozen approved schools in the United States, Western States Chiropractic College in Portland, Oregon, is the only one in the Northwest.

DENTISTRY

C. E. Chinn, Academic Adviser

The minimum requirement for admission to the study of dentistry is 96 quarter hours. However, most dental schools expect candidates for admission to have completed a bachelor's degree. The following courses are basic:

College Writing	8
Religion	6 per year
Mathematics	8
General Biology or Zoology	12
General Chemistry	12
General Physics	12
Organic Chemistry	12

Specific course requirements are listed in the Interdisciplinary section of this bulletin.

DENTAL ASSISTANT

A. E. Grable, Academic Adviser

The minimum requirement for admission to the study of dental assistantship is 48 quarter hours from a liberal arts college. The following courses are to be

PREPROFESSIONAL PROGRAMS

included for the Associate of Science degree from Loma Linda University:

*Accounting or Bookkeeping	6
*Beginning Typewriting	6
Biology	4-12
College Writing	8
General Psychology	4
*Introductory Chemistry	8
Religion	6
Sociology	4
Speech	4
*U.S. History	8

*Or secondary school credit with a grade of C or better. At least three of these areas should be taken on the secondary level to be able to complete the program in one year.

DENTAL HYGIENE

A. E. Grable, Academic Adviser

Students planning for careers in dental hygiene must complete 96 quarter hours with a cumulative grade-point average of 3.0 or above before seeking admission to the various dental hygiene programs. Some schools require that electives include a foreign language. Other schools require the advanced First Aid Certificate; check with adviser.

Loma Linda University

Experience has indicated that a minimum average of 3.00 is needed to compete for admission to the program at Loma Linda University. The following courses are required in preparation for advanced studies there:

College Writing	8
Speech	4
General Biology	12
Microbiology	5
Introductory Chemistry	8
Religion	12
History	8
General Psychology	4
Sociology	8
Physical Activity Courses	3
Literature, Fine Arts and/or Foreign Language	15

The Bachelor of Science degree is awarded by Loma Linda University.

LAW

W. N. Messer, Academic Adviser

There is no specific curriculum for prelaw students. The student should secure a broad liberal arts preparation. Courses which are designed to

develop skills in both oral and written communication and ability to reason and think analytically are strongly recommended.

Most law schools require the completion of a bachelor's degree for admission. Admission requirements also include a satisfactory grade-point average and score on the Law School Admission Test (LSAT). Law schools vary in the levels of achievement required for admission. Students planning to study law should consult with the prelaw adviser to make sure the students' proposed schedule of courses will meet requirements of the law school which they plan to attend.

MEDICINE

W. B. Rippon, Academic Adviser

Most medical schools require completion of a bachelor's degree with a grade-point average of 3.5 or above, computed separately for science and nonscience courses. The following courses are normally required by Loma Linda University:

English	8
General Biology	12
General Chemistry	12
Organic Chemistry	9-12
Physics	12
Religion	16
Calculus strongly recommended	

If applying to a medical school other than Loma Linda University, it is recommended the following courses also be included:

Developmental Biology
Quantitative Analysis
Physical Chemistry
Foreign Language

MEDICAL TECHNOLOGY

H. C. Weir, Academic Adviser

Students wishing to become medical technologists may complete the first three years at the College and transfer to approved hospitals for the fourth year. Upon completion of the fourth year, the student will receive a Bachelor of Science degree.

Specific course requirements are listed in the Interdisciplinary section of this bulletin.

U. S. History
Zoology

All pharmaceutical colleges require three years of residency in a two year of prepharmacy: some require a third year.

PREPROFESSIONAL PROGRAMS

NURSING

Wynelle Huff, Anne Lindt, Academic Advisers

For details about courses, etc., in nursing, please see the Nursing section of this bulletin. Candidates who plan to enter other schools should write to the director of the nursing school of their choice and ask for specific requirements.

OCCUPATIONAL THERAPY

G. Bruns, Academic Adviser

Students who are preparing for the Bachelor of Science degree in occupational therapy should plan to complete 96 quarter hours before entering the professional training. The following curriculum is recommended:

Anatomy and Physiology	8
Microbiology	5
Chemistry or Physics or Mathematics	12
College Writing	8
Social Studies	12
To include sociology, psychology; additional courses may be selected from economics, history or political science.	
Humanities	12
To include speech, general crafts and ceramics, and one or more of the following: fine arts (3 quarter hours of applied music may be included), humanities, language, literature and philosophy.	
Religion	12
Electives	24
To meet the minimum of 96 quarter hours. Courses in art and behavioral sciences are recommended.	

More than 30 institutions of higher learning accredited by the Council on Medical Education and Hospitals of the American Medical Association offer training in occupational therapy. Loma Linda University is generally chosen by Walla Walla College students.

OPTOMETRY

T. L. Anderson, Academic Adviser

Two years of college preparation are the minimum requirement for admission to most optometry schools, and this is generally followed by four years of training for the Doctor of Optometry degree. In some cases the Bachelor of Science degree may also be awarded by the optometry school.

The preprofessional curriculum should include as a minimum the following courses:

College Writing	8
*Fundamentals of Mathematics	8
Analytic Geometry and Calculus	4
*Fundamentals of Mathematics should be taken the first year.	

	PHYSICAL SCIENCES
General Biology	12
General Chemistry	12
General Physics	12
General Psychology	4

It is important that the student obtain a catalog from each college of optometry he may wish to enter, since these schools differ widely in their recommendations of other courses for the preoptometry program. Other commonly required courses include:

Organic Chemistry	12
Psychological Experiments	2

Competition for admission to some optometry schools is enough that the student would do well to complete a third year of college (and advanced courses in chemistry and biology) unless he achieves a very strong academic record.

OSTEOPATHY

W. B. Rippon, Academic Adviser

Schools of osteopathic medicine usually require a degree from an accredited college. The course requirements are essentially the same as for medical schools. (See the medical requirements listed previously in this section of the bulletin.)

PHARMACY

J. R. Chambers, Academic Adviser

At least two years of general college work are required. Students should consult with the college of pharmacy of their choice about course requirements. The following courses should be included:

Bacteriology	5
Botany	3
College Writing	8
General Physics	12
Health Science	2
General Chemistry	12
Mathematics	8
Organic Chemistry	10
Physical Activity Courses	2
Anatomy and Physiology	8
Psychology	6
Quantitative Chemistry	5
U. S. History	8
Zoology	9

All pharmaceutical colleges require three years in residency beyond the two years of prepharmacy; some require four years.

PREPROFESSIONAL PROGRAMS

PHYSICAL THERAPY

G. Bruns, Academic Adviser

The minimum requirement is the completion of 96 quarter hours.

The following courses must be completed:

College Writing	8
Humanities	12
Select from at least two fields: fine arts (3 quarter hours of applied music or arts may be included), language, literature, philosophy or speech (highly recommended).	
General Biology or Anatomy and Physiology	12
Microbiology	5
Chemistry	9-12
(a complete course with laboratory).	
Physics	6
(a course with laboratory is required, in addition, of students not having had high school physics).	
Social Studies	12
To include child or adolescent psychology, general psychology, (minimum 4 quarter hours). Additional courses may be selected from economics, history, political science or sociology.	
Religion	12
Electives	18-21
To meet the minimum of 96 quarter hours. Courses in art and behavioral sciences are recommended.	

PUBLIC HEALTH

Patti Velez, Academic Adviser

Loma Linda University offers a Master of Public Health (M.P.H.) as a professional degree that can be completed in three to six quarters. Major areas of study include biostatistics, environmental health, epidemiology, health administration, health education, nutrition, preventive care and tropical health.

The Master of Science in Public Health (M.S.P.H.) degree is offered in health education, biostatistics and parasitology and can usually be completed in four quarters.

Research and thesis programs leading to the Master of Science (M.S.) degree are offered through the graduate school by the department of biostatistics and nutrition.

Specific information about prerequisites and programs leading to the above-mentioned degrees is available in the School of Health bulletin, Loma Linda University.

RADIOLOGICAL TECHNOLOGY

H. C. Weir, Academic Adviser

Forty-five quarter hours are required for admission to most schools of radiological technology. College courses should be chosen to remove high school deficiencies in mathematics and science, if such exist. Courses such as anatomy and physiology, chemistry, general psychology, general physics and mathematics should be taken, and, whenever possible, typing. Inquiry should be made of the school to be attended for specific entrance requirements.

VETERINARY SCIENCE

D. W. Rigby, Academic Adviser

There are approximately 18 colleges and veterinary science in the United States. Since the basic requirements are not exactly the same, the student should confer with the college of his choice. The following will generally meet the requirements:

Biology	17-25
General Biology	12
*Microbiology or Bacteriology	5
Electives	8
Chemistry	24-28
General Chemistry	12
Organic Chemistry	12
*Biochemistry	4
Physics	12
General Physics	12
Mathematics	8-12
Fundamentals of Mathematics	8
*Calculus I	4
College Writing	6-9
Humanities and Social Studies	15-20
Physical Activity Courses	0-4

*Not required by certain schools.

Major Requirements:

RELI 101, 102, 103 Greek I

RELI 221, 222, 223 Greek II

RELI 441 Hebrew Introduction

RELI 442, 443 Hebrew I

Electives (12 must be upper division)

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

RELIGION

M. Maxwell, Dean; J. Brunt, E. Bursey, J. Dybdahl, P. Grove, Lucile Knapp, G. Mattison, L. Neverka, A. Thompson, G. Winslow.

The principal purposes of the school of theology are to provide undergraduate education for students seeking to enter the ministry and to offer courses in religion as desired by students in various other curricula of the College.

Candidates for the ministry are selected on the basis of scholarship, spiritual qualities, cultural refinement, social sympathies and skills. Ministerial students are admitted to candidacy for a Bachelor of Arts degree with a major in theology upon the approval of the theology faculty at the beginning of the junior year. Those approved will then work to meet seminary entrance requirements by completing a theology major. Two additional years of graduate study at the Theological Seminary of Andrews University should be anticipated for ministerial internship.

Those who expect a recommendation to the seminary and/or those who plan to be pastors, evangelists, Bible workers, or Bible teachers should take a theology major. The religion major is available to those who are not planning on the ministry, and for those planning on additional graduate training in such fields as medicine, dentistry and law.

All majors must successfully complete a senior comprehensive examination. Those planning to attend the seminary should make sure that they obtain the necessary undergraduate subjects required for entrance. Students who plan to teach religion in academies must aim for teacher certification as outlined in the Education section of this bulletin. Students should consult the dean of the school of theology about courses required as early as possible in their college career.

The Biblical languages major is intended for those students who wish to gain facility in use of the basic tools for Biblical study, especially those anticipating graduate work in this and related areas.

MAJOR IN BIBLICAL LANGUAGES (Bachelor of Arts)

A student majoring in Biblical languages must complete 45 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

RELL 101, 102, 103	Greek I	12
RELL 221, 222, 223	Greek II	9
RELL 441	Hebrew Introduction	3
RELL 442, 443	Hebrew I	6
Electives (12 must be upper division)		<u>15</u>
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		<u>45</u>

RELIGION

Required Cognates:

RELB 223	Exegesis of Romans (Greek)	3
RELT 404	A Scientific Approach to Biblical Interpretation	2
RELH 405	Biblical Archaeology	2
RELH 406	History of the English Bible	2
RELH 455	Development of the Christian Church	3

MAJOR IN RELIGION (Bachelor of Arts)

A student majoring in religion must complete 50 quarter hours in the major, the required cognate, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

RELT 230	Discipleship and Mission	4
RELT 496	Seminar	2
Electives (20 must be upper division)		<u>44</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 50

Required Cognate:

ENGL 224	Research Writing in Religion	3
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MAJOR IN THEOLOGY (Bachelor of Arts)

A student majoring in theology must complete 60 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

RELP 150	Ministerial Orientation	0
RELB 141, 142, 143	Biblical Exegesis I	9
RELB 221, 222	Biblical Exegesis II	6
RELB 223	Exegesis of Romans (Greek)	3
RELH 455	Development of the Christian Church	3
RELT 456, 457	Systematic Theology	6
RELT 316 or RELH 317	Inspiration and Ellen White Denominational History	2
RELP 496	Seminar in Theology	4
Electives (16 must be upper division)		<u>27</u>

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman. 60

Required Cognates:

RELL 101, 102, 103	Greek I	12
RELL 221, 222, 223	Greek II	9
RELL 441	Hebrew Introduction	3
HIST 465	The Renaissance and Reformation	4
SPCH 101	Fundamentals of Speech Communication	4
SPCH 381, 382	Pulpit Address	6
BIOL 407	Philosophy of Science	4
ENGL 224	Research Writing in Religion	3

MINOR IN BIBLICAL LANGUAGES

A student minoring in Biblical languages must complete 30 quarter hours; 6 quarter hours must be upper division; RELB 223; RELT 404; RELH 405; RELH 406 and RELH 455 are required. Approval of Biblical languages adviser required.

MINOR IN RELIGION

A student minoring in religion must complete 30 quarter hours; 9 quarter hours must be upper division. Approval of religion adviser required.

BIBLICAL STUDIES (RELB)

RELB 101, 102, 103 BIBLE SURVEY	2, 2, 2
An introductory course designed to provide the tools necessary for an understanding of the Bible. Portions of both the Old and New Testaments are studied in order that the student may gain insight into the major divisions of the Scripture story. Students having had Bible courses on the secondary or college level should not register for this course.	
RELB 104, 105, 106 LIFE AND TEACHINGS	2, 2, 2
A study of the life of Christ, His teachings, His methods and the principles of His kingdom as they apply in the world today. <i>Those having had RELB 141, 142, 143 should not register for this course without special permission.</i>	
RELB 111 MESSAGE OF THE OLD TESTAMENT	4
A survey of the basic themes of the Old Testament.	
RELB 141, 142, 143 BIBLICAL EXEGESIS I	3, 3, 3
An introductory course which inductively leads the student into a study of the God-man, the nature of His kingdom and the teachings of Christ concerning Himself, His law and the way of salvation. The concepts of Matthew and John are studied so that the theology of Christ is seen against the background of His earthly life. Open only to theology majors. Must be taken in sequence.	
RELB 216, 217, 218 PAULINE LETTERS	2, 2, 2
An exegetical examination of each of Paul's letters within its historical context to determine the particular message of each, the literary devices employed to convey this message and its relevance for today.	
RELB 221, 222 BIBLICAL EXEGESIS II	3, 3
An exegetical study of the writings of Paul and the General Epistles of the New Testament within their historical context. This course is particularly geared for those students planning for the ministry and is, therefore, open only to theology majors. <i>Students who have taken RELB 216, 217, 218 or RELB 464, 465, 466 should not register for this course without special permission.</i>	
RELB 223 EXEGESIS OF ROMANS (GREEK)	3
An exegetical study of the letter of Paul to the Romans based on the Greek text. Prerequisite: RELB 221, 222, 223.	
RELB 301 OLD TESTAMENT HISTORY	3
A study of the historical framework in which the religion of Israel developed. Attention is paid to dominant events and trends in God's saving relationship to His covenant people.	
RELB 302 WRITINGS	3
An exegetical examination of the historical and poetic books of the Bible. Attention is given to authorship, the time and circumstance of writing and other literary questions.	

RELIGION

RELB 303 PENTATEUCH

An exegetical examination of significant passages in Pentateuch. Attention is given to the historical setting, authorship, time, circumstance of writing and other literary questions.

RELB 304, 305, 306 HEBREW PROPHETS

3, 3, 3
A study of the major and minor prophets from the viewpoint that these things "were written for our admonition upon whom the ends of the world are come." Attention is given to the historical setting of the prophecies, with careful exegetical study of the text, emphasizing the fundamentals of the gospel as contained therein. RELB 304 prerequisite to RELB 305 or RELB 306.

RELB 312 DANIEL

3
An advanced course on the historical setting and significance of the book. The prophetic features of the book are studied in the light of both secular and church history to provide the student with a clearer insight into contemporary religious conditions.

RELB 313 REVELATION

3
An advanced course on the historical setting and significance of the book. The prophetic features of the book are studied in the light of both secular and church history to provide the student with a clearer insight into contemporary religious conditions.

RELB 434, 435, 436 GOSPELS

3, 3, 3
An exegetical examination of each gospel within its historical context to determine the particular message of each and the literary devices employed to convey this message and its relevance for today.

RELB 464, 465, 466 NEW TESTAMENT EPISTLES

3, 3, 3
An exegetical study of the writings of Paul and the General Epistles of the New Testament within their historical context. This course is intended for any student who wishes to make a thorough study of this literature. *Students who have taken RELB 216, 217, 218 should not register for this course without special permission.*

RELIGIOUS HISTORY (RElh)

RElh 317 DENOMINATIONAL HISTORY

2
A study of the rise and development of the Seventh-day Adventist denomination.

RElh 402 MODERN DENOMINATIONS

3
This course deals with the cardinal teachings of a number of the prominent religions of the world. Comparisons are made of the teachings relating to God, salvation, sin and the future.

RElh 403 WORLD RELIGIONS

3
A short study of the greater religions of mankind, such as Animism, Hinduism, Buddhism, Confucianism, Shintoism, Islam and Christianity. Consideration is given to the historical setting out of which these religions arose, their founders, their basic teachings and rituals, their conceptions of God and man, as well as their influence on cultural development.

RElh 405 BIBLICAL ARCHAEOLOGY

2
An introduction to the science of archaeology with particular attention to those discoveries which bear on the interpretation of the Biblical text.

RElh 406 HISTORY OF THE ENGLISH BIBLE

2
A survey of the history of the Bible from the earliest manuscripts through the science of textual criticism to a comparison of the numerous English versions currently available.

RElh 455 DEVELOPMENT OF THE CHRISTIAN CHURCH

3
A course on the rise of Christianity with emphasis on the development of theological concepts.

RElh 249 RELIGION IN A SOCIAL CONTEXT

4
See Sociology and Social Work section of the bulletin for description. (SOci 249)

BIBLICAL LANGUAGES (RELL)**RELL 101, 102, 103 GREEK I**

4, 4, 4

An introductory study of the elements of New Testament Greek with experience in translation. This course emphasizes the development of the ability to read the original language, and at the same time aims to create an interest in the New Testament. The First Epistle of John is translated as well as selected chapters in the Gospel of John.

RELL 221, 222, 223 GREEK II

3, 3, 3

Continued reading in the Greek New Testament with emphasis upon principles of interpretative translation. The book of Revelation and selections from the Gospels are used in developing a facility in translation.

RELL 341, 342, 343 DOCTRINAL EPISTLES OF PAUL

2, 2, 2

An exegetical study of the great doctrinal epistles of Paul. Selections from the letters of the Thessalonians, Corinthians, Romans and Galatians are especially studied as examples of the apostle's theological writings.

RELL 344, 345, 346 LATER EPISTLES OF PAUL

2, 2, 2

An exegetical study of examples of Paul's later letters, especially the so-called prison epistles. The epistles of Paul to the Ephesians, Philippians and Colossians are studied as typical of this period of the apostle's life.

RELL 441 INTRODUCTION TO BIBLICAL HEBREW

3

An introduction to the basic elements of Biblical Hebrew. Designed to enable the student to use the language as a tool in Biblical studies and to provide a basis for further study in Hebrew.

RELL 442, 443 HEBREW I

3, 3

A concentrated study of Hebrew grammar. Emphasis is given to the mastery of the regular verb, use of the lexicon, and the reading of narrative prose from the Pentateuch and the Prophets. RELL 441 is prerequisite to RELL 442 or RELL 443.

RELL 451, 452, 453 HEBREW READING

2, 2, 2

Directed reading in the prophetic sections of the Hebrew Bible. Material from Isaiah and either Jonah or Hosea is selected for translation. Some experience in the translating from the Dead Sea Scrolls is provided in the spring quarter.

RELL 461, 462 TEXTUAL CRITICISM OF THE NEW TESTAMENT

2, 2

A study of materials, methods and history of New Testament textual criticism, with practical exercise using microfilms and facsimiles of manuscripts. Must be taken in sequence.

RELL 463 TRANSLATION PROBLEMS

2

A study of the methods, resources and history of the art of Bible translation. A critical evaluation will be made of the important contemporary translations and of some of the more important translation problems.

MISSIONS (RELM)**RELM 233 INTRODUCTION TO CROSS-CULTURAL MINISTRY**

3

A study of the major issues involved in communicating Christianity in other cultures with the aim of preparing the student for actual field work. This prerequisite for student missionaries is also open to other interested students.

PROFESSIONAL (RELP)**RELP 150 MINISTERIAL ORIENTATION**

0

A ministerial orientation seminar offered the autumn quarter by the theology staff and visiting lecturers which includes the many facets of the ministerial profession. Required of all freshman and transfer theology majors.

RELIGION

RELP 370 HOSPITAL MINISTERIAL TRAINING	2 or 6
This course is offered as a seminar at the Portland Adventist Medical Center or the Walla Walla General Hospital. Besides a balanced program of clinical experience, there will be films, discussion, lectures by physicians, chaplains and other resource personnel. Registration by permission only; class limited to five students. (Two quarter hours, Walla Walla General Hospital; six quarter hours, Portland Adventist Medical Center.)	
RELP 381 CHURCH ADMINISTRATION	3
Study of church organization, election and duties of church officers, church boards, business meetings and finances, with opportunity for observation and participation in these phases of church activity. Careful study is given to principles of Christian worship and the special services of the church.	
RELP 442 PERSONAL EVANGELISM	2
A course designed for students desiring to learn methods of individual religious instruction, the techniques of meeting objections, and the art of securing decisions. The preparation and giving of Bible studies will be featured. Special attention given to junior and youth evangelism.	
RELP 447 PASTORAL EVANGELISM	3
A survey of evangelistic methods used by Seventh-day Adventist pastors. Emphasis will be placed on health evangelism, Sabbath-School outreach, cottage meetings, small-scale public evangelism and other soulwinning programs commonly used in the local church. Students will be encouraged to develop unique evangelistic approaches.	
RELP 472 METHODS OF TEACHING BIBLE IN THE SECONDARY SCHOOL	3
An examination of current teaching practices in the secondary school in the area of religion with emphasis on objectives, content, organization, and materials and resources available. Observations in the schools along with microteaching giving opportunity to demonstrate competency is required. Will not apply on a major or minor in theology or religion.	
RELP 481 PASTORAL COUNSELING	3
The basic principles of counseling studied from the perspective of the pastor.	
RELP 482 INTRODUCTION TO PASTORAL CARE	3
The nature and function of pastoral care from a theological perspective. Practical applications of theological insights will be made to the vocation of the pastor.	
RELP 490 FIELD EVANGELISM	1-3; 3
Experience in evangelistic techniques is obtained by giving Bible studies and/or holding meetings. One to three hours any quarter; maximum, three.	
RELP 496 SEMINAR IN THEOLOGY	2; 6
These seminars involve intensive individual study, written reports and group discussion on assigned Biblical topics and contemporary theological and ethical issues. Open only to theology majors who are advanced to candidacy. Two hours per quarter; maximum, six.	
ENGL 224 RESEARCH WRITING IN RELIGION	3
See the English section of this bulletin for description.	

THEOLOGY (RELT)

RELT 112 THEOLOGY OF CHRISTIAN WITNESSING	3
A study of the theology and methodology of the individual Christian witness in a contemporary world.	
RELT 201 THE CHRISTIAN WAY OF SALVATION	4
A systematic study of the Christian way of life including such topics as conversion, righteousness by faith, Christian growth and witnessing.	

See Sociology and Social Work section of the bulletin for description (SOCY 249)

RELT 202 BASIC CHRISTIAN BELIEFS	4
A study of the Christian teachings about God and human beings. Topics such as the trustworthiness of the Bible, creation and the controversy between good and evil will be explored. Special attention will be given to the distinctive Seventh-day Adventist beliefs.	
RELT 204 CONTEMPORARY ISSUES IN ADVENTIST THOUGHT	4
A study of current ideas and issues in Adventist theology designed for those who have an adequate background in Adventist doctrine.	
RELT 230 DISCIPLESHIP AND MISSION	4
A course designed to explore the relationship of the individual to the church. Attention is given to the development of study skills with analysis of a member's responsibility to the church community. Specific areas to be covered include: methods of Bible study, the use of tools for Bible study, organization of the church, the role of the layman in the administration of the church, the mission of the church. Designed primarily for the nonministerial student.	
RELT 310 CHRISTIAN ETHICS	2
A study of Biblical ethics in relation to current ethical views on conduct and behavior.	
RELT 314 ESCHATOLOGY	3
A study of the final events of this earth's history as outlined in the great lines of Bible prophecy and the writings of Ellen G. White. Emphasis is placed upon the important issues in the great controversy between good and evil and the final establishment of God's everlasting kingdom upon the earth.	
RELT 315 INSPIRATION AND THE BIBLE WRITERS	2
A study of inspiration and revelation as given by God to meet the needs of man and their function through the centuries.	
RELT 316 INSPIRATION AND ELLEN WHITE	2
A study of the life and ministry of Ellen G. White in the framework of inspiration in modern times.	
RELT 404 A SCIENTIFIC APPROACH TO BIBLICAL INTERPRETATION	2
The doctrines of inspiration and revelation are considered in preparation for a survey of the history of the canon and the critical disciplines employed by scholars to arrive at a better understanding of the text.	
RELT 408 DOCTRINE OF THE SANCTUARY	3
A study of the Hebrew tabernacle and its services with special emphasis on its significance for Christian faith in the twentieth century.	
RELT 412 PHILOSOPHY OF RELIGION (or PHIL 412)	4
A constructive study of religious feeling, thought and practice from a philosophical point of view. Attention is especially given to the fundamental reasoning underlying the Christian faith in general and the beliefs of Seventh-day Adventists in particular.	
RELT 417, 418 CHRISTIAN DYNAMICS	3, 3
An analytical study and practical application of the dynamics of Christian behavior. An advanced course designed to guide the student in understanding and experiencing the moving physical, mental, spiritual and social forces that produce constructive thought, healthy motivation and positive action in the religious life. One lecture, one discussion, one laboratory period each week.	
RELT 419 STUDIES IN CHRISTIAN DYNAMICS	2
A survey of research methods combined with individual, independent study carried out under the direction of the instructor. A representative paper will be required in which the student must show competence in study and research on an independent basis. Registration by permission of the instructor. Prerequisite: RELT 417, 418.	
RELT 456, 457 SYSTEMATIC THEOLOGY I, II	3, 3
A systematic study of the major teachings of the Christian religion and the Seventh-day Adventist Church in particular, with emphasis on the Bible as the authority for truth. The student will be asked to organize his concepts of Bible doctrines and to give adequate scriptural support for his positions. Designed for theology majors, or registration by permission of instructor.	

HELP 300 HOSPITAL MINISTERIAL TRAINING COURSE FOR CHRISTIAN HOSPITALS AND MEDICAL CENTERS. This course is designed to help Christian hospitals and medical centers develop their own training programs for their personnel. Registration by permission only, class limited to ten students. (1) Two qualified persons. (2) Wally W. Weller, Director, Hospital Medical Center.

HELP 301 CULTURE AND CIVILIZATION IN VARIOUS COUNTRIES

HELP 302 CHURCH ADMINISTRATION. A broad-based study of church organization, election and

business methods and finances, with one month of practical training in administration.

HELP 303 BIBLE STUDY. A study of the Bible, with special emphasis on the Old Testament.

HELP 304 BIBLE STUDY. A study of the Bible, with special emphasis on the New Testament.

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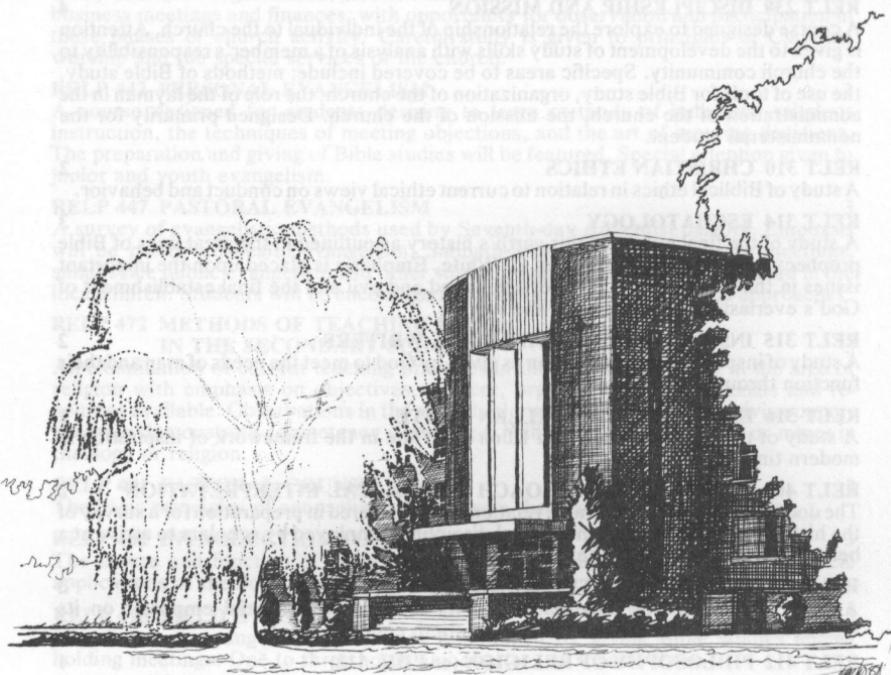
HELP 353 BIBLE STUDY. A study of the Bible, with special emphasis on the New Testament.

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HELP 357 BIBLE STUDY. A study of the Bible, with special emphasis on the New Testament.



SITTNER HALL — Men's Dormitory

SOCIOLOGY AND SOCIAL WORK

Wilma Hepker, Chairman; R. Gardner, R. Henry, D. Snarr.
(P. E. Mitchell, Ed Kasner; Field Placement Liaison Personnel)

The department of sociology and social work offers a Bachelor of Social Work degree and a Bachelor of Arts degree with a major in sociology. Minors are available in both social work and sociology.

The degree in social work is designed to prepare the student for beginning professional social work practice; to prepare students for other professions and services, particularly within the Seventh-day Adventist church; and to prepare students for graduate professional social work education. Supervised field experience in selected social work agencies or related services is an integral part of the program.

Sociology broadens the student's perspective of the overall organization and function of society. A sociologist is concerned with the scientific study of social phenomena arising out of group relationships. A major in sociology is useful as preprofessional preparation for advanced research and teaching in sociology, community planning, public administration, law and medical professions, and other fields concerned with plural relationships.

SOCIAL WORK (Bachelor of Social Work Degree)

A student taking the social work program must complete 70 quarter hours in the area, the required cognates, and the general studies for the Bachelor of Science degree program as outlined in this bulletin.

Social Work Requirements:

SOWK 264	Introduction to Social Work	3
SOWK 266	Social Welfare as a Social Institution	3
SOWK 365	Social Welfare Administration	3
SOWK 370	Field Work	12
SOWK 371	Social Work Practice with Individuals	3
SOWK 372	Social Work Practice with Small Groups	3
SOWK 373	Social Work Practice with Marriage/Family	3
SOWK 375	Social Work in Community Services	3
SOCI 204	General Sociology	4
SOCI 236	Racial and Ethnic Relations	3
SOCI 324	Human Development and the Family	4
SOCI 345	Sociology of Communities	3
SOCI 451	Methods of Social Research I	2
SOCI 452	Methods of Social Research II	1
SOCI 453	Methods of Social Research III	1
Electives (6 must be upper-division)		<u>19</u>
Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.		<u>70</u>

SOCIOLOGY AND SOCIAL WORK

Required Cognates:

PSYC 130	General Psychology	4
MATH 115	Mathematics Through Statistics	
or	or	
MATH 116	Applied Statistics	4
or	or	
PSYC 350	Elementary Statistics	
PLSC 224	American Government	
or	or	
HIST 448	Twentieth Century America	4
BIOL 101, 102	General Biology	
or	or	
BIOL 201, 202	Anatomy and Physiology	8

MAJOR IN SOCIOLOGY (Bachelor of Arts)

A student majoring in sociology must complete 45 quarter hours in the major, the required cognates, and the general studies program for the baccalaureate degree as outlined in this bulletin.

Major Requirements:

SOCI 204	General Sociology	4
SOCI 451, 452, 453	Methods of Social Research I, II, III	4
SOCI 454	History of Social Thought	4
SOCI 455	Sociological Theory	3
Electives		30

Electives must be chosen in consultation with and approved by the academic adviser assigned by the department chairman.

Required Cognate:

MATH 115	Mathematics Through Statistics	
or	or	
MATH 116	Applied Statistics	4
or	or	
PSYC 350	Elementary Statistics	

MINOR IN SOCIAL WORK

A student minoring in social work must complete 30 quarter hours; SOCI 204; SOWK 264; SOWK 266 and SOCI 324 are required. Approval of social work adviser required.

MINOR IN SOCIOLOGY

A student minoring in sociology must complete 30 quarter hours; 3 quarter hours must be upper division; SOCI 204 required. Approval of sociology adviser required.

ANTHROPOLOGY (ANTH)**ANTH 255 CULTURAL ANTHROPOLOGY**

3

A study of the origin and nature of culture, the uniformities and variations in man's cultural development as seen in preliterate societies, with special emphasis upon the value of the cultural concept. Prerequisite: SOCI 204.

CORRECTIONS, LAW ENFORCEMENT AND CRIMINAL JUSTICE (CORR)**CORR 285 INTRODUCTION TO LAW ENFORCEMENT AND CRIMINAL JUSTICE**

3

Philosophy and history of law enforcement; overview of crime and police problems; agencies involved in administration of criminal justice; processes of justice from detection of crime to parole of offender; evaluation of modern police services; survey of professional career opportunities and qualifications required. Observations and field trips arranged.

CORR 385 CRIMINOLOGY

2

A study of the historical background of crime and factors of deviant social behavior; a survey of criminological theories to analyze contributing factors and evaluate remedial measures now in common use. Visits to agencies and institutions arranged.

CORR 387 JUVENILE DELINQUENCY

2

A study of factors in delinquency, juvenile courts, detention and probation; an investigation and comparison of programs of treatment and prevention as well as the study of the role of volunteer service. Field trips arranged.

CORR 485 SOCIOLOGY OF LAW

2

A general treatment of the social origins and consequences of law and legal process. Special emphasis is placed on problems of legal change and on the structure and functioning of legal sanctions. Social conditions affecting the administration of justice; role of social science in jurisprudence.

CORR 487 TREATMENT THEORIES AND PROGRAMS IN CORRECTIONS

3

This course includes an analysis of major treatment theories utilized by counseling and rehabilitation personnel in major penal institutions and in community-based correctional programs. Emphasis is given to the influences of the entire criminal justice system on theories of treatment, and preventive as well as rehabilitative programs. Both adult and juvenile treatment programs are considered.

SOCIAL WORK (SOWK)**SOWK 264 INTRODUCTION TO SOCIAL WORK**

3

The profession of social work in the United States; principles, methods and values of the social worker; settings for social work practice. Observations and field trips arranged.

SOWK 266 SOCIAL WELFARE AS A SOCIAL INSTITUTION

3

Historical development of U.S. social welfare system, examination of current social welfare institutions in terms of political, social and value systems and in terms of needs they attempt to fulfill. Prerequisite: SOWK 264.

SOWK 365 SOCIAL WELFARE ADMINISTRATION

3

An introduction to the basic techniques and skills of social welfare policy analysis, planning and administration. Emphasis is on policy formulation, decision-making, evaluation and planning models. Organizational structure, theory, goals, practice and budgeting are also covered in the context of delivering social welfare services.

SOCIOLOGY AND SOCIAL WORK

SOWK 370 FIELD WORK

Training under a professional social worker in a public or private welfare or correction agency. Credit is earned at the rate of one quarter hour for three hours of field work per week approved by the supervisor and instructor. Written reports and evaluations are included. Students who take twelve hours during one quarter will register for **block placement**. Block placements are designed to provide specialized training in social work or criminal justice. Instruction is offered at various locations in such fields as medical social work, school social work, secondary school residence counseling, pastoral social work, and public health social work. Prerequisites: SOWK 264, SOCI 204, SOWK 266 and permission of the instructor. Corequisites or prerequisites: SOWK 371, SOWK 372, SOWK 373. Twelve quarter hours are required for a social work major.

SOWK 371 SOCIAL WORK PRACTICE WITH INDIVIDUALS

An introduction to social work methods provided through a survey of basic intervention skills and basic interviewing techniques. The Christian value system as it relates to social work practice is explored. Students participate in field experiences and videotaped interviews. Prerequisite: SOWK 264.

SOWK 372 SOCIAL WORK PRACTICE WITH SMALL GROUPS

Students learn group process skills to build a basic foundation for group intervention methods. Students will participate in and observe small groups. Prerequisite: SOWK 371.

SOWK 373 SOCIAL WORK PRACTICE WITH MARRIAGE AND FAMILY

Basic intervention skills are expanded by experiencing family and marriage dynamics through role playing. Students will be exposed to various types of family practice intervention methods by audiovisual aids.

SOWK 375 SOCIAL WORK IN COMMUNITY SERVICES

The social work method known as community organization is explored for its value in meeting the needs of large groups of persons such as churches, schools and neighborhoods. Recommended prerequisite or corequisite: SOCI 345.

SOWK 464 CHILD WELFARE

Historical and contemporary aspects of problems affecting children and the welfare services assigned to deal with these problems.

SOWK 466 COMPARATIVE THEORIES OF SOCIAL WORK PRACTICE

An in-depth study of selected models of social work practice with individuals, families and groups. Social work students will become skilled in the use of at least one of these models. Prerequisites: SOWK 264; SOWK 266; SOWK 371, SOWK 372, SOWK 373.

SOWK 468 CONTEMPORARY THOUGHTS ON GROUP PROCESS

Further developing group process, the students relate their group experiences to contemporary group work concepts and theories.

SOCIOLOGY (SOCI)

SOCI 204 GENERAL SOCIOLOGY

A course dealing with the fundamentals of group behavior, social conditions and dynamics. Attention is also given to such phases as culture, groups, population trends, religions, institutions, social problems, theories and objectives.

SOCI 225 MARRIAGE AND FAMILY LIFE

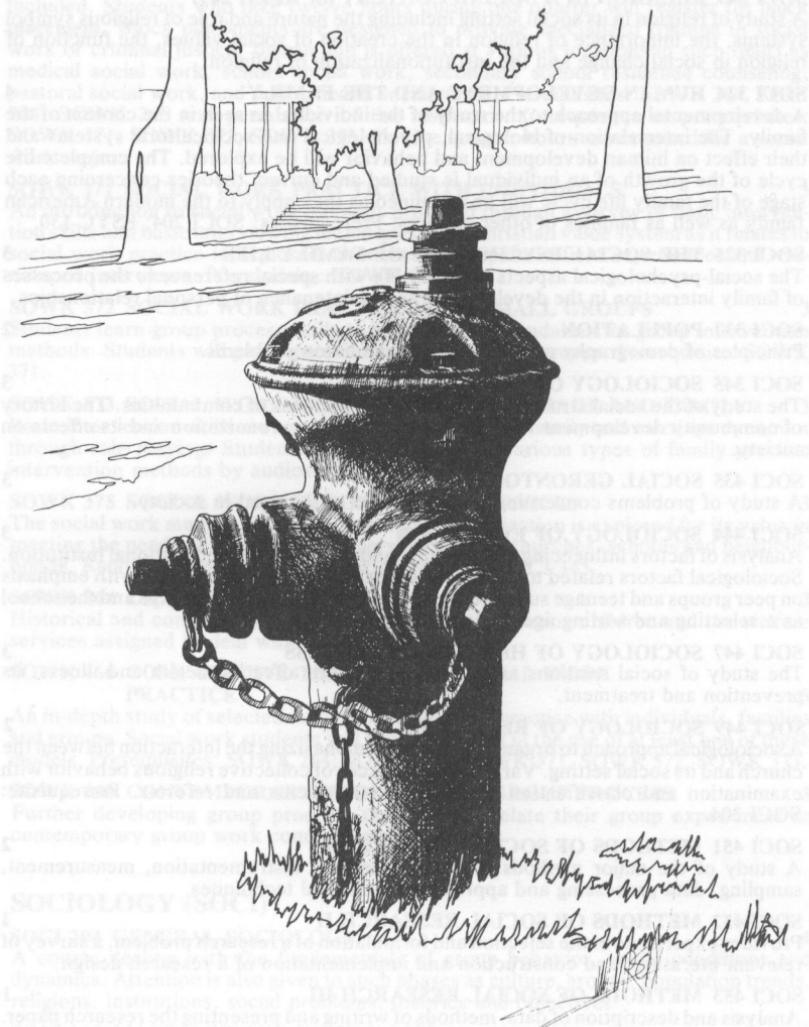
A course designed to help a student make the physical, economic and psychological adjustments necessary for happy marriage and parenthood; Christian philosophy and principles will be stressed; staff members and guest speakers will lecture and lead discussions.

SOCI 234 CURRENT SOCIAL PROBLEMS

Applications of sociology to the study of social problems of particular concern in contemporary society.

SOCIOLOGY AND SOCIAL WORK

SOCI 236 RACIAL AND ETHNIC RELATIONS	3
The history, present status and problems of racial, religious and ethnic minorities in the United States and other countries.	
SOCI 249 RELIGION IN A SOCIAL CONTEXT (or RELH 249)	4
A study of religion in its social setting including the nature and role of religious symbol systems, the importance of religion in the creation of social values, the function of religion in social change and the institutionalization of religion.	
SOCI 324 HUMAN DEVELOPMENT AND THE FAMILY	4
A developmental approach to the study of the individual as seen in the context of the family. The interrelation of biological, psychological and sociocultural systems and their effect on human development and behavior will be explored. The complete life cycle of the growth of an individual is studied and current theories concerning each stage of the family life cycle will be examined as they apply to the modern American family as well as families of other cultures. Prerequisites: SOCI 204; PSYC 130.	
SOCI 325 THE SOCIAL PSYCHOLOGY OF FAMILY LIFE	3
The social-psychological aspects of family life with special reference to the processes of family interaction in the development and maintenance of personal relationships.	
SOCI 337 POPULATION	2
Principles of demography and analysis of population problems.	
SOCI 345 SOCIOLOGY OF COMMUNITIES	3
The study of the social structure and interaction patterns of communities. The history of community development with special emphasis on urbanization and its effects on society.	
SOCI 435 SOCIAL GERONTOLOGY	3
A study of problems concerning the social role of the aged in society.	
SOCI 444 SOCIOLOGY OF EDUCATION	3
Analysis of factors influencing the structure and function of the educational institution. Sociological factors related to the role of the school as a social system, with emphasis on peer groups and teenage subcultures, leadership types, power groups and the school as a selecting and sorting agency; sociometric devices.	
SOCI 447 SOCIOLOGY OF HEALTH AND ILLNESS	3
The study of social relations and culture as factors affecting health and illness, its prevention and treatment.	
SOCI 449 SOCIOLOGY OF RELIGION	2
A sociological approach to organized religion, emphasizing the interaction between the church and its social setting. Varieties and sources of collective religious behavior with examination and classification of religious movements and reforms. Prerequisite: SOCI 204.	
SOCI 451 METHODS OF SOCIAL RESEARCH I	2
A study of the major methods of social research, instrumentation, measurement, sampling, data processing and appropriate statistical techniques.	
SOCI 452 METHODS OF SOCIAL RESEARCH II	1
Provides experience in the selection and formulation of a research problem, a survey of relevant literature, and construction and implementation of a research design.	
SOCI 453 METHODS OF SOCIAL RESEARCH III	1
Analysis and description of data, methods of writing and presenting the research paper.	
SOCI 454 HISTORY OF SOCIAL THOUGHT	4
History of sociological thought since earliest times including a study of early social writers and leading sociologists of the 19th and 20th centuries, including Comte, Malthus, Marx, Spencer, Durkheim, Weber and others.	
SOCI 455 SOCIOLOGICAL THEORY	3
A survey of modern theories with emphasis on theory construction in preparation for developing research designs.	



W. H. M. 10/10/68

THE COREY

THE COREY

FINANCIAL INFORMATION

Walla Walla College desires that the financial arrangements and transactions be as considerate as possible for both students and parents. Several plans are available which should make it possible, as far as finances are concerned, for almost everyone who desires to attend Walla Walla College to realize this aim.

BOARD ACTIONS

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.

TUITION

1-12 quarter hours	\$ 78 (per quarter hour)
13-16 quarter hours	995 (per quarter)
above 16	68 (additional per quarter hour)

Residence hall students will be charged a minimum of \$936 per quarter tuition except seniors in their final quarter who need less than 12 quarter hours to graduate.

STUDENT ASSOCIATION FEE

A fee of \$15 per quarter is charged students registered for six or more quarter hours which provides membership in the student association.

PAYMENTS REQUIRED TO REGISTER

An advanced payment of \$800 plus any balance due from a previous quarter shall be paid at time of registration. Part-time students shall pay the full tuition charge in advance if less than \$800.

FAMILY DISCOUNTS

A ten percent discount will be allowed on tuition for each student when three

or more unmarried students from one family are in full-time attendance at Walla Walla College during the same quarter.

Discounts will be forfeited if student status is terminated prior to the end of the period for which the discount was given.

BOOKS AND SCHOOL SUPPLIES

Textbooks, stationery, gym suits and equipment and other materials needed for schoolwork may be obtained at the College Store. Parents should allow the student \$75 to \$100 extra for such purchases each quarter.

STATEMENTS

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

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

REMITTANCES

Checks, drafts and money orders should be made payable to Walla Walla College and should be sent to:

Accounting Office
Walla Walla College
College Place, WA 99324

SPECIAL FEES

Application Fee (not refundable)	\$10.00
Audit Credit	Regular Tuition
Aviation (as announced)	
Challenge Examination	One-half tuition for credit received.
Change of program	1.00
Classes having numerous or extended field trips will be given notice of special fees to cover expenses	
Degree, Bachelor's and Associate	7.50
Degree, <i>in absentia</i> , Bachelor's and Associate	17.50
Degree, Master's	25.00
Degree, <i>in absentia</i> , Master's	35.00
ID Card Replacement	3.00
Late Registration	15.00
Special Examination	5.00
Transcript, first copy	free
Transcript, additional copies each	1.00
Tutoring, triple tuition is charged for individual tutoring.	
Validating Examination Fee—per quarter hour	2.00

MUSIC FEES

Music lessons are offered on either a credit or noncredit basis. Where credit is desired, regular tuition is charged, and in addition a private lessons fee, except for those music majors or minors who have enrolled for Music Theory I.

Charges per quarter for half-hour lessons taken by students not majoring or minoring in music (double the amount for one-hour lessons):

for credit from music faculty	tuition, plus \$55
for credit from student teacher	tuition, plus \$40
noncredit from music faculty	\$75 lessons fee
noncredit from student teacher	\$55 lessons fee
secondary and elementary students from music faculty	\$55 lessons fee
secondary students from student teacher	\$30 lessons fee

Rentals:

Practice room (per quarter for students desiring practice only)	\$12.00
Organ (per quarter for students desiring practice only)	25.00
Band or orchestral instrument (per quarter for students desiring lessons and not possessing their own instrument)	10.00

PHYSICAL EDUCATION FEES OR DEGREES

Canoeing	\$15.00
Camping and Survival	10.00
Ceramics	20.00
Golf, Beginning	15.00
Golf, Advanced	30.00
Horsemanship	40.00
Ice Skating	25.00
Kayaking and Rafting I	15.00
Kayaking and Rafting II	70.00
Lapidary	15.00
Mountaineering	15.00
Sailing	20.00
SCUBA Diving	15.00
Skiing (Spout Springs)	40.00

RESIDENCE HALL EXPENSES

Where there is dual occupancy, the room rental charge for each student per quarter is:

Conard Hall	\$200
Foreman Hall	215
Sittner Hall	200
Whitman Lodge; Hallmark	200-230
Portland Campus	200

The above charge includes flat laundry service (sheets, pillowcases, towels).

When rooms are available, single occupancy is permitted at an extra charge of \$35 per quarter.

Dormitory students should *not* bring their own laundry bags, as special bags will be provided by the College. Name tags are recommended on items sent to the College Laundry.

PERSONAL PROPERTY LOSS

The College cannot accept responsibility for any loss of or damage to the personal property of any student.

ROOM RESERVATIONS

Each student resident in one of the college residence halls will be required to make a \$50 room deposit which will be credited to the account when the student permanently discontinues dormitory residence, less any room charges turned in by the dean for delayed departure, uncleaned rooms or room damage. This deposit will secure continuous room reservation on a year-by-year basis as long as the student desires dormitory residence.

A refund will be made until *August 1* each year upon receipt of a written cancellation of room reservation, but no refund is made thereafter.

BOARD

The cafeteria plan is followed in the college dining hall. Actual charges for food are billed to the student's statement each month.

AUTOMOBILE PARKING FEE

Residence hall students bringing automobiles with them will be charged a fee of \$6 per quarter for parking privileges. Covered parking is available at additional cost. The College does not carry parking lot insurance which will cover damage to the vehicle, or theft, or loss of any sort while parking in the lot. If such insurance is desired, comprehensive coverage can be secured by the owner at a more reasonable rate than can be provided by the College.

REFUNDS

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

Tuition: 90% during first week of quarter

75% between second and third weeks

50% between fourth and sixth weeks

No tuition is refunded after the sixth week

Room Rent: 80% during first two weeks of quarter

50% between third through fifth weeks

30% between sixth through eighth weeks

No refund after first week for ice skating, horsemanship, ski instructor's course.

The beginning of the quarter will be considered to be 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 withdrew. STUDENTS WHO LEAVE SCHOOL WITHOUT COMPLETING WITHDRAWAL PROCEDURES WILL BE CHARGED UNTIL PROPER ARRANGEMENTS ARE MADE. (Also see *Room Reservations*.)

INSURANCE—ACCIDENT AND HOSPITALIZATION

Student accident and hospital insurance is carried by the College under a blanket policy for all students enrolled for six or more quarter hours. The premium is charged on the student's September statement of account and provides coverage for 12 months whether or not the student remains in school for the full period of coverage. Information describing cost, coverage and claim procedures will be supplied each student. Inquiries should be directed to the student health center.

STUDENT HEALTH CENTER

The clinical facilities and 12 beds of the health center are available for students requiring treatment or minor hospitalization. Prescriptions and other medicines are available at special prices. A reasonable charge is made for hospitalization in excess of three days per quarter. The three days allowed per quarter are not cumulative. 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.

INQUIRIES

Inquiries concerning student financial matters should be directed to the director of student accounts and employment and those concerning financial aid should be directed to the director of financial aid. Inquiries concerning the academic or instructional program or admission should be directed to the office of admissions and records.

FINANCIAL AIDS

FINANCIAL AID POLICY. Walla Walla College assumes that a student and his parents have the primary obligation of paying for his education. Parents are expected to provide, as they are able, the basic essentials of life, whether the student lives in the community or on campus.

For families unable to meet the full costs of attending Walla Walla College, financial aid is available in the form of student employment, grants, long-term loans and scholarships. Grants and scholarships are *gift aid* and do not have

to be repaid. Interest rates for long-term loans are extremely low, and repayment does not begin until after a student leaves college.

A freshman requesting aid is expected to earn at least \$700 during the school year.

Eligibility for aid is based on individual financial need and is evaluated by submitting an Application for Financial Aid to Walla Walla College, and a Financial Aid Form (FAF) to College Scholarship Service (CSS). CSS will provide the college with a need analysis for determining the amount of aid to be awarded. In most cases, a student will be offered a package of financial aid including several forms of assistance.

FAF's are available from secondary school counselors and the WWC Financial Aid Office. First consideration for awards will be given to those students with greatest financial need who have complete materials (1) results of FAF from CSS (2) WWC Financial Aid Application in the WWC Financial Aid Office **prior to April 15.**

STUDENT EMPLOYMENT. Walla Walla College has year-round campus work opportunities, including work in Harris of Pendleton, College Place Plant, located near the campus, to help students earn a portion of their school expenses. These opportunities, while not unlimited, are many, and ordinarily take care of most students who need part-time employment. Students needing employment should seek their assignment through the office of student accounts and employment.

Full-time students cannot earn all their expenses from part-time employment as there needs to be a balance between work and study. Students of average academic ability will find 12-15 hours a week an adequate work program. Students planning to work in the industrial departments such as the press, bindery, laundry, dairy and farm should plan to work a 15-20 hour week. *The responsibility of taking advantage of campus work opportunities rests with the student.*

SCHOLARSHIPS, ASSISTANTSHIPS AND GRANTS

MAXIMUM SCHOLARSHIP:

\$200 per year
Nonrenewable

ENTERING FRESHMAN ACHIEVEMENT AWARD. The College awards a \$200 nonrenewable scholarship to any entering freshman who has placed scholastically in the upper five percent of his graduating class. To validate this award, evidence of class standing must be submitted to the director of financial aid.

\$300-\$500 per year
Nonrenewable

NATIONAL MERIT SCHOLARSHIPS. The College will award scholarships to entering freshmen of the North Pacific Union Conference of Seventh-day Adventists who have placed in the National Merit Scholarship competition as follows:

Finalist	\$500
Semifinalist	\$400
Commended Student	\$300

These scholarships are nontransferable and nonrenewable.

FORUM SCHOLARSHIP. The Walla Walla College chapter of the Adventist Forum makes available several scholarships. Candidates must be of minority ethnic groups. Preference will be given to students from the North Pacific Union Conference. For additional information, contact the Adventist Forum Scholarship Fund Coordinator, Walla Walla College, College Place, WA 99324.

PUBLISHING HOUSE SCHOLARSHIPS. Students may earn a portion of their school expenses by selling denominational literature during the summer. These scholarships apply to room, board, tuition and other direct school expenses. For details regarding this scholarship plan, write to the Publishing Secretary of the North Pacific Union Conference, P.O. Box 16677, Portland, OR 97216.

YOUTH SERVICE OPPORTUNITIES. The College, in cooperation with the youth department of the North Pacific Union and the local conferences, makes available variable scholarships for students participating in the Youth Services Opportunities program during the summer. Service opportunities are in the areas of youth camp work, vacation Bible schools, door-to-door visitations, etc. For additional information and application forms, write: Youth Department, P.O. Box 16677, Portland, OR 97216.

MAXIMUM ASSISTANCE:

GRADUATE ASSISTANTSHIPS. A few assistantships are available for graduate students in biology and education. Candidates applying for these assistantships should write to the respective department chairmen.

MAXIMUM GRANT:

\$1,500 per year
Renewable

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT. These grants are made available by the United States Department of Health, Education and Welfare. To qualify, a student must be enrolled as at least a half-time undergraduate student and have *exceptional* financial need as evidenced by submission of a Financial Aid Form (FAF) and a WWC application for financial aid. Applications and FAF's are available through the college financial aid office.

W.C.P.T. FINANCIAL GRANT FOR EDUCATION. The Washington Congress of Parents and Teachers provides two grants per year for entering freshmen. Applicants must have graduated from a high school located in the state of Washington. The College will give first consideration to

\$100 per year
Nonrenewable

\$450
Renewable

the financial need of applicants rather than high academic achievement in making these awards.

Applications are available through the college financial aid office. The cut-off date for submitting applications to the College is April 1.

\$750

WASHINGTON STATE NEED GRANT. The State of Washington has made available a grant program for state residents only. Qualifications are state residency and financial need. Residency of dependent students follows that of the parents. A student must have been domiciled in the state for one full year prior to the commencement of the first day of the quarter for which aid is requested.

Application forms consist of a WWC financial aid application and a Financial Aid Form (FAF) and may be obtained from the college financial aid office.

\$750
Renewable

NPUC EMPLOYMENT GRANT. The North Pacific Union Conference of Seventh-day Adventists and Walla Walla College jointly provide funds for this grant. Applicants must be baptized Seventh-day Adventists having home church membership in the North Pacific Union Conference. Grants are awarded on the basis of need as evidenced by submission of a Financial Aid Form (FAF) and an application for financial aid. Grant awards must be matched by student earnings from a school-term work program. Matching earnings may be earned on or off campus from October through and including May. Students wishing to work off campus and receive matching employment grant credit must first make special arrangements with the financial aid office.

\$1,400
Renewable

LAW ENFORCEMENT EDUCATION GRANT. The United States Department of Justice makes available a limited number of educational grants for students who are full-time employees of law enforcement agencies. These grants may amount to as much as \$250 per quarter. *Financial need is not a criterion in approving this aid.*

Applications are available from the college financial aid office.

BASIC EDUCATIONAL OPPORTUNITY GRANT. This program is made available by the United States Department of Health, Education and Welfare (DHEW). To qualify students must be enrolled at least half time (8 hours or more) and have need according to a formula established by DHEW. Applications may be obtained from high school or academy counselors or the College financial aid office.

Commended Student

\$300

These scholarships are nontransferable and nonrenewable.

B.I.A. GRANTS. Students having at least one-fourth American Indian or Eskimo blood may obtain considerable grant assistance from the Bureau of Indian Affairs. For applications and additional information, write to Bureau of Indian Affairs, 1425 NE Irving Street, Portland, OR 97208.

DEFERRED PAYMENT PLANS

EDUCATIONAL FUNDS, INCORPORATED. For students and parents desiring to pay education expenses in monthly installments, a low-cost deferred-payment program is available through Education Funds, Inc. E.F.I. Contracts run for a maximum of 12 months, and must be renewed each school year. Parents desiring further information concerning this deferred payment plan should contact the director of student accounts and employment, Walla Walla College or Education Funds, Inc., 36 South Wabash, Room 1000, Chicago, Illinois 60603.

THE INSURED TUITION PAYMENT PLAN. This program provides for dividing the entire four-year educational expenses into equal monthly payments. An extended repayment plan is available.

It includes insurance on the parent for death or total disability. The insurance is designed so that its value is always adequate to pay the remaining planned educational expense.

The earlier the plan is begun, the smaller will be the monthly payments and the longer the term of insurance coverage.

Additional information may be obtained from the director of student accounts and employment, Walla Walla College, or Richard C. Knight, Insurance Agency, Inc., Insured Tuition Payment Plan, 6 St. James Avenue, Boston, Massachusetts 02116.

LONG TERM LOANS

An increasing number of students are financing their education through the use of loan funds. Several of these funds are available, making it possible for the great majority of students to continue school without interruption due to lack of finances.

MAXIMUM LOAN:

\$2,500 per year
Renewable

ALASKA STATE LOAN. Alaskan students may borrow up to \$2,500 per year for collegiate expenses through this program. Up to 40 percent of this loan may be forgiven if the student returns to Alaska after graduation.

Applications may be obtained from the Department of Education, Student Loan Office, Pouch F, Juneau, AK 99801.

\$2,500 per year
Renewable

FEDERALLY INSURED LOAN. Many banks are offering Federally Insured Loans to college students. These are long-term, low-interest loans that need not be repaid until

\$5,000 Aggregate for Undergraduate Students	the student completes his course of study. Consult the loan officer of your bank for additional information.
	Applications are available through the college financial aid office.
\$2,500 per year Renewable	<p>NATIONAL DIRECT STUDENT LOAN. The National Direct Student Loan is made available through the United States Department of Health, Education and Welfare and Walla Walla College. To qualify, the students must have financial need as evidenced by submission of a WWC application for financial aid and a Financial Aid Form (FAF). Priority in awarding this aid is given to students with the greatest financial need. Repayments begin after the applicant's student status terminates.</p>
	Applications and FAFs are available through the college financial aid office.
\$1,500 per year Renewable	<p>NURSING STUDENT LOAN. Nursing Student Loans are made available through the United States Department of Health, Education and Welfare and Walla Walla College. To qualify, a student must have financial need as evidenced by submission of a WWC application for financial aid and a Financial Aid Form (FAF). Priority in awarding this aid is given to students with the greatest financial need. Repayments begin after the applicant's full-time nursing student status terminates.</p>
	Applications and FAFs are available through the college financial aid office.
	<p>OREGON STATE STUDENT LOAN. Under this plan Oregon State residents may borrow from their hometown bank if they are accepted for enrollment or are enrolled in good standing and carrying at least a half-time course of study.</p>
	Applications are available in the student finance office.
	<p>SHORT LOANS. Walla Walla College has several short-term emergency loan funds available. Repayments begin during the year in which the loans are made. Additional information is available in the student accounts and employment office.</p>

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W

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Workshops

X

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Y

Youth Service Scholarship

Youth Service Leadership



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