Walla Walla College

1967-68

Accounting
Biblical Languages
Biology
Biophysics
Business Administration
Chemistry
Elementary Education
Engineering
English

MAJOR AREAS OF STUDY



Based on broad studies in the humanities, basic science, mathematics, social science and the Christian heritage.

Foods and Nutrition
German
History
Industrial Education
Interior Design and Decoration
Journalism
Mathematics
Medical Technology
Music
Nursing
Physical Education
Physics
Religion
Secretarial Science
Spanish
Speech
Speech and Hearing Therapy
Theology

WALLA WALLA COLLEGE BULLETIN 1967-1968

The College is Accredited by

The Northwest Association of Secondary and Higher Schools

The Washington State Board of Education

Department of Baccalaureate and Higher Degree Programs of the National League for Nursing

National Association of Schools of Music

is a member of

Association of American Colleges

Association of Seventh-day Adventist Colleges and Secondary Schools

Council of Member Agencies, Department of Baccalaureate and Higher Degree Programs of the National League for Nursing

American Council on Education National Commission on Accreditation

is approved by

U.S. Government for the training of veterans under the U.S. Code, Title 38, Chapters 31, 34, and 35.

The Attorney General of the United States for nonimmigrant students

Washington State for training in Vocational Rehabilitation

BULLETIN
WALLA WALLA COLLEGE
VOL. LXXVI, NO. 1
MARCH, 1967

Published March, June, September, and December at College Place, Washington, by Walla Walla College. Entered as second-class mail matter, College Place, Washington 99324, under Act of Congress, August 24, 1912.

CP9000

ARCHIVES
WALLA WALLA COLLEGE LIBRARY

FOR INFORMATION

Concerning application blanks, bulletins, general information, student handbooks, viewbooks, write

The Registrar

Concerning apartments, financial arrangements and work, write

Finance Counseling Office

Concerning room reservations and other matters of residence, write

The Dean of Men or

The Dean of Women

WALLA WALLA COLLEGE
College Place, Washington 99324

Telephone
Walla Walla
JAckson 5-7560
Area Code 509

CONTENTS

ACCREDITATION 1

ADDRESSES 2

CAMPUS MAP 4, 5

CALENDAR FOR 1967-1968 7

BOARD OF TRUSTEES 8

ADMINISTRATION 8

FACULTY 9

COMMITTEES 14

ADVISERS 15

COORDINATING COMMITTEE 17

PRESIDENTS OF WALLA WALLA COLLEGE 17

VOCATIONAL SUPERINTENDENTS 17

SUPERVISORY INSTRUCTORS 18

COLLEGE AIMS 19

GENERAL INFORMATION 21

GENERAL REGULATIONS 27

ACADEMIC INFORMATION 31

DEGREE REQUIREMENTS 41

PREPROFESSIONAL COURSES OF STUDY 47

DEPARTMENTS OF INSTRUCTION 53

SCHOOL OF THEOLOGY 140

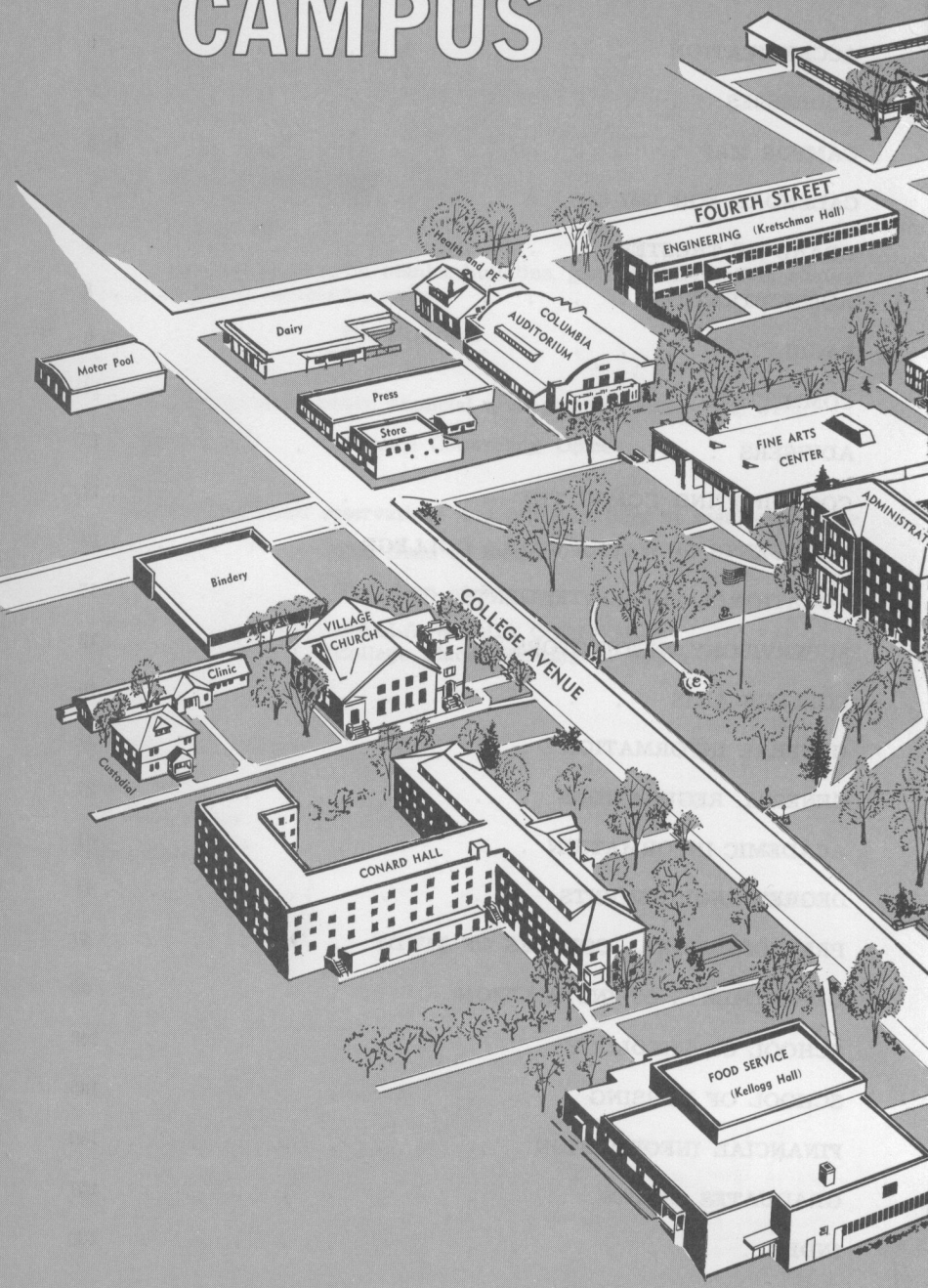
SCHOOL OF NURSING 145

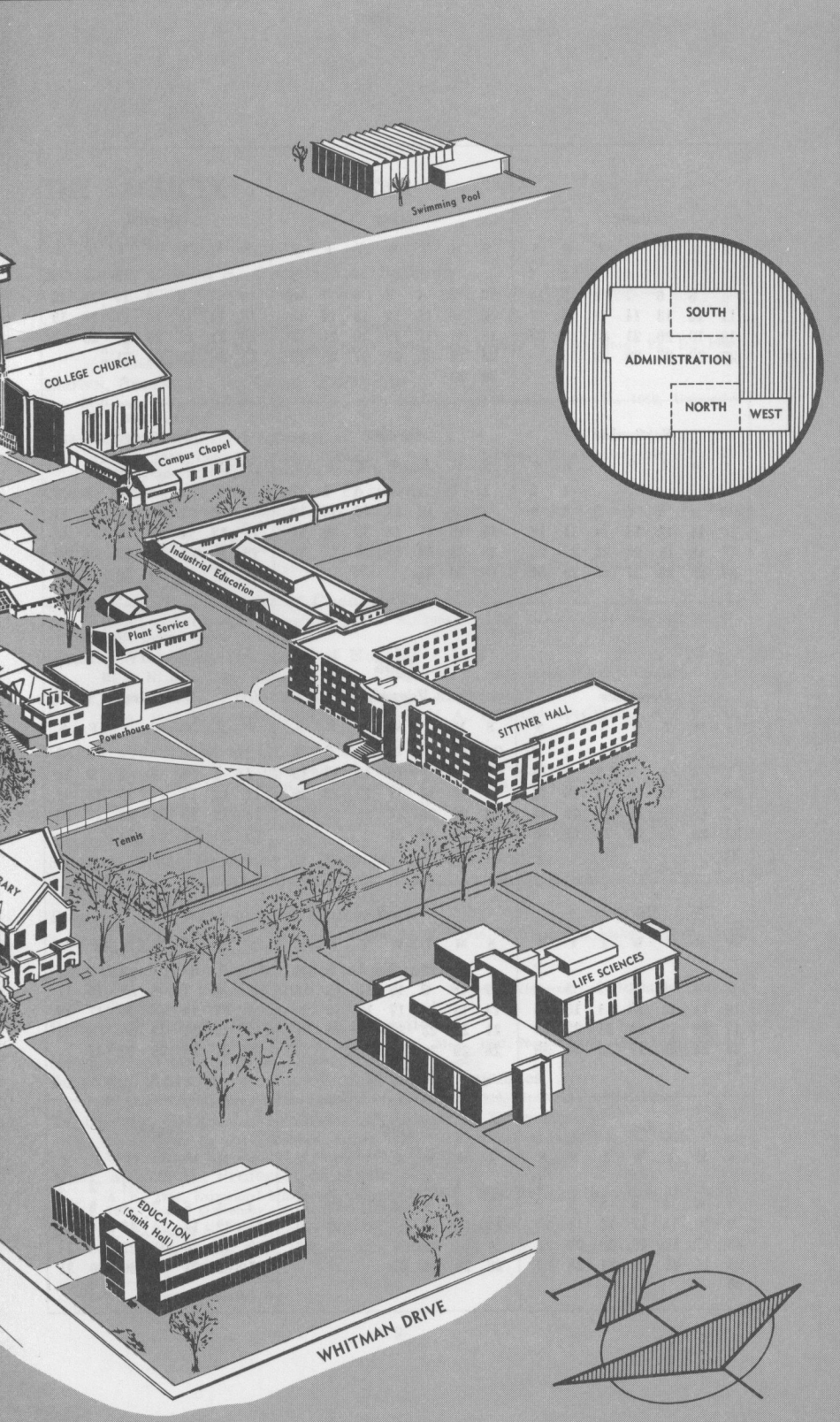
FINANCIAL INFORMATION 150

GRADUATES OF 1966 157

INDEX 160

WALLA WALLA COLLEGE
CAMPUS





Revised February 1966

1967

June

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	

July

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					

August

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

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

October

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				

November

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		

December

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						

1968

January

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			

February

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		

March

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						

April

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				

May

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

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						

July

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			

August

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

THE FACULTY

PROFESSORS

BALHARRIE, GORDON S., Professor of Religion

B. A., 1915, Columbia Union College; M. A., 1949, B. D., 1960, Theological Seminary, Andrews University

BARNETT, CLAUDE C., Professor of Physics

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

BROWN, ROBERT H., Professor of Physics

B. A., 1940, Union College; M. S., 1942, University of Nebraska; Ph. D., 1950, University of Washington

CHAMBERS, JAMES R., Professor of Chemistry

B. A., 1939, Columbia Union College; M. S., 1949, Western Reserve University; Ph. D., 1958, Texas Agricultural and Mechanical College

CROSS, EDWARD F., Professor of Engineering

M. E., 1929, Stevens Institute of Technology; M. A., 1938, Columbia University; P. E., 1948, Washington; P. E., 1952, Oregon

GROVE, J. PAUL, Professor of Religion

B. A., 1944, Columbia Union College; M. A., 1956, B. D., 1961, Theological Seminary, Andrews University

JONES, CARL T., Professor of Chemistry

B. A., 1933, Columbia Union College; M. S., 1939, Catholic University of America; Ph. D., 1959, Oregon State College

LEAZER, WILMA L., Professor of Nursing

B. S. N. Edu., 1947, Columbia Union College; M. S., 1958, Loma Linda University

LITKE, RICHARD L., Professor of Biblical Languages

B. A., 1948, Walla Walla College; B. A., 1953, M. A., 1953, University of California; Ph. D., 1959, Yale University

***MANALAYSAY, REUBEN G., Professor of Education**

B. S. E., 1938, B. A., 1939, Philippine Union College; M. A., 1947, Far Eastern University; M. Ed., 1950, University of the Philippines; Ed. D., 1951, Indiana University

MECKLING, FRANK E., Professor of History

B. A., 1929, Columbia Union College; M. A., 1931, University of Maryland; Ph. D., 1950, University of California at Los Angeles

MEHLING, J. G., Professor of Business and Economics

B. B. A., 1934, Walla Walla College; M. A., 1947, University of Washington; C. P. A., 1947, State of Washington

PETERS, J. V., Professor of Education

B. A., 1936, Minnesota Teachers College; M. A., 1946, University of Idaho; Ed. D., 1962, University of Montana

RASMUSSEN, HANS L., Professor of Education

B. A., 1937, Emmanuel Missionary College; M. A., 1943, University of Michigan; Ed. D., 1946, Stanford University

RHODES, J. WESLEY, Professor of Education

B. A., 1931, Emmanuel Missionary College; M. Mus., 1947, Northwestern University; Ed. D., 1957, Columbia Teachers College

SORENSON, AGNES L., Professor of Modern Languages

B. A., 1923, Emmanuel Missionary College; M. A., 1929, University of Michigan

TRAUTWEIN, CALVIN L., Professor of Industrial Education

B. A., 1945, La Sierra College; B. S., 1950, Pacific Union College; Ed. M., 1955, Oregon State College; Ed. D., 1962, Colorado State College

WEST, MELVIN K., Professor of Music

A. B., 1952, Emmanuel Missionary College; M. Mus., 1955, Redlands University; Mus. A. D., 1959, Boston University; F. A. G. O., 1957

WINTER, EUGENE S., Professor of Physical Education

B. A., 1941, Walla Walla College; M. S., 1948, State College of Washington; Ph. D., 1963, University of Oregon

---

*Leave of absence current year.

ASSOCIATE PROFESSORS

BARNES, JOSEPH N., Associate Professor of Religion
B. A., 1947, Union College; M. A., 1955, Ph. D., 1965, New York University

CANADAY, LEWIS H., Associate Professor of Industrial Education
B. S., 1953, M. A., 1959, Walla Walla College; Ed. M., 1961, Oregon State University

CULPAN, FLORENCE, Associate Professor of Nursing
B. S. N. E., 1953, Florida State University; M. A., 1959, Columbia University

EVANS, HELEN WARD, Associate Professor of English
B. A., 1949, Walla Walla College; M. A., 1955, Ph. D., 1965, Stanford University

HARE, GORDON B., Associate Professor of Mathematics
B. A., 1951, Columbia Union College; M. S., 1954, Ph. D., 1964, University of Colorado

HARTBAUER, ROY E., Associate Professor of Speech
B. Th., 1950, Walla Walla College; M. A., 1961, University of Southern California; Ph. D., 1966, Michigan State University

JONES, LUCILE HALL, Associate Professor of Health Education
B. S. N. Ed., 1936, Columbia Union College; M. S., 1955, Oregon State College; M. A., 1956, Walla Walla College

***LICKEY, EUGENE HAROLD, Associated Professor of Music**
B. A., 1950, Union College; M. Mus., 1958, Texas Christian University

LUDGATE, T. K., Associate Professor of Religion
B. A., 1942, Columbia Union College; M. A., 1945, Theological Seminary, Andrews University

MABERLY, NORMAN C., Associate Professor of Education
B. Th., 1952, Walla Walla College; M. A., 1954, Andrews University; Ed. D., 1962, University of Southern California

MACKINTOSH, KENNETH R., Associate Professor of Art
M. F. A., 1961, Otis Art Institute

***MANALAYSAY, RAQUEL, Associate Professor of Education**
B. S. E., 1942, Philippine Union College; M. Ed., 1954, University of the Philippines; Ed. D., 1957, Indiana University

MASDEN, GLENN W., Associate Professor of Engineering
B. S. E. E., 1955, M. S. E. E., 1958, University of Colorado

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

NOEL, ROBERT L., Associate Professor of Engineering
B. S., 1950, M. S., 1951, University of Wisconsin; P.E., 1953, Illinois; P. E., 1955, Michigan

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

RITTENHOUSE, EVELYN, Associate Professor of Secretarial Science
B. A., 1943, Pacific Union College; M. S., 1951, University of Southern California

SALOM, A. P., Associate Professor of Religion
B. A., 1951, Walla Walla College; M. A., 1952, Andrews University; Ph. D., 1956, University of Chicago

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

STAHLNECKER, ROBERT E., Associate Professor of Education
B. Th., 1950, Walla Walla College; M. A., 1960, Eastern New Mexico University; Ed. D., 1965, University of Oregon

STOUT, JOHN F., Associate Professor of Biology
B. A., 1957, Columbia Union College; Ph. D., 1963, University of Maryland

TEEL, LOIS FLORETTA, Associate Professor of Erucation
B. A., 1947, Emmanuel Missionary College; M. Ed., 1959, University of Oregon

WHITE, ARTHUR L., Associate Professor of Economics
B. S., 1956, Walla Walla College; M. B. A., 1957, University of Washington

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

---

*Leave of absence current year.

ASSISTANT PROFESSORS

ASHTON, J. BRUCE, Assistant Professor of Music
B. Mus., 1963, Capital University; M. Mus., 1964, American Conservatory of Music

BENNETT, FREDERICK R., Assistant Professor of Engineering
B. S., 1955, Walla Walla College; P. E., 1961, Washington; M. S., 1966, Washington State University

*BLAKE, DONALD F., Assistant Professor of Biology
B. A., 1953, Oakwood College; B. S., 1957, M. S., 1959, Michigan State University; Ph. D., 1965, University of Rhode Island

BOECK, STELLA, Assistant Professor of Nursing
B. S. N. Ed., 1943, Columbia Union College; M. N., 1964, University of Washington

BURGESON, RUTH E., Assistant Professor of English
B. A., 1951, M. A., 1957, Pacific Union College

*BUSHNELL, VINSON, Assistant Professor of Music
B. A., 1958, Southern Missionary College; M. A., 1960, University of Rochester

CALLENDER, LYNN R., Assistant Professor of Education
B. Th., 1945, Walla Walla College; Ed. M., 1958, Temple University; Ed. D., 1966, Arizona State University

CHAMBERS, ANNIE MAE, Assistant Professor of English
B. A., 1944, Columbia Union College; M. A., 1965, University of Southern California

COLE, JON, Assistant Professor of Engineering
B. S. C. E., 1961, Illinois Institute of Technology; M. S., 1964, University of Wisconsin; P. E., 1966

DICKINSON, LOREN, Assistant Professor of Speech
B. A., 1957, Union College; M. A., 1960, University of Nebraska

*EICHNER, DONALD, Assistant Professor of Political Science
B. A., 1951, Walla Walla College; M. A., 1958, Andrews University

FORSS, CARL, Assistant Professor of Biology
B. A., 1958, Walla Walla College; M. A., 1959; Ph. D., 1965, Oregon State University

FURBER, HELEN, Assistant Professor of Nursing
B. S., 1964, University of Oregon; M. S., 1965, University of Minnesota

GRABLE, ALBERT, Assistant Professor of Biology
B. S., 1959, La Sierra College; M. S., 1962, Ph. D., 1964, University of Minnesota

HUNTER, ROBERT J., Assistant Professor of Music
A. B., 1959, Pacific Union College; M. A., 1962, Andrews University

JOHNSON, INGRID RUDY, Assistant Professor of Nursing
B. S. in Nursing, 1956, Columbia Union College; M. A., 1959, Walla Walla College

JONES, RALPH L., Assistant Professor of Business
B. A., 1948, Pacific Union College; LL. B., 1952, Harvard Law School; M. B. A., 1952, Stanford University

*KINGMAN, ROBERT, Assistant Professor of Physics
B. S., 1961, Walla Walla College; M. S., 1966, University of Arizona

KNAPP, LUCILE HARPER, Assistant Professor of Biblical Languages
B. A., 1947, Walla Walla College; M. A., 1949, Theological Seminary, Andrews University

LENO, H. LLOYD, Assistant Professor of Music
B. A., 1948, Walla Walla College; M. A., 1954, Columbia Teachers College

*MAXWELL, D. MALCOLM, Assistant Professor of Religion
B. A., 1956, Pacific Union College; M. A., 1958, Andrews University

MOORE, NATHAN, Assistant Professor of English
B. A., 1963, Rockford College; M. A., 1965, Carlton University

MURPHY, WILLIAM H., Assistant Professor of Music
B. A., 1952, Union College; M. A., 1960, Colorado State College

RIGBY, DONNIE THOMPSON, Assistant Professor of Speech
B. A., 1952, La Sierra College; M. A., 1965, Redlands University

*Leave of absence current year.

RITER, E. JOYCE, Assistant Professor of Nursing
B. S., 1960, Walla Walla College; M. N., 1964, University of Washington

SOPER, WARD ARTHUR, Assistant Professor of Mathematics
B. A., 1961, Andrews University; M. A., 1962, University of Michigan

SPRING, GLENN, Assistant Professor of Music
B. A., 1962, La Sierra College; M. Mus., 1964, Texas Christian University

*WAGNER, DALE O., Assistant Professor of Education
B. A., 1952, Walla Walla College; M. A., 1958, Eastern Washington State College

WAGNER, ROBERT D., Assistant Professor of Education
B. Sc., 1942, University of Nebraska; M. A., 1954, University of Nebraska

WHITSETT, ROBERT M., JR., Assistant Professor of Physics
B. S., 1961, Pacific Union College

ZAUGG, WAYNE, Assistant Professor of Chemistry
B. S., 1961, Walla Walla College; Ph. D., 1965, University of Washington

INSTRUCTORS

ARMSTRONG, DOROTHY, Instructor in Secretarial Science
B. S., 1967, Atlantic Union College

BARRETT, CLAUDE R., Instructor in Industrial Education
B. A., 1947, Walla Walla College

BLAKE, CHESTER, Instructor in Industrial Education
B. S., 1963, Walla Walla College

BORDER, GERALDINE, Instructor in Home Economics
B. S., 1965, Walla Walla College

CHANCE, JANICE P., Instructor in Nursing
B. S., 1959, Walla Walla College

COWIN, DARRELL J., Instructor in Industrial Education

DRESSLER III, ANDREW, Instructor in Business Administration
B. A., 1965, Walla Walla College

FEARING, RICHARD D., Instructor in Religion
B. A., 1950, Columbia Union College; M. A., 1964, Andrews University

FRENCH, LLOYD D., Instructor in English
B. A., 1964, Walla Walla College

GREGG, JOYCE M., Instructor in Nursing
B. S., 1964, Walla Walla College

HALL, DONALD E., Instructor in Physics
B. A., 1961, Southern Missionary College; M. S., 1964, Stanford University

HARTNELL, CALVIN V., Instructor in Religion
B. Th., 1949, Walla Walla College; M. A., 1962, Andrews University

HAZELTON, ALICE, Instructor in Nursing
B. S., 1942, 1965, Walla Walla College

HENDERSON, ROBERT A., Instructor in History
B. A., 1962, Walla Walla College

JAMES, LEAH KAY, Instructor in Physical Education
B. S., 1965, Walla Walla College

JOHNSON, JOYCE, Instructor in Nursing
B. S., 1962, Walla Walla College

KEY, WILLIAM J., Instructor in Business and Economics
B. A., 1961, La Sierra College; M. B. A., 1966, Washington State University

LAY, MAE MACKLIN, Instructor in English
B. A., 1924, Walla Walla College

LISKE, ELWIN, Instructor in Industrial Education
B. S., 1963, Walla Walla College

*Leave of absence current year.

McCHESNEY, ROBERT L., Instructor in History
B. A., 1965, Walla Walla College; M. A., 1966, Andrews University

McGHEE, JEANETTE OBERG, Instructor in Music
B. A., 1965, Walla Walla College

McNIEL, ORAN, Instructor in Engineering
B. S., 1961, Walla Walla College

MEDLOCK, JOYCE, Instructor in Secretarial Science
B. S., 1965, Walla Walla College

MURDOCH, CHRISTINE M., Instructor in Modern Languages
B. A., 1964, Andrews University

MURDOCH, FLOYD M., Instructor in History
B. A., 1963, M. A., 1964, Andrews University

OSTERUD, HAROLD H., Instructor in Public Health and Epidemiology
M. D., 1947, Medical College of Virginia; M.P.H., 1951, University of North Carolina

PALADENI, BEVERLY J., Instructor in Nursing
B. S., 1964, Walla Walla College

PINDER, MARILYN, Instructor in Nursing
B. S., 1963, Walla Walla College; M. S., 1965, Loma Linda University

QUIRING, ED E., Instructor in Secretarial Science
B. A., 1964, Walla Walla College

REED, DOROTHY, Instructor in History and Sociology, Clinical Division
B. A., 1923, Mills College; M. D., Ph. D., 1932, Columbia University

RUSSELL, L. E., Instructor in Religion
B. S., 1949, Union College; M. A., 1960, University of Oregon

SHARPE, BETTY R., Instructor in Nursing
B. S., 1947, University of California, San Francisco; Public Health Certification, 1961, San Jose State College

SINGER, JAMES A., Instructor in German
B. A., 1963, Pacific Union College; M. A., 1965, University of Nebraska

UHRIG, JOHN WILLIAM, Instructor in Physical Education
B. S., 1961, Union College

WATERBROOK, JOHN, Instructor in Physical Education
B. S., 1966, Walla Walla College

WHITSETT, WINIFRED, Instructor in Nursing
B. S., 1964, Walla Walla College

WISS, GARY ALAN, Instructor in English
B. A., 1966, Walla Walla College

WOOD, CLARENCE A., Instructor in Speech
B. A., 1961, La Sierra College; M. A., 1963, University of Denver

EMERITI

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

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

BLACK, IRENE T., Registrar
B. A., 1941, Columbia Union College

BOWERS, GEORGE W., Professor of Chemistry
B. A., 1917, Union College; M. A., 1924, Ph. D., 1935, University of Nebraska; LL. D., 1956, Walla Walla College

HANSON, FREDRICK R., Professor of Nursing
B. A., 1932, Walla Walla College; M. A., 1942, University of Washington

LOSEY, LEON B., Professor of Agriculture
B. A., 1921, Walla Walla College; M. S., 1939, Oregon State College

MILLER, LULU HILL, Professor of Art

SHANKEL, CECIL W., Professor of Chemistry

B. A., 1924, Walla Walla College, M. A., 1926, University of Nebraska

SMITH, WALTER I., Professor of Education

B. A., 1911, Union College; M. S., 1917, Whitman College; Ed. D., 1934, George Washington University; LL. D., 1957, Walla Walla College

STOEHR, HENRIQUE G., Professor of Modern Languages

B. A., 1948, Walla Walla College, Dr. U.P., 1952, University of Paris

WEAVER, GENEVIEVE STABLER, Associate Professor of Secretarial Science

B. A., 1949, Walla Walla College

WESTERMEYER, HARRY E., Professor of History

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

FACULTY COMMITTEES

ACADEMIC STANDARDS

H. L. RASMUSSEN, G. S. BALHARRIE, C. C. BARNETT, E. F. CROSS, HELEN EVANS, R. E. HARTBAUER, WILMA LEAZER, F. E. MECKLING, J. G. MEHLING, ORPHA OSBORNE, J. V. PETERS, M. K. WEST.

ADMINISTRATIVE COUNCIL

W. H. SHEPHARD, W. E. ANDERSON, G. S. BALHARRIE, R. H. BROWN, J. J. HAFNER, HANNAH R. HAGSTOTZ, M. E. LOEWEN, ORPHA OSBORNE, H. L. RASMUSSEN, C. W. SHANKEL, A. L. WHITE.

ADMISSIONS

H. L. RASMUSSEN, G. S. BALHARRIE, R. H. BROWN, HANNAH R. HAGSTOTZ, R. H. KOORENNY, M. E. LOEWEN, J. V. PETERS, ROBERTA MOORE, ORPHA OSBORNE.

COLLEGE DAY

R. L. HARTBAUER, ORPHA OSBORNE, J. D. ROBERTS, JUDITH TOOP, J. WOHLERS, and the presidents of the residence hall clubs.

FACULTY SENATE

W. H. SHEPHARD, W. E. ANDERSON, R. H. BROWN, ORPHA OSBORNE, H. L. RASMUSSEN, and all chairman of departments.

GRADUATE COUNCIL

J. V. PETERS, C. C. BARNETT, R. H. BROWN, F. E. MECKLING, ORPHA OSBORNE, H. L. RASMUSSEN, D. W. RIGBY, J. F. STOUT.

HEALTH AND SAFETY

R. H. KOORENNY, LUCILE JONES, M. E. LOEWEN, J. D. LOSEY, W. SNYDER, MARIE STRATTON, JUDITH TOOP, C. L. TRAUTWEIN, E. S. WINTER.

LIBRARY

H. L. RASMUSSEN, HELEN EVANS, G. B. HARE, R. L. LITKE, MYRTLE ROWSE, A. P. SALOM, J. F. STOUT

PROFESSIONAL EVALUATION

R. H. BROWN, J. N. BARNES, C. C. BARNETT, J. R. CHAMBERS, HELEN EVANS, C. T. JONES, M. E. LOEWEN, H. L. RASMUSSEN, D. W. RIGBY, C. W. SHANKEL, J. F. STOUT, A. L. WHITE.

PUBLICATIONS

W. E. Anderson, J. J. Hafner, Mae Lay, K. R. MacKintosh, Roberta Moore.

PUBLIC RELATIONS

R. H. Brown, W. E. Anderson, J. J. Hafner, H. L. Leno, Mae Lay, M. K. West, E. S. Winter, C. A. Wood.

RELIGIOUS INTERESTS

R. D. Fearing, G. S. Balharrie, J. N. Barnes, R. H. Brown, Hannah R. Hagstotz, J. P. Grove, R. L. Litke, J. W. Rhodes, J. D. Roberts, A. P. Salom, Lilah Schlotthauer.

SCHOLARSHIPS AND GRANTS

R. H. Brown, J. J. Hafner, C. T. Jones, R. H. Koorenny, Orpha Osborne, H. L. Rasmussen, Evelyn Rittenhouse, J. D. Roberts, A. P. Salom, Judith L. Toop.

SOCIAL ACTIVITIES

J. G. Mehling, Marguerite Aplington, R. E. Hartbauer, R. J. Hunter, E. L. Liske, M. E. Loewen, Judith Toop, E. S. Winter, Evelynne Wright.

STUDENT AFFAIRS

R. H. Brown, J. P. Grove, Hannah R. Hagstotz, R. H. Koorenny, M. E. Loewen, Orpha Osborne, H. L. Rasmussen, Donnie Rigby, J. D. Roberts, C. W. Shankel, Judith L. Toop.

TEACHER EDUCATION COUNCIL

J. V. Peters, Orpha Osborne, H. L. Rasmussen, and the chairmen of all departments offering a major or minor designed for students planning on elementary or secondary school teaching.

COMMITTEES, CLINICAL DIVISION

CURRICULUM

I. Johnson, J. Riter, H. Furber, F. Culpan, W. Leazer.

FACULTY COUNCIL

W. Leazer, S. Boeck, M. Pinder, M. McNiel, G. Pyke, C. Hartnell.

LIBRARY

G. Pyke, S. Boeck, M. Pinder.

FACULTY ADVISERS

ACADEMIC ADVISERS

In Majors: Degree candidates will consider the chairman of the department in which they major to be their faculty adviser in all matters relating to their academic program. Studnts planning to teach in either elementary or secondary schools should also counsel with the chairman of the Department of Education.

IN PREPROFESSIONAL COURSES: Members of the faculty have been appointed to serve as advisers to students preparing for careers in certain professional vocations, as follows:

Dental	J. F. STOUT
Dental assistant	ALBERT GRABLE
Dental hygiene	ALBERT GRABLE
Law	A. L. WHITE
Medical	C. W. SHANKEL
Medical technology	J. R. CHAMBERS
Nursing	WILMA LEAZER, MARIE STRATTON
Occupational therapy	E. S. WINTER
Optometry	R. M. WHITSETT
Pharmacy	C. T. JONES
Physical therapy	MRS. C. T. JONES
Podiatry	
Social Work	
Veterinary	D. W. RIGBY
X-ray technology	C. C. BARNETT

PERSONAL COUNSELORS

As a part of the college counseling program of helping each student to achieve his goals in college, members of the faculty serve as personal counselors to individual students. Prior to registration each probationary student will be assigned to a faculty member who will serve as personal counselor. Freshman students will choose a personal counselor during the latter part of the autumn quarter. Students above the freshman level usually choose to counsel with some teacher within the department of their major field of emphasis.

The Academic Dean is the coordinator of the counseling program of the College.

STUDENT ORGANIZATION COUNSELORS

Aleph Gimel Ain	HANNAH R. HAGSTOTZ
American Temperance Society	C. L. TRAUTWEIN
ASWWC Center	RUTH BURGESON, R. E. STAHLNECKER
ASWWC Graduate Manager	A. L. WHITE
ASWWC Nominating Committee	R. H. BROWN
ASWWC Religious Activities Committee	J. N. BARNES
ASWWC Social Activities Committee	GLENN SPRING, DONNIE RIGBY
Aurora Duxes	R. J. HUNTER
Chiquita Sola	HELEN EVANS
The Collegian	ROBERTA MOORE
Cosmopolitan Club	R. D. WAGNER
Epsilon Mu Sigma	ROY AND JOYCE HARTBAUER
Missionary Volunteers	J. PAUL GROVE
The Mountain Ash	L. H. CANADAY

Omicron Pi Sigma ..... M. E. Loewen
Peace Corps ..... F. E. Meckling
Sabbath School .....
WWC Flying Club ..... J. P. Grove

COORDINATING COMMITTEE OF WALLA WALLA COLLEGE AND PORTLAND SANITARIUM AND HOSPITAL

W. J. Hackett, *Chairman*
R. H. Brown, *Secretary*
W. E. Anderson
D. E. Caslow
L. W. Crooker
J. O. Emmerson
V. J. Jester
Wilma Leazer
H. L. Rasmussen
H. L. Rudy
Grace Scheresky
W. H. Shephard
T. W. Walters

PRESIDENTS OF WALLA WALLA COLLEGE

Edward A. Sutherland	1892-1897
Emmett J. Hibbard	1897-1898
Walter R. Sutherland	1898-1900
E. L. Stewart	1900-1902
Charles C. Lewis	1902-1904
Joseph L. Kay	1904-1905
Marion E. Cady	1905-1911
Ernest C. Kellogg	1911-1917
Walter I. Smith	1917-1930
John E. Weaver	1930-1933
William M. Landeen	1933-1938
George W. Bowers	1938-1955
Percy W. Christian	1955-1964
William H. Shephard	1964-

INDUSTRIAL SUPERINTENDENTS

Anderson, W. E., General Manager
Border, Lester, Plant Services
Cheney, Hazel I., Store
Koenig, William, Farm
Mandigo, David, Laundry and Dry Cleaners
Mayer, J. A., Bindery
Wickward, Bruce, Dairy
Wohlers, John, Press

SUPERVISORY INSTRUCTORS

Rogers Elementary School:

BUTHERUS, ALBERT D., Principal
BARNETT, BETTY M. ..... Grade I
FERGUSON, RUBY ..... Grade I
JONES, MABEL ..... Grade II
FITZGERALD, ANNITA ..... Grade II
PRUEHS, EDITH ..... Grade III
OLMSTED, MARGARET ..... Grade III
CAIN, RAY ..... Grade IV
JACOBSON, MYRTLE ..... Grade V
HINTZ, ROMAN ..... Grade V
LAWSON, CLIFFORD J. ..... Grade VI and Shop
FEHRER, EVAINE P. ..... Grade VI
REA, WILLIAM L. ..... Grades VII and VIII
CLARAMBEAU, VERNE ..... Grades VII and VIII
LARRABEE, LAWRENCE ..... Grades VII and VIII
HOWELL, DONALD ..... Physical Education
FINCH, GORDON A. ..... Band

Walla Walla Valley Academy:

DAVIS, G. W., Principal
BUELL, WILLIAM ..... History, English
COFFEEN, W. A. ..... Bible, Guidance
EDSTROM, E. I. ..... Bible
FINCH, GORDON A. ..... Band
KELLOGG, DAVID ..... Science
KRAVIG, FRANK ..... Choir, German
LONG, LORA LEE ..... Home Economics
LOOMER, DON ..... Physical Education
LOVELAND, SANDRA ..... English
MURDOCH, CHRISTINE ..... French
QUACKENBUSH, DON ..... Science
WHITEHEAD, GERALD ..... Industrial Arts
WHITEHEAD, VIRGINIA ..... Secretarial Science

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."

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 greatest 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.

GENERAL INFORMATION

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 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.

CAMPUS AND BUILDINGS

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, Student Association Center, and a number of classrooms, laboratories, and teacher offices.

BOWERS HALL. The Chemistry Department 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.

CLARA E. ROGERS ELEMENTARY SCHOOL. The Rogers School, completed in 1952, has 27,000 square feet of floor space and contains 12 large classrooms, teachers' offices, library and administrative offices. Five and one-half acres of playground area adjoin the school to the south and west. These facilities provide an excellent experience for students in teacher training.

COLLEGE CHURCH. The College Church is a large, new 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 is a youth chapel and several large rooms for youth and children's Sabbath Schools.

COLUMBIA AUDITORIUM. Columbia Auditorium, a reinforced concrete gymnasium-auditorium with a seating capacity of over 2,000 persons, is equipped with a splendid pipe organ. The building serves the college community as an auditorium and as a gymnasium. The large floor provides ample space for physical education activities, games and roller skating, while retaining the galleries for use of spectators.

E. C. KELLOGG HALL. Kellogg Hall contains the food service facilities for the college. The structure was completed in 1958 and meets adequately the present needs of the student body.

FINE ARTS CENTER. A new 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.

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 south front wing houses the department of Art, where classrooms and work area provide space and facilities for drawing, painting, design, printmaking and sculpture. A display area for art is provided in the downstairs hallways and courtyards.

INDUSTRIAL EDUCATION BUILDING. The department of Industrial Education is housed in a one-story frame building in excellent condition containing 17,000 square feet of floor space. There are six offices, two classrooms, and six shop-laboratories. Here the students receive both the theoretical instruction as well as the necessary practicum for the programs in Automotive, Electronics, Graphics, Industrial Crafts, Metals and Woods. The facilities are shared in part with the College Place Trade-Technical School.

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.

LIBRARY. The College Library is a vital part of the educational program at Walla Walla College. The building, completed in 1944, is convenient and well planned. Reading room accommodations, the open-shelf system, seminar and conference rooms, and a browsing room contribute to

the study and enjoyment of books. A microfilm reader and a microcard reader make accessible microfilmed, scholarly material. The Library contains 80,000 bound volumes and 5,000 pamphlets. An average of 3,400 volumes is accessioned annually. The library receives 700 current periodicals regularly and also has a classified file of almost 2,000 mounted pictures. All these materials are adequately catalogued by modern methods, and periodical indexes and other bibliographical aids are available. Resources in other libraries are available to students and faculty members through the Library's membership in the Pacific Northwest Bibliographic center which serves as a clearinghouse for interlibrary loans.

LIFE SCIENCES BUILDING. Departments housed in the Life Sciences Building completed in 1967 are Biology, Home Economics, Human Dynamics Research Institute, and Nursing.

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

The Home Economics Department is housed in the east wing of the Life Sciences Building. 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.

A number of teacher offices and classrooms have been arranged on the lower level of the Life Sciences Building to provide teaching, counseling and laboratory facilities for the nursing students.

MARINE BIOLOGICAL STATION. This facility occupies forty acres of beach and timberland at Rosario Beach adjoining Deception Pass State Park, Anacortes, Washington. The physical plant includes four laboratory buildings, a cafeteria, an assembly hall, shop, and 29 cabins for student and staff housing.

PORTLAND SANITARIUM AND HOSPITAL. In addition to the College Place campus, Walla Walla College also utilizes the large plant of Portland Sanitarium and Hospital, located at Portland, Oregon, where the students in nursing obtain their clinical practice.

On the Portland campus is a residence hall for unmarried students in the clinical division, located across the street from the Portland Sanitarium and Hospital. The nurses' home has a large parlor, sitting room, a modern kitchen, and laundry facilities to provide for comfortable living in homelike surroundings. A reverent and devotional atmosphere for worships or private meditations is provided by the little chapel on the main floor. The nurses' home also contains classrooms and a library.

RESIDENCE HALLS. 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. A modern communication system aids in making dormitory life delightful.

Sittner Hall, the men's residence, was erected in 1947. It houses 436 men and is modern in every respect.

SMITH HALL. The department of education is housed in a three-story building which was completed in 1965. It contains classrooms, laboratory,

curriculum library, lecture hall, audio-visual and instructional materials center 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 Center.

SWIMMING POOL. A new standard-sized swimming pool with a diving ell, completed in 1965, is in daily operation and serves as an instructional and recreational center for the college students.

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 the Finance Counseling Office.

RESIDENCE HALLS. All unmarried students are required to live in one of the College residence halls and to board in the College cafeteria, unless they live with their parents or with other close relatives in the immediate community. Under special circumstances, however, sophomores and upper-division students may make application to the Student Affairs Committee for permission to live off the campus in an officially approved home. Such applications will be acted on only at the beginning of a quarter. Failure to secure official approval to reside in the community or to withdraw from a College residence hall will invalidate the registration of the student. Students who have received approval for off-campus living may be called into the College residence halls at any time.

RELIGIOUS ACTIVITIES

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 has for its object the development by theory and practice of efficient missionary workers. Several auxiliary bands, such as Foreign Mission, Literature Distribution, and Sunshine, are under the direction of this organization.

PRAYER 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.

STUDENT ORGANIZATIONS

ASSOCIATED STUDENTS. The Associated Students is an organization whose membership consists of all faculty members and regularly enrolled students. The Association has for its object 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.

Residence Clubs

Aleph Gimel Ain (AGA)	Dormitory women
Omicron Pi Sigma (OPS)	Dormitory men
Chiquita Sola (CS)	Single village women
Aurora Duxes (AD)	Single village men
Epsilon Mu Sigma (EMS)	Married Students

Departmental Clubs

American Institute of Physics, WWC Chapter
Beta Mu (Home Economics)
Biology Club
Business Administration Club
Chancery Club (Law)
Chemistry Club
Delta Rho Theta (Speech)
Der Deutsche Verein (German)
Engineering Club
Grammateis Club (Secretarial)
Gymkhana Club (Physical Education)
Industrial Education Club
International Relations Club (History)
Le Cercle francais (French)
Mathematics Club
Pegasus Club (English)
Students National Education Association
Theology Club
Theta Phi Delta (Nursing)

GENERAL REGULATIONS

In all matters pertaining to personal conduct, students are expected to act as reponsible citizens and members of a Christian community. Any student whose activities demonstrate lack of harmony with the principles and standards of the College thereby places in jeopardy his membership in the student body. Every effort will be made to stimulate students to worthy scholastic endeavor and consistent Christian living, but the College cannot be expected to assume responsibility for students who are not in sympathy with its announced purposes.

STUDENT CITIZENSHIP

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

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

Students are expected to abstain from behavior inconsistent with the basic principles of Christian living as interpreted by the College. Specifically, this includes the use of profane and unbecoming language, visiting pool halls or gambling places, attending the theater, motion pictures, or any other type of entertainment not approved by the College, the use of alcoholic beverages or tobacco in any form, card playing or having possession of cards, reading or having possession of pernicious literature, and engaging in improper associations. Any student who engages in such practices fails to represent his college properly and jeopardizes his continuation as a student.

CHAPEL

The chapel hour, which is held two times each week, is regarded as a vital part of the total education program at Walla Walla College, and all students are required to attend a specified number of these assemblies.

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.

SOCIAL STANDARDS

Walla Walla College is a coeducational institution, and as such recognizes the desirability of proper associations among its students. The marriage of students during the regular school year (September to June) or during the summer session is not approved, and students should make their marriage plans for the vacation periods immediately before or after summer school, or during a quarter when they are not registered in the College. The registration of any student who violates this regulation will be canceled. The social policies of the College are fully outlined in the *Student Handbook*, and each student is responsible for becoming familiar with these policies and acting in harmony with them.

USE OF VEHICLES

Since the ownership or use of a motor vehicle frequently militates against success in college, students are not encouraged to bring motor vehicles to the College unless absolutely necessary. Freshmen are not permitted to bring motor vehicles to the College, or to the vicinity, or to operate motor vehicles owned by other individuals.

A student with upperclass standing (minimum of 84 quarter credits) is required to have earned a minimal accumulated GPA of 2.00 and to have a GPA of 2.00 on the previous quarter's work in order to operate a motor vehicle or maintain a motor vehicle in the vicinity of the College. A student above the freshman level but below the upperclass level (accumulative quarter credits between 36 and 84) is required to have a minimal accumulative GPA of 2.50 and a GPA of 2.00 on the previous quarter's work in order to operate a motor vehicle in the vicinity of the College.

All students, whether living in the residence hall or in the community, who own or operate any type of motor vehicle (automobile, motorcycle, motorscooter, etc.) are required to register these within 24 hours after arrival at the College. Drivers must, of course, have a valid operater's license. Furthermore, it is required that all operaters of motor vehicles carry public liability and property damage insurance and that they show evidence of this insurance at the time of registration and whenever requested.

Failure to comply with these regulations makes the student liable to penalties of up to $25 and may also involve severe disciplinary action. Each student is expected to be familiar with the detailed regulations governing the use of motor vehicles which are published in the *Student Handbook*.

MISCELLANEOUS

The College cannot accept responsibility for any loss of or damage to the personal property of any student.

Any student causing damage to College property is expected to report such damage promptly and to pay the cost of repairs or replacement; if the damage is not reported to the proper authority within 24 hours, double the cost of replacement will be charged, and disciplinary action may result.

THE RESIDENCE HALLS

The College believes that the purpose of the institution can be realized most successfully when all unmarried students live in the College residence halls. Here, amid comfortable, homelike influences, the students may cultivate those habits of life and graces of character which distinguish the refined Christian man and woman. These years in the lives of students are usually the formative ones, when habits of promptness, neatness, self-control, courtesy, and ideals of association are formed. The value of such training is properly regarded as a most vital part of an education for life.

Daily association of earnest young people helps to develop strong Christian character in students. Attractive parlors are provided in each residence hall for group entertainments, and for the general use of the students during leisure time.

PLEDGE OF COOPERATION. Students who apply for admission to one of the College residence halls are understood by that act to pledge themselves to conform cheerfully to all regulations printed in this bulletin, the *Student Handbook*, or announced publicly.

STUDY HOUR. In order to provide an atmosphere for study, quietness is maintained during the evening study period. Permission must be secured from the dean for any absence from the residence halls during the study hours. Students are not expected to receive visitors or to make or receive telephone calls during this time except in case of emergency.

LEAVING THE CAMPUS. Since it frequently happens that students are unexpectedly called for, and since students are responsible to those in charge of the residence halls, no student should leave the campus for any length of time without making arrangements with his residence hall dean. For campus leaves which involve absence from classes, the student must also receive the permission of the Academic Dean.

ROOMS. Students living in the residence halls are required to care for their own rooms, and are expected to observe habits of neatness and cleanliness about the premises. When a student withdraws from school, his room should be left neat and clean. Failure to do this will cause forfeiture of his room deposit.

WORSHIP ATTENDANCE. Attendance at worship, Friday evening vespers, Sabbath school, and Sabbath morning church service, is expected of all dormitory students.

INTRAMURAL SPORTS. The College sponsors a program of intramural sports in connection with the physical education activities. Participation in the intramural sports program is open to students whose grade-point average was C or better the preceding quarter.

ACADEMIC INFORMATION

WALLA WALLA College will admit as students men and women of good moral character who are willing to do earnest, faithful study. Any student seeking admission to the College thereby pledges to comply with the standards and regulations as published or announced. Should this pledge be broken, the student may be required to withdraw.

ADMISSION PROCEDURE

Formal application for admission to the College is required on a form supplied by the Registrar. A recent photograph and a $5 fee must be included. The chief factors considered by the Admissions Committee are good character, scholastic achievement, intellectual ability, financial support, and good health. Notification of acceptance is sent promptly after the applicant's record of previous work and recommendations have been received by the College.

All records become the property of the College and are kept on permanent file. Applications should be made as early as possible prior to the quarter in which study is to commence.

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 from the Registrar's Office or from the chairman of the Admissions Committee. Applicants ought not to plan on residence or work on the campus until they have been formally accepted.

LATE APPLICATION. Students who arrive on the campus without having been previously accepted will pay a late fee of $25 to compensate for expenses and loss of time involved in hurried processing of applications while the school is in operation.

OFFICIAL TRANSCRIPT. While a student may receive tentative acceptance on the basis of an unofficial transcript, no one will be permitted to register unless there is an official transcript in the Registrar's Office for him at the time of 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 that this service may be as meaningful as possible and in order that the most efficient aid can be given in the cases of illness and accidents, it is required that all new students and students who have broken residence present a certificate of a recent physical examination. Approved forms are available in the registrar's office.

Students in nursing who are ready to enter the clinical division will need additional medical tests. Inquire about these from the School of Nursing.

ADMISSION TO THE FRESHMAN CLASS

Applicants for admission to the freshman class shall have been graduated from a recognized four-year secondary school and shall have earned an average grade of C in the basic courses. Students coming from non-accredited schools and from academies not approved by the Board of Regents of the G.C. may be required to take examinations to validate their credits. The pattern of subjects required for entrance is not rigidly prescribed, but an applicant should have completed those subjects which are prerequisites of the curriculum he wishes to pursue in college. The following pattern of basic subjects (solids) is highly recommended:

English	3 units
Foreign Language	2
Mathematics: Algebra, Geometry	2
Science	2
Social Studies (including History, 1 unit)	2

ENTRANCE REQUIREMENTS FOR THE CURRICULUMS. Certain specific subjects are required for admission to the various curriculums or courses of study in the College. Applicants who are deficient in one or two subjects required for entrance to their chosen curriculum will be required to make them up during the first year of residence. These subjects are given in the columns below. For the specific requirements see the letter following the course of study and then look under the column headed by that letter.

Accounting	A	Journalism	B
Biblical Languages	B	Mathematics	A
Biology	A	Medical Technology	A
Biophysics	A	Music	B
Business Administration	A	Nursing	D
Chemistry	A	Physical Education	B
Elementary Teaching *	B	Physics	A
Engineering	A	Pre-Dental	A
English	B	Pre-Law	A
Foods and Nutrition	A	Pre-Medical	A
German	B	Secretarial Science	C
History	B	Spanish	B
Home Economics	C	Speech	B
Industrial Education	B	Theology	B
Interior Design and Decoration	C		

	A	B	C	D
English	3	3	3	3
History	1	1	1	1
Mathematics:				
**Algebra	1	—	1	—
Geometry	1	—	—	—
Elective	—	1	—	2
Science	1	1	1	1
Additional Basic Units	2	3	3	2

*Beginning with the 1968-69 school year one unit each of Algebra and Geometry will be required.

**Two units of algebra are required of students who plan to major in Biology, Biophysics, Chemistry, Engineering, Mathematics and Physics.

CHANGING CURRICULUMS. An applicant who has been admitted to one course of study or curriculum may not change to another without satisfying the entrance requirements of the curriculum to which he wishes to transfer. A student is not considered for degree candidacy until the entrance requirements of his curriculum or course of study have been met.

ADMISSION BY EXAMINATION. Mature persons who have not completed secondary school or who are unable to furnish transcript of credits may be admitted to freshman standing through examination as required or administered by the Admissions Committee. Students so admitted are not granted regular admission until they demonstrate ability to maintain a satisfactory scholarship record.

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 they may become degree candidates.

TRANSIENT ADMISSION. Students who have been in residence at other institutions of higher learning and who are not candidates for a degree from this College may be classified as transients. The category includes those who wish to transfer limited credit to other institutions and those registering for certain adult education courses. The transient 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.

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

PSYCHOLOGY TESTS. All new students are required to take a battery of college aptitude tests during the orientation week or as soon thereafter as possible. The following are exempt: students who have taken the Washington Pre-college Test and transfer students who can have the scores of such or similar tests transferred before registration.

ADMISSION TO ADVANCED STANDING

Applicants who have attended other institutions of collegiate rank may be admitted to advanced standing by submitting complete official transcripts of all credits embodying a statement of honorable dismissal. Failure to indicate that work has been taken at other institutions at the time of application invalidates any admission. The maximum amount of credit accepted from a junior college is 108 quarter credits.

Students who present advanced credits from courses completed in secondary schools will receive commensurate college credit for these, provided they have been validated by the CEEB examination with passing scores of 3, 4, or 5.

Students transferring from nonaccredited institutions are given conditional status with tentative credit for previous work as evaluated by the Academic Dean and Registrar or the Academic Standards Committee. If the student maintains a C average or above, he may be given regular status with such credits for advanced standing as the transcript evaluation warrants. Failure to meet this standard will delay or prohibit graduation.

A student who has been dismissed from another institution because of poor scholarship, or who is on probation from such institution, is not eligible for admission to the College until he can qualify for readmission to the institution from which he has been dismissed.

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

Each new student is required to submit evidence of a standard physical examination. Approved forms are available in the Registrar's Office.

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 credits with a grade-point average of at least 2.00 are listed as sophomores.

JUNIOR. Students who have a minimum of 84 credits with a grade-point average of at least 2.00, who can complete degree requirements by the end of the following school year, and who have been approved by the Registrar are eligible for junior class membership.

SENIOR. Students with a minimum of 136 credits 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.

GRADUATE. The College offers courses leading to the Master of Arts and the Master of Education degrees with majors in Biology and Education. For further information concerning graduate courses and degree requirements, see the bulletin of the Graduate Division.

AUDITOR. A student may audit certain courses with permission of the instructor involved. No credit is allowed and an audited course may not later be taken for credit. Students wishing to audit courses must register in the usual manner and are charged full tuition.

REGISTRATION

The regular academic year is divided into three periods or quarters. The summer session is regarded as the fourth quarter.

All students are required to register on designated days at the beginning of the academic year and prior to the beginning of each quarter. Registration is not official until all procedures required by the Registrar have been completed and all fees have been paid. Students are assigned faculty advisers who assist in registration and planning programs. Changes in registration, approved by the adviser, may be made during the first week of instruction. No changes involving other courses are permitted after this time without the permission of the adviser and 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.

WITHDRAWALS. Students withdrawing from college or individual courses must file an official drop voucher with the Registrar's Office. Failure to do so will result in the recording of unsatisfactory withdrawal (Wf) on the student's permanent record. During the first four weeks of any quarter the student may withdraw from a course and receive a W. Withdrawals after this time will result in the recording of a Wf unless exception is granted by the Academic Dean. Withdrawals must be approved by the adviser and instructor involved and are not permitted during the last two weeks of a quarter.

LATE REGISTRATION Students who register after the designated registration periods are charged a late registration fee of $5. Students may not register after the second week of a quarter without permission of the Academic Dean and the instructors involved, and a reduction in course load.

REREGISTRATION

Occasionally a student's registration is cancelled when he fails to meet certain academic appointments and requirements; this does not constitute an expulsion, and as soon as the student has attended to whatever may be defaulted he is reinstated. There is a fee of $10.00 for reregistration.

EXPLANATION OF CREDITS

A credit usually represents one class meeting a week or three hours of laboratory work a week for the duration of the quarter. Thus, a three-credit class would meet three times each week. For each "quarter credit" of school work 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.

STUDY LOAD. The normal load is 16 credits per quarter. Sophomores, juniors, and seniors may request to register for 18 credits if their grade-point average for the previous quarter was 3.00 (B).

Students in college residence halls may not register for less than 10 credits without permission of the Academic Dean. Students are not permitted to add to their load by giving or receiving instruction away from the College, or registering for correspondence work, without permission of the Academic Standards Committee.

In general, the full study load for graduate students is 12 quarter credits, and for the undergraduate students 16 quarter credits. Therefore, students who have to work should reduce their study load accordingly. The following is recommended.

OUTSIDE WORK	STUDY LOAD
1 - 14 hours per week	12 - 16 credits
15 - 20	10 - 14
20 - 24	8 - 12

The following study loads will satisfy the authorities indicated:

1. Immigration Authorities	12 quarter credits
2. Selective Service	15
3. Social Security	12
4. Veterans	14

COURSE NUMBERING

Beginning June 1, 1963, the following numbering system went into effect:

SUB-COLLEGE LEVEL

No credit. Courses numbered 0 to 99 carry no credit toward a degree or a college program.

LOWER DIVISION

Freshman. Courses numbered 100 to 199 are considered first-year college courses, or the freshman level. Seniors registering for these courses may not count such credits toward the required 192 credits for a degree.

Sophomore. Courses numbered 200 to 299 are considered second-year college courses, or the sophomore level.

UPPER DIVISION

Junior. Courses numbered 300 to 399 are considered third-year college courses, or the junior level.

Senior. Courses numbered 400 to 499 are considered fourth-year college courses, or the senior level. Some of these courses may apply toward a graduate program.

GRADUATE

Courses numbered 500 to 599 are considered fifth-year college courses, the graduate level. Seniors with high scholarship who are concurrently completing their last year in a degree program and who are within 12 credits of graduation may request permission to take some of these courses.

MISCELLANEOUS

Course numbers connected with hyphens indicate courses which ordinarily carry credit only when completed in their entirety. Uncompleted hyphenated courses do not carry credit toward completion of any course or degree unless by permission of the chairman of the department and the Academic Standards Committee.

Ordinarily, courses numbered 300 or above may not be taken until 84 credits have been earned and the basic degree requirements have been met.

However, a sophomore who has completed 75 credits may petition the Academic Standards Committee for permission to register for courses numbered 300-399 if he has all the course prerequisites, if his scholarship is acceptable, and if progress in his chosen curriculum would otherwise be jeopardized.

GRADING SYSTEM

The quality of student effort is measured by a system of grades and by computed grade-point averages. Each grade is assigned a numerical value in points. A report of grades earned is made to both students and parents at the end of each quarter. The following system of grades and point values is used:

A—exceptional	4 grade points per credit
B—above average	3
C—average	2
D—below average	1
F—failure	0

Other symbols used are as follows: S, satisfactory; W, withdrawal; Wf, unsatisfactory withdrawal; I, incomplete; and Au, audit course. The Wf is recorded when students unofficially withdraw from a class or withdraw after the first four weeks of any quarter. The I is given in case of incomplete work due to justifiable causes and must be made up three weeks before the close of the following quarter; otherwise it becomes an F. This regulation also applies to students who discontinue college. Permission to receive an I must be obtained from the instructor. A student with an I should adjust his course load the following quarter so that the work may be completed without jeopardizing scholarship in other classes.

GRADE-POINT AVERAGE. The grade-point average (GPA) is computed by totaling the grade points for all courses and dividing by the total credits for which grades are received. Credits for which an F or Wf are received are included in calculating the grade-point average. The symbols S, I, W, and Au are disregarded in computing the grade-point average.

ERRORS AND CORRECTIONS. Grade cards are issued at the close of each quarter. Upon the receipt of a grade card, the student should carefully check it for correctness as to the courses recorded, credits, and grades. Any corrections needed must be taken care of within one week. No change will be made in the permanent record after two weeks from the issue of the grade card.

REPEAT COURSES. Students may repeat only courses in which grades lower than a C have been received. Courses in which an F has been received must be repeated in residence unless permission to do otherwise is granted by the Academic Standards Committee. In computing the grade-point average both the original grade and the grade received in the repeated courses are included.

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 Academic Dean. Students whose cumulative grade-point average falls below C (2.00) are automatically placed on scholastic probation, and they remain so classified until the overall GPA is again 2.00 or better.

HONORS

HONOR ROLL. Students with a grade-point average of 3.50 or above, who are registered for at least 15 credits, are listed on the official honor roll issued each quarter.

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

CLASS REGULATIONS

Students are not officially registered for a course until the instructor has been informed by the Registrar's 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. Arrangements may be made with the Academic Dean for emergency situations.

ADVENTIST COLLEGES ABROAD. Walla Walla College, together with eight other Adventist colleges in the United States, has formed an organization for the purpose of providing opportunities for qualified students to study abroad. Presently, arrangements have been made for students to study a full school year at Seminaire Adventiste, Collonges, France, and at Seminar Marienhohe, Darmstadt, Germany. Arrangements will, no doubt, be made with other schools also. Credits will be granted for these studies so that a student will be able to complete almost a full college year abroad. Write for information.

CORRESPONDENCE WORK

The College will accept a maximum of 24 quarter credits of approved courses by correspondence towards a degree. Correspondence work may not apply on a major unless approved by the chairman of the department concerned. Students must obtain approval from the Academic Standards Committee to carry correspondence work while in college, and correspondence work taken while attending college will be counted as a part of the student's study load. Seniors who have unfinished correspondence work will not be listed as prospective graduates until such work is completed. Correspondence work will not meet upper division requirements, nor can a student who has failed a course make this up by correspondence study.

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

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. Ask the registrar for information.

EXTENSION COURSES

Extension courses are accepted provided the institution offering the courses accepts similar credits towards a degree on its own campus.

VOCATIONAL AND TECHNICAL PROGRAMS

As a service to students with interests and abilities in technical and vocational skills, the College offers a program leading to a certificate in printing, secretarial, and a few vocational-industrial areas. These courses do not lead to a degree, but will prepare the students for positions in the areas mentioned. Write for information.

EXAMINATIONS AND WAIVERS

Applications to receive credit by examination for work in which credentials cannot be supplied must be filed with the Academic Standards Committee during the first quarter of residence. Examination and recording fees are charged for credits obtained in this manner. The grades earned, even when unsatisfactory, will be recorded.

Requests for waivers of credit must be made during the first three quarters in residence.

TRANSCRIPTS

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

DEGREE REQUIREMENTS

THE College offers courses of study leading to the following degrees:

Bachelor of Arts	Bachelor of Science in Engineering
Bachelor of Music	Master of Arts
Bachelor of Science	Master of Education

Candidates for degrees 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 two consecutive quarters must meet the requirements of the current bulletin upon resuming attendance.

For information concerning requirements for the Master of Arts and Master of Education degrees see the bulletin of the Graduate Division.

GENERAL DEGREE REQUIREMENTS

All candidates for baccalaureate degrees must complete a minimum of 192 credits including 60 credits in courses numbered 300 or above, and have a cumulative grade-point average of 2.00 (C) or above.

MAJOR AND MINOR STUDY. A minimum of 45 credits in a major and 27 credits in a minor or completion of the prescribed requirements of certain curriculums is required. The following degrees and majors do not require a minor: the Bachelor of Music, the Bachelor of Science in Engineering, the Bachelor of Science with a major in Biophysics, the Bachelor of Science with a major in Nursing.

The major should be chosen no later than the end of the sophomore year. The selection of a minor and appropriate electives should be made in counsel with the major professor or faculty adviser.

A grade lower than C (2.00) in a course may not apply on a major or minor except in Engineering (see page 79.) At least 21 credits in the major and 3 credits in the minor must be in courses numbered 300 or

above. The maximum allowed on a major for the Bachelor of Arts degree is 60 credits unless the excess is beyond the 192 credits required for the degree.

Majors are available in the following areas:

Accounting
Applied Music
Biblical Languages
Biology
Biophysics
Business Administration
Chemistry
Elementary Teaching
Engineering
English
Foods and Nutrition
German
History
Home Economics
Industrial Education
Interior Design and Decoration
Journalism
Mathematics
Medical Technology
Music
Music History and Literature
Music Theory
Nursing
Physical Education
Physics
Religion
Secretarial Science
Spanish
Speech and Hearing Therapy
Theology

Minors are available in the following areas:

Art
Biblical Languages
Biology
Business Administration
Chemistry
Economics
English
French
German
Health
History
Home Economics
Industrial Education
Journalism
Mathematics
Music
Physical Education
Physics
Political Science
Psychology
Religion
Secretarial Science
Sociology
Spanish
Speech

COMPREHENSIVE EXAMINATION. Satisfactory completion of a comprehensive examination in the major is required before a degree may be conferred. A student who fails this examination may not attempt another examination until one quarter has elapsed. Industrial education students will submit an appropriate project and/or report approved by the chairman of the department.

Residence. Transfer students must be in residence three consecutive quarters and complete a minimum of 36 credits.

Other degree candidates must be in residence the last three quarters preceding their graduation.

CANDIDACY FOR DEGREE. 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 Registrar not later than one week after the beginning of the third quarter preceding graduation. Appropriate forms may be obtained from the Registrar's Office. Students are not considered candidates for degrees or eligible for senior class membership until officially notified by the Registrar.

Candidates for degrees must be members of the senior class. The fee fixed by the class and approved by the President of the College must be paid not later than March 5 in order for candidates to be eligible for graduation.

Seniors who have unfinished correspondence work will not be listed as prospective graduates until such work is completed. All degree candidates must have their correspondence courses finished and all incompletes removed one month prior to graduation.

BACHELOR OF ARTS DEGREE: BASIC REQUIREMENTS

Candidates for the Bachelor of Arts degree must meet certain general education requirements which are to provide a basic understanding of those areas of knowledge common to the liberal arts. The pattern of courses required depends upon the secondary school background and the major chosen. The areas and the specific requirements are as follows:

HUMANITIES	Credits
English 101-102-103	9

Literature and Speech. Five credits must be in literature; the remaining credits may be chosen from speech or literature. Candidates for teaching certification must complete four credits in Fundamentals of Speech.

Language. The number of credits required depends upon the amount of language completed in secondary school and the major chosen.

Majors in the following must complete 9-24 credits:

Biology	Journalism	Physics	
Chemistry	Language	Religion	
English	Mathematics	Speech	
History	Music	Theology	9-24

Students who have had two units of one language in secondary school must complete nine credits if the same language is continued. Those who have had no language or do not continue the same language must complete 24 credits. Music majors must complete French or German. Majors in chemistry should choose French or German. Majors in theology must choose Greek for their language requirement. Majors in religion may choose Greek or a modern language.

Majors in the following must complete 0-15 credits:

Accounting	
Business Administration	
Home Economics	
Interior Design and Decoration	0-15

No language is required of students who have had two units of one language in secondary school. Those who have had no language previously must complete 15 credits.

NATURAL SCIENCE AND MATHEMATICS

Completion of a basic course in one of the following areas: Astronomy, Biological Science, Chemistry, Physics, or Mathematics. 12

SOCIAL SCIENCE

Education, Psychology. Philosophy of Christian Education (2 credits) and General Psychology (4 credits) are required. 6

History. Completion of either History 101, 102, 103 or 201, 202, 203. 9

Religion. Students who submit two or more units of Bible from an academy will complete 18 credits in college. Students who have completed less than two units of Bible in academy, and those transferring from non-Seventh-day Adventist colleges will take two credits each quarter in college. Religion 201, 202, 203 or the equivalent is required of all students. Students who enter college with fewer than two units in religion should begin their religious studies with courses 101, 102, 103.

Additional credits are to be chosen from the following courses: 104, 105, 106; 141, 142, 143; 221, 222, 223; 322, 323; 341, 342, 343; 357, 358, 359; 364, 365, 366; 384; 426; 444, 445; 464, 465, 466. In addition, students may apply as Bible the courses 421, 422, 423 if all three quarters are completed or dynamics 427, 428 if both are completed. 18-24

PHYSICAL EDUCATION AND HEALTH

Health. Completion of the course Health Principles or waiver by examination during the freshman year. 2

Physical Education. Physical Education is required of all students under 30 years of age. Veterans who have completed basic training are exempt from Physical Education upon presentation of discharge papers. 3

BACHELOR OF SCIENCE DEGREE: BASIC REQUIREMENTS

Candidates for the Bachelor of Science degree are required to complete certain general education requirements and usually a greater concentration of courses in their major and cognate areas. The general education requirements are as follows:

HUMANITIES

Credits

English 101-102-103 9

Literature and Speech. Five credits must be in literature; the remaining credits may be chosen from speech or literature. Candidates for teaching certification and majors in nursing must complete four credits in Fundamentals of Speech. 9

Language. The number of credits required depends upon the amount of language completed in secondary school and the major chosen.

Majors in the following must complete 9-24 credits:

Biology Mathematics 9-24

Students who have had two units of one language in secondary school must complete nine credits if the same language is continued. Those who have had no language or do not continue the same language must complete 24 credits. Majors in biology and chemistry should choose French or German.

Majors in chemistry must complete credits in German or French 0-15

No language is required of students who have completed two units in one of these languages on the high school level.

No language is required for the following majors:

Accounting *Industrial Education*
Biophysics *Medical Technology*
Business Administration Nursing
Elementary Teaching Physical Education
Foods and Nutrition Physics 0

NATURAL SCIENCE AND MATHEMATICS

Completion of a basic course in one of the following areas: Astronomy, Biological Science, Chemistry, Physics or Mathematics. 12

SOCIAL SCIENCE

Education, Psychology. Philosophy of Christian Education (2 credits) and General Psychology (4 credits) are required. 6

History. Completion of either History 101, 102, 103 or 201, 202, 203 is required. 9

Religion. Students who submit two or more units of Bible from an academy will complete 18 credits in college. Students who have completed less than two units of Bible in academy, and those transferring from non-Seventh-day Adventist colleges will take two credits each quarter in college. Religion 201, 202, 203 or the equivalent is required of all students. Students who enter college with fewer than two units in religion should begin their religious studies with courses 101, 102, 103.

Additional credits are to be chosen from the following courses: 104, 105, 106; 141, 142, 143; 221, 222, 223; 322, 323; 341, 342, 343; 357, 358, 359; 364, 365, 366; 384; 444, 445; 464, 465, 466. In addition, students may apply as Bible the courses 421, 422, 423 if all three quarters are completed or dynamics 427, 428, if both are completed. Majors in Nursing must include the following courses: Ministry of Healing, Interviewing and Spiritual Counselling. 18-24

PHYSICAL EDUCATION AND HEALTH

Health. Completion of the course Health Principles or waiver by examination during the freshman year. 2

Physical Education. Physical Education is required of all students under 30 years of age. Veterans who have completed basic training are exempt from Physical Education upon presentation of discharge papers. 3

BACHELOR OF MUSIC

Students wishing to receive the Bachelor of Music degree must follow the curriculum as outlined under Music. The physical education and religion requirements are the same as for other baccalaureate degrees.

BACHELOR OF SCIENCE IN ENGINEERING

Students wishing to receive the Bachelor of Science in Engineering degree must follow the curriculum outlined under Engineering.

SECOND BACHELOR'S DEGREE

Two different degrees may be conferred at the same time if the candidate has met the requirements of both degrees, and has completed a total of 237 credits. The College does not grant two degrees of the same kind to any one person, such as two B.A.'s or two M.A.'s. Students may, however, earn a second degree after one degree has been conferred by completing an additional 45 quarter credits, meeting the basic degree requirements of both degrees, and the requirements of a second major and a second minor.

MUSIC CREDIT ALLOWED ON DEGREES

Students who are not majoring or minoring in music may use nine credits of applied music, including three credits in ensemble, in meeting degree requirements. Thereafter, one credit in music classwork must be completed for each credit in applied music, with a maximum of eight additional credits in ensemble.

GRADUATION

Degrees are conferred twice each year, June and August. Candidates for degrees are required to be present for graduation. The President may grant permission for graduation *in absentia* when all requirements have been met and circumstances warrant this.

PREPROFESSIONAL COURSES OF STUDY

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. Preprofessional courses of study are offered for the professions hereinafter listed.

DENTAL

Adviser: Mr. Stout

The minimum requirement for admission to the study of dentistry is two years of college. However, most dental schools expect candidates for admission to have completed three to four years of college. A total of 96 credits is required, and should include the following:

Embryology	5
Freshman Composition	9
General Biology or Zoology	12
Inorganic Chemistry	15
Modern Language	0-9
Organic Chemistry	9-12
Physics	12

Some schools require nine credits in a foreign language and three to six credits of Quantitative Analysis.

DENTAL ASSISTANT

Adviser: Mr. Grable

The minimum requirement for admission to the study of dental assistantship is 48 credits from a liberal arts college. The following courses are to be included;

American History	9
*Accounting or Bookkeeping	6
*Beginning Typewriting	6
Freshman Composition	9

General Psychology	4
Government	3
*Introductory Chemistry	9
Religion	6
Sociology	3
Speech	4

*Or high school credits

DENTAL HYGIENE

Adviser: Mr. Grable

Women planning for careers in dental hygiene must complete 96 credits with a cumulative grade-point average of 2.25 or above before seeking admission to the various dental hygiene programs. Experience has indicated that a minimum average of 2.50 is needed to compete for admission to the program at Loma Linda University. The following credits are required:

American Government	3
Biology	12
Chemistry	9
Freshman Composition	9
General Psychology	6
History of the United States	9
Microbiology or Comparative Anatomy	5
Physical Education	3
Psychology or Sociology	3
Religion	12
Sociology	3
Speech	4
Electives	18

Some schools require that electives include a foreign language, such as Spanish or French.

LAW

Adviser: Mr. White

While most law schools require the bachelor's degree for admission, they do not require any specific courses as prerequisite for entrance; some require Principles of Accounting. Courses which tend to develop skills in the English language and ability to reason and think analytically are highly recommended. Students planning to study law should consult with the Pre-Law adviser to make sure that the courses taken in college will meet the requirements of the law school which they plan to attend.

By special arrangements with Willamette University College of Law, a combined-cooperative degree program has been developed whereby an individual may shorten the total time required by one year. Under this program the student is required to complete a major in Business Administration, satisfy degree and general education requirements, and complete at least six credits in speech and three credits in political science, acquiring a minimum of 147 credits with a grade-point average of 2.5 or above while at college. Qualifying students may then be awarded the Bachelor of Arts degree by Walla Walla College upon satisfactory completion of the first year of law school. Upon completion of the law school curriculum, the student may receive the Bachelor of Laws from Willamette University.

MEDICAL

Adviser: Mr. Shankel

Most medical schools require completion of 192 credits with a grade-point average of 2.5 or above, computed separately for science and non-science courses. The following credits are normally required:

Embryology	5	Mathematics	8
English	9	Organic Chemistry	9-12
Foreign Language	9-12	Physics	12
General Biology or Zoology	12	Quantitative Analysis	3-6
Inorganic Chemistry	15	Religion	18

MEDICAL TECHNOLOGY

Adviser: Mr. Chambers

Students wishing to become medical technologists or laboratory technicians may complete the first three years at the College and transfer to the Portland Sanitarium and Hospital or other approved hospitals for the fourth year. Candidates who plan to go to hospitals other than the Portland Sanitarium and Hospital must submit their request to the Academic Standards Committee for approval if they wish to obtain a degree from Walla Walla College. Upon completion of the fourth year, the student may receive a Bachelor of Science degree. The following courses must be completed:

First Year		Second Year	
Chemistry 141-142-143	15	Chemistry 244	4
Health and P.E. 110	2	Biological Sciences 101, 102, 103	12
Education 110	2	History 201, 202, 203	9
Education 121, 122	4	Literature or Speech	4
English 101-102-103	9	Physics 181, 182, 183 and 184, 185, 186	12
Mathematics 121	4	Religion	6
Physical Education	3	Electives	1
Religion	6		
Electives	3		

Third Year		Fourth Year
Biological Sciences 107 or 465	5	At Portland Sanitarium and Hospital
Biological Sciences 202-203 or 392, 393	8-10	
Chemistry 301-302-303 or 321-322-323	9-12	
Chemistry 406	4	
Literature	5	
Religion (UD)	6	
Electives (UD)	6-11	

Students majoring in Medical Technology must meet all degree and general educational requirements. During the three years of pre-medical technology the student must complete 144 credits, including 30 credits of upper division.

NURSING

Advisers: Miss Leazer, Mrs. Stratton

Details concerning the educational program in nursing offered by Walla Walla College are given on pages 145-149.

Candidates who plan to enter other schools for their clinical experience should write to the director of the nursing school of their choice and ask for specific requirements. The courses may be taken at Walla Walla College.

OCCUPATIONAL THERAPY

Adviser: Mr. Winter

Students who are preparing for the Bachelor of Science degree in Occupational Therapy should plan to complete 96 quarter credits before entering the professional training. The following curriculum is recommended:

Biological Science	15
Chemistry	9
Freshman Composition	9
History of the United States	9
Physical Education	3
Psychology	9
Religion	12
Sociology	3
Speech	4
Electives	23

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

Adviser: Mr. Whitsett

At least one year of general college work may be applied to the curriculum of most optometry schools. Science requirements may include full-year courses in biology, chemistry, and physics. Mathematics requirements may include analytical geometry and calculus. To avoid problems in their curriculum, it is important that students consult the college of optometry they wish to enter for specific information.

PHARMACY

Adviser: Mr. C. Jones

At least two years of general college work are required. Students should consult with the college of pharmacy which they wish to enter about courses required. The following should be included:

Bacteriology	5	Organic Chemistry	10
Botany	3	Physical Education	2
Freshman Composition	9	Physiology	5
General Physics	12	Psychology	6
Health Principles	2	Quantitative Chemistry	5
Inorganic Chemistry	15	U. S. History	9
Mathematics	8	Zoology	9

All pharmaceutical colleges require three years in residency beyond the two years of pre-pharmacy; some require four years.

PHYSICAL THERAPY

Adviser: Mrs. Jones

The minimum requirement is the completion of 96 credits (two full years of liberal arts courses). The student should consult the adviser for Pre-Physical Therapy. The credit hour requirements in the areas indicated below must be met.

Behavioral Science	12
*General Psychology	
Sociology	
Additional Psychology	
Biological Sciences	15
General Biology	
Comparative Anatomy or Microbiology	
Chemistry	6
Must include laboratory	
Communication Arts	12
*Freshman Composition	
*Speech	
Physical Education	3
Religion	9
Social Studies	12
*U.S. History	
American Government	
Electives	27
Chosen from: fine arts, foreign language, history, literature, mathematics, religion, sociology, speech.	
	96

*Complete course must be taken.

PODIATRY

Students who are interested in preparing for the study of Podiatry should complete 90 credits in liberal arts and science with concentrations in chemistry and biology, and basic courses in physics and mathematics. The Illinois College of Podiatry does not have classes on Saturday.

VETERINARY

Adviser: Mr. Rigby

There are 18 colleges of veterinary science in the United States. Since their basic requirments are not exactly the same, the student should confer with the college of his choice. The following will generally meet the preprofessional requirements:

Freshman Composition	9
General Biology	12
General Physics	12
History of the U. S.	9
Inorganic Chemistry	15
Mathematics	4
Intro. to Organic Chemistry	6
Social Science	3
Speech	3
U. S. Government	3
Zoology	12
Electives, biology	6

X-RAY TECHNOLOGY

Adviser: Mr. Barnett

Forty-five credits are required for admission to most schools of X-ray 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, mathematics, and, whenever possible, typing should be included.

DEPARTMENTS OF INSTRUCTION

THIS section contains a list of all courses offered in the College. The departments are arranged in alphabetical order. The curriculums and courses offered in the School of Theology and the School of Nursing begin on pages 140 and 145, respectively.

Courses numbered 100-199 are normally taken by freshmen; those from 200-299 are normally taken by sophomores; those from 300-499 by juniors and seniors; and those 500 and above by graduate students.

The description of courses in each department includes: (1) the number of the course as used in the College records; (2) the title of the course; (3) a brief description of course content; (4) the number of credits given; (5) the quarter in which it is given.

The credit indicated in connection with each course is the "quarter credit," and one credit represents one recitation period per week for one quarter. The number of credits listed is for each quarter. Thus, "Three credits; autumn, winter, spring," means three credits each quarter, or a total of nine credits for the year.

Two or three numbers connected with hyphens indicate courses which must be completed in their entirety. Only upon permission of the chairman of the department and the Academic Standards Committee may credit be obtained for a single quarter of study in a hyphenated course.

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.

Courses preceded by an * are not offered in the current year.

ART

Chairman: Professor MacKintosh

The aim of the Art Department is to cultivate an awareness, appreciation and understanding of the various forms of visual experience, and through instruction and practice help the student develop his creative abilities and appreciation.

MINOR REQUIREMENTS:

Design	161-162-163	9
Drawing	181-182-183	3
History & Appreciation of Art	321, 322, 323	6
Special Problems	477, 478, 479	3
Electives (Approval of the Chairman of the Department required.)		6
		27

COURSES

161-162-163. **DESIGN.** An intensified study of the basic elements of design aiming to develop cognizance of visual organization. Three credits; autumn, winter, spring.

181-182-183. **DRAWING.** An experience in the use of line with representational and abstract approaches through application to still life and portraiture. One credit; autumn, winter, spring.

191, 192, 193. **INTRODUCTION TO PAINTING.** A first course in painting through various uses of acrylics. One credit; autumn, winter, spring.

201, 202, 203. **PAINTING.** To develop the aesthetic enjoyment and understanding in the application of paint, whether the media be oil, casein, or tempera. Prerequisite: 181-182-183, or equivalent. Two credits; autumn, winter, spring.

261-262-263. **SCULPTURE.** The study and application of three dimensional forms in space using varied media such as plaster, plasticene and paper. One credit; autumn, winter, spring.

281, 282, 283. **INTRODUCTION TO PRINTMAKING.** A beginning course in the art of printmaking: relief method of printmaking: linoleum cut, woodcut, and wood engraving. One credit; autumn, winter, spring.

305. **ART IN THE ELEMENTARY SCHOOL.** 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. Three credits; winter.

307, 308, 309. **ADVANCED DRAWING.** A utilization of the basic principles of drawing with various experimental approaches. Prerequisite: 181-182-183. Two credits; autumn, winter, spring.

311, 312, 313. **PRINTMAKING.** An advanced course in the various processes of intaglio printmaking, drypoint, engraving, etching. Open to minors only. Prerequisite: 161-162-163 and 281, 282, 283. Two credits; autumn, winter, spring.

321, 322, 323. **HISTORY AND APPRECIATION OF ART.** 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. Two credits; autumn, winter, spring.

477, 478, 479. **SPECIAL PROBLEMS IN ART.** Individual student projects chosen and carried out under the direction of the chairman of the department. Open to minors only. One to three credits any quarter. Maximum, three credits; autumn, winter, spring.

BIBLICAL LANGUAGES

Chairman: Doctor Litke
Associate Professor: A. P. Salom
Assistant Professor: Lucile Harper Knapp

In its objective, the department aims to provide theological students with tools for scholarly research and to enable them to read the Bible in the original. The major in Biblical Languages is intended for those who would like to increase their proficiencey in Biblical study and research as well as for those who may look forward to the teaching of these languages.

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

A minimum of 51 credits, which must include 461, 462, 463. The following cognates are required: Religion 444, 445, 446 and History 321, 322, 323.

MINOR REQUIREMENTS:

A minimum of 30 credits, at least 6 of which must be in upper-division language courses. The lecture courses 461, 462, and 463, are strongly urged as additional electives; Religion 444. 445, and History 321, 322, and 323 are recommended.

COURSES

101-102-103. **GREEK I.** 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. Five credits; autumn, winter, spring.

221, 222, 223. **GREEK II.** 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. Three credits; autumn, winter, spring.

341, 342, 343. **DOCTRINAL EPISTLES OF PAUL.** An exegetical study of the great doctrinal epistles of Paul. Selections from the letters to the Thessalonians, Corinthians, Romans, and Galatians are especially studied as examples of the apostle's theological writings. Two credits; autumn, winter, spring.

*344, 345, 346. **LATER EPISTLES OF PAUL.** 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. Two credits; autumn, winter, spring.

*347, 348, 349. **PASTORAL AND GENERAL EPISTLES.** An exegetical study of the Pastoral Epistles and the General or "Catholic" Epistles. Selections are studied from Paul's epistles to Timothy and Titus, and from the epistles of Peter, James and Jude. Two credits; autumn, winter, spring.

*Not offered the current year.

441-442-443. **HEBREW I.** An introductory course in Biblical Hebrew. Emphasis is placed upon an intensive study of the grammar of this ancient language. The student is taught the ability to read from the Hebrew Bible and to use lexical materials. Three credits; autumn, winter, spring.

451, 452, 453. **HEBREW READING.** 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. Two credits; autumn, winter, spring.

461, 462. **TEXTUAL CRITICISM OF THE NEW TESTAMENT.** 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. Two credits; autumn, winter.

463. **TRANSLATION PROBLEMS.** 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. Two credits; spring.

477, 478, 479. **SPECIAL PROBLEMS IN BIBLICAL LANGUAGES.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

BIOLOGICAL SCIENCES

Chairman: Professor Rigby
Associate Professor: John F. Stout
Assistant Professors: Beatrice Emery, Carl Forss, Albert Grable

The department offers a Bachelor of Arts degree and a Bachelor of Science degree with a major in biology, and jointly with the Physics Department a Bachelor of Science degree with a major in Biophysics. Graduate work leading to the Master of Arts degree is also offered. For further information, see the bulletin of the Graduate Division.

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

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

BIOLOGY MAJOR—REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

General Biology	101, 102, 103	12
Survey of the Plant Kingdom	271	4
Comparative Anatomy	272	5
Embryology	273	5
Genetics	322	4
Physiology	392, 393	8
Systematic Botany	426	4
Philosophy of Origins and Speciation	482	3
Research Methods I, II, III	251, 352, 453	3
Electives (Upper Division)		8
Four hours must be chosen from the following courses: 403, 424, 444, 446, or 462.		— 56

Required Cognates:

Mathematics	121, 122	8
Chemistry	141-142-143	12 or 15
Physics, with laboratory	181, 182, 183	12

One summer term at the Marine Biological Station

BIOLOGY MAJOR—REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Biological science courses for the B. A. degree are also required for the B. S. degree.

Required Cognates:

Mathematics	121, 122, 181	12
Chemistry	141-142-143	15
Physics, with laboratory	181, 182, 183	12

One summer term at the Marine Biological Station

A minor in one of the following is required: Chemistry, Physics, or Mathematics.

BIOPHYSICS MAJOR—REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE

The requirements for the curriculum of Biophysics are listed in the Department of Physics. See page 129.

MINOR REQUIREMENTS IN BIOLOGY:

A minimum of 27 credits including eight upper division credits. Course 101, 102, 103 is required. Four credits must be in botany.

COURSES

101, 102, 103. **GENERAL BIOLOGY.** 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. One laboratory per week. Four credits; autumn, winter, spring.

104. **ELEMENTARY PHYSIOLOGY.** A study of the elements of the functioning of the major organ systems with emphasis on human physiology. Will not apply on a biology major. One laboratory per week. Five credits; autumn.

107. **MICROBIOLOGY.** The nature of bacteria and disease-producing organisms with their habits and methods of reproduction and the relation of these organisms to disease in the human body are studied. One laboratory per week. Will not apply on biology major. Five credits; autumn.

202-203. **ANATOMY, PHYSIOLOGY.** A survey of human anatomy and physiology is given. Health principles will be integrated in this course. One laboratory per week. Will not apply on biology major or minor. Five credits; winter, spring.

251. **RESEARCH METHODS I.** Discussion of the methods of science, the types of biological literature, sources of biological information and methods of information retrieval. First quarter of a three-quarter sequence required of all majors. One credit; autumn.

271. **SURVEY OF THE PLANT KINGDOM.** A study of the life histories, internal anatomy and physiology of the various members of the plant kingdom. Prerequisite: 103. One laboratory per week. Four credits; autumn.

272. **COMPARATIVE ANATOMY.** A study of the comparative anatomy of chordates with emphasis on the vertebrates. Detailed dissections of the shark and cat are made in the laboratory. Prerequisite: 101, 102, 103. Two laboratories per week. Five credits; winter.

273. **EMBRYOLOGY.** A study of embryonic development of animals with emphasis on the developmental morphology of the vertebrates. Prerequisite: 101, 102, 103. Two laboratories per week. Five credits; spring.

278. **DIRECTED STUDY.** Study in an area of interest to the student under the guidance and supervision of a staff member. A formal report summarizing the results of the study is required. Permission must be obtained from the department chairman. One, two, or four credits per quarter. Maximum, four credits. Summer. (WWC Marine Biological Station.)

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

322. **GENETICS.** A study of the principles of inheritance in plants and animals. One laboratory per week. Four credits; winter.

352. **RESEARCH METHODS II.** Methods of selection of a research problem, experimental design, and the forms for presentation of data in the scientific paper are discussed. Second quarter of a three-quarter sequence required of all majors. One credit; winter.

389. **NATURAL HISTORY OF VERTEBRATES.** A study of vertebrates with emphasis on natural history, ecology, and taxonomy of birds and mammals. Two laboratories per week. Will not apply on the biology major. Five credits; spring.

392, 393. **PHYSIOLOGY.** The study of the principles of physiology of animals and plants and related chemical and physical phenomena at the cellular level comprises the first half of the course. The second half of the course is a study of the organ physiology of animals with emphasis on the vertebrates and is based on the concepts developed during the first half of the course. Prerequisite: 392 for 393 and a beginning chemistry course; co-requisite: Physics or permission of instructor. One laboratory per week. Four credits; winter, spring.

401. **PLANT PHYSIOLOGY.** A course designed to cover the principles of physiology of plants in general. Prerequisite: 271. One laboratory per week. Four credits; autumn.

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. Four credits; spring.

405. **GENERAL ENTOMOLOGY.** A study of insect morphology, physiology, ecology, and control. One laboratory per week. Four credits: winter.

407. **PHILOSOPHY OF SCIENCE.** 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. Does not apply on a biology major. Three credits; winter.

411. **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. Prerequisite: 271. One laboratory per week. Four credits: autumn.

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

426. **SYSTEMATIC BOTANY.** Principles of classification of plants with emphasis on the angiosperms. Two laboratories per week. Four credits; spring.

427. **COASTAL FLORA.** A study of the principles of classification and of the ecological relationships of the vascular plants of the Puget Sound area. Special emphasis is given to the salt marshes, fresh-water pond, estuarine, grassland, and forest habitats of the islands and mainland. Four credits; summer. (WWC Marine Biological Station.) (This course

*Not offered the current year.

can be substituted for Systematic Botany for the biology major, but both courses may not apply to an undergraduate major.)

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. Four credits; summer (WWC Marine Biological Station.)

442. **MICROTECHNIQUE.** A course designed to cover the important methods of making microscope slides. Two laboratories per week. Three credits; winter.

444. **MAMMALOGY.** A systematic study of mammals with emphasis on natural history and ecology. Two laboratories per week. Four credits; autumn.

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

447. **PARASITOLOGY.** A systematic study of the morphology, life cycle, and host-parasite relationships of protozoan, helminth, and arthropod parasites. Two laboratories per week. Five credits; autumn.

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

451, 452. **INVERTEBRATE ZOOLOGY.** A study of the biology of protozoan, acoelomate and pseudocoelomate invertebrates comprises the first half of the course. The biology of the eucoelomate invertebrates is studied in the second half of the course. Four credits each term; summer (WWC Marine Biological Station).

453. **RESEARCH METHODS III.** Methods of writing the scientific paper, oral presentation of the paper and a discussion of the organization of the biological sciences for the communication of results of scientific research are included. Third quarter of a three-quarter sequence required of all majors. One credit; spring.

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

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

464. **ANIMAL BEHAVIOR.** A comparative study of the behavior of animals with emphasis on an experimental analysis of behavior. A research project will be required. Four credits; summer (WWC Marine Biological Station).

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. Five credits; winter.

466. **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. Prerequisite: course 405 highly recommended. Two laboratories per week. Four credits; spring.

467. **BIOLOGICAL OCEANOGRAPHY.** A study of the geology, geography, and biology of the ocean. Four credits; summer (WWC Marine Biological Station).

468. **COMPARATIVE PHYSIOLOGY.** A comparative study of the physiology and life processes of animals with emphasis on invertebrates. Prerequisite: 392, 393. Recommended prerequisite: 451, 452. Four credits; summer (WWC Marine Biological Station).

470. **BIOPHYSICS.** An introductory course emphasizing the physical aspects of living organisms studied by the experimental and conceptual methods of physics with application to marine life. Four credits; summer. (WWC Marine Biological Station).

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. Three credits; winter.

477, 478, 479. **SPECIAL PROBLEMS IN BIOLOGICAL SCIENCE.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

482. **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. Three credits; winter.

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

502. **GENETICS AND EVOLUTION.** Detailed study of the variability of the genetic mechanism as the latter relates to speciation. Processes of significance in species formation at the organism and population levels will be considered. Prerequisite: 322. Three credits; winter

504. **MORPHOLOGY OF PLANTS.** An advanced study of the type forms of the divisions of the plant kingdom. One laboratory per week. Prerequisite: 271 or consent of the instructor. Four credits; autumn.

510. **GRADUATE SEMINAR.** Presentation of topics and discussion of current research in specific areas of biology. One credit; any quarter. Maximum: five credits.

512. **PRINCIPLES OF TAXONOMY.** A course designed to give the student a working knowledge of the rules of nomenclature, the factors considered in classification, the preparation of synonymies and keys, and new methods for determining relationships. Four credits; winter.

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: Coursework in one group of animals **or** plants **or** microbes **or** parasitology. Chemistry courses through organic are highly recommended. Two laboratories per week. Four credits; autumn.

*516. **ARTHROPOD VECTORS.** Vectors and other insects of medical import to humans are covered. The host-parasite relationships as well as preventive and control methods in tropical and temperate regions are considered. Two laboratories per week. Prerequisite: 447. Four credits; spring.

*519. **FOREST ENTOMOLOGY.** A study of economically important forest insects with methods of control. Practical field experience is stressed. Prerequisite: 405. One laboratory per week. Four credits; spring.

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: 392, 393. Five credits; winter.

524. **MARINE INVERTEBRATES.** A study of the biology of selected groups of marine invertebrates. Individual research projects are required. Four credits; summer (WWC Marine Biological Station).

*539. **HELMINTHOLOGY.** A detailed study of the more common helminth parasites of animals is undertaken. Emphasis is given to current areas of research in helminthology. Basic techniques of importance in laboratory work with helminths are covered. Prerequisite: 447. Two laboratories per week. Four credits; spring.

541. **BIOSTATISTICS.** Practice and theory in the use of statistical methods in quantitative biology. Four credits; autumn.

545. **THESIS.** Preparation of the master's dissertation after successfully carrying out original study with a suitable topic to be selected after consultation with the major professor. Eight credits.

*Not offered the current year.

BUSINESS AND ECONOMICS

Chairman: Professor Mehling
Associate Professor: Arthur L. White
Assistant Professor: Ralph L. Jones
Instructors: Andrew Dressler III, William J. Key

The objective of the department is to offer students opportunity for the general education and specialized training necessary for success in society at large as well as in the business world. Courses offered in the department are designed to prepare for denominational service, civil service, business and industry.

BACHELOR OF ARTS—MAJOR DEGREE REQUIREMENTS

Principles of Accounting	131-132, 133	9
Intermediate Accounting	231, 232, 233	9
Business Law	241, 242, 243	6
Principles of Economics	261-262, 263	9
Seminar	492	1
Electives, upper division		20
		54

BACHELOR OF SCIENCE—MAJOR DEGREE REQUIREMENTS

Major: Administration and Management

Principles of Accounting	131-132, 133	9
Intermediate Accounting	231, 232, 233	9
Business Law	241, 242, 243	6
Principles of Economics	261-262, 263	9
Cost Accounting	331	5
Seminar	492	1
Electives, upper division		32
		71

Major: Accounting

Students desiring an accounting major as preparation for a public accounting career and for the C. P. A. examination will complete the specific courses listed above for the management major and include the following in their electives:

Tax Procedure	335	3
Accounting Systems	336	3
Business Finance	376	3
Statistics	411	3
Accounting Problems	431, 432, 433,	3-9
Fund Accounting	434	3
Auditing Procedure	439	3

Required Cognates:

Students majoring in Business Administration must demonstrate proficiency in typing. Mathematics 121 or the equivalent is also required.

MINOR IN BUSINESS:

Principles of Accounting	131-132, 133	9
Principles of Economics	261-262, 263	9
Electives, upper division		9
		27

MINOR IN ECONOMICS:

Principles of Economics	261-262, 263	9
Price Theory	361	5
Aggregate Economic Analysis	362	5
Electives		8
		27

COURSES

112. **PERSONAL FINANCE.** A course designed to provide an individual with the techniques to manage his personal finances more efficiently. Two credits; winter.

131-132, 133. **PRINCIPLES OF ACCOUNTING.** Introduction to accounting; books of original entry; ledgers; statements of condition and of operations. To be taken in sequence. Three credits; autumn, winter, spring.

135-136. **PRINCIPLES OF ACCOUNTING.** Introduction to accounting; books of original entry; ledgers; statements of condition and of operations. Five credits, winter; four credits, spring.

231, 232, 233. **INTERMEDIATE ACCOUNTING THEORY.** Autumn quarter is devoted to a study of the construction, analysis and interpretation of the financial statement and reports prepared from accounting records. Winter and spring quarters relate to a study of basic accounting procedures employed in balance sheet evaluation and profit determination. Further study of funds, inventories, reserves, contingent liabilities and partnership accounting. Prerequisite: 131-132, 133. Three credits; autumn, winter, spring.

236. **INTRODUCTION TO INFORMATION SCIENCE.** An introduction to the logical organization of digital computers; data organization and processing; algorithms; flow diagrams; the use of a computer language as applied to various accounting systems; and the operation of all-purpose bookkeeping machines. Three credits; spring.

241, 242, 243. **BUSINESS LAW.** Fundamentals of law which affect business transactions. Emphasis on contracts, agencies, negotiable instruments, landlord and tenant relationship, personal property, and corporations. Two credits; autumn, winter, spring.

261-262, 263. **PRINCIPLES OF ECONOMICS.** A study of the organization, operation and control ot the American economy, and of the principles and analytical concepts pertaining thereto. Must be taken in sequence. Three credits; autumn, winter, spring.

321, 322, 323. **MARKETING AND ADVERTISING.** A study of the principles underlying marketing and market organizations in connection with the psychology and science of advertising. Two credits; autumn, winter, spring.

BUSINESS AND ECONOMICS

331. **COST ACCOUNTING.** Theory and practice in keeping cost records for manufacturing concerns. Job order, process, and standard cost systems. Prerequisite: 131-132, 133. Five credits; autumn.

335. **TAX PROCEDURE.** A study of tax regulations and accounting records necessary to facilitate proper tax accounting and the determination of tax liability for individuals, partnerships, and corporations. Three credits; winter.

*336. **ACCOUNTING SYSTEMS.** A study of diversified accounting systems, system construction and installation procedures. Prerequisite: 231, 232, 233. Three credits; spring.

344. **PRINCIPLES OF INSURANCE.** A study of insurance contracts, underwriting organizations, and insurance representation and procedures. Three credits; autumn.

346. **REAL ESTATE.** A survey course in the basic principles and problems of real estate management and appraisal. Three credits; spring.

*348. **LABOR RELATIONS.** The development and present status of labor law and employment problems. Three credits; winter.

361. **PRICE THEORY.** 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: 261-262, 263. Five credits; autumn.

362. **AGGREGATE ECONOMIC ANALYSIS.** Analysis of the determinants of the aggregate level of employment, output, and income of an economy. Prerequisite: 261-262, 263. Five credits; winter.

366. **DEVELOPMENT OF ECONOMIC THOUGHT.** A study of the history of economic doctrine, tracing the origins of contemporary economic theory. Prerequisite: 361, 362. Five credits; spring.

369. **BUSINESS CYCLES.** A study of the business cycle including analysis of cycle theories, appraisal of proposals for controlling cycles and of forecasting techniques. Prerequisite: 361, 362. Five credits; spring.

375. **BUSINESS FINANCE.** A study of the fundamental principles of financial policy in the organization and management of corporate enterprises. Three credits; winter.

411. **STATISTICS.** This course stresses an understanding of basic statistical principles and their applications. Graphic presentations, distributions, probabilities, index numbers, correlations and statistical decision making are studied. Prerequisite: Mathematics 121 and 122 or consent. Three credits; spring.

414. **BUSINESS MANAGEMENT.** A study of the internal organization of the business enterprise; problems of planning, coordination and production management. Three credits; autumn.

431, 432, 433. **ACCOUNTING PROBLEMS.** Studies in equities and control of assets in C.P.A. type problems. Prerequisite: 24 credits of accounting. Three credits; autumn, winter, spring.

*Not offered the current year.

434. **FUND ACCOUNTING.** A study of the application of accounting principles to trust funds, pledged funds, sinking funds, special tax funds and general funds accumulated for special purposes such as plant extension, debt retirement and operation of non-profit enterprises. Three credits; autumn.

439. **AUDITING PROCEDURE.** A survey of practical auditing procedure as applied in the verification of accounting records, and the preparation and presentation of formal reports. Prerequisite: 231, 232, 233 or permission from the instructor. Three credits; spring.

441. **INVESTMENTS.** A study of the principles of making sound investments in the securities markets, managing investment portfolios, evaluating securities, the function of the spectator, the hedging operation and the evaluation of market risks. Three credits; summer.

442. **CREDIT ADMINISTRATION.** A study of loan and investment problems from the viewpoint of the credit administrator. Three credits; summer.

453. **HUMAN RELATIONS IN MANAGEMENT.** A survey of the human relations problems found in industry today. Three credits; spring.

462. **COMPARATIVE ECONOMIC SYSTEMS.** Compares the operation of modern capitalistic, socialistic and communistic systems as they respond to economic problems. Prerequisite: 263. Three credits; winter.

463. **MONEY AND BANKING.** A study of the functional activities of the institutions which comprise our financial system; emphasizing the nature and functions of money, credit, and banking. Five credits; spring.

*465. **ECONOMICS OF FOREIGN TRADE.** 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 exchange. Prerequisite: 263. Three credits; winter.

477, 478, 479. **SPECIAL PROBLEMS IN BUSINESS ADMINISTRATION.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

492. **SEMINAR.** A course in orientation, research, problems and trends in business and economics. Students will do independent study and present a paper. Open to majors only. One credit; winter.

*Not offered the current year.

CHEMISTRY

Chairman: Doctor Jones
Professor: James R. Chambers
Associate Professor: Cecil W. Shankel
Assistant Professor: Wayne Zaugg

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Inorganic Chemistry	141-142-143	15
Elementary Quantitative Analysis	244, 245-246	10
Organic Chemistry	321-322-323	12
Physical Chemistry	351, 352, 353	12
		49

A minimum of 21 upper division credits is required. Any minor may be chosen. The following courses are also required. Physics 181, 182, 183, or 201, 202, 203. Mathematics requirements are listed with the courses.

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Inorganic Chemistry	141-142-143	15
Analytical Chemistry	244, 245-246	10
Organic Chemistry	321-322-323	15
Physical Chemistry	351, 352, 353	12
Special Problems	477, 478 or 479	2-3
Electives		9-12
	Minimum	63-67

Minors in both mathematics and physics are recommended. Regardless of the minor the following are required: Mathematics 121, 122, 181, 281, 283; Physics 181, 182, 183 or 201, 202, 203.

MINOR REQUIREMENTS:

A minimum of 27 credits including 3 credits of upper division.

COURSES

101-102-103. **INTRODUCTORY CHEMISTRY.** An introductory course in chemistry covering the fields of inorganic, organic, and biochemistry. Does not apply on a major or minor. Two lectures, one laboratory per week. Three credits; autumn, winter, spring.

141-142-143. **INORGANIC CHEMISTRY.** A systematic study of typical metals and non-metals together with a survey of all the elements. Emphasis is placed on fundamental principles and theories. Mathematics 121 prerequisite or taken concurrently. Four lectures and three hours laboratory per week. Five credits; autumn, winter; two or five, spring.

244, 245-246. **ELEMENTARY QUANTITATIVE ANALYSIS.** Fundamental principles and laboratory practices in both gravimetric and volumetric analysis are presented in 244. The remaining time is spent on ionic equilibrium and simple instrumental methods of analysis. Prerequisite: 141-142-143, Mathematics 121; 244 is prerequisite for 245-246. Three lectures, one laboratory per week autumn; two lectures, one laboratory per

week winter and spring. Four credits; autumn. Three credits; winter, spring.

301-302-303. **INTRODUCTION TO ORGANIC CHEMISTRY.** A short course designed to furnish a basis for the understanding of structural chemistry, systems, nomenclature, and organic chemistry reactions. Open to students in home economics, pre-dental, and certain other preprofessional courses. Does not apply on a major. Prerequisite: 141-142-143. Two lectures, one laboratory per week. Three credits; autumn, winter, spring.

321-322-323. **ELEMENTARY ORGANIC CHEMISTRY.** A study of the preparation, reaction, and constitution of the aliphatic and aromatic compounds of carbon. Prerequisite: 141-142-143. Three lectures and one or two laboratories per week. Four or five credits; autumn, winter, spring.

341. **ADVANCED INORGANIC CHEMISTRY.** A more detailed study of inorganic substances with emphasis on the metals, their preparation and uses. Prerequisite: 141-142-143. Two credits; autumn.

351, 352, 353. **PHYSICAL CHEMISTRY.** An introductory course in theoretical chemistry and electrochemistry. Experiments involve the various physical properties of matter and their constants. Prerequisite: 244-245-246, Physics 181, 182, 183 or 201, 202, 203 and Mathematics 121, 122, 181, 281. Three lectures, one laboratory per week. Four credits; autumn, winter, spring.

406, 407. **BIOCHEMISTRY.** A study of the chemistry of foods, digestion and body metabolism. Prerequisite: 301-302-303, or 321-322-323. The spring quarter, 406, consists of three lectures and one laboratory per week; it is prerequisite to the autumn course, 407, which is three lectures per week and no laboratory. Four credits; spring; three credits, autumn.

424. **ORGANIC SYNTHESIS.** The preparation of various aliphatic and aromatic compounds involving representative procedures employed in synthetic work. One lecture, two laboratories per week. Three credits; autumn; conference to be arranged.

425. **INORGANIC SYNTHESIS.** The course includes the preparation of a variety of inorganic compounds to illustrate standard methods of procedure employed in inorganic preparations. One lecture, two laboratories per week. Three credits; winter.

426. **ORGANIC QUALITATIVE ANALYSIS.** A systematic identification of the various types of organic compounds, including unknowns. One hour conference and six to eight hours laboratory. Three credits; spring.

429. **ADVANCED ORGANIC CHEMISTRY.** A study of the current theories in the field of aliphatic and aromatic chemistry. Prerequisite: 321-322-323. Two credits; winter.

461, 462, 463. **ADVANCED ANALYTICAL CHEMISTRY.** A study of gravimetric, volumetric and instrumental methods of analysis. Problem solving is emphasized. One lecture, two laboratory periods per week. Three credits; autumn, winter, spring.

477, 478, 479. **SPECIAL PROBLEMS IN CHEMISTRY.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits Autumn, winter, spring.

EDUCATION AND PSYCHOLOGY

Chairman: Doctor Peters
Professor: J. Wesley Rhodes
Associate Professors: Lucile Hall Jones, Norman C. Maberly, Robert E. Stahlnecker, Lois Floretta Teel
Assistant Professors Lynn R. Callender, Robert D. Wagner

The College offers teacher-education programs leading to the bachelor's degree with Washington State and denominational certification for elementary and secondary teaching. Generally, a degree and the first certificate (provisional) can be earned in four years of college.

Those planning to teach at the elementary level should follow the program leading to the Bachelor of Science degree with the elementary teaching major. Those planning for secondary teaching, including junior high school level, should follow one of the regular bachelor's degree programs with a major and minor. In addition, candidates must meet the requirements of courses in education.

CERTIFICATION

Attention is given to planning each program to fit the needs of the individual student. Those transferring from other colleges should plan carefully with the Education Department to avoid unnecessary duplication of course work.

State certification procedures must be initiated by the student. The College recommends the student after formal application and the payment of a certification fee of $1.00 to the County Superintendent of Schools.

Denominational certification applications are filed with the Union Conference educational superintendent for processing. The "credentials" on file in the Placement Office do not relate to certification.

REQUIREMENTS FOR PROVISIONAL ELEMENTARY CERTIFICATION

I. GENERAL EDUCATION

Candidates must meet the basic requirements for the Bachelor of Science degree as listed on pages 43, 44 with the following inclusions:

History of the Pacific Northwest	3
Mathematics	12
(in addition to a basic science sequence of 12 hours)	

II. PROFESSIONAL EDUCATION

Introduction to Education	210	3
Educational Psychology	220	3
Teaching of Language Arts	361	3
Teaching of Reading	362	3
Teaching of Social Studies	365	3
Educational Evaluation	430	3
Child Psychology	435	3
Directed Teaching	450	12
Methods and Materials of Instruction	470	3

III. MINORS

In addition to the requirements listed in I and II above, the student will complete a minor in each of two areas taught in the public schools. Students who so desire may chose a suitable major for elementary teaching in place of the two minors as the area requirement.

IV. ADDITIONAL REQUIREMENTS

Electives	21-27
To be chosen in counsel with the chairman of the department	

REQUIREMENTS FOR PROVISIONAL SECONDARY CERTIFICATION

I. GENERAL EDUCATION

Candidates must complete the basic requirements for the Bachelor of Science degree or for the Bachelor of Arts degree as listed on pages 41, 42 with the following inclusion:

History of the Pacific Northwest	3

II. PROFESSIONAL EDUCATION

Introduction to Education	210	3
Educational Psychology	220	3
Adolescent Psychology	436	3
Educational Evaluation	430	3
Methods and Materials of Instruction	470	3
Methods Course	471, 472 or 473	3
Directed Teaching	460	12

III. TEACHING AREAS

Students planning for the secondary school teaching certificate will complete a regular college major and minor. Students who have completed majors in subjects not taught in the public secondary schools, may meet the certification requirements by completing minors in two approved subjects.

STANDARD CERTIFICATE—FIFTH YEAR

To be recommended for the Washington Standard Certificate, the candidate must fulfill the following requirements:

1. Hold a valid Washington provisional certificate
2. Complete two years of successful teaching
3. Complete 45 quarter credits beyond the bachelor's degree

Of the 45 credits 22½ credits must be in residence; 30 credits may be earned prior to the first year of teaching; a maximum of 12 credits may be earned by correspondence and/or extension study. Correspondence or extension credits must be from schools approved by the college recommending the candidate for certification. No correspondence work is applicable to the Master's degree.

The fifth-year program must be planned by authorized personnel in the Department of Education. By careful programming, some students are able to complete the requirements for the Master's degree in Educa-

tion at the same time they are fulfilling the requirements for the Standard Certificate. For preliminary information, consult the Bulletin of the Graduate Division.

PRINCIPAL'S CREDENTIALS

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

Write the Department of Education for detailed information.

PSYCHOLOGY MINOR

The psychology minor serves as a basis for further training for a variety of occupations including careers in school counseling, industrial guidance services, and certain types of social work. It can be integrated, by advisement, with related areas of sociology and health for candidacy for certification as a school psychologist.

MINOR REQUIREMENTS:

General Psychology	121, 122, 123	6
Educational Psychology	220	3
Educational Evaluation	430	3
Educational Guidance	426	3
Child Psychology	435	
or		
Adolescent Psychology	436	3
A course in Statistics		3
Electives: May include select courses in Sociology chosen in counsel with the chairman of the department.		7
		28

COURSES IN EDUCATION

110. **PHILOSOPHY OF CHRISTIAN EDUCATION.** A study of the ideals and principles of Christian education, especially as interpreted by the Seventh-day Adventist Church. Two credits; autumn, winter or spring.

210. **INTRODUCTION TO EDUCATION.** A study of the historical and philosophical backgrounds with the current organization and objectives of American education. Three credits; autumn, winter or spring.

305ND. **CHILDREN'S LITERATURE.** See Non-Departmental.

305Art. **ART IN THE ELEMENTARY SCHOOL.** See Art.

352. HPE. **PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** See Health and P.E.

361. **TEACHING OF LANGUAGE ARTS.** Materials, objectives, and methods used in the teaching of the language arts in the elementary school. Pertinent to the teaching of composition, spelling, reading, listening, speaking. Three credits; autumn.

362. **TEACHING OF READING.** Objectives and methods in the teaching of reading in the elementary school. Three credits; winter.

365. **TEACHING OF SOCIAL STUDIES.** Materials, objectives, and methods used in teaching social studies in the elementary school, chosen from the fields of geography, history, and civics. Three credits; winter.

369. **SCIENCE IN THE ELEMENTARY SCHOOL.** Objectives and materials used in the teaching of science at the primary and intermediate levels with particular emphasis on the application of the scientific method. Three credits; spring.

373. **MATHEMATICS IN THE ELEMENTARY SCHOOL.** Methods of teaching modern mathematics in the elementary school. Prerequisite: 8 hours of mathematics. Three credits; spring.

404. **HISTORY OF EDUCATION.** A survey of the history of education from early times to the present. Three credits; autumn.

426. **EDUCATIONAL GUIDANCE.** An introduction to the basic functions of guidance and a study of organizational patterns. Prerequisite: 121, 122. Three credits; winter.

431 HPE. **ELEMENTARY SCHOOL HEALTH INSTRUCTION.** See Health and P.E.

447. **EXPLORATORY SCHOOL EXPERIENCE.** 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—approximately three weeks. This "September Experience" does not replace student teaching requirements. Three credits; autumn.

449. **DIRECTED TEACHING.** Practical experience in working with primary and intermediate children in a program of varied school activities. Prerequisite: At least one year of teaching experience. Permission from the chairman of the department is required. Maximum, three credits. Three credits; summer.

†450. **DIRECTED TEACHING.** Professional laboratory experiences for students preparing to teach on the elementary level. Taken as one complete quarter's work in conjunction with Methods and Materials of Instruction. Arrangements must be made through the department by midterm prior to the quarter during which the directed teaching is to be done. Arrangement for directed teaching during the autumn quarter must be made in the spring. A weekly seminar and group conference period is provided. Twelve credits; autumn, winter, or spring.

†460. **DIRECTED TEACHING.** Professional laboratory experiences for students preparing to teach on the secondary level. Taken as one complete quarter's work in conjunction with Methods and Materials of Instruction. Arrangements must be made through the department by midterm prior

† The following courses are prerequisite to courses †450 and †460: Introduction to Education, Educational Psychology, Educational Evaluation, and a Methods Course.

to the quarter during which the directed teaching is to be done. Arrangement for directed teaching during the autumn quarter must be made in the spring. A weekly seminar and group conference period is provided. Twelve credits; autumn, winter, or spring.

461. **METHODS OF AUDIO-VISUAL EDUCATION.** A survey of the methods of instruction through the use of audio-visual aids. The course provides training in equipment utilization, integration of techniques into instructional practices and selection and evaluation of audio-visual media. Two credits; autumn.

462. **INSTRUCTIONAL AIDS: PRODUCTION.** Designed for teachers, audio-visual directors and others interested in laboratory experience in production of instructional aids; emphasis on course-of-study implementation through production techniques feasible at the local level. Prerequisite: 461 or equivalent. Two credits; winter.

463 Mus. **METHODS OF TEACHING MUSIC IN THE ELEMENTARY SCHOOL.** See Music.

470. **METHODS AND MATERIALS OF INSTRUCTION.** Considers the basic principles of instruction and fundamental teaching procedures which are applicable at any grade level. Includes orientation in organization of classroom procedures, keeping records, making reports, guiding and disciplining students, and other activities which support the instructional program. Course is coordinated with 12 hour "block-of-time" student teaching assignments. Meets daily for two or three periods during the first and last weeks of the quarter. Three credits; autumn, winter, or spring.

471, 472 or 473. **METHODS COURSES.** Several methods courses are offered by the various departments of the College. They deal with materials and specific methods applicable to the teaching of each individual subject. Actual classroom presentation and demonstration is included. Three credits. (All have the same numbers.)

477, 478, 479. **SPECIAL PROBLEMS IN EDUCATION.** 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 showing competence in and extent of his study. Open to students preparing for teacher certification. Permission from the chairman of the department is required. One to three credits any quarter. Maximum, three credits; autumn, winter, spring.

485. **GROUP TESTING.** A study of the methods and interpretation of group tests including classroom testing for the elementary and secondary schools. Prerequisite: 430. Two credits; spring.

COURSES IN PSYCHOLOGY

121, 122, 123. **GENERAL PSYCHOLOGY.** 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. Must be taken in sequence. Two credits; autumn, winter, spring.

220. **EDUCATIONAL PSYCHOLOGY.** This course emphasizes the application of psychological principles to the art of teaching. The responsibility of the school in developing a dynamic, social, and ethical personality is stressed. The practices of the modern school are studied in the light of empirical findings, experimental research, and case studies. Three credits; autumn, winter or spring.

430. **EDUCATIONAL EVALUATION.** A study of statistics and the methods of using evaluative instruments in the elementary and secondary school. Three credits; winter or spring.

431. **PSYCHOLOGY OF EXCEPTIONAL CHILDREN.** Characteristics and problems of all types of exceptional children with consideration of essential educational adaptation. Prerequisite: 121, 122. Three credits; summer.

435. **CHILD PSYCHOLOGY.** Principles of growth as related to various phases of human development during the preadolescent years: physical, mental, and emotional. Prerequisite: 121, 122. Three credits; autumn.

436. **ADOLESCENT PSYCHOLOGY.** Principles of growth as related to various phases of human development during the adolescent years: physical, mental, and emotional. Prerequisite: 121, 122. Three credits: winter.

444. **SOCIAL PSYCHOLOGY.** A study of personality patterns that function in the interpersonal and intergroup life into which all human beings are born, and within which they develop and mature. The course is concerned with human behavior, attitudes, and processes of the phenomena of communication, suggestion, conflict, accommodation, assimilation, and socialization. Three credits; autumn.

GRADUATE COURSES IN EDUCATION

500. **GRADUATE SEMINAR.** An orientation to graduate study. Required of all master's degree candidates. No credit. Summer, autumn.

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

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

509. **VOCATIONAL GUIDANCE.** A study of current materials and trends in educational and vocational guidance. Three credits; summer or winter.

511. **LITERATURE IN THE SECONDARY SCHOOL.** A survey of literature suitable to grades 7-12 with attention to evaluation, selection, authors, illustrators, and publishers. Three credits; summer.

515. **COUNSELING AND GUIDANCE.** Principles and techniques of individual and group counseling. Prerequisite: 426 or equivalent. Three credits; spring.

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

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

526. **SCHOOL FINANCE.** A course designed for administrators, emphasizing origin and disbursement of school funds derived from tax sources and other revenues. Techniques of budget construction are studied and a general overview is given of the principles of financing education. Three credits; summer.

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

535. **TEACHING OF REMEDIAL READING.** Diagnostic and remedial reading techniques, how to recognize reading difficulties and improve reading skills. Laboratory experience required. Four credits; summer.

539. **SUPERVISION.** For principals, classroom teachers or those planning to be supervisors. Problems, responsibilities, privileges and duties of both teacher and supervisor, and the improvement of teachers in service through a comprehensive program of supervision. Three credits; spring.

544. **ADMINISTRATION OF THE ELEMENTARY SCHOOL.** Organization, supervision, and administration of elementary schools. Three credits; summer.

549. **MENTAL HEALTH IN EDUCATION.** Physiological and psychological factors related to emotional maturity. Identification of mental health activities. Individual mental health, classroom climate, patterns of acceptance and rejection. Three credits; spring.

551. **ADMINISTRATION OF THE SECONDARY SCHOOL.** Problems and procedures in the organization of secondary schools. Three credits; autumn.

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

560. **ADMINISTRATIVE PRACTICUM.** Professional laboratory experience for candidates for an administrative credential. The course is designed to involve each candidate in a variety of practical administrative experiences and to assist in his successful induction into school leadership. Five or ten credits; any quarter.

561. **METHODS OF RESEARCH.** Procedures in the selection and evaluation of research projects, and techniques in the analysis of research data. Three credits; autumn.

567. **COMPARATIVE EDUCATION.** A comparison of systems and philosophies of education in various parts of the world; emphasis on the role of cultural impacts. Three credits; spring.

570. **TOPICS.** Selected topics in education involving research and reports in addition to regular class activities. Maximum, six credits. Three credits; any quarter.

581, 582, 583. **PROFESSIONAL PROJECT.** Selected areas of advanced study involving reading and research. Formal report required. Prerequisite: consent of department head and graduate standing. Maximum, six credits. Two, four, or six credits; any quarter.

584. **WORKSHOPS.** Short-term group instruction with all-day sessions (two or three weeks.) Workshop organization utilized to provide major emphasis upon specific projects of local or international needs. Three credits; summer.

590. **THESIS.** Eight credits; any quarter.

GRADUATE COURSES IN PSYCHOLOGY

501. **STATISTICS IN EDUCATION AND PSYCHOLOGY.** Statistical procedures and interpretations particularly as applied to research in education, psychology and related fields. Three credits; spring.

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

531. **INDIVIDUAL TESTING—BINET.** A course designed to familiarize the student with the Stanford-Binet Intelligence Scale, its administration and interpretation. Arrangements should be made through the department chairman. Three credits; summer.

532. **INDIVIDUAL TESTING—WESCHLER.** A course designed to familiarize the student with the Weschler Intelligence Scales, their administration and interpretation. Arrangements to enroll in the course must be made through the department chairman. Prerequisite 430. Three credits; summer.

564. **ABNORMAL PSYCHOLOGY.** A study of behavioral deviations, therapeutic measures, and theories. Three credits; autumn.

565. **PRACTICUM IN SCHOOL COUNSELING.** Practical experience in various guidance techniques under supervision of qualified school counselors. Prerequisite: department approval. Five or ten credits, arranged.

ENGINEERING

Chairman: Professor Cross
Associate Professors: Glenn W. Masden, Robert L. Noel
Assistant Professors: Frederick R. Bennett, Jon Cole
Instructor: Oran McNiel

The College offers courses leading to the degree of Bachelor of Science in Engineering, with curriculums in civil, electrical and mechanical engineering. The aim of the engineering course is to prepare students to practice professional engineering, and also to provide undergraduate instruction which will be adequate as a foundation for graduate studies. Professional engineering is considered the art and science of applying mathematics, science, economics and ethics to the problems of research, development, design and construction of useful devices, machines, structures and systems.

The curriculum in civil engineering gives primary consideration to structural design, but includes also the areas of soils, highways, and elementary sanitary engineering. In electrical engineering the emphasis is particularly upon those problems that are related to the fields of electrical machinery, electronics. and communications. In mechanical engineering the predominant instructional areas are machine design, thermodynamics and heat transfer, and the beginning phases of structures and electrical engineering.

Entering engineering freshmen should have a strong background of mathematics, physics, chemistry, history and English. A student with fewer than three years of preparatory training in mathematics can be admitted to the engineering course only on a provisional basis until such deficiency is removed.

College students who have pursued successfully a pre-engineering program elsewhere may enter with advanced standing. If the possession of specific knowledge is in question, a qualifying examination may be taken, the grade earned to become a part of the student's permanent record.

Admission to engineering will be made only in September, except for certain advanced students. Satisfactory progress is contingent upon full attendance for all three quarters, and the maintenance of a C average grade. Since there is no clear distinction between major and minor courses, the grade of D in any subject will be interpreted as follows: A grade of D may be accepted for credit toward the degree provided there are no more than two such marks in any given quarter, and further provided that the grade-point average for that quarter is not lower than 2.00. Where these conditions do not hold, a grade of D will necessitate repeating the course, whether it is engineering or nonengineering in nature.

In the senior year the following non-course requirements should be met: inspection trip and a satisfactory score on the Graduate Record Examination. Also, at or near the time of graduation, seniors will sit for the State of Washington Engineer-in-Training examination.

The stipulated requirements for the degree of Bachelor of Science in Engineering are as follows:

ENGINEERING

CIVIL ENGINEERING

First Year

Religion	6
Freshman Composition	9
Fundamentals of Math.	8
Anal. Geom. & Calculus	4
Inorganic Chemistry	15
Engineering Drawing	6
Engineering Problems	3
Physical Education	3
	54

Second Year

Religion	6
Introductory Physics	15
Anal. Geom. & Calculus	12
Engineering Mechanics	9
Surveying	6
Curves and Earthworks	3
	51

Third Year

Religion	4
Philosophy of Christian Educ.	2
Differential Equations	4
Mechanics of Materials	4
Fluid Mechanics	4
Engineering Thermodynamics	4
Electrical Engineering	3
Engineering Materials	6
Structural Anal. & Design	9
Soil Mechanics	4
Hydrology	3
Water Supply	3
Engineering Administration	3
M. E. Laboratory I	1
	54

Fourth Year

Religion or Electives	6
Mathematics Elective	4
Circuit Analysis	4
Engineering Electronics	3
Indeterminate Structural Analysis	4
Structural Design	14
Foundations	3
Transportation Engineering	3
Sewage Disposal	3
Seminar	3
Contracts & Specifications	2
Intro. Mod. Computers	2
	51

ELECTRICAL ENGINEERING

First Year

Religion	6
Freshman Composition	9
Fundamentals of Math.	8
Anal. Geom. & Calculus	4
Inorganic Chemistry	15
Engineering Drawing	6
Engineering Problems	3
Physical Education	3
	54

Second Year

Religion	6
Introductory Physics	15
Anal. Geometry & Calculus	12
Engineering Mechanics	9
Electrical Engineering	9
	51

Third Year

Religion or electives	2
Philosophy of Christian Educ.	2
Probability & Statistics	4
Partial Diff. Equations	4
Differential Equations	4
Modern Physics	5
Physical Electronics	5
Mechanics of Materials	4
Fluid Mechanics	4
Engineering Thermodynamics	4
Circuit Analysis	4
Engineering Electronics	6
Electric Field Analysis	4
	52

Fourth Year

Religion	6
Engineering Administration	3
Engineering Materials	6
Transient Analysis	3
Network Analysis	3
Feedback Control Engineering	4
Radio Engineering	8
Adv. Electronics Laboratory	1
Wave Propag. & Radiation	4
Wave Propag. & Radiation Lab.	2
Electric Machinery	8
Intro. Mod. Computers	2
Seminar	3
	53

First Year
(Same as for Electrical Engin'g.)

Second Year
(Same as for Electrical Engin'g.)

Third Year

Religion	6
Philosophy of Christian Educ.	2
Ord. Differential Equations	4
Partial Differential Equations	4
Mechanics of Materials	4
Fluid Mechanics	4
Engineering Thermodynamics	4
Circuit Analysis	4
Engineering Electronics	3
Modern Physics	5
Mechanical Engineering Lab. I	3
Survey of Metal Practice	6
Electives	3
	52

Fourth Year

Religion or Electives	6
Engineering Administration	3
Engineering Materials	6
Transient Analysis	3
Engineering Thermodynamics	4
Heat Transfer	4
Machine Design	12
Electric Machinery	8
Intro. Mod. Computers	2
Mechanical Engineering Lab II	2
Seminar	3
	53

CIVIL ENGINEERING

CE 204. **ELEMENTARY SURVEYING.** Use of basic surveying instruments; systematic note keeping and computational methods; transit traverse; mapping. Prerequisites: Mathematics 122, ME 101-102-103. Three credits; autumn.

CE 205. **CURVES AND EARTHWORKS.** Theory and computation of simple, compound, and transition curves; earthwork computations. Prerequisite: CE 204. Three credits; winter.

CE 206. **ADVANCED SURVEYING.** Cadastral, route, and land surveying methods; photo-interpretation and mapping. Prerequisite: CE 205. Three credits; spring.

CE 301. **MECHANICS OF MATERIALS.** Stresses, deformations and deflections of posts, shafts, beams, columns; combined stresses. Prerequisite: ME 207-208-209. Four credits; autumn.

CE 302. **CONTRACTS AND SPECIFICATIONS.** Preparation and interpretation of contracts and specifications; relation of the engineer to the owner and contractor. Two credits; winter.

CE 304. **SOIL MECHANICS.** Fundamental principles; testing and classification of soils for use in foundations and highway subgrades; interpretation of test results, basic geology. Prerequisite: Chemistry 143. Four credits, with laboratory; autumn.

CE 305. **TRANSPORTATION ENGINEERING.** Highway, railroad, and airport planning, design and construction; introduction to traffic engineering. Prerequisite: CE 206, 304. Three credits; winter.

CE 361. **ELEMENTARY STRUCTURAL ANALYSIS.** Graphical and algebraic analysis of statically determinate structures; influence diagrams, criteria for maxima; moving loads. Corequisite: CE 301. Three credits; autumn.

ENGINEERING

CE 362, 363. **STRUCTURAL DESIGN.** Analysis and design of elements of timber and steel structures; connections, beams, girders, columns and trusses; bearings; glulam construction. Prerequisite: CE 361. Three credits; winter, spring.

CE 388. **HYDROLOGY.** Occurrence, measurement, and storage of ground and surface waters. Corequisite: ME 325. Three credits; winter.

*CE 393. **WATER SUPPLY.** Fundamental processes in the collection, conditioning, and distribution of water for public use. Prerequisite: CE 388, ME 325. Three credits; spring.

CE 407. **INDETERMINATE STRUCTURAL ANALYSIS.** Analysis of statically indeterminate structures; continuous beams, trusses, rigid frames, and arches. Prerequisite: CE 361. Four credits; autumn.

CE 436. **SEWAGE DISPOSAL.** Fundamentals of the collection, treatment, and disposal of human and industrial wastes. Prerequisite: CE 388, ME 325. Three credits; spring.

CE 461, 462, 463. **ADVANCED STRUCTURAL DESIGN.** Analysis and design of elements of reinforced concrete structures; beams, slabs, girders, columns and footings; design of statically indeterminate reinforced concrete and steel structures; industrial buildings, bridges, multi-story buildings; prestressed concrete; plastic and ultimate design. Corequisite: CE 407. Four credits; autumn. Five credits; winter, spring.

CE 466. **FOUNDATIONS.** Analysis and design of foundations and other substructures including concrete footings, pile foundations, retaining walls, cofferdams, and caissons. Prerequisite: CE 304, 461. Three credits; spring.

ELECTRICAL ENGINEERING

EE 221-222, 223. **ELECTRICAL ENGINEERING.** Foundations of electrical engineering; current, voltage, power, energy; Ohm's law, resistance, Kirchoff's laws, elementary electric and magnetic field concepts, magnetic circuits, Faraday's law, inductance, capacitance; AC voltage, current, power: basic electrical measurement; applications. Corequisite: Mathematics 281, 282, 283. Three credits, with laboratory; autumn, winter, spring.

EE 311. **CIRCUIT ANALYSIS.** Electric circuit variables and parameters; mesh and node analysis; network theorems; AC steady state analysis by phasors, frequency characteristics; beginning transient analysis, Fourier theorem and harmonic analysis. Prerequisite: Mathematics 283; either Physics 203 or EE 223. Three credits; autumn.

EE 312, 313. **ENGINEERING ELECTRONICS.** Electronics from a circuit viewpoint with volt-ampere characteristics of devices as a beginning point; characteristics of vacuum and solid-state devices, equivalent circuits, nonlinear analysis; applications in rectifier, amplifier, and oscillator circuits; introduction to pulse and wave-shaping techniques. Prerequisite: EE 311, 314. Three credits, with laboratory; winter, spring.

EE 314. **ELECTRICAL INSTRUMENTS LABORATORY.** Experimental study of the techniques and problems involved with electrical

*Not offered the current year.

circuit measurements; emphasis upon the use of electronic measurement equipment such as high impedance voltmeters, oscillators, oscilloscopes, and servo recorders. Corequisite: EE 311. One credit; autumn.

EE 373. **ELECTRIC AND MAGNETIC FIELD ANALYSIS.** A study of the properties of static and dynamic electric and magnetic fields with particular emphasis given to Maxwell's equations in vector differential form; development of the wave equation in dielectric and conducting media; reflections at boundaries. Prerequisite: EE 221-222, 223; Mathematics 311, 312. Corequisite: Mathematics 313. Four credits; spring.

EE 384. **INTRODUCTION TO MODERN COMPUTERS.** Introduction to the use of analog and digital computers in the solution of engineering problems. For the analog computer, the basic computing circuits, time and amplitude scaling and programming will be considered. For the digital computer, analysis of the problem, flow charting and coding will be considered. Prerequisite: Mathematics 312. Primarily for engineering students: limited enrollment. Two credits; autumn.

EE 411. **ADVANCED ELECTRONICS LABORATORY.** Continuation of engineering electronics and electronic instrumentation on an experimental basis; consideration of pulse and wave-shaping circuits, wideband amplifiers, high frequency impedance measurements with the Q-meter. Prerequisite: EE 312, 313. One credit; autumn.

EE 432, 433. **ELECTRIC MACHINERY.** Characteristics of DC motors, generators, and associated control equipment, transformers and their application in single and polyphase circuits; induction motors; synchronous motors, alternators; single phase motors and other special types of rotating machines; metering techniques; consideration of applications. Prerequisite: EE 221-222, 223. Four credits with laboratory; winter, spring.

EE 442-443. **RADIO ENGINEERING.** Tuned circuits and their use in bandpass amplifiers, tuned power amplifiers, oscillators; feedback, noise; AM and FM modulation and demodulation processes, transmitters and receivers. Prerequisite: EE 312, 313, 411. Three credits; winter; five credits, with laboratory; spring.

EE 444. **TRANSIENT ANALYSIS.** A study of simple electrical and mechanical components in which emphasis is placed upon the behavior of the response function when sudden changes are made in the excitation function and/or other system parameters. Both classical and Laplace transform methods. Prerequisite: EE 221-222, 223, 311. Mathematics 311, 312, 313. Three credits; autumn.

EE 464. **WAVE PROPAGATION AND RADIATION.** Solution of the electromagnetic wave equation in transmission lines, wave guides and radiation from simple antennae. Application of Smith chart to solution of problems. Prerequisite: EE 373. Four credits; autumn.

EE 465. **NETWORK ANALYSIS.** A study of the properties of the impedance and admittance functions defined on the complex plane, including pole and zero concepts and their application to the analysis and design of reactive networks. Prerequisite: EE 444. Three credits; winter.

EE 468. **WAVE PROPAGATION LABORATORY.** A laboratory study of wave propagation along lossless and lossy transmission lines and in rectangular wave guides; basic techniques of measuring microwave quantities. Prerequisite: EE 464. Two credits; winter.

ENGINEERING

EE 486. **FEEDBACK CONTROL ENGINEERING.** An introduction to control and feedback systems made up of electrical, mechanical and electro-mechanical components, including system components, multi-terminal component concepts, stability criteria, and the use and limitations of block diagrams and signal flow methods. Prerequisite: **EE** 465. Four credits; spring.

MECHANICAL ENGINEERING

ME 101-102-103 **ENGINEERING DRAWING.** Lettering; theory and practice of projection drawing; conventional and simplified practices; pictorial representation; detail and assembly drawings; problems in descriptive geometry, developments and intersections; engineering applications. Two credits; autumn, winter, spring.

ME 104-105-106. **ENGINEERING PROBLEMS.** Orientation lectures, graphics, slide rule, engineering problems, calculating methods, desk calculators, introduction to digital computers. One credit; autumn, winter, spring.

ME 207-208-209. **ENGINEERING MECHANICS.** Statics, two and three dimensional; analytical and graphical methods; kinetics; work and energy; dynamics of rotation, translation, and plane motion; impulse and momentum, vibrations, modified vector approach to be used throughout. Corequisite: Mathematics 281, 282, 283. Three credits, autumn, winter, spring.

ME 325. **FLUID MECHANICS.** Fluid statics; fluid dynamics; nozzles, orifices, and weirs; impulse and reaction turbines; pipe flow; channel flow. Prerequisite: ME 207-208-209. Four credits; winter.

ME 326, 327. **ENGINEERING THERMODYNAMICS.** Properties of gases and vapors; entropy; PV, TS, HS, and HV planes; gas and vapor cycles; psychrometry; applications. Prerequisite: Physics 202; Mathematics 313. Corequisite: Mathematics 312. Four credits; spring, autumn.

ME 343. **ENGINEERING ADMINISTRATION.** Business, economic, and ethical phases of engineering practice; engineering organization. Three credits; spring.

ME 367, 368, 369. **MECHANICAL ENGINEERING LABORATORY I.** Fuels and lubricants; calorimetry; instrumentation, calibrations, flow of fluids. Corequisite: ME 325, 326. One credit; autumn, winter, spring.

ME 401-402. **ENGINEERING MATERIALS.** Study of the science of engineering materials—metallic and non-metallic; properties, uses, tests, behavior under stress; laboratory. Three credits; autumn, winter.

ME 404, 405. **MECHANICAL ENGINEERING LABORATORY II.** Mechanical system studies. Prerequisite: ME 367, 368, 369. One credit; autumn, winter.

ME 449. **HEAT TRANSFER.** A study of the basic laws of heat transfer by conduction, convection, and radiation. Prerequisite: ME 326, 327; Mathematics 312, 313. Four credits; spring.

ME 451-452-453. **MACHINE DESIGN.** Practical application of kinematics, materials, mechanics, and mechanical processes to the design of machines and machine elements, with due regard to the selection of ma-

terials, construction, lubrication, safety, and cost. Calculations, layouts and detail drawings as required. Prerequisite: CE 301. Corequisite: ME 401-402. Four credits; autumn, winter, spring.

GENERAL

477-478-479. **SPECIAL PROBLEMS IN ENGINEERING.** Directed independent study in an approved area. The student will be required to read widely; follow regular research and/or design methods; present a paper and/or engineering design showing competence in arriving at an acceptable solution. For senior engineering students only, by permission of the head of the department. One to three credits. Maximum, three credits. Autumn, winter, spring.

491-492-493. **SEMINAR.** Presentation and discussion by faculty and students of design problems and current trends in engineering. One credit; autumn, winter, spring.

ENGLISH

Chairman: Doctor Evans
Professor: Kenneth A. Aplington
Associate Professor: Roberta J. Moore
Assistant Professors: Ruth E. Burgeson, Annie Mae Chambers, Nathan Moore
Instructors: Lloyd D. French, Judy Komen, Gary Alan Wiss

The primary objective of the department is to develop competence in the use of the English language, and to inspire students with the best in the world's literature.

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

American Literature	224, 225, 226	6
English Literature	244, 245, 246	6
Seminar	491-492-493	3
Electives, upper division literature		30
		45

Required Cognates:

Advanced English Grammar	306	3
History of the English Language	426	3
Writing courses in English or Journalism beyond Freshman Composition		6
History of the U. S.	201, 202, 203	9
History of England	404, 405, 406	6
Introduction to Linguistics	425	2
		29

MINOR REQUIREMENTS:

American Literature	224, 225, 226	6
English Literature	244, 245, 246	6
Writing courses beyond Freshman Composition		3
Advanced English Grammar	306	3
Electives, upper division literature		9
		27

Required Cognate:

Methods of Teaching English	472	3

COMPOSITION

101-102-103. **FRESHMAN COMPOSITION.** A study of the principles of composition; extensive reading of both prose and poetry to formulate and develop ideas logically. Three credits; autumn, winter, spring.

281, 282 or 283. **ADVANCED WRITING.** Additional work beyond the Freshman Composition level in letters, reports, directions and other types

of exposition as well as some narration; extensive reading for ideas and style. Three credits; autumn, winter or spring.

306. **ADVANCED ENGLISH GRAMMAR.** The study of grammar and usage in current writing; extensive analysis of form and function. Three credits; autumn.

385 or 386. **CREATIVE WRITING.** Techniques of writing beyond those of mere correctness and clarity in creative forms. Three credits; autumn or winter.

401. **EXPOSITORY PROSE.** Intensive work in analyzing and writing *expository prose; emphasis on research methods, bibliography and idea* development; designed to aid students in writing of research projects in their major fields. Two credits; summer.

LITERATURE

224, 225, 226. **AMERICAN LITERATURE.** A survey of American literature with particular attention to the cultural complexes and philosophies that have characterized the various periods of literary history in this country. Recommended it be taken in sequence. Two credits; autumn, winter, spring.

244, 245, 246. **ENGLISH LITERATURE.** A chronological study of English literature with emphasis on the major writers and movements from Beowulf to the present. Recommended it be taken in sequence. Two credits; autumn, winter, spring.

Courses numbered 300 and above have as prerequisites the appropriate lower division preparation. Registration only by permission of the department chairman.

301. **TWENTIETH CENTURY LITERATURE.** Modern American and British literary achievements studied as a revelation of contemporary attitudes, ideals, and conduct. Prerequisites: 224, 225, 226, and 244, 245, 246. Three credits; autumn.

304. **WORLD LITERATURE.** A study of selected masterpieces of world literature from the works of Hugo, Goethe, Ibsen, Cervantes, Homer, Virgil, Dante, Khayyám and Shakespeare. Three credits; autumn.

404, 405, 406. **THE VICTORIAN PERIOD.** An advanced study of the poetry and prose of the men who molded and reflected characteristic opinion and ideals after the first third of the nineteenth century. Prerequisite: 244, 245, 246. Three credits; autumn, winter, spring.

407, 408, 409. **AMERICAN LITERARY MASTERS.** An advanced study of a restricted number of American writers who have given significant distinction to American letters. Prerequisite: 224, 225, 226 or equivalent. Two credits; autumn, winter, spring.

421, 422, 423. **THE ROMANTIC PERIOD.** An analytical examination of the emergence of Romantic ideals and their manifestation in literature, beginning with the pre-Romantic school to 1832. Prerequisite: 244, 245, 246 or equivalent. Two credits; autumn, winter, spring.

ENGLISH

427, 428, 429. **RESTORATION AND NEOCLASSIC LITERATURE.** Neoclassic ideas and achievements as reflected in the chief writers of the time from Bunyan and Dryden to Johnson. Prerequisite: 244, 245, 246 or the equivalent. Two credits; autumn, winter, spring.

441, 442, 443. **OLD AND MIDDLE ENGLISH LITERATURE.** An examination and study in its historical setting of English literature from the earliest Anglo-Saxon remains to about 1450; Old English works studied in translation and Middle English, including Chaucer, largely in the originals. Three credits; autumn, winter, spring.

464, 465, 466. **RENAISSANCE LITERATURE.** Detailed exploration in the significant literature that reflects the essential temper of the Renaissance period, with chief emphasis on Spenser, Shakespeare, Bacon and Milton. Prerequisite: 244, 245, 246 or equivalent. Three credits; autumn, winter, spring.

468. **LITERATURE OF THE BIBLE.** Reading of both poetry and prose in the Old Testament, with a detailed study of the poem of Job as probably the greatest masterpiece in any language. Three credits; winter.

491-492-493. **SEMINAR.** 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 the class members, group conferences and reports. One credit; autumn, winter, spring.

GENERAL

425. **INTRODUCTION TO ENGLISH LINGUISTICS.** Detailed scientific analysis of the structure of the English language, stressing those aspects of formative change which help to clarify current usage. Two credits; winter.

426. **HISTORY OF THE ENGLISH LANGUAGE.** This course is designed to give the student a broad, comprehensive understanding of present-day English. It aims to present the historical development in such a way as to maintain a balance between the external and internal history of the language. Required for those seeking departmental recommendation for teaching. Does not meet literature requirement for graduation. Three credits; spring.

472. **METHODS OF TEACHING ENGLISH IN THE SECONDARY SCHOOL.** Content, organization, methods and techniques of teaching English and related subjects in the secondary school. Observation, demonstration, and class presentation are required of the students as a part of this course. Required of all candidates for teacher certification. Will not apply on an English major. Three credits; winter.

HEALTH AND PHYSICAL EDUCATION

Chairman: Doctor Winter
Associate Professor: Lucile Hall Jones
Instructors: Leah Kay James, John William Uhrig, John Waterbrook

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.

HEALTH

The courses in health are offered with the objective of preparing elementary and secondary school teachers, physical education instructors, nurses, and social workers to cope competently with health problems in school and community and to teach health principles and practices effectively.

MINOR REQUIREMENTS:

Health Principles	110	2
Principles of Community Health	266	3
School Safety	282	2
First Aid	283	2
School Health Program	351	3
Elementary School Health Instruction	431	3
or		
Secondary School Health Instruction	432	3
Electives:		12
To be chosen in counsel with the department chairman.		
Elementary Physiology (Biology)	104	
Human Nutrition (Home Economics)	220	
Marriage and Family Life (Soc.)	225	
Child Psychology (Education)	435	
Adolescent Psychology (Education)	436	
Administration of P.E.	451	
Sp. Problems (H&PE)	477, 478, 479	

COURSES

110. **HEALTH PRINCIPLES.** A study of the healthy, wholesome personality including the underlying principles governing the harmonious development of the human body. It includes personal, home and community health. Two credits; autumn, winter or spring.

266. **PRINCIPLES OF COMMUNITY HEALTH.** A study of community health problems which United States citizens are facing and their most feasible solutions to date. Prerequisite: 110. Three credits; winter.

282. **SCHOOL SAFETY.** Prevention of accidents found in various school situations with special emphasis on care of injuries associated with playground and gymnasium activities. Two credits; winter.

HEALTH AND PHYSICAL EDUCATION

283. **FIRST AID AND MEDICAL SELF-HELP TRAINING.** The standard American Red Cross First Aid course and the Civil Defense Medical Self-help training course constitute the basic elements of this course. Two credits; spring.

351. **SCHOOL HEALTH PROGRAM.** 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. Three credits; autumn.

*431. **ELEMENTARY SCHOOL HEALTH INSTRUCTION.** Concepts of unit planning, methods, techniques, sources and evaluation of materials for use in elementary schools are studied. Students are required to read widely and collect material pertinent to the course. Three credits; winter.

432. **SECONDARY SCHOOL HEALTH INSTRUCTION.** Concepts of unit planning, methods, techniques, sources and evaluation of instructional materials for secondary schools are studied. Students are required to read widely and collect material pertinent to the course. Three credits; winter.

PHYSICAL EDUCATION

GENERAL REQUIREMENTS OF ALL STUDENTS

All students are required to complete a total of three credits of the service courses offered in the department of Physical Education. This requirement should be met during the student's freshman and sophomore years.

Students above thirty years of age and veterans who can supply a copy of their separation papers before registration may be exempt from all requirements in physical education including the swimming and physical fitness tests.

Students who register for SCUBA diving or who wish to participate in SCUBA diving must obtain a health certificate from the Health Center before participating in any of the activities.

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Introduction to PE	181	2
Professional Activities I, II, III	187, 188, 189 287, 288, 289 381, 382, 383	18
Kinesiology	265	3
Intramural Activities and Officiating	284	3
Physiology of Exercise	363	3
Coaching of P.E.	420	2
Foundations of PE	422	3
Tests and Measurements in PE	424	1
Administration of PE	451	3
Seminar	492, 493	2
Electives, upper division		5
	Total	45

*Not offered the current year.

Required Cognates:

Biology 101, 102, 103; 104
Chemistry 101-102-103
Home Economics 220
Health 110; 282; 351, 432

A minor in health or biology is recommended.

MINOR REQUIREMENTS:

Introduction to P.E.	181	2
Professional Activities	187, 188, 189	6
Foundations of P.E.	422	3
Administration of P.E.	451	3
Methods of Teaching P.E.	472	3
Electives in the elementary or secondary areas to be chosen in counsel with the chairman of the department		10
		27

SERVICE COURSES IN PHYSICAL EDUCATION

A wide selection of activities is available for the student. Those unable to pass a basic swimming test will be required to enroll in a swimming class in order to acquire this important skill. The student will be required to enroll in at least one team activity as well as an individual or dual type. At least one quarter of gymnastics is strongly recommended.

100. **FUNDAMENTALS OF PHYSICAL ACTIVITY.** A prerequisite for all service courses. Lecture, various methods of body development, physical fitness and motor ability tests, mass games and calisthenics. One credit; autumn, winter or spring.

201, 202, 203. **INDIVIDUAL ACTIVITIES.** Badminton, golf, tennis, skiing and a variety of other individual or dual activities. One credit; autumn, winter, spring.

204, 205, 206. **TEAM SPORTS.** Activities such as softball, basketball, Touch football, soccer and volleyball. One credit; autumn, winter, spring.

207, 208, 209. **WATER SPORTS.** Activities from beginning swimming to advanced swimming, lifesaving, spring-board diving and SCUBA diving. One credit; autumn, winter, spring.

211, 212, 213. **TUMBLING, GYMNASTICS.** Courses in tumbling, gymnastics, weight-lifting and body mechanics are available in this group. One credit; autumn, winter, spring.

PROFESSIONAL COURSES

181. **INTRODUCTION TO PHYSICAL EDUCATION.** 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. Two credits; autumn.

187, 188, 189. **PROFESSIONAL ACTIVITIES I.** Methods, techniques, and the skills involved in various activities of the physical education program. Two credits; autumn, winter, spring.

230. **WATER SAFETY INSTRUCTOR'S COURSE.** This course prepares students to meet the requirements of the National Red Cross Certificate to instruct in swimming and supervise in swimming areas. A valuable asset for summer employment. Two credits; autumn, or winter, or spring.

*264. **ANATOMY.** Gross anatomy: a study of skeletal and muscular structure of the human anatomy. Three credits; autumn.

*265. **KINESIOLOGY.** Study of joint and muscular mechanism action of muscles involved in fundamental movements. Effect of gravity and other forces on motion. Prerequisite: 264, or equivalent Three credits; winter.

273. **CORRECTIVE PHYSICAL EDUCATION.** 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. Three credits; spring.

284. **INTRAMURAL ACTIVITIES AND OFFICIATING.** Mechanics of intramural organization and the art of officiating the various sports activities. Three credits; autumn.

*287, 288, 289. **PROFESSIONAL ACTIVITIES II.** Methods, techniques and the skills involved in various activities of the physical education program. Prerequisite: 187, 188, 189, or equivalent. Two credits; autumn, winter, spring.

350. **AQUATICS.** A course to give an overview of the entire aquatics program. It will include such items as boating, sailing, canoeing, surfing, water-skiing, etc. Legislation concerning the use of our water resources for recreational purposes will also be included. One lecture per week—Sunday lab. Three credits; autumn, spring, or summer.

352. **PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** 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. Three credits; winter.

363. **PHYSIOLOGY OF EXERCISE.** Physiological results of muscular exercise. Prerequisite: Biological Sciences 104. Three credits; spring.

381, 382, 283. **PROFESSIONAL ACTIVITIES III.** Methods, techniques, and advanced skills involved in various activities of the physical education program. Prerequisite: 287, 288, 289, or equivalent. Two credits; autumn, winter, spring.

420. **COACHING OF PHYSICAL EDUCATION ACTIVITIES.** Techniques of coaching individuals and teams in a variety of sport activities. Laboratory experience in the intramural program as well as class situations will be required. Two credits; autumn, winter, or spring.

422. **FOUNDATIONS OF PHYSICAL EDUCATION.** History and theory of physical education. A practical study of the reasons physical education should be included in the school program and the unique contribution it makes to education. Three credits; winter.

*Not offered the current year.

424. **TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION.** A study of various testing devices which may be used in physical education. Practical experience will be given by test administration and scoring. Prerequisite: Education 430. One credit; autumn.

451. **ADMINISTRATION OF PHYSICAL EDUCATION.** 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. Three credits; autumn.

472. **METHODS OF TEACHING PHYSICAL EDUCATION.** A study of the methods and techniques of teaching physical education in both the elementary and secondary schools, indoors and outdoors, individual as well as group activities are stressed. The students are required as observe and demonstrate in classes pertinent to the level in which they plan to teach. Three credits; winter.

477, 478, 479. **SPECIAL PROBLEMS IN HEALTH AND PHYSICAL EDUCATION.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

492, 493. **SEMINAR.** A study of the modern trends in physical education. Group discussion and presentation of current material in the field. Prerequisite: senior standing. One credit; winter, spring.

RECREATION

244, 245, 246. **ARTS AND CRAFTS.** This course is offered to help plan the leisure time activity of young people as well as preparation for a hobby in later life. This includes lapidary and ceramics. Other crafts are taught in the Industrial Education Department. Two credits; autumn, winter, or spring.

343. **CAMPCRAFT AND MANAGEMENT.** A course to help in the preparation of competent summer camp leaders. Two lectures per week, with laboratory work in the form of junior group leading on occasion. Three credits; spring.

403. **LEADERSHIP IN CAMPING AND CAMPCRAFT.** A class for those interested in advanced work in this field. These students will act as laboratory instructors for those in course 343. Prerequisite: 343 and permission of instructor. Two credits; spring.

424, 425, 426. **ADVANCED ARTS AND CRAFTS.** Continuation of 244, 245, 246, with special emphasis upon teaching methods, preparation of teaching aids, sources of material, cost, etc. Two credits; autumn, winter, or spring.

HISTORY, POLITICAL SCIENCE AND SOCIOLOGY

Chairman: Doctor Meckling
Professors: Gordon S. Balharrie, Richard L. Litke
Instructors: Robert A. Henderson, Floyd M. Murdoch

The department offers a major in history and minors in history, political science, and sociology.

HISTORY

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 and of life; to train in skills of research and evaluation; and to prepare teachers and social workers.

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

History of Civilization	101, 102, 103	9
History of the United States	201, 202, 203	9
Seminar	491, 492, 493	3
Electives (Nine credits must be from the European area and nine credits from the American area. Nine credits may be selected from Political Science, Sociology, and Economics in consultation with the department chairman.)		33
		54

MINOR REQUIREMENTS:

History of Civilization	101, 102, 103	9
History of the United States	201, 202, 203	9
Seminar	491	1
Electives (May select 3 credits from Political Science and Sociology in consulation with the department chairman.)		9
		28

COURSES

BASIC

101, 102, 103. **HISTORY OF CIVILIZATION.** A survey of world history from antiquity to the present. Three credits; autumn, winter, spring.

201, 202, 203. **HISTORY OF THE UNITED STATES.** A survey of the colonial period, followed by a more detailed study of the national period. Three credits; autumn, winter, spring.

EUROPEAN HISTORY

321, 322, 323. **HISTORY OF THE ANCIENT NEAR EAST.** A study of the major civilizations of antiquity as clarified by modern archaeological research. In tracing the development of the various successive empires of the ancient Mediterranean world, special emphasis is placed upon the

history of Babylonia, Palestine, Egypt, Greece, and Rome. Two credits; autumn, winter, spring.

404, 405, 406. **HISTORY OF ENGLAND.** The development and expansion of the English nation from the earliest times to the present including the development of the British Empire. Two credits; autumn winter, spring.

407, 408, 409. **EUPOPE SINCE 1815.** Political, economic, and social developments in nineteenth and twentieth century Europe, with special attention to our own times. Three credits; autumn, winter, spring.

421, 422, 423. **HISTORY OF RUSSIA.** A general survey of the expansion of Russia, Tsarish experiments in political and social reform, the rise and spread of revolutionary socialism, the collapse of the Russian Empire during the First World War, the postwar history of the U.S.S.R., including its conflict with Germany in World War II. Two credits; autumn, winter, spring.

426. **THE EARLY CHRISTIAN ERA.** Significant events and trends in the development of Christianity from the time of Christ to Charlemagne including a study of the Church in relation to the Roman Empire. Attention is also given to the missionary expansion of the Church, its cultural, social and political influence, heretical sects, Ecumenical Councils, Christological controversies, and the rise of the papacy. Three credits; spring.

427. **THE LATE MIDDLE AGES.** The period of papal revival, the growth of the towns, the struggle of Empire and Papacy, the emergence of royal authority, the rise of the bourgeoise, growing dissent in the medieval church. Three credits; autumn.

428. **THE RENAISSANCE.** The decline of feudalism, of the guild system, of papal authority, and of scholastic thought, followed by the Italian Renaissance and Humanism in the north. Three credits; winter.

429. **THE REFORMATION.** The revolution in religion. A study of the main branches of Protestantism and their relation to the political life of Europe; the Catholic Counter-Reformation. Three credits; spring.

AMERICAN HISTORY

*424, 425. **THE AMERICAN FRONTIER.** The exploration, settlement, and development of the American west with consideration given to economic, social, cultural, and political factors. Three credits; autumn, winter.

446. **HISTORY OF THE PACIFIC NORTHWEST.** 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. Three credits; spring.

447, 448, 449. **TWENTIETH CENTURY AMERICA.** A study of maturing America from 1877 to the present. Special attention is given to the significance of industrialism, urbanization, the Progressive Movement, the New Deal, prosperity and depression, and the expanding role of the United States in world affairs. Three credits; autumn, winter, spring.

HISTORY, POLITICAL SCIENCE AND SOCIOLOGY

467, 468, 469. **HISTORY OF LATIN AMERICA.** 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. Two credits; autumn, winter, spring.

477, 478, 479. **SPECIAL PROBLEMS IN HISTORY.** 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 showing competence in and extent of his study. Open only to majors and minors. Instructor's approval required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

491, 492, 493. **SEMINAR.** An orientation and research course in problems connected with historical materials and methods. Open to majors and minors. History minors will take autumn quarter only, while history majors will take all three quarters. One credit; autumn, winter, spring.

POLITICAL SCIENCE

The objectives of the courses in Political Science are to give an understanding of the functions of our government and of international relations, and to prepare for teaching, religious liberty work, and study in law.

MINOR REQUIREMENTS:

American Government	203	3
Democratic European Govts.	303	3
Totalitarian Governments	306	3
Constitutional Interpretation	401	3
World Politics	402	3
Electives (Three credits must be in history. Instructor's approval required.)		12
		27

COURSES

203. **AMERICAN GOVERNMENT.** A survey of the origin and establishment of the constitution of the United States followed by a study of the executive, legislative, and judicial departments of the national government. State and municipal governments also receive consideration. Three credits; spring.

303. **DEMOCRATIC EUROPEAN GOVERNMENTS.** An analysis of the nature of democracy including the origins and systems of contemporary governments of France, Western Germany, and the United Kingdom. Prerequisite: History 101, 102, 103. Three credits; spring.

306. **TOTALITARIAN GOVERNMENTS.** A study of the origins and politics of dictatorship in the modern world including a brief analysis of Fascist Italy, Nazi Germany, Communist China, and Communist Russia. Three credits; spring.

*311. **INTERNATIONAL ORGANIZATION.** Historical survey and evaluation of international organizations with emphasis on the League of Nations and the United Nations with their specialized agencies and the

*Not offered the current year.

participation of the United States in these organizations. Three credits; autumn.

401. **CONSTITUTIONAL INTERPRETATION.** The first part will be devoted to a brief survey of constitutional development followed by a careful study of the function of the judiciary in the American system of government. During the second part, important court decisions will be considered, with special emphasis upon those dealing with religion and the relation of church and state. Three credits; autumn.

402. **WORLD POLITICS.** A study of the political objectives of imperialistic nations and powers, with emphasis on the emergence of the United States as a world power. Three credits; winter.

414, 415, 416. **AMERICAN DIPLOMATIC HISTORY.** 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. Two credits; autumn, winter, spring.

*424, 425, 426. **POLITICAL HISTORY AND THEORY.** Origin and evolution of major concepts in Western political thought from Pericles to Machiavelli, from Machiavelli to Edmund Burke, and from the American colonial times to the present. Three credits; autumn, winter, spring.

SOCIOLOGY

The objectives of the study of sociology are to contribute to the understanding of the entire world society as well as one's own cultural background; and to provide adequate backgrounds for social workers, teachers of social science, and the individual for better personal adjustment.

MINOR REQUIREMENTS:

Introduction to Sociology	204	3
Marriage and Family Life	225	2
Cultural Anthropology	303	3
Field of Social Work	304	3
Electives		7
Required Cognates:		
Social Psychology	Edu. 444	3
World Religions	Rel. 403	3
World Politics	Pol. Sci. 402	3
		27

COURSES

204. **INTRODUCTION TO 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. Three credits; autumn.

230. **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. Two credits; winter or spring.

*Not offered the current year.

HISTORY, POLITICAL SCIENCE AND SOCIOLOGY

303. **CULTURAL ANTHROPOLOGY.** A study of the origin and nature of culture, the uniformities and variations in man's cultural development as seen in pre-literate societies, with special emphasis upon the value of the cultural concept. Three credits; spring.

304. **THE FIELD OF SOCIAL WORK.** A survey of the fields and methods of social work; the growth, organization, and function of public and private programs in the field of social welfare. For the social worker, as well as for the professions of teaching, nursing, medicine, and the ministry. Field trips arranged. Three credits; autumn.

305. **HUMAN RELATIONS.** A course which deals with the psychological, environmental, and social factors influencing human behavior. Emphasis is placed on the effective use of these factors for best interpersonal relationships between leaders and those with whom they work. Classes are conducted by lecture, case study discussions, and student reports. Students in nursing must take this course on the Portland campus. Two credits: winter.

308. **CULTURAL FOUNDATIONS.** A course designed to survey the aesthetic values expressed by Western cultural groups through their painting, sculpture, architecture, music and literature. Three credits; winter.

310. **THE FAMILY IN SOCIETY.** The student is introduced to problems confronting the family as a unit of society in modern life, including comparison of problems of an American family with those of other cultures. May also be taught on the Portland campus, spring quarter. Two credits; winter or spring.

348. **WORLD GEOGRAPHY.** A survey course of the major groups of natural regions. Essentially human geography, but with adequate attention to economic and physical aspects. Three credits; winter.

442. **PERSONALITY AND LEADERSHIP.** The course is concerned with the phenomena that leadership and followership together comprise the gist of personality; furthermore, that certain behavior and personality traits possess special leadership value. The various areas of study concern: theories of leadership; social, mental, and executive leadership; and a further sequence—autocratic, paternalistic, and democratic leadership. Two credits; winter.

445. **CURRENT SOCIAL PROBLEMS.** The course deals with the dimensions of social problems as regards role, status, stress, the ethical and intellectual implications of twentieth century material abundance with the consequent social pathologies, and such problems as adolescence, courtship and family, present conditions of the underprivileged, race, and community changes. Three credits; winter.

471. **METHODS OF TEACHING SOCIAL SCIENCE.** 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. Three credits; autumn.

HOME ECONOMICS

Chairman: Professor Wright
Instructor: Geraldine Border

The major in Home Economics is for those preparing to teach, whereas the major in Interior Design and Decoration is for those interested in such professional positions as interior decorator, Extension Service specialist, drapery or home furnishing consultant. The major in Foods and Nutrition meets all the requirements of the American Dietetic Association and prepares the student to enter a dietetic internship.

HOME ECONOMICS MAJOR—REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Principles of Food Science	101	3
Food Economics	102	3
Meal Management	103	3
Human Nutrition	220	3
Art in Everyday Living	222, 223	6
Clothing Selection & Construction	242, 243	6
Household Management	346	3
Interior Decoration	424, 425	6
Advanced Nutrition	441	3
Methods of Teaching Home Economics	471	3
Seminar	493	1
Electives, upper division		5
		45

Required Cognates:
Biological Science 107
Chemistry 101-102-103

Minor:

Principles of Food Science	101	3
Food Economics	102	3
Meal Management	103	3
Human Nutrition	220	3
Seminar	493	1
Electives (in the areas of Clothing & Textiles or Foods & Nutrition in counsel with the department chairman.)		17
		30

INTERIOR DESIGN AND DECORATION MAJOR—REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Meal Management	103	3
Equipment	201	3
Human Nutrition	220	3
Consumer Buying	221	3
Art in Everyday Living	222, 223	6
Clothing Selection & Construction	242, 243	6
Textiles	269	2

Weaving and Home Furnishings	302	3
Textile Design	403	3
Interior Decoration	424, 425	6
Advanced Interior Decoration	486	3
Seminar	493	1
Electives, upper division		5
		47

Required Cognates:

Industrial Education 123, 345
Health & P.E. 244, 245, or 246
A minor in Art is required.

FOODS AND NUTRITION MAJOR—REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Principles of Food Science	101	3
Food Economics	102	3
Meal Management	103	3
Equipment	201	3
Institution Food Preparation	286	3
Child Development	382	3
Experimental Cookery	421, 422	6
Advanced Nutrition	441, 442	6
Diet in Disease	443	3
Institution Food Purchasing	447	3
Institution Management	448	3
Methods of Teaching Home Economics	471	3
Seminar	493	1
Electives (Soc. 225 does not apply)		2
		45

Required Cognates:

Chemistry 141-142-143 (12 credits), 321-322-323 (12 credits), 406 and course work specified by the American Dietetic Association for internship.

COURSES

101. **PRINCIPLES OF FOOD SCIENCE.** Basic food preparation with emphasis on principles underlying the science of food and nutrition. Three credits; autumn.

102. **FOOD ECONOMICS.** Principles of food economics, problems of purchasing in today's market, and preparation to retain maximum nutritive values and palatability. Three credits; winter.

103. **MEAL MANAGEMENT AND TABLE SERVICE.** Managerial aspects of planning, preparing and serving food for family meals and special occasions. Prerequisite: 101, 102 or 220 or equivalent. Three credits; spring.

201. **EQUIPMENT.** Selection, operation and care of household and institutional appliances, electricity in the home and kitchen planning. Three credits; spring.

210. **SOCIAL AND PROFESSIONAL ETHICS.** A course designed to develop an understanding of the current social code for both men and women and to provide experience in its application to college life, home and community living. Acceptable modes of interacting in social and professional situations are presented. Two credits; autumn, winter or spring.

220. **HUMAN NUTRITION.** 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 or physical education. Three credits; autumn or spring.

221. **CONSUMER BUYING.** A study of the consumer's problems in buying textiles, clothing, household equipment and furnishings with emphasis on the economic principles involved. Three credits; autumn.

222, 223. **ART IN EVERYDAY LIVING.** 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. Course 222 prerequisite for 223. Three credits; winter, spring.

225 Soc. **MARRIAGE AND FAMILY LIFE.** See Sociology.

241. **CLOTHING FUNDAMENTALS.** A course presenting the fundamental processes of hand and machine sewing; construction and selection of simple garments. Three credits; autumn.

242, 243. **CLOTHING SELECTION AND CONSTRUCTION.** Aims to develop good taste in dress and to give an appreciation in selection of clothing from standpoint of beauty, health, and economy; fundamental processes of hand and machine sewing; study of alterations, fitting problems and use of commercial patterns; construction of garments using cotton, wool, rayon and other materials; consideration of fabrics to determine fundamental differences and to develop judgment in buying clothing. Prerequisite: 241 or its equivalent. Three credits; winter, spring.

269. **TEXTILES.** A study of fabrics to determine fundamental differences and to develop judgment in buying clothing and house-furnishing materials. Two credits; spring.

286. **INSTITUTION FOOD PREPARATION.** Instruction and laboratory experience in large quantity food preparation, and food cost control. This course is primarily for those interested in actual preparation of food in college and academy cafeterias. Prerequisite: 101, 102, 103. Three credits; winter.

302. **WEAVING AND HOME FURNISHINGS.** The study of the development of weaving, color harmonies and design as applied to fabrics. Construction of hand-woven materials; tailoring draperies, bedspreads and slip covers. Prerequisite: 222 or equivalent. Three credits; winter.

346. **HOUSEHOLD MANAGEMENT.** Management problems of the homemaker in regard to income, time, labor, and family relationships. Study of the selection, operation, care and arrangement of household equipment. Three credits; winter.

382. **CHILD DEVELOPMENT.** A study of the care and development of young children, with special reference to home education and nutrition. Three credits; winter.

403. **TEXTILE DESIGN.** Study of line, texture, and color as applied to weaving. Emphasis on originality in construction and color combinations of hand-woven fabrics. Prerequisite: 302 or equivalent. Three credits; spring.

421, 422. **EXPERIMENTAL COOKERY.** 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. Prerequisite: 101, 102, 103, 421, and Chemistry 101-102-103 or 141-142-143 (12 credits) or equivalent. Three credits; autumn, winter.

424, 425. **INTERIOR DECORATION.** 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 furniture, textiles, pictures, and other furnishings for the home and their arrangement with appropriate backgrounds. Prerequisite: 222, 223, or equivalent for 424, and 424 or equivalent for course 425. Three credits; autumn, winter.

441, 442. **ADVANCED NUTRITION.** A scientific study of nutrition involving digestion and metabolic processes and products; selection of an optimum diet for health; recent investigations of nutritional deficiency diseases. Prerequisite: 101, 102, 103; 220 and Chemistry 101-102-103 or 141-142-143 (12 credits). Three credits; autumn, winter.

443. **DIET IN DISEASE.** Recent developments in the dietary treatment of disease in which nutrition plays a major role. Experience in independent use of journal literature in the field. Prerequisite: 101, 102, 103, 220 or equivalent. Three credits; spring.

*447. **INSTITUTION FOOD PURCHASING.** Marketing operations, buying procedures, food selection and care. Inspection of merchandise at markets and wholesalers. Prerequisite: 101, 102, 103. Three credits; autumn.

448. **INSTITUTION MANAGEMENT.** Principles of organization, qualifications for institution managers, purchasing and maintenance of equipment, planning of work, budget analysis. This course offers practical work in the school cafeteria for those who are interested in being managers in institution food services. Prerequisite: 101, 102, 103. Three credits; spring.

461-462. **TAILORING.** Principles involved in making suits and coats for women. Open only to those who show skill in construction of gar-

*Not offered the current year.

ments. Students should provide themselves with material for making coats the autumn quarter. Prerequisite: 241, 242, 243 or equivalent. Two credits; autumn, winter.

471. **METHODS OF TEACHING HOME ECONOMICS.** The principles and practices 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. Three credits; autumn.

477, 478, 479. **SPECIAL PROBLEMS IN HOME ECONOMICS.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits; autumn, winter, spring.

486. **ADVANCED INTERIOR DECORATION.** Advanced study in interior decoration with advice, estimates, and actual work on decorating problems. Should be taken the last quarter of the senior year. Prerequisite: 222, 223; 424, 425 or equivalent. Three credits; spring.

493. **SEMINAR.** Studies of selected topics and reviews of current literature. Special investigation of problems. One credit; spring.

INDUSTRIAL EDUCATION

Chairman: Doctor Trautwein
Associate Professor: Lewis H. Canaday
Instructors: Claude R. Barrett, Chester Blake, Darrell J. Cowin, Elwin Liske

The purpose of this department is twofold: to provide instruction and experience for a college major and minor, and to prepare teachers of industrial arts. There is considerable freedom in the choice of courses in the following areas:

Automotive	Graphics	Metals
Electronics	Industrial Crafts	Woods

Departmental permission must be received to enter any class having a laboratory.

BACHELOR OF SCIENCE DEGREE, MAJOR REQUIREMENTS:

A minimum of 54 credits is required, 24 of which must be on the upper division level. The following courses must be included:

Technical Drawing, (104, 105-106). (Omit this when 33 credits of graphic arts are included)
Senior Problem, 488.

Students preparing for teaching in the industrial arts should plan a curriculum in consultation with the chairman of the department from the requirements listed below:

Technical Drawing	104, 105-106	9
Lettering	123	2
College Woodwork	221, 222-223	6
or		
Minimalic Carpentry	224-225-226	
Machine Tool Practice I	244, 245-246	6
or		
Welding	204, 205, 206	
Principles of Electronics	231, 232-233	6
or		
Introduction to Graphic Arts	144, 145-146	
Industrial Crafts, electives	113, 247, 248, 249	6
or		
Auto Mechanics	101, 102, 103	
Industrial Arts Design	264	3
Course Construction	387	3
Shop Administration	389	3
History of Industrial Arts	447	2
Special Problems (In Supervision)	477, 478, or 479	2
Senior Problem	488	1
Electives, upper division		13
Approval of the Chairman of the department required.		— 62

MINOR REQUIREMENTS:

A minimum of 27 credits including 6 upper-division credits. Technical Drawing (104, 105-106) is required except when 17 credits of graphic arts are included.

CERTIFICATE COURSES:

Students interested in terminal courses leading to a certificate should contact the chairman of the department.

PROFESSIONAL

264. **INDUSTRIAL ARTS DESIGN.** Basic principles of design as applied to the various industrial arts, including theory of color and study of major periods and styles of furniture. Three credits; autumn.

387. **COURSE CONSTRUCTION.** The course deals with objectives, analysis and selection of content, course of study outline, lesson plans, standards of attainment. Required prior to Directed Teaching. Three credits; autumn.

389. **SHOP ADMINISTRATION AND PLANNING.** School shop planning, supplies, personnel organization and guidance, and shop management. Required prior to Directed Teaching. Three credits; spring.

447. **HISTORY OF INDUSTRIAL ARTS.** Origin and growth of industrial arts, emphasizing aims and objectives in the field of education. Two credits; autumn.

472. **METHODS OF TEACHING INDUSTRIAL ARTS.** Methods and techniques in selection, presentation, and testing content material in industrial subjects. Observation, demonstration, and class presentation are required of the students as a part of this course. Prerequisite: 387. Required prior to Directed Teaching. Three credits; winter.

477, 478, 479. **SPECIAL PROBLEMS IN INDUSTRIAL EDUCATION.** Supervisory experience for prospective teachers or tradesmen, research problems, or teaching-aid construction. Area to be selected in counsel with department chairman. Prerequisite: lower division work in same area for supervisory or teaching-aid construction. Six credits maximum from this and/or Special Projects. Autumn, winter, spring.

AUTOMOTIVE

101, 102, 103. **AUTOMOTIVE MECHANICS.** A comprehensive basic course in the construction details and service adjustments of the automobile with disassembly, inspection and reassembly of units in the laboratory. Autumn, engine units; winter, automotive, fuel and electrical systems; spring, chassis units. Two credits; autumn, winter, spring.

301. **AUTOMATIC TRANSMISSIONS.** Special attention given to hydraulic drives and planetary gearing with practice on the G. M. Hydromatic transmission and a survey of other makes. Prerequisite: 103 or equivalent. Three credits; autumn.

302. **ENGINE MAINTENANCE AND REPAIR.** Special attention to removal, disassembly, inspection, machine operation, repair and reassembly of the automotive engine. Prerequisite: 101 or equivalent. Three credits; winter.

303. **ENGINE TUNE-UP.** Special attention to the fuel and electric systems, trouble shooting and testing engine performance. Prerequisite: 101, 102 or equivalent. Three credits; spring.

ELECTRONICS

231, 232-233. **PRINCIPLES OF ELECTRONICS.** An introduction to the electron theory, direct and alternating current, vacuum tubes, transistors and basic circuits studied by lecture, laboratory experiments, and project construction. At the option of the student and with a minimum of additional work, laboratory projects may be altered to include preparation for the novice class Amateur Radio license examination. Course 231 is prerequisite to 232 unless one Carnegie unit or equivalent is presented from secondary school. Two credits; autumn, winter, spring.

331-332-333. **APPLIED ELECTRONICS.** The study of vacuum tubes and transistors, principles of radio frequency transmission and reception, basic electronic circuits with reference to construction, operation, adjustment, and methods of trouble shooting. At the option of the student and with a minimum of additional work, laboratory projects may be altered to include preparation for the Technical or General class Amateur Radio license examination. Prerequisite: 231, 232-233, or equivalent. Four credits; autumn, winter, spring.

GRAPHICS

104, 105-106. **TECHNICAL DRAWING.** Technical drawing including: care and use of instruments; geometry; orthographic, oblique, and isometric projections; auxiliary views; sections; revolutions; working drawings; developments and intersections; and architectural drawing. Application to practical problems with emphasis on visualization and analysis. Course 104 is prerequisite to 105 unless one Carnegie unit or equivalent is presented from secondary school. Three credits; autumn, winter, spring.

123. **LETTERING.** 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. Two credits; spring.

144, 145-146. **INTRODUCTION TO GRAPHIC ARTS.** Letterpress printing, straight and display composition, typographical design, imposition and simple presswork. Course 144 is prerequisite to 145 unless one Carnegie unit or equivalent is presented from secondary school. Two credits; autumn, winter, spring.

161. **PRINCIPLES OF PHOTOGRAPHY.** 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. Two credits; autumn.

242. **SILK SCREEN PRINTING.** Basic screen printing (mitography) including various methods of stencil preparation, types of materials used, and preparation of equipment. Two credits; winter.

284-285-286. **LINOTYPE COMPOSITION.** Care and operation of the linotype machine, study of the assembling, casting, and distributing mechanisms, keyboard practice and composition of straight matter, tabular

forms, and display work. Prerequisite: 144, 145-146 or equivalent. Two credits; autumn, winter, spring.

*305. **PRINTING MANAGEMENT.** Operating management of a commercial printing plant, purchasing of equipment and supplies, inventory control, pricing, personnel and production supervision. Two credits; winter.

*321-322-323. **ADVANCED LETTERPRESS PRINTING.** Hand-fed and automatic presswork, including imposition, makeready, care and operation of equipment for numbering, perforating, scoring, die cutting, folding, and other processes of printing production. Prerequisite: 144, 145-146 or equivalent. Three credits; autumn, winter, spring.

327-328-329. **OFFSET LITHOGRAPHY.** Laboratory experience in offset photography, plate making, cold type composition, and presswork. Prerequisite: 144, 145-146 or equivalent, and 161 concurrent or equivalent. Three credits; autumn, winter, spring.

362. **APPLIED PHOTOGRAPHY.** Composition, photochemistry, optics, and advanced study of printing, enlarging and processing of chromatic and monochromatic mediums, with manipulative experience. Camera required. Prerequisite: 161 or equivalent. Three credits; winter.

370. **PRESS PHOTOGRAPHY.** Experience in commercial photography, embodying shooting, processing, and finishing prints for publication. Prerequisite: 362 or equivalent. One credit; autumn, winter, or spring.

INDUSTRIAL CRAFTS

113. **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 applied crafts. Two credits; spring.

247. **ART METALS.** Utilization of semi-precious 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. Two credits; autumn.

248. **PLASTICS.** Technical information and operation including carving, molding, crafting, forming, fabricating, and finishing. Two credits; winter.

249. **LEATHERS.** Technical information and fundamental operation including tooling, carving, stamping, lacing, modeling, forming, and finishing. Two credits; spring.

METALS

204, 205, 206. **WELDING.** Basic gas welding, oxyacetylene cutting, braze welding and brazing, techniques of electric welding, and specialized processes with direct emphasis on production of assigned and student-selected projects. Must be taken in sequence. Two credits; autumn, winter, spring.

241-242-243. **SURVEY OF METAL PRACTICE.** Particularly for mechanical engineering and physics majors, but is open to Industrial Edu-

*Not offered the current year.

cation majors and minors who have taken no credits in metals. Both laboratory experiences and class lectures are used to give a broad introduction to manufacturing operations with factors influencing design and production. Two credits; autumn, winter, spring.

*244, 245-246. **MACHINE TOOL PRACTICE I.** Theory and manipulation of basic machine tools, bench work, hand operations, and machine operations combined with prescribed and student-selected projects. Course 244 is prerequisite to 245 unless one Carnegie unit or equivalent is presented from secondary school. Two credits; autumn, winter, spring.

381-382-383. **MACHINE TOOL PRACTICE II.** Advanced processes of turning and hand work together with operations involving milling, shaping, grinding, gear calculation and cutting, with assigned exercises, together with student-selected projects. Prerequisite: 244, 245-246 or equivalent. Three credits; autumn, winter, spring.

WOODS

182. **WOOD TURNING I.** Assigned and original project operations including spindle, face plate and chuck turning. Two credits; winter.

*221, 222-223. **COLLEGE WOODWORK.** Working drawings, hand and machine operations, and finishes as applied to basic furniture construction and cabinet making. Course 221 is prerequisite to 222 unless one Carnegie unit or equivalent is presented from secondary school. Two credits; autumn, winter, spring.

224-225-226. **MINIMALIC CARPENTRY.** Application of carpentry fundamentals including actual construction in miniature from architect's plans; laboratory work in framing of rafters and selected architectural sections with full-size lumber. Two credits; autumn, winter, spring.

313. **WOOD TURNING II.** Intricate cuts, special chucking devices, fancy turning, metal spinning. Prerequisite: 182. One credit; spring.

326. **WOODWORKING MACHINES.** Power machines, jigs, attachments, as applied to furniture making. Prerequisite: 221, 222-223 or equivalent. Three credits; winter.

*341, 342, 343. **ADVANCED WOODWORK.** Advanced operations with power machines, finishing methods and design. Assigned and student-selected projects. Prerequisite: 221, 222-223 and 264 or equivalent. Course 264 may be concurrent. One credit; autumn, winter, spring.

GENERAL

330. **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 or two credits; autumn, winter, or spring.

345. **FINISHING MATERIALS AND METHODS.** Composition and application of finishing materials, selection and care of equipment. Two credits; winter.

*Not offered the current year.

484, 485, 486. **SPECIAL PROJECTS.** Advanced laboratory work in a chosen area, to be selected in counsel with the department chairman. Six credits maximum from this and/or Special Problems in Industrial Education. Prerequisite: lower division work in chosen area. Autumn, winter, spring.

488. **SENIOR PROBLEM.** A student-selected, department-approved project to demonstrate ability to perform in the field. In addition, an associated research report is required, the final accepted copy of which must be on file in the department no later than four weeks before graduation. One credit; winter.

JOURNALISM

Chairman: Professor Moore

The aims of professional courses are to train writers for both newspaper and magazine journalism and to provide an 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 to competent writing and responsible journalism.

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Liberal Arts, beyond the basic degree requirements: (chosen in counsel with the chairman of the department)

English		12
History, Political Science and Sociology		12
Business and Economics (261-262)		6

Students who have a major or a minor in any one of the above areas may substitute a similar number of credits in another field with the approval of the chairman of the department.

Professional Courses		
News Writing	264, 265, 266	9
Electives		21
		60

Required Cognates:

Introduction to Graphic Arts	144, 145-146	6

Students majoring in Journalism must demonstrate a proficiency in typing.

MINOR REQUIREMENTS:

A minimum of 27 credits.

COURSES

103. **INTRODUCTION TO JOURNALISM.** A basic course which explores the wide field of journalism, its demands, and its vocational opportunities. Three credits; spring.

264, 265, 266. **NEWS WRITING.** A practical course in gathering news and writing news stories. Short field trips are made to enrich the student's understanding of public affairs and print and broadcast media. Two lectures and one laboratory per week. Three credits; autumn, winter, spring.

326. **MASS COMMUNICATION MEDIA.** A consideration of print and broadcast media, with emphasis on ethics, controls and effects. Three credits; spring.

*341, 342, 343. **MAGAZINE ARTICLE WRITING.** Fact writing, with analysis of magazine markets, fundamentals of gathering materials for articles and preparation of manuscripts for publication. Two credits; autumn, winter, spring.

361. **COPYREADING AND EDITING.** Lectures on the selection, preparation, and display of news; practice in editing copy and writing headlines. Three credits; autumn.

*382. **EDITORIAL WRITING.** The writing of editorials, interpretive articles, and critical reviews, with a study of these types as found in today's newspaper. Two credits; winter.

384. **RELIGIOUS WRITING.** A course intended to help students who want to write about religion, directly or indirectly. Underscoring a conviction that good religious writing is needed now more than ever, it treats both the problems and methods of the craft. Students will do several types of writing; publication will be encouraged. Three credits; autumn.

*401, 402, 403. **PRESS PROBLEMS.** Students will choose individual research projects and present written and oral reports of their work. Two credits; autumn, winter, spring.

412. **NARRATIVE WRITING.** A course in the writing of stories. Students will analyze short narratives in current periodicals to see how successful writers handle their material. Three credits; winter.

417. **HISTORY OF JOURNALISM.** Consideration of the development of the American press, including such aspects as press freedom and privileges, leaders of the press, and early political and religious organs. Three credits; autumn.

*426. **SCHOOL PUBLICATIONS.** A course designed for prospective English teachers who will work with school publications staffs. A study of editorial and business aspects in such publications, with an examination of several school papers and yearbooks. Two credits; spring.

*Not offered the current year.

MATHEMATICS

Chairman: Doctor Hare
Associate Professor: Lilah Godfrey Schlotthauer
Assistant Professor: Ward Arthur Soper

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:
A minimum of 47 credits including 351, 352, 353; 411, 412, 413. Other courses require the approval of the chairman of the department.

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:
A total of 90 credits in mathematics and science is required. Forty-seven credits must be in mathematics, the remaining 43 credits must include an elementary course in physics and an elementary course in either biology or chemistry. The 47 credits in mathematics must include 351, 352, 353; 411, 412, 413.

MINOR REQUIREMENTS:
A minimum of 28 credits. Approval of the chairman of the department required.

COURSES

111, 112, 113. **SURVEY OF MATHEMATICS.** A terminal course in mathematics for nonscience students emphasizing the structure of the number system, elementary number theory, basic concepts of algebra including algebraic structures, and informal geometry. Must be taken in sequence. Will meet the basic requirement in mathematics for the baccalaureate degree, but will not apply on a major or a minor in mathematics. Four credits; autumn, winter, spring.

121. **FUNDAMENTALS OF MATHEMATICS I.** A systematic study of the sets of integers, rational numbers, real numbers, and complex numbers; mathematical induction; equations and inequalities; functions and their graphs; systems of equations; binomial theorem; progressions; matrices; determinants. Four credits; autumn or winter.

122. **FUNDAMENTALS OF MATHEMATICS II.** Theory of equations, exponential and logarithmic functions, trigonometry. Prerequisite: 121 or one and one-half units of algebra. Four credits; winter or spring.

181. **ANALYTIC GEOMETRY AND CALCULUS I.** An integrated course in which topics of analytic geometry are introduced as needed in developing the topics in calculus. Prerequisite: 122 or a satisfactory score on a departmental qualifying examination. Four credits; autumn or spring.

281. **ANALYTIC GEOMETRY AND CALCULUS II.** A continuation of 181. Four credits; autumn or winter.

282. **ANALYTIC GEOMETRY AND CALCULUS III.** A continuation of 281. Four credits; winter or spring.

283. **ANALYTIC GEOMETRY AND CALCULUS IV.** A continuation of 282. Four credits; autumn or spring.

304-305-306. **INTRODUCTION TO THE THEORY OF NUMBERS.** Congruences, continued fractions, Diophantine equations, quadratic residues. Permission of the instructor required. Two credits; autumn, winter, spring.

311. **PROBABILITY AND STATISTICS.** Probability, discrete and continuous distribution functions, sampling, correlation, regression, testing of hypotheses. Prerequisite: 283. Four credits; autumn.

312. **ORDINARY DIFFERENTIAL EQUATIONS.** Differential equations of first order, linear differential equations of order n, series solutions, applications. Prerequisite: 283. Four credits; winter.

313. **PARTIAL DIFFERENTIAL EQUATIONS.** Solutions of various types of partial differential equations with emphasis on solutions of boundary value problems. Prerequisite: 312. Four credits; spring.

351, 352, 353. **ADVANCED CALCULUS.** Partial differentiation, vectors, differential geometry, Stieltjes integral, multiple integrals, line and surface integrals, infinite series, convergence of improper integrals, Fourier series, the Laplace transform. Prerequisite: 283. Three credits; autumn, winter, spring

411, 412, 413. **MODERN ALGEBRA.** A study of various algebraic topics including groups, rings, fields, modules, vector spaces, dual spaces, matrices, matrix algebra, similarity, and linear transformations. Must be taken in sequence. Permission of the instructor required. Four credits; autumn, winter, spring.

*471. **METHODS OF TEACHING MATHEMATICS.** 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. Three credits; autumn.

477, 478, 479. **SPECIAL PROBLEMS IN MATHEMATICS.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits; any quarter. Maximum three credits.

*Not offered the current year.

MODERN LANGUAGES

Acting chairman: Professor Sorenson
Instructors: Christine M. Murdoch, James A. Singer

The objectives of the department are to develop the ability to understand, speak, read, and write French, German, and Spanish to a level where the student can communicate fluently in these languages. The department also prepares students for service in foreign lands and trains teachers of these languages.

Majors are offered in German and Spanish; and minors in French, German, and Spanish.

MAJOR REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:
A minimum of 40 credits beyond the elementary course, of these 27 credits must be on the upper-division level. Required cognate: 471.

MINOR REQUIREMENTS:
A minimum of 24 credits beyond the elementary course, nine of these must be on the upper-division level.

FRENCH

101-102-103. **ELEMENTARY FRENCH.** Introduction to the basic language skills of understanding, speaking, reading, and writing of French, with stress on understanding and speaking. Minimum of five hours laboratory per week. Five credits; autumn, winter, spring.

201, 202, 203. **INTERMEDIATE FRENCH.** Continuation of Elementary French; special attention is given to reading and writing of the language. This course, together with Elementary French, is designed to prepare students in the use of French as a means of fluent communication with French-speaking people. Attention is also given to the understanding and appreciation of French culture. Minimum of three hours laboratory per week. Three credits; autumn, winter, spring.

204, 205, 206. **FRENCH COMPOSITION AND CONVERSATION.** Intensive practice in correct pronunciation with emphasis on speaking and writing French. Use of films and language laboratory. Prerequisite: 101-102-103. Minimum of two hours laboratory per week. Two credits; autumn, winter, spring.

301, 302, 303. **SURVEY OF FRENCH LITERATURE.** A survey of French masterworks from Le Chanson de Roland to the present. Introduction to literary analysis; lectures, reports, required library reading. The class is conducted in French. Prerequisite: 201, 202, 203. Three credits; autumn, winter, spring.

404, 405, 406. **FRENCH DIRECTED READING.** The work consists of assigned reading and reports. One to three credits, maximum, six; autumn, winter, spring.

GERMAN

111-112-113. **ELEMENTARY GERMAN.** Development of the basic skills of understanding, speaking, reading, and writing of German through a thorough internalization of German sounds and conceptual patterns developed through the audio-lingual method. Minimum of five hours laboratory per week. Five credits; autumn, winter, spring.

211, 212, 213. **INTERMEDIATE GERMAN.** Continued emphasis on the development of the fundamental language skills. Reading and writing of German will receive special attention. This course, together with Elementary German, is designed to prepare students in the use of German as a means of fluent communication with German-speaking people. Attention is also given to the understanding and appreciation of German culture. Minimum of three hours laboratory per week. Three credits; autumn, winter, spring.

214, 215, 216. **GERMAN COMPOSITION AND CONVERSATION.** A comprehensive and thorough review of grammar; facility in oral and written expression; study of common idioms; analysis of difficult points of German syntax. Minimum of two hours laboratory per week. Two credits; autumn, winter, spring.

*311, 312, 313. **SURVEY OF GERMAN LITERATURE.** A survey of the history of German literature from its beginning to the twentieth century, supplemented by a study of representative masterpieces of the language. Three credits; autumn, winter, spring.

*323. **SCIENTIFIC GERMAN.** This course is designed especially for students who intend to enter a medical school, or who wish to acquire facility in reading German in the various fields of science. Prerequisite: 211, 212, 213. Three credits; spring.

403. **MODERN GERMANY AND ITS LITERATURE.** In this course contemporary cultural developments in Germany will be discussed and examined. They will be illustrated by readings from modern German prose, lyric poetry, and dramas. Reports. Newspaper reading. Three credits; spring.

411, 412, 413. **GERMAN DIRECTED READING.** The work consists of assigned readings in the library and written reports. Prerequisite: 311, 312, 313. One to three credits, maximum, six credits; autumn, winter, spring.

421. **GERMAN ROMANTICISM.** A study of the social, philosophical, and religious influences on the literature of the period, illustrated in works of the most representative authors. Lectures, collateral reading, and reports. Three credits; autumn.

422. **CLASSIC GERMAN LITERATURE.** A careful study of the works of Goethe, Schiller, and Lessing, illustrating their influence upon the intellectual movements of their own and subsequent times. Critical study of Goethe's *Hermann und Dorothea;* Schiller's *Wallenstein;* Lessing's *Nathan der Weise.* Three credits; winter.

*Not offered the current year.

*423. **ADVANCED GERMAN COMPOSITION AND CONVERSATION.** Advanced composition, conversation, and reading; increased oral practice; emphasis on fluency and accuracy in comprehension and reproduction; a comprehensive review of grammar, acquisition of an extended vocabulary; instruction largely in German; offered upon sufficient demand. Three credits; autumn.

SPANISH

121-122-123. **ELEMENTARY SPANISH.** Development of the basic skills of understanding, speaking, reading and writing of Spanish through a thorough internalization of the Spanish sounds and conceptual patterns. Minimum of five hours laboratory per week. Five credits; autumn, winter, spring.

217, 218, 219. **SPANISH COMPOSITION AND CONVERSATION.** Grammar and composition drills and idioms. Use of films and laboratory. Minimum of two hours laboratory per week. Two credits autumn, winter, spring.

221, 222, 223. **INTERMEDIATE SPANISH.** Continued emphasis on the development of understanding, speaking, reading and writing Spanish with stress being placed on reading and writing. This course is designed to prepare students to use Spanish as a means of communication as a cultural and research tool. Minimum of three hours laboratory per week. Three credits; autumn, winter, spring.

280. **CULTURAL STUDY TOUR.** A program that combines residence in a Spanish-speaking country together with systematic study of Spanish thought and cultural patterns, compared and contrasted with their American counterparts. Prerequisite: Instructor's approval; knowledge of Spanish not required. Will not apply on a Spanish major. Five credits; summer.

314, 315, 316. **SURVEY OF SPANISH LITERATURE.** 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. Three credits; autumn, winter, spring.

402. **SPANISH APPLIED LINGUISTICS.** A close analysis of Spanish phonology, morphology, and syntax as these apply to the classroom situation. Abundance of individual drill. Three credits; summer.

414, 415, 416. **SPANISH DIRECTED READING.** The work consists of assigned readings and reports. Prerequisite: 314, 315, 316. One to three credits. Maximum, six credits. Autumn, winter, spring.

*417. **ADVANCED SPANISH FOR TEACHERS.** Intensive practice in the language skills of understanding, speaking, reading and writing. Reports and discussion on topics of current, historical, cultural and literary interests. The class is conducted in Spanish. Prerequisite: 217, 218, 219. Two credits; summer.

*Not offered the current year.

*427, 428, 429. **SPANISH LITERATURE OF THE GOLDEN AGE.** A study of major Spanish genres of literature from the "Dialogues" of the Valdez brothers to the drama of Calderon de la Barca. Three credits; autumn, winter, spring.

431. **SPANISH ESSAY.** A study of the important Spanish essayists and their representative essays. Three credits; autumn.

432, 433. **LATIN AMERICAN LITERATURE.** An introduction to Latin American literature with special emphasis on the South American and Mexican authors. Three credits; winter, spring.

480. **LINGUISTIC STUDY TOUR.** This course comprises a tour to Mexico where students will reside with Spanish-speaking families, attend regular classes and lectures, prepare reports and take part in excursions. Instruction will be given in applied Spanish linguistics, cultural patterns, thoughts and customs of the country. Prerequisite: Instructor's approval; knowledge of Spanish. Eight credits; summer.

GENERAL

471. **METHODS OF TEACHING MODERN LANGUAGES.** 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. Three credits; winter or spring.

477, 478, 479. **SPECIAL PROBLEMS IN MODERN LANGUAGES.** Directed, independent study in an approved area of French, German, or Spanish. The student will be required to read widely on an assigned subject, follow regular research methods, and present a paper showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

*Not offered the current year.

MUSIC

Chairman: Doctor West
Assistant Professors: J. Bruce Ashton, Robert J. Hunter, H. Lloyd Leno, William H. Murphy, Glenn Spring
Instructor: Jeanette Oberg McGhee

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. Walla Walla College offers two curriculums in music: the Bachelor of Music with majors in Performance or Music Education, and the Bachelor of Arts with majors in Music History and Literature, Music Theory, or Applied Music.

BACHELOR OF MUSIC

Students seeking preparation for a music profession should choose the Bachelor of Music degree and major in Performance or Music Education. Precollege musical experience and a natural gift for music are prerequisites. All majors must audition for the music faculty before enrolling in an applied field. Sincerity of purpose, application, and aptitude must be demonstrated during the first year before full status as a major student is granted. An examination in the basic elements of music is administered at the beginning of each school year to determine the student's qualification for entering Theory I.

Participation in a musical organization is required for each quarter in residence. Voice majors must be in a choral group, string majors in the orchestra, and brass and woodwind majors in the orchestra or band. Piano and organ majors may elect up to six credits of Ensemble as partial fulfillment of the organization requirement.

Attendance at all general recitals and three concerts is required for each quarter in residence. Attendance is also required of majors at all senior recitals. Majors must pass the examinations on all six departmental Listening Lists, and the Piano Proficiency Examination.

REQUIREMENTS FOR A BACHELOR OF MUSIC DEGREE IN PERFORMANCE WITH PIANO, ORGAN OR VOICE

First Year		Second Year	
Religion	6	Religion	6
Freshman Composition	9	Applied Major	12
Phil. of Christian Education	2	Theory II	9
Applied Major	12	Organization	3
Theory I	9	*Language	15
Organization	3	Electives	3
Survey of Music Literature	3		48
Physical Education	3		
Electives	1		
	48		

Third Year	
Religion	6
Applied Major	12
Hist. & Lit. of Music	9
Basic Conducting	2
Inst. or Choral Conducting	2
Analytical Techniques	6
Organization	3
Electives	8
	48

Fourth Year	
Applied Major	12
Counterpoint	3
Orchestration	3
Composition	6
Music Literature Electives	9
Organization	3
Religion or Electives	6
Electives	6
	48

*Voice majors who have had two units of French or German on the secondary level must register for one year of French or German, whichever language the student has not had. If the student has not had French or German on the secondary level, he must register for one year each of French and German.

A recital during both the junior and senior years is required. This curriculum does not prepare the student for denominational or state teaching certification.

REQUIREMENTS FOR A BACHELOR OF MUSIC DEGREE WITH A MAJOR IN MUSIC EDUCATION

First Year	
Religion	6
Freshman Composition	9
History (Hist. of Civilization preferred)	9
Theory I	9
Survey of Music Literature	3
Major Performance	6
Organization	3
Physical Education	3
	48

Second Year	
Religion	6
Science (or Math)	12
Phil. of Christian Education	2
Theory II	9
Major Performance	6
[1]Minor Performance	3
Organization	3
[2]Instrumental Techniques	3
[3]Voice	1
Electives	3
	48

Third Year	
Religion	6
Hist. & Lit. of Music	9
Analytical Techniques	6
Meth. Teach. Music	3
[4]Conducting	4-6
Major Performance	6
Minor Performance	3
Organization	3
Introduction to Education	3
Educational Psychology	3
Electives	0-2
	48

Fourth Year	
Literature	4
[5]Major Performance	6
Organization	2
Orchestration	3
Adolescent Psychology	3
Educational Evaluation	3
Directed Teaching	12
Methods & Materials	3
History of Pacific NW.	3
Electives	9
	48

[1]Voice majors will elect piano unless they are able to pass the Piano Proficiency Examination. Organ majors will elect piano, and piano majors will elect organ. Instrumental majors may count their additional hours in instrumental techniques as fulfilling this requirement.

[2]Instrumental majors must take all the instrumental techniques courses. Voice and keyboard majors will elect either Brass, Woodwind, or String Techniques.

[3]Not required of voice majors.

[4]Basic Conducting is required of all majors. Voice and instrumental majors elect both Instrumental and Choral Conducting, while keyboard majors may elect either.

[5]The music faculty may allow 3 hours of Selected Topics in Conducting toward the fulfillment of this requirement.

Voice majors must enroll for Singer's Diction and Vocal Techniques.

Organ majors must enroll for Keyboard Harmony.

Piano majors must enroll for Piano Pedagogy and Literature.

A joint senior recital (or solo recital) is required of all candidates for this degree. With 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 musicianship in these areas.

This curriculum prepares the student for teaching on the elementary or secondary level and results in denominational and Washington Provisional certification. Upon completion of the Fifth Year (see Education Department, p. 71) the student is eligible for the Washington State Standard Certificate.

BACHELOR OF ARTS

The Bachelor of Arts degree is a nonprofessional degree with a choice of three majors: Music History and Literature, Music Theory, and Applied Music. All majors must audition for the music faculty before enrolling in an applied field. Sincerity of purpose, application, and aptitude must be demonstrated during the first year before full status as a major student is granted. An examination in the basic elements of music is administered at the beginning of each school year to determine the student's qualification for entering Theory I.

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, orchestra or band for brass and woodwind majors. Piano and organ majors may elect one year of Ensemble as partial fulfillment of the organization requirement.

Attendance at all general recitals and three concerts is required for each quarter in residence. Attendance is also required of majors at all senior recitals. Majors must pass the examinations of all six departmental Listening Lists and the Piano Proficiency Examination.

MUSIC

Major Requirements for Music History and Literature

Theory I and II	18
History and Literature of Music	9
Counterpoint, Orchestration Analytical Techniques (elect 6 hrs.)	6
Advanced Music Literature Courses	15
Applied Music	12
	60

Major Requirements for Music Theory

Theory I and II	18
History and Literature of Music	9
Counterpoint	3
Orchestration	3
Analytical Techniques	6
Composition	6
Advanced Music Literature Courses	3
Applied Music	12
	60

Major Requirements for Applied Music

Theory I and II	18
History and Literature of Music	9
Analytical Techniques	6
Advanced Theory or Literature Courses	6
Applied Music	21
	60

Majors in Music History and Literature as well as Music Theory will present a senior project for which approval must be obtained from the music faculty. Majors in Applied Music will present a joint (or solo) senior recital.

Minor Requirements

Theory I	9
Introduction to Music (or History and Literature of Music)	6-9
Basic Conducting	2
Applied Music (in one field, with an examination by the music faculty at the end of the first and second years of private lessons)	6
Electives	1-4
	30

THEORY AND COMPOSITION

102. **FUNDAMENTALS OF MUSIC.** A basic course intended to lay a foundation in the following: notation, rhythm, scales, key-signatures, chords, terms, form, and sight-singing. This course may not be counted toward a major or minor in music. Two credits; winter.

104-105-106. **THEORY I.** A study of the science of music with a presentation of its essential elements through part writing, sight-singing, ear training, and keyboard harmony. Prerequisite: 102 or equivalent. Three credits; autumn, winter, spring.

204-205-206. **THEORY II.** A continuation of Theory I which will include a study of contemporary harmonic techniques as exhibited in twentieth century musical practice. Prerequisite: 104-105-106. Three credits; autumn, winter, spring.

304. **ANALYTICAL TECHNIQUES—HOMOPHONIC FORMS.** Structural analysis of homophonic forms from the Classical Era to the present. Prerequisite: 204-205-206. Three credits; autumn.

305. **ANALYTICAL TECHNIQUES—CONTRAPUNTAL FORMS.** Structural analysis of contrapuntal forms from the Renaissance to the present. Writing in the various styles under consideration is required. Prerequisite: 204-205-206. Three credits; winter.

331-332-333. **KEYBOARD HARMONY.** A course designed to acquaint keyboard majors with the various practical facets of musicianship such as harmonization of figured and unfigured basses and melodies, transposition, open-score reading, modulation, and elementary improvisation. Required of all organ majors. Prerequisite: 204-205-206 and/or the permission of the instructor. One credit; autumn, winter, spring.

406. **COUNTERPOINT.** A continuation of Course 305 with concentration on the more intricate forms of contrapuntal writing such as motet, canon, and fugue. Prerequisite: 304 and 305. Three credits; spring.

409. **ORCHESTRATION.** 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: 304 and 305. Three credits; spring.

411, 412, 413. **COMPOSITION.** A study of the art of composing in the smaller forms. Special emphasis is given to twentieth century techniques. Prerequisite: 204-205-206 and/or the permission of the instructor. Two credits; autumn, winter, spring.

HISTORY OF LITERATURE

181-182-183. **SURVEY OF MUSIC LITERATURE.** An introduction to the art of aural comprehension through listening to music. The assignments are based on the departmental Listening Lists. Class discussions deal with techniques of listening, an introduction to musical form, and a survey of the main periods of music history. Required of all majors. One credit: autumn, winter, spring.

201, 202, 203. **INTRODUCTION TO MUSIC.** An introduction to the appreciation and enjoyment of music through a study of its basic literature with extensive listening. The course seeks to develop an awareness of the emotional, aesthetic and intellectual appeals of music. Students beginning with winter or spring quarter must obtain approval of the instructor. Credit is not allowed toward a major. Two credits; autumn, winter, spring.

341, 342, 343. **HISTORY AND LITERATURE OF MUSIC.** A study of Western music from pre-Christian times to the present with emphasis on

the evolution of forms, styles, and media. Lectures will be supplemented with reading, performance and listening to the music of the period under consideration. For music majors and minors only. Three credits; autumn, winter, spring.

431. **J. S. BACH.** A study of the music of J. S. Bach and its significance in the stream of music history. Three credits; autumn.

432. **MUSIC OF THE TWENTIETH CENTURY.** A study of music from Impressionism to the present. Three credits; winter.

*433. **CHORAL LITERATURE.** A survey of the most significant choral literature from the early Renaissance to the present. Three credits; spring.

481, 482, 483. **SELECTED TOPICS IN MUSIC.** Directed independent study on selected advanced topics. All study is done under the supervision of the instructor and elected only after consultation with the chairman of the department. One to three credits: maximum, three credits; autumn, winter, spring.

MUSIC EDUCATION

*211-212-213. **SINGER'S DICTION.** 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. One credit; autumn, winter, spring.

*277, 278, 279. **BRASS TECHNIQUES.** Class instruction in the playing and teaching of brass instruments. One credit; autumn, winter, spring.

281, 282, 283. **WOODWIND TECHNIQUES.** Class instruction in the playing and teaching of woodwind instruments. One credit; autumn, winter, spring.

*284, 285, 286. **STRING TECHNIQUES.** Class instruction in the playing and teaching of stringed instruments. One credit; autumn, winter, spring.

*287. **PERCUSSION TECHNIQUES.** Class instruction in the playing and teaching of percussion instruments. One credit; autumn.

*308. **PIANO PEDAGOGY AND LITERATURE.** A course conducted as an introduction to the teaching of piano, including both the private and the class piano approaches. Combined with the problems of technique, pedalling, sight reading, memorizing and interpretation will be a brief survey of piano literature as it applies to teaching situations. Required of all piano majors. Three credits; winter.

*382. **VOCAL TECHNIQUES.** A study of the factors involved in correct voice production and artistic performance of vocal literature. Required of all voice majors. Three credits; winter.

472. **METHODS OF TEACHING MUSIC.** A study of the problems in teaching music on the secondary and elementary levels, including basic philosophies, content, methods of teaching, course outlines, and supervision of the music program. Three credits; spring.

*Not offered the current year.

CONDUCTING

387. **BASIC CONDUCTING.** A course specifically designed to lay the foundation for the development of the skill and the art of conducting musical ensembles of all kinds. Two credits; autumn.

388. **INSTRUMENTAL CONDUCTING.** Instruction and experience with conducting live performances of representative works of band and orchestral literature. Prerequisite: 387. Two credits; winter.

389. **CHORAL CONDUCTING.** Instruction and experience with conducting live performances of representative works of choral literature Prerequisite: 387. Two credits; spring.

CHURCH MUSIC

*208-209. **MINISTRY OF MUSIC.** A study of the purpose and use of music in religious services. Attention is given to the aesthetics of the church service and hymnology. Two credits; winter, spring.

VOCAL AND INSTRUMENTAL ENSEMBLES

Credit will be granted for the following organizations only when the student completes the spring quarter. Ensemble 254, 255, 256 is an exception to this requirement.

234-235-236. **MEN'S GLEE CLUB.** Organized to provide a musical outlet for men with a special interest in male chorus music. A wide variety of musical styles will be included of interest to the general student. Regular performances are planned. Membership is by audition. One credit; autumn, winter, spring.

237-238-239. **WOMEN'S GLEE CLUB.** Organized to provide musical opportunities for the many women who desire choral participation. In addition to attractive musical selections for women's voices, joint performances with the Men's Glee Club as a mixed chorus are planned. Membership is by audition. One credit; autumn, winter, spring.

241-242-243. **SCHOLA CANTORUM.** A select ensemble for those with unusual vocal talent and muscianship. A challenging choice of specialized type of choral literature, both sacred and secular, is studied and performed. Regular appearances on and off campus are customary. Membership is by invitation. One credit; autumn, winter, spring.

244-245-246. **CHORALE.** This eight-part choral organization performs regularly as the church choir, in addition to presenting concerts on and off campus. Standards of repertoire and performance are equal to those of the Schola Cantorum, but have a different musical objective. Great masterpieces of choral literature are performed each quarter. Membership is by audition. One credit; autumn, winter, spring.

247-248-249. **CONCERT BAND.** A select organization which serves the College by performing numerous 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 appropiate trans-

*Not offered the current year.

criptions. Members are selected on the basis of talent, musicianship, technical development and the need for a balanced instrumentation. Auditions are held during registration. A more select band called the Wind Ensemble will be organized as a part of the Concert Band. One credit; autumn, winter, spring.

251-252-253. **ORCHESTRA.** An organization which rehearses and performs a cross-section of standard orchestral literature from the Baroque Era to the present. Membership is by audition. One credit; autumn, winter, spring.

254-255-256. **ENSEMBLE.** 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 credits of ensemble in lieu of belonging to one of the larger College organizations. One credit; autumn, winter, spring.

APPLIED MUSIC

One to four credits of applied music may be earned each quarter. One credit of applied music presupposes 50 hours of practice per quarter; two credits, 100 hours. One hundred forty hours of practice are required per quarter for three credits; and 180 hours for four credits. (Music majors are required to take a weekly 1-hour lesson unless advised otherwise by the music faculty.)

Music majors are required to take lessons on their chosen instrument each quarter in residence regardless of the amount of credit accumulated.

Not more than nine credits in applied music (including three credits of ensemble) may be earned toward graduation without an equal number of hours in music classwork.

Transfer students majoring in music must take a minimum of six hours in applied music at Walla Walla College.

107, 108, 109. **APPLIED MUSIC.** Beginning.

127, 128, 129. **APPLIED MUSIC.** Intermediate.

227, 228, 229. **APPLIED MUSIC.** Upper intermediate.

327, 328, 329. **APPLIED MUSIC.** Lower advanced.

427, 428, 429. **APPLIED MUSIC.** Advanced.

PIANO PROFICIENCY REQUIREMENTS:

All majors are expected to pass an examination based on the following minimum requirements:

*Not offered the current year.

Technique: Major and harmonic minor scales, hands parallel, for at least two octaves, ascending and descending.

Repertoire: Easier compositions of the Baroque, Classic, Romantic and Twentieth-Century eras.

Sight-Reading: Second-grade material; hymns (which must be transposed at sight a half-step in either direction).

Accompanying: An easy solo at sight.

Harmonization: A simple melody at sight. (Vocalists to show ability to accompany any three well-known vocalises.)

Chord Progression: Using triads in any inversion, dominant-sevenths, in any major or minor key.

NON-DEPARTMENTAL

10. **DEVELOPMENTAL READING.** This course is designed to help college students develop speed and comprehension in reading. The latest reading techniques are taught and some of the best equipment is available for classroom use. It is a highly recommended course, especially for students whose reading habits are poor. Proficiency in reading means improved study skills. No credit; autumn, winter, or spring.

210. **AVIATION GROUND SCHOOL.** A study of pre-flight facts, meterology, the flight computer, navigation and Federal Aviation Regulations. The course is designed to enable the student to pass the FAA private pilot written examination. Two credits; winter.

221-222-223. **LIBRARY METHODS.** Introduction to the use of books and periodicals, the classification and cataloging of books, the principles of school library administration, and the history of libraries. Laboratory required. Three credits; autumn, winter, spring.

305. **CHILDREN'S LITERATURE.** A study of children's literature for the elementary school. Three credits; winter.

477. **SCHOOL LIBRARY ADMINISTRATION.** Designed to teach the objectives, organization, and administration of modern school libraries. Discussion of standards, selection of materials, routines, and programs of activities for school libraries. Three credits; autumn.

NURSING

For complete information concerning the School of Nursing and course descriptions, see pages 145 to 149.

PHYSICS

Chairman: Doctor Barnett
Assistant Professor: Robert M. Whitsett

The department offers a Bachelor of Arts degree and a Bachelor of Science degree with a major in physics, and jointly with the biology department, 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. 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.

PHYSICS MAJOR — REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Introduction to Experimental Physics	114, 115, 116	3
Introductory Physics*	201, 202, 203	
	204, 205, 206	15
Introduction to Modern Physics	311, 314	4
Physical Electronics	312, 315	4
Thermodynamics	313	3
Electricity and Magnetism**	301, 302	8
Physical Optics**	303, 316	5
Physics Seminar I	317, 318, 319	3
Physics Seminar II	417, 418, 419	3
		48

*Students having 12 hours of credit in General Physics may meet the Introductory Physics requirement by passing an examination set by the Physics Department and electing an additional three hours of physics.

**Electronics option: In place of Physics 301, 302, 303 the student may elect EE 311, 312, 313 and Physics 414, 415, 416.

Required Cognates:

Chemistry	141-142-143
Industrial Education	241-242-243
Mathematics	181, 281, 282, 283

PHYSICS MAJOR—REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Introduction to Experimental Physics	114, 115, 116	3
Introductory Physics	201, 202, 203	
	204, 205, 206	15
Introduction to Modern Physics	311, 314	4
Physical Electronics	312, 315	4
Thermodynamics	313	3
Electricity and Magnetism	301, 302	8
Physical Optics	303, 316	5
Physics Seminar I	317, 318, 319	3
Atomic and Nuclear Physics	411, 412, 413	9

Experimental Physics	414, 415, 416	3
Physics Seminar II	417, 418, 419	3
Theoretical Mechanics	421, 422	6
		66

Required Cognates:

Chemistry	141-142-143
Electrical Engineering	311, 312, 313
Industrial Education	241-242-243
Mathematics	312, 351, 352, 353
Speech	101-102 or 105-106

Candidates for this degree must meet all basic graduation requirements with the exception of language, and either literature or psychology.

BIOPHYSICS MAJOR—REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Biology

General Biology	101, 102, 103	12
Embryology*	273	5
Physiology	392, 393	8
General Ecology	446	4
Research Methods I, II, III	251, 352, 453	3
		32

*Biology 272, 447, or 451, 452 may be elected in place of Biology 273.

Physics

Introduction to Experimental Physics	114, 115, 116	3
Introductory Physics	201, 202, 203 204, 205, 206	15
Introduction to Modern Physics	311, 314	4
Physical Electronics	312, 315	4
Thermodynamics	313	3
Optics Lab	316	1
Physics Seminar I	317, 318, 319	3
Physics Seminar II	417, 418, 419	3
		36

Required Cognates:

Chemistry	141-142-143, 244 and either 321-322-323, or 351-352
Electrical Engineering	311, 312, 313
Mathematics	181, 281, 282, 283, 311

Candidates for this degree must meet all basic graduation requirements with the exception of language and health principles. The minor requirements for this degree are met in the cognates listed above.

MINOR REQUIREMENTS:

A minimum of 27 credits chosen in counsel with the department chairman.

PHYSICS

COURSES

114, 115, 116. **INTRODUCTION TO EXPERIMENTAL PHYSICS.** The principles and practice of physical measurements, experiment design and evaluation. One credit; autumn, winter, spring.

181, 182, 183. **GENERAL PHYSICS.** An introductory course in mechanics, heat, sound, light, electricity, atomic and nuclear physics, special relativity, designed primarily for the non-physics major to acquaint him with the ideas and methods of physics for possible application to problems in other areas of human endeavor. Emphasis is placed on the interplay of theory and experiment in understanding natural phenomena. Prerequisite: Mathematics 111, 112, 113 or 121, 122. Physics 181 prerequisite for 182 or 183. Corequisite: 184, 185, 186. Three credits; autumn, winter, spring.

184, 185, 186. **GENERAL PHYSICS LABORATORY.** Laboratory work integrated with 181, 182, 183. One credit; autumn, winter, spring.

201, 202, 203. **INTRODUCTORY PHYSICS.** An introductory course in mechanics, wave motion, thermodynamics, electro-magnetism, geometrical and wave optics, designed to provide the science and engineering major with both an intuitive and a mathematical understanding of fundamental physical concepts. Must be taken in sequence. Prerequisite: Mathematics 181. Corequisite: 204, 205, 206; Mathematics 182, 183, 184. Four credits; autumn, winter, spring.

204, 205, 206. **INTRODUCTORY PHYSICS LABORATORY.** Experimental exploration and study of the fundamental concepts of physics. One credit; autumn, winter, spring.

241, 242, 243. **PHYSICAL ASTRONOMY.** 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. Four credits; autumn, winter, spring.

Physics 201, 202, 203 or equivalent prerequisite for all courses numbered 300 or above; Mathematics 181, 281, 282, 283 prerequisite for all courses numbered 300 or above except 352, 353.

Students registered for courses numbered 300 or above, except 351, 352, are required to be concurrently registered for Physics Seminar.

301, 302. **ELECTRICITY AND MAGNETISM.** 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. Corequisite: 317, 318. Four credits; autumn, winter.

303. **PHYSICAL OPTICS.** Classical theory of radiation and optics based on Maxwell's equations: reflection, refraction, dispersion, diffraction, interference, polarization, scattering, polychromatic waves. Prerequisite: 302. Corequisite: 316, 319. Four credits; spring.

311. **INTRODUCTION TO MODERN PHYSICS.** Basic principles of special relativity, quantum theory, atomic and nuclear structure. Corequisite: 314, 317. Three credits; autumn.

312. **PHYSICAL ELECTRONICS.** Physical principles of solid state, gaseous, and vacuum electronic devices. Prerequisite: 311. Corequisite: 315, 318. Three credits; winter.

313. **THERMODYNAMICS.** An introduction to the physical theories of equilibrium thermostatics and irreversible thermodynamics based on elementary statistical mechanics. Prerequisite: 312. Corequisite: 316, 319. Three credits; spring.

314. **MODERN PHYSICS LABORATORY.** Experimental study of the characteristics of alpha, beta and gamma radiation, interaction of radiation with matter, neutron activation. One credit; autumn.

315. **PHYSICAL ELECTRONICS LABORATORY.** Experiments in crystal and semi-conductor physics, properties of ionized gases, measurement of fundamental physical constants. One credit, winter.

316. **OPTICS LABORATORY.** Experimental study of geometrical and physical optics. One credit; spring.

317, 318, 319. **PHYSICS SEMINAR I.** 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 bi-yearly. Regular use will be made of the current literature of physics. One credit; autumn, winter, spring.

352, 353. **RADIOISOTOPE RESEARCH TECHNIQUES.** 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: 181, 182, 183, or Chemistry 141-142-143. Two credits; winter, spring.

411, 412, 413. **ATOMIC AND NUCLEAR PHYSICS.** 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: 301, 302, 303. Corequisite: 414, 415, 416; 417, 418, 419. Three credits; autumn, winter, spring.

414, 415, 416. **EXPERIMENTAL PHYSICS.** Classical and modern experiments in atomic and nuclear physics. One credit; autumn, winter, spring.

417, 418, 419. **PHYSICS SEMINAR II.** 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 bi-yearly. Regular use will be made of the current literature of physics. One credit; autumn, winter, spring.

PHYSICS

421, 422, 423. **THEORETICAL MECHANICS.** Statics and dynamics of particles, fluids, and rigid bodies, harmonic, orbital, and wave motion, Lagrange and Hamiltonian mechanics. Corequisite: 417, 418, 419. Three credits; autumn, winter, spring.

471. **METHODS OF TEACHING PHYSICAL SCIENCE.** 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. Three credits; summer.

477, 478, 479. **SPECIAL PROBLEMS IN PHYSICS.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

RELIGION

For complete information concerning the School of Theology, major and minor requirements, and course descriptions, see pages 140-144.

SECRETARIAL SCIENCE

Chairman: Professor Rittenhouse
Instructors: Dorothy Armstrong, Joyce Medlock, Ed. E. Quiring

The degree program aims to integrate vocational preparation on the collegiate level with a broad cultural education. This program prepares students for professional secretaryship. The department also seeks to equip students with knowledge and skills necessary for stenographers and general office workers.

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Records Management	181	2
Secretarial Procedures	207-208	4
Advanced Typewriting	221, 222, 223	6
Adding and Calculating Machines	230	1
Office Machines	262, 263	4
Advanced Shorthand and Transcription	287-288-289	9
Business Communications	361, 362	3-6
Advanced Secretarial Procedures	408, 409	6
Shorthand Reporting	427	3
Denominational Terminology	428	3-6
or		
Medical Terminology	448-449	
Problems in Secretarial Science	480	2
Secretarial Science Seminar	492	1
Upper division, electives		0-5
		49-55

Required Cognates: Business and Economics 131-132; 261-262.

Students preparing for medical secretarial work should complete the following courses before taking 448-449:

Microbiology	107	5
Anatomy, Physiology	202-203	10

MINOR REQUIREMENTS:

Secretarial Procedures	207-208	4
Advanced Typewriting	221, 222, 223	6
Office Machines	262, 263	4
Adv. Shorthand & Transcription	287-288-289	9
Adv. Secretarial Procedures	409	3
Methods of Teaching Typewriting	471	3
		29

SECRETARIAL SCIENCE

COURSES

121-122. **BEGINNING TYPEWRITING.** An introductory course with emphasis on basic theory and skills for personal and vocational use. Two credits; autumn, winter.

123. **INTERMEDIATE TYPEWRITING.** A continuation of courses 121-122. Two credits; autumn, winter or spring.

141-142-143. **SHORTHAND THEORY.** A course covering Gregg Shorthand principles with emphasis on correct writing and transcribing of shorthand notes. Corequisite: 121-122, 123 or equivalent. Five credits; autumn, winter, spring.

161-162-163. **INTERMEDIATE SHORTHAND.** A course designed for students who have taken shorthand previously but who are not qualified for Secretarial Science 287-288-289. Two credits; autumn, winter, spring.

181. **RECORDS MANAGEMENT.** A course in the theory and practice of the modern systems of filing. Two credits; autumn.

207-208, 209. **SECRETARIAL PROCEDURES.** A preparation for the activities and procedures common to most stenographic jobs, including business arithmetic, business English, business meetings and reports. Two credits; autumn, winter, spring.

210. **SWITCHBOARD.** Instruction in the organization and operation of a PBX system. Thirty hours switchboard practice with special instruction in the development of a pleasing telephone personality. One credit; winter or spring.

221, 222, 223. **ADVANCED TYPEWRITING.** A continuation of course 123 with emphasis on increase of speed, accuracy, and skill in the production of business papers. Must be taken in sequence. Prerequisite: 121-122, 123 or equivalent. Two credits; autumn, winter, spring.

230. **ADDING AND CALCULATING MACHINES.** Instruction in the use of computing and adding machines. One credit; autumn, winter, spring.

240. **IBM KEY PUNCH.** A course designed to give basic knowledge and skill in punch card operation. Supervised experience on the IBM 029 Printing Card Punch is provided. Permission from chairman of the department required. One credit; autumn, winter or spring.

262, 263. **OFFICE MACHINES.** Instruction and practice in the use of office machines, duplicating machines (winter), voicescription machines (spring). Prerequisite: 121-122, 123. Two credits; winter, spring.

287-288-289. **ADVANCED SHORTHAND AND TRANSCRIPTION.** A course planned to review the principles of Gregg Shorthand and to build speed in taking and transcribing business dictation. Emphasis on and extensive practice in the production of mailable transcripts. Prerequisite: 121-122, 123 and 141-142-143 or equivalent. Three credits; autumn, winter, spring.

310. **ADVANCED OFFICE MACHINES.** A laboratory course for students who desire to develop vocational proficiency in the operation of a specific office machine. Prerequisite: 230 or 262 or 263. One credit; autumn, winter or spring.

361, 362. **BUSINESS COMMUNICATIONS.** A study of the principles basic to effective communication with application to specific problems related to business. The winter quarter will cover business reports. Three credits; autumn, winter.

408, 409. **ADVANCED SECRETARIAL PROCEDURES.** A study of the duties and problems of the secretary in business and the professions. Includes the study of personality and office relations. Prerequisite: 121-122, 123; 141-142-143; 263. Three credits; winter, spring.

427. **SHORTHAND REPORTING.** A course designed to build skill in reporting and transcribing congressional and other technical material at higher speeds. Prerequisite: 221, 222, 223 and 287-288-289 or equivalent. Three credits; autumn.

428. **DENOMINATIONAL TERMINOLOGY.** A study of the work of the denominational secretary, specialized vocabulary, and reporting procedures. Prerequisite: 141-142-143 and 287-288-289 or equivalent. Three credits; winter

448-449. **MEDICAL TERMINOLOGY.** A study of the duties of the medical secretary, and the development of a basic medical vocabulary. There will be practice in the transcription of medical records from voicescription machines. Prerequisite: 141-142-143, 287-288-289 or the equivalent, and Biology 202-203. Three credits; winter, spring.

463. **LEGAL TERMINOLOGY.** A course emphasizing the terminology, dictation and transcription of legal material, and study of the legal office. Recommended cognate: B.A. 241. Three credits; spring.

471. **METHODS OF TEACHING TYPEWRITING.** A survey of the objectives, methods, and techniques of teaching typewriting in the secondary school. Observation, demonstration, and class presentation are required of the students as a part of this course. Three credits; autumn.

472. **METHODS OF TEACHING SHORTHAND.** Consideration of materials and methods in the teaching of shorthand in the secondary school. Observation, demonstration, and class presentation are required of the student as a part of this course. Three credits; winter.

480. **PROBLEMS IN SECRETARIAL SCIENCE.** A course for advanced Secretarial Science students to give opportunity for supervised work experience and/or individual study of a problem in Secretarial Science. Approval of the chairman of the department required. Two credits; autumn, winter, or spring.

492. **SECRETARIAL SCIENCE SEMINAR.** A course for senior Secretarial Science students for research, special problems, analysis of new trends in the field, and study of the major areas in Secretarial Science. One credit; winter.

SPEECH

Chairman: Doctor Hartbauer
Professor: Gordon S. Balharrie
Assistant Professors: Loren Dickinson, Donnie Thompson Rigby
Instructor: Clarence A. Wood

The program of the department is directed toward the traditional objective of preparing the student to be a well-informed, publicly acceptable person who can present well-organized material by the oral media thus strengthening his personality and capacity for responsibility and leadership in society, business and the professions.

One curriculum leads to preparation for teaching of speech; another trains the student to become a speech and hearing therapist.

BACHELOR OF ARTS—MAJOR DEGREE REQUIREMENTS:

Major: Speech

Fundamentals of Speech	101-102 or 105-106	4
Voice and Articulation	107	2
Group Discussion	207	3
Oral Interpretation	211	2
Broadcast Techniques and Announcing	231	3
Speech Science	291	3
Advanced Public Address	323	3
Speech and Hearing Therapy	371, 372, 373	9
Introduction to Semantics	401	2
Speech Composition and Analysis	422	3
Rhetoric and Public Address	453	3
Electives		11
		48

Major: Speech and Hearing Therapy

Fundamentals of Speech	101-102 or 105-106	4
Voice and Articulation	107	2
Group Discussion	207	3
Phonetics	274	2
Speech Science	291	3
Speech and Hearing Therapy	371, 372, 373	9
Clinical Techniques and Practices	374, 375, 376	3
Lip Reading and Auditory Training	388	3
Audiometry and Hearing Rehabilitation	391	3
Introduction to Semantics	401	2
Electives		14
		48

MINOR REQUIREMENTS:

A minimum of 27 credits including 101-102 or 105-106 and 9 upper division credits. Approval of the chairman of the department required.

COURSES

101-102 or 105-106. **FUNDAMENTALS OF SPEECH.** 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. Two credits; autumn, winter; or winter, spring.

107. **VOICE AND ARTICULATION.** 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. Two credits; autumn.

207. **GROUP DISCUSSION.** Participation in various types of group discussions, and theory and practice of parliamentary procedure. Three credits; autumn.

211. **ORAL INTERPRETATION.** 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. Two credits; autumn.

231. **BROADCAST TECHNIQUES AND ANNOUNCING.** Instruction concerning studio and control room operation and study of microphone techniques; emphasis on voice and diction and interpretation of copy. Includes preparation for the FCC Radio Telephone Third Class Operator Permit. On-the-air experience on KGTS. Two lectures, one laboratory per week. Three credits; autumn.

274. **PHONETICS.** The theory, history, development and application of the international phonetic alphabet and its application to speech correction and to adequate pronunciation. Two credits; autumn.

291. **SPEECH SCIENCE.** A comprehensive study of the anatomy, physiology and physics of speech and hearing; their normal development and usage. Prerequisite: 101-102. Three credits; autumn.

323. **ADVANCED PUBLIC ADDRESS.** 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: 101-102 or 105-106. Three credits; spring.

341. **PRINCIPLES OF ARGUMENTATION AND DEBATE.** Theory and practice of argumentation and debate. Evidence and forms of reasoning; logical analysis and organization of argument. Three credits; autumn.

352. **ESSENTIALS OF PUBLIC BROADCASTING.** Study of organization and operation of stations, networks, and world systems of broad-

casting as well as study of legal and regulatory control of radio-tv. Three credits; winter.

363. **PROJECTS IN INTERPRETATION.** Intensive training in advanced oral expression and the communication of thought and emotion of literature. A study of the technique of planning and producing secular and sacred programs. Three credits; spring.

371, 372, 373. **SPEECH AND HEARING THERAPY.** The nature, measurement, and evaluation of hearing ability, and rehabilitation of the acoustically handicapped; etiology and therapy techniques of organic speech disorders such as aphasia, cerebral palsy, and cleft palate; theory of natural development of speech, methods for prevention and correction of basic functional speech disorders. Three credits; autumn, winter, spring.

374, 375, 376. **CLINICAL TECHNIQUES AND PRACTICE.** Instruction in techniques of diagnosis and therapy of speech and hearing problems and supervised practice in clinical and school situations. Prerequisite: 371, 372, 373 or equivalent. One credit; autumn, winter, spring. Maximum: three credits.

381, 382. **PULPIT ADDRESS.** 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. Three credits; autumn, winter.

388. **LIP READING AND AUDITORY TRAINING.** Basic principles of establishing communication by observation of visible aspects of speech; methods of teaching lip reading to the acoustically handicapped; recognition and discrimination of speech sounds and speech skills. Prerequisite: 274. Three credits; winter.

391. **AUDIOMETRY AND HEARING REHABILITATION.** Theory and practice in determining types and kinds of hearing abilities; the interpreting of test results; remedial and follow-up procedures for the acoustically handicapped. Prerequisite: 371. Three credits; spring.

401. **INTRODUCTION TO SEMANTICS.** A course stressing the use of language to influence human behavior; language in problem solving and as a means of resolving conflicts. Prerequisites: 101-102 or equivalent or permission of department. Two credits; winter.

422. **SPEECH COMPOSITION AND ANALYSIS.** A comprehensive treatment of speech organization, content, and delivery. Analysis of great American speeches. Prerequisite: 101-102 or 105-106 or consent of the instructor. Three credits; winter.

443. **PERSUASIVE SPEAKING.** 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: 101-102 or 105-106. Three credits; spring.

453. **RHETORIC AND PUBLIC ADDRESS.** Study of the principles of rhetoric proposed by Aristotle, Quintillian and Cicero. The relationship of the principles of rhetoric to modern speechmaking. Prerequisite: 101-102, 323 or permission of department. Three credits; spring.

477, 478, 479. **SPECIAL PROBLEMS IN SPEECH.** 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 showing competence in and extent of his study. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

484. **THE BASES OF SPEECH I.** A study of the social, linguistic, psychological, genetic and semantic bases of speech. Processes of significant and verbal communication. Not applicable to major or minor requirements. Prerequisite: 101-102 and permission of instructor. Three credits; summer.

485. **THE BASES OF SPEECH II.** A comprehensive study of the physical, physiological, neurological and phonetic bases of speech. Consideration of normal speech development and of symptoms of defective speech production. Not applicable to major or minor requirements. Prerequisite: 101-102 and permission of instructor. Three credits; summer.

497, 498, 499. **SEMINAR IN SPEECH.** Studies of selected topics and review of current literature in speech. Special investigations of problems. One credit; maximum three. Autumn, winter, spring.

SCHOOL OF THEOLOGY

Dean: Professor Balharrie
Professors: J. Paul Grove, Richard L. Litke
Associate Professors: Joseph N. Barnes, T. K. Ludgate, A. P. Salom
Assistant Professor: Lucille Harper Knapp
Instructors: Calvin V. Hartnell, L. E. Russell

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 upper-division standing in the School of Theology upon approval of the theology faculty and must meet Seminary entrance requirements by completing a theology major. Two additional years of graduate study at the Theological Seminary of Andrews University are recommended as prerequisite for the ministerial internship. In order to graduate with a major in theology, the student must have a grade-point average of 2.5 as required for regular admission to the Seminary. If at the beginning of his senior year a theology candidate fails to meet this standard, he will register as a Religion major.

All Theology and Religion majors must successfully complete a senior comprehensive examination which will cover broad areas of religious knowledge. The student is advised, therefore, to select a wide variety of courses so that he may have some familiarity with the entire field. Those planning to attend the Seminary should make sure that they obtain the necessary undergraduate subjects required for entrance. It is highly recommended that all Theology and Religion majors elect as many courses in education as possible with the purpose of eventually securing teacher certification. Those desiring to become Bible instructors may select either the Theology or Religion major.

THEOLOGY MAJOR—REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Theology I	141, 142, 143	9
Theology II	221, 222, 223	9
Theology III	411, 412, 413	6
Electives (Counsel with department chairman.)		30
		54

Required Cognates:

Biblical Languages	101-102-103; 221, 222, 223	24
History	101, 102, 103; 201, 202,	12
	or 203 and electives	6
Political Science or Sociology		3
Speech	101-102 or 105-106, 381, 382	10
	and electives	3
Biological Science	407	3

RELIGION MAJOR—REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE:

Theology III (6 credits) and 48 credits of electives chosen in counsel with the chairman of the department.

MINOR REQUIREMENTS:

Religion, 30 credits, including 9 upper division.

COURSES

A. THEOLOGY

101, 102, 103. **BIBLE SURVEY.** 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. Two credits; autumn, winter, spring.

104, 105, 106. **LIFE AND TEACHINGS OF JESUS.** A study of the life of Christ, His teachings, His methods, and the principles of His kingdom as they apply to life in the world today. Two credits; autumn, winter, spring.

141, 142, 143. **THEOLOGY I.** 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. Intended for theology and religion majors. Must be taken in sequence. Three credits; autumn, winter, spring.

201, 202, 203. **FUNDAMENTALS OF CHRISTIAN BELIEF.** An introductory course in the evidences and principles of Christianity, consisting of a study of the basic concepts of religious faith and practice, and a survey of the fundamental doctrines held by the Seventh-day Adventist denomination. Two credits; autumn, winter, spring.

221, 222, 223. **THEOLOGY II.** This course consists of a thorough study of the basic teachings of the Bible. Students will be required to organize their own concepts of Bible doctrines and teach them to others, in groups and individually, in class and community. Lectures, discussion and seminar methods will be employed. Intended for theology and religion majors. Three credits; autumn, winter, spring.

322. **DANIEL.** 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. Prerequisite: 201, 202, 203. Three credits; winter.

323. **THE REVELATION.** 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. Prerequisite: 201, 202, 203; 322. Three credits; spring.

357, 358, 359. **THE PAULINE LETTERS.** A survey of the writings of the great apostle to the Gentiles. Particular attention will be given to the present-day application of Paul's counsels and their practical value for Christians. Two credits; autumn, winter, spring.

364, 365, 366. **HEBREW PROPHETS.** 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. Course 364 prerequisite to 365 or 366. Three credits; autumn, winter, spring.

384. **DOCTRINE OF THE SANCTUARY.** A study of the Hebrew tabernacle and its services with special emphasis on its significance for the twentieth century. Three credits; autumn.

411, 412, 413. **THEOLOGY III.** This course involves lectures, written reports, and group discussion on assigned Biblical topics and contemporary theological issues. Two credits; autumn, winter, spring.

426. **ESCHATOLOGY.** 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. Three credits; spring.

464, 465, 466. **NEW TESTAMENT EPISTLES.** An exegetical study of the epistles of the New Testament, with attention being given in each case to the introductional matters. This course is intended for Theology students although it is open to others with a mature background in Bible. The latter, however, should counsel with the instructor before registering for this course. Must be taken in sequence. Three credits; autumn, winter, spring.

477, 478, 479. **SPECIAL PROBLEMS IN RELIGION.** 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 showing competence in and extent of his study. Open only to majors and minors. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

B. CHRISTIAN PHILOSOPHY

231. **MINISTRY OF HEALING.** A study of the work of Christ as the great compassionate Healer. Emphasis is given to the opportunities for spiritual ministry by the Christian nurse. Two credits; autumn. (Taught on the Portland campus only.)

341, 342, 343. **SPIRIT OF PROPHECY AND DENOMINATIONAL HISTORY.** A careful review of the Gift of Prophecy in the remnant church. The bestowal of this gift in the beginning, after the fall of man, and its work during the centuries to the 1844 movement. The rise of the denomination in its connection with the prophetic movement of Revelation 10 and in its development during the last one hundred years is carefully studied. Course 341 prerequisite to 342 or 343. Two credits; autumn, winter, spring.

421. **INTRODUCTION TO PHILOSOPHY.** A course designed to acquaint the beginner with the vocabulary, methods and concerns of philosophy. Study is made of the living issues facing mankind and the efforts of philosophy to provide answers to these major human problems. This course will not apply on basic Bible requirements unless the student also completes courses 422 and 423. Two credits; autumn.

422. **PHILOSOPHY OF RELIGION.** 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. Prerequiste: 421. Two credits; winter.

423. **CONTEMPORARY PHILOSOPHY.** A critical examination of the significant philosophical thinking of our time. The theories of naturalism, idealism, realism, pragmatism, logical empiricism, existentialism and other related movements will receive careful scrutiny. This comparative survey of twentieth-century systems is designed to assist the student in relating and communicating to the present civilization. Prerequisite: 421. Two credits; spring.

C. BIBLICAL LANGUAGES

For description of these courses, see the Department of Biblical Languages.

D. ARCHAEOLOGY AND RELIGIOUS HISTORY

402. **MODERN DENOMINATIONS.** 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. Three credits; winter. (Also taught on the Portland campus: two credits.)

403. **WORLD RELIGIONS.** A short study of the greater religions of mankind, such as Animism, Hinduism, Buddhism, Confuscianism, 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. Three credits; spring.

444, 445, 446. **BIBLICAL BACKGROUNDS.** An exploration of those archaeological, historical, and scientific studies of the present age which make the scriptural record more meaningful. Special emphasis is placed upon recent archaeological and manuscript discoveries that throw light upon the life and times of the Bible period. Two credits; autumn, winter, spring.

E. APPLIED THEOLOGY

383. **CHURCH ADMINISTRATION.** 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. Three credits; spring.

390. **INTERVIEWING AND SPIRITUAL COUNSELING.** This course stresses practical Christiantiy in personal life and in the nurse-patient relationship. Methods of Christian conversation and counseling are presented to give the student understanding and confidence in spiritual ministry. Three credits; any quarter. (Taught on the Portland campus only.)

427, 428. **CHRISTIAN DYNAMICS.** 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. Prerequisite: 201, 202, 203. Three credits; autumn, winter.

429. **STUDIES IN CHRISTIAN DYNAMICS.** 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: 427, 428. Two credits; spring.

441, 442, 443. **PERSONAL EVANGELISM.** 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. Two credits; autumn, winter, spring.

447, 448. **PUBLIC EVANGELISM.** Advanced study in the art of preaching with particular emphasis upon Bible exposition. Detailed attention will be given to the various phases of evangelistic work including advertising and the planning of public meetings. This course is definitely designed for young men who desire to make the gospel ministry their vocation. Admission to the class will be upon the recommendation of the professor. Prerequisite: Speech 381, 382. Two credits; autumn, winter.

461, 462, 463. **FIELD EVANGELISM.** Experience in evangelistic techniques is obtained by giving Bible studies and/or holding meetings. One credit; autumn, winter, spring.

SCHOOL OF NURSING

Dean: Professor Leazer
Associate Professor: Florence Culpan
Assistant Professors: Stella Boeck, Helen Furber, Ingrid Rudy Johnson, Joyce E. Riter
Instructors: Janice P. Chance, Joyce Gregg, Alice Hazelton, Beverly Paladeni, Marilyn Pinder, Betty Sharpe, Lois Smith, Karen Trivett, Winifred Whitsett

The bachelor of science degree offered in the School of Nursing is parallel in nature to those offered in other departments of the college: approximately half of the courses for the degree are of the same groups of liberal arts or basic courses required for bachelor of science degrees; the other half are professional.

The aim is to provide an education broadening and cultural in nature and at the same time prepare the student for the beginning of professional nursing to people of all ages under varying circumstances. The contributing benefits of a college degree with an emphasis on humanities, science, social science, and the Christian heritage, we believe, provide a basis for personal development, for depth in perspective of human needs, mature judgment, and increasing continued growth in professional competence and dedication.

The objectives of the School of Nursing are as follows:

To guide the student in a personal development which will produce a well-adjusted individual, capable of accepting the responsibility for, and direction of, her own life in full harmony with the philosophy of the school.

To provide opportunity for the student to secure basic knowledge and skills essential to meet nursing needs in illness, in the conservation of health, and in giving restorative service to the individual and to the family.

To motivate creative thinking and intellectual curiosity.

To develop a foundation for leadership in the field of nursing, and the basic foundation for graduate education.

To stimulate and nurture the desire to give selfless, kind, tolerant, and understanding service to mankind.

To encourage the student to develop a Christian philosophy of life as a basis for the solution of her own problems, and a basis for ministration to the patient.

To prepare Christian youth for missionary nursing in the health activities of the Seventh-day Adventist Church throughout the world.

GENERAL INFORMATION

The School of Nursing is approved by the Collegiate Board of Review of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing, and by the Washington State Board of Professional Nursing. The principal clinical practice area for Walla Walla College nursing students is the Portland Sanitarium and Hospital, a modern institution which is approved by the Joint Commission on Accreditation of Hospitals and has more than 10,000 patient admissions per year.

NURSING

The nursing curriculum may be completed in twelve quarters. Seven quarters are spent on the College Place campus and five quarters in the Clinical Division. Upon satisfactory completion of the curriculum the student is eligible to write State Board Examinations and will receive the Bachelor of Science degree with a major in nursing.

Students gain laboratory practice at the Portland Sanitarium and Hospital in the following areas: Medical-Surgical Nursing, Pediatric Nursing and Obstetrical Nursing.

Public Health Nursing practice is obtained through the Umatilla County Health Department in Pendleton, Oregon.

Experience in Psychiatric Nursing is obtained at Eastern Oregon State Hospital, Pendleton, Oregon. During public health nursing and psychiatric nursing, the students reside on the main campus in College Place.

Students must provide for their own transportation during field practice in public health nursing. Use of an automoblie is required during this quarter.

Students whose cumulative grade-point average falls below C (2.00) on courses completed will not take part in the capping exercise.

All students registered in the School of Nursing are subject to the general regulations of the College.

ADMISSION TO CLINICAL DIVISION

Completion of the first four quarters' work on the College Place Campus does not automatically admit the student to the Clinical Division. Students whose cumulative GPA falls below 2.00 will not be allowed to register for courses in the clinical division. Preference will be given to students whose cumulative GPA is 2.25 or better. A committee representing the staff on both campuses evaluates the aptitude and qualifications of each student and selects those students who may proceed to the Clinical Division.

ADMISSION WITH ADVANCED STANDING

Applicants with advanced standing must apply directly to Walla Walla College for admission. Such applicants should also write to the Dean of the School of Nursing for counsel concerning credits and requirements. School of Nursing, 6014 SE. Yamhill, Portland, Oregon 97215.

DEGREE REQUIREMENTS

The degree of Bachelor of Science is conferred by Walla Walla College upon satisfactory completion of the Collegiate Nursing Curriculum. Students must have achieved a cumulative grade-point average of 2.00 (C).

Students must meet the degree requirements listed on pages 44, 45. In addition, the following liberal arts courses are required:

Biological Science	107; 202-203	15
Chemistry	101-102-103	9
Education	123; 435; 444	8
English	282 or 385	3
Home Economics	210; 220	5
Religion	402	2
Sociology (Elec. 5 UD)	204; 305; 310	12

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE:

Fundamentals of Nursing	224	3
Medical-Surgical Nursing	262-263; 265-266	26
Parent-Child Nursing	347-348; 351-352	20
Psychiatric Nursing	361, 364	10
Intro. to Public Health and Epid.	322	4
Public Health Nursing	401; 404	10
Selected Problems in Nursing	411	7
Leadership in Nursing	424	7
Trends and Prof. Relationships in Nsg.	444	3
Seminar in Nursing	493	1
		91

DEGREE REQUIREMENTS FOR REGISTERED NURSES

For registered nurses who have not had the benefit of a collegiate program, the College provides opportunity to fulfill the requirements for the regular Bachelor of Science Degree with a major in nursing. The program for the registered nurse students is intended to provide them with the same background of general and professional education as is attained by the basic baccalaureate nursing student. It is planned to provide opportunities for the solution of patient problems and to develop deeper and broader understanding and abilities required in the practice of nursing.

ADMISSION

Students planning to come to Walla Walla College should submit their credits for evaluation. Graduate nurses who have completed pre-nursing in a liberal arts college and 27-36 months in a hospital school of nursing should plan to spend approximately six quarters at Walla Walla College. Nurses who hold hospital school diplomas instead of collegiate degrees will be required to complete the courses listed in the first four quarters of the collegiate nursing program.

For course work taken in an approved hospital school of nursing candidates may obtain credit by successfully passing validating examinations toward the Bachelor of Science degree with a major in nursing. These validating examinations are given in the Clinical Division of the College and credits granted by examinations will be recorded in toto when the candidate has met all entrance requirements.

SUMMARY OF REQUIREMENTS

1. Satisfactory scores in NLN achievement tests and teacher tests in all clinical areas. Deficiencies in any clinical area must be made up in regular, basic baccalaureate nursing classes.
2. Completion of all courses which are peculiar to the Walla Walla College School of Nursing curriculum.
3. One quarter clinical nursing on Portland campus.
4. One quarter public health nursing.
5. Sufficient electives to bring total college credits to 192 hours, including 60 upper division credits.

COURSE DESCRIPTIONS

224. **FUNDAMENTALS OF NURSING.** Orientation to the profession, emphasizing present-day concepts of nursing, professional ethics, and prep-

aration for modern nursing practice. Instruction is given in the care of patients presenting various nursing problems, with emphasis on techniques commonly used in the care of all patients. Through discussion and demonstration in the classroom and laboratory, the student acquires understanding and skills in preparation for the clinical situation. Three credits; autumn or spring.

262-263. **MEDICAL-SURGICAL NURSING.** Attention is given to the various medical-surgical conditions common to adults, and appropriate related nursing concepts are studied. Scientific facts and principles which form the basis for professional nursing are considered. The course emphasizes the psychological, social, spiritual and public health aspects of illness, prevention, treatment, rehabilitation, disaster nursing, diet therapy, drug therapy, physical therapy and operating room experience. Six credits; winter or summer. Eight credits; spring or autumn.

265-266. **MEDICAL-SURGICAL NURSING LABORATORY.** This course provides supervised practice in applying scientific principles to the care of the adult patient ill with common medical and surgical conditions. Emphasis is placed on the giving of nursing care according to individual needs and problems of patients. Six credits; autumn and winter; or spring and summer.

322. **INTRODUCTION TO PUBLIC HEALTH AND EPIDEMIOLOGY.** A study of the historical background and general organization and structure of public 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. Four credits; summer or winter.

347-348. **PARENT-CHILD NURSING.** An introduction to the concept of family-centered maternity and child care. Includes basic principles of growth and development, disease prevention, disease processes and disability and scientific principles related to the nursing care of mothers, infants, and children. Five credits; autumn, winter or spring, summer.

351-352. **PARENT-CHILD NURSING LABORATORY.** Guided practice and observation in the nursing care of mothers and newborn in the hospital, home and various community agencies. Includes care and observation of well and sick children in nursery school, out-patient clinic, doctor's office, hospital, and school for mentally retarded. Five credits; autumn, winter or spring, summer.

361. **PSYCHIATRIC NURSING.** Deals with the study of human behavior and its relationship to the prevention, diagnosis, and treatment of the emotionally ill. Emphasis is placed on rehabilitation, introspection, increased skill and understanding in observation of behavior, communication and interpersonal relationships. Five credits; any quarter.

364. **PSYCHIATRIC NURSING LABORATORY.** Guided experience in interaction with selected patients in the hospital, out-patient department and community, where students begin to develop their role as participants in the psychiatric-mental health team. Five credits; any quarter.

401. **PUBLIC HEALTH NURSING.** Principles of public health nursing in family and community health services. Prerequisite: 322. Five credits; autumn, winter, spring, or summer.

404. **PUBLIC HEALTH NURSING LABORATORY.** Application of public health principles and skills in family and community health situations. Prerequisite: 321. Five credits; autumn, winter, spring, or summer.

411. **SELECTED PROBLEMS IN NURSING.** Analysis of and experience in dealing with complex nursing problems in patients with chronic or acute illness. Includes the formulation of comprehensive nursing care plan for selected patients. Prerequisite: 262-263, 265-266. Seven credits; summer or autumn.

424. **LEADERSHIP IN NURSING.** The principles of leadership in nursing, including application of principles in team leadership and management of a hospital unit. Seven credits; autumn or summer.

444. **TRENDS AND PROFESSIONAL RELATIONSHIPS IN NURSING.** A study of present-day trends in nursing and how they evolved. Study is given to professional organizations, patterns of nursing education, nursing legislation, opportunities in the field of nursing, and other problems in nursing practice. Three credits; autumn or summer.

477, 478, 479. **SPECIAL PROBLEMS IN NURSING.** Directed, independent study in an approved area in nursing science or practicum. The student will be required to read widely on an assigned subject, follow regular research methods, and present a paper showing competence in and extent of his study. Permission from the chairman of the department required. One to three credits any quarter. Maximum, three credits. Autumn, winter, spring.

493. **SEMINAR IN NURSING.** Seminar on techniques of health education. One credit; spring.

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. For further information, see the section on Loans and Scholarships.

TUITION AND FEES

Charges include all laboratory fees, music lessons, all rentals (typewriter, piano, and organ), registration fee, Student Association, student insurance, dormitory and village clubs, and lyceum tickets.

Credit Hours	Tuition
1- 5	$ 30.00 per quarter credit
6- 9	35.00 per quarter credit
10-16	400.00 flat fee
17-20	435.00 flat fee

AUDITING. Regular tuition is charged for auditing classes.

TUTORING. Triple tuition is charged for individual tutoring.

LESS THAN SIX CREDITS. Students enrolled for less than six hours per quarter are required to pay the total tuition in advance at the time of registration. Students registering for less than six hours are not considered members of the Student Association. If they desire a *Mountain Ash*, arrangements should be made with the *Mountain Ash* office. However, they may use the library, and receive one *Collegian* subscription.

APPLICATION FEE. Students entering the College for the first time will enclose $5 with their application blank. This fee, which is paid but once and which is not refundable, covers the cost of checking grades, securing recommendations, and the making of required records. Accounts with other schools must be settled before matriculation.

SPECIAL FEES.

Advanced standing credit by examination, per quarter credit	$ 2.00
Band and orchestral instruments, per quarter	5.00

Change of program, per subject	1.00
Classes having numerous or extended field trips will be given notice of special fees to cover expenses	
Degree, Bachelor's	7.50
Degree, in absentia, Bachelor's	17.50
Degree, Master's	25.00
Degree, in absentia, Master's	35.00
Developmental reading, per quarter	25.00
Entrance tests (at academies or on campus)	5.00
Late registration	5.00
Skating per quarter	10.00
Skiing per quarter	25.00
Special examination	3.00
Transcript, first one*	free
Additional copies each	1.00

*Each student is furnished one free transcript when he graduates or withdraws from college. All other transcripts cost $1 per copy.

MUSIC FEES.

Rentals (Students taking music without credit are charged the following rentals.)

Practice room, 1-9 hours per week	7.00
Practice room, 10 hours or more per week . . .	12.00
Practice room, individual hourly basis, per hour	.50
Organ, 1-9 hours per week	18.00
Organ, 10 hours or more per week.	30.00

STATEMENTS

Tuition and room rent will be billed at the beginning of each quarter. Room rent which is billed at the beginning of the quarter must be paid in full not later than one month before the end of the quarter. Cafeteria charges are billed each month and they are due when the statement is received.

The College must operate on a cash basis, and the students will be expected to meet all financial obligations promptly.

Student statements are rendered as of the close of each month and payments are due on the 10th, and past due on the 20th day, of the following month. When settlement is not made by the 20th, the student is automatically requested to review his account with the Student Finance Counselor. In case of unforeseen circumstances, change in charges, labor plans, and general organization may be necessary during the year. 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.

DISCOUNTS

A two percent discount will be given on tuition and room rent if paid in full at the time of registration. Two hundred dollars of the tuition must be paid at that time and the balance is to be paid at least one month before

the close of the quarter. This discount applies only to the actual cash turned into the Business Office; it does not apply to scholarships, loans, grants, and awards, unless these have been received from some other organization and are on hand in the form of cash or check at the time of registration. Colporteur and camp scholarships are not entitled to the two percent discount because the College contributes a total of 12 percent to these scholarships. A 10 percent discount will be given to the parents when three or more of the single children are in attendance at the College.

REMITTANCE

Checks, drafts, and money orders should be made in favor of Walla Walla College and should be sent directly to the College Business Office. A 2 percent cash discount will be given when a minimum of one quarter's tuition is paid in advance.

REFUNDS

Within the first week of any quarter a student may drop without any charge for tuition. If a student withdraws during the first 30 days, there will be a 60 percent refund. Those dropping within the following 30 days will receive a 30 percent refund. Beyond this period there will be no refund.

Accounts with credit balance will not be refunded until 30 days after the close of the month in which the student withdraws from school. Upon proper withdrawal. tuition charges cease according to the schedule above. Students who drop school without completing withdrawal procedures will be charged until proper arrangements are made.

RELEASE OF TRANSCRIPTS OR DEGREES

By action of the Board of Trustees of the College, a degree or transcript of credit may not be released until the student's account is in balance.

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. Personal checks will be processed and a waiting period of 30 days is required to clear the bank before releases can be made.

EXAMINATION PERMITS

Examination permits are issued 15-20 days prior to quarter examinations. Students are required to have clearance cards five days before examinations are given. A $1 penalty per day will be assessed for issuance of late permits. A student whose account is overdue may not be permitted to take the final quarter examinations.

INSURANCE — ACCIDENT AND HOSPITALIZATION

Student accident and hospital insurance will be carried by the College under a blanket policy for all students. A brochure describing the coverage will be supplied to each student. Detailed information is available at the Health Center or from the Business Manager. Insurance coverage is terminated whenever a student leaves school, and a refund is made.

STUDENT HEALTH CENTER

The clinical facilities and twelve beds of the Health Center are available for students requiring treatments or minor hospitalization. Prescrip-

tions 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.

BOOKS AND SCHOOL SUPPLIES

Textbooks, stationery, gym suits and equipment, and other materials needed for school work may be obtained at the College Store at reasonable prices. *These items are to be paid for in cash at the time of purchase.* Parents should allow the student $50 to $75 extra for such purchases each quarter.

INQUIRIES

Inquiries concerning student financial matters should be directed to the Finance Counseling Office, and those concerning the academic or instructional program should be directed to the Academic Dean of the College.

RESIDENCE HALL EXPENSES

Where there is dual occupancy the room rental charges for each student per quarter are as follows:

Conard Hall	$87.00, $90.00, $93.00
Sittner Hall	$87.00, $90.00, $93.00
Clinical Division, Nurses Home	$75.00

When rooms are available, single occupancy is permitted at an extra charge of $30 per quarter. The above charges include heat, electric lights to a maximum of 200 watts, and plain laundering not to exceed $1 per week. Dormitory students should *not* bring their own laundry bags, as special bags will be provided by the College. Name tapes are *not* required on clothing sent to the College Laundry but are recommended.

ROOM RESERVATIONS. Each student residing 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 used in the College dining halls. The minimum charge for board per month is as follows:

Men	$30.00
Women	27.00
Clinical Division	20.00

AUTOMOBILE PARKING FEE. Residence hall students bringing automobiles with them will be charged a fee of $4 per quarter for parking privileges. Covered parking is available at a slightly 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.

LOANS AND SCHOLARSHIPS

Each year 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. The following loan funds are recommended:

1. **Education 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., a nationwide organization specializing in education financing.

All EFI plans include insurance on the life of the parent, total and permanent disability insurance on the parent, plus trust and administration in event of the parent's death or disability. Agreements may be written to cover all costs payable to the school over a four-year period in amounts up to $14,000.

Parents desiring further information concerning this deferred payment plan should contact the financial officer of the school or Education Funds, Inc., 10 Dorrance Street, Providence, Rhode Island 02901.

A contract can be signed with Education Funds, Inc., for one academic year with 12 monthly payments, or for other periods, such as for four academic years with payments extended over 60 months. A discount of 2 percent is allowed on the amount of the contract. Checks should be made payable to Education Funds, Inc.

a. The payments are reduced to a minimum by being spread over 12 months on a one-year contract and up to 6 months on a four-year contract.

b. The payments are equal and predetermined so accurate financial plans can be made in advance.

c. No cancellation fee is charged by Education Funds, Inc., in case of withdrawal from school.

Employed parents and bona fide sponsors are accepted without investigation by Education Funds, Inc.

2. **United Student Aid Fund.** Arrangements can be made through Walla Walla College and your local bank to obtain funds at a low rate of interest. These funds can be obtained without collateral and are repaid after graduation over an extended period of time up to 54 monthly payments. This plan may be started after one year of satisfactory college attendance.

3. **National Defense Education Loan.*** National Defense Education Loan is made available through the Federal Government and Walla Walla College. This loan may be paid after the student leaves school. Students who become teachers are accorded special consideration in repayment.

4. **National Defense Nursing Loan.*** National Defense Nursing Loan is made available through the Federal Government and Walla Walla College. This loan may be paid after the student leaves school. Students who become nurses in non-profit institutions are accorded special consideration in repayment.

---

* Applications for these loans must be received in the Student Finance Office no later than August 15, 1967.

5. **Other Loans and Scholarship Funds.** Certain individuals and organizations have made scholarship and loan funds available. The funds are as follows: Alumni Association, Student Loan Fund, Bertha Schneider Theology Student Loan Fund, Carrie Welch Student Fund, Grettner Student Loan Fund, Summer Class of 1953 Loan Fund, Worthy Student Fund, Carolyn Harding Votaw Loan Fund, and Ed F. and Clara M. Degering Research Grant and Scholarship Fund.

Freshman Scholarships. Each year the College awards a small scholarship to one student from each academy and one student from a high school in each of the conferences. These scholarships are based on high scholastic performance and need.

Graduate Fellowships. A few fellowships are available for graduate students in Biology and Education. Each fellowship consists of $900 and half tuition. Candidates applying for these should write the respective departments.

The Finance Counseling Office has full particulars regarding these loan funds and other methods of finance.

PUBLISHING HOUSE SCHOLARSHIPS

Students entering the colporteur work for the purpose of earning school expenses have two plans available. One is the payment by mail scholarship plan, and the other is the C.O.D. scholarship plan. These scholarships are to cover room, board, tuition, and other direct school expenses. Full details regarding the scholarship plans can be secured from the Publishing Secretaries of the various conferences or the North Pacific Union Conference. Some information is also available in the Finance Counseling Office. Students wishing the colporteur scholarship benefits must arrange to have the full amount of their credit forwarded to the College. They should also present the possible amount available at the time of registration which will indicate the amount of credit which they will receive from this source.

Amount of Scholarship	$550	$650	$750	$850
Scholarship Award, 30 percent	165	195	225	255
Amount for Student to Earn	385	455	525	595
Amount for Student to Deliver	770	910	1050	1190

Students wishing the colporteur scholarship benefits must arrange to have the full amount of their required credit forwarded to the College before the close of the first six weeks of school.

STUDENT LABOR

Frequently, students who lack sufficient funds to defray college expenses are given employment in some department connected with the institution. Thus, many are assisted in their efforts to secure an education. The student should not, however, expect to earn his entire expenses. Students are expected to register for at least 10 credits each quarter and are, therefore, limited in the amount earned through labor. The College Board has found it necessary to establish certain regulations concerning student labor. Full details are available from the Finance Counseling Office.

The rate paid to students will be set each period by the business manager in counsel with the heads of the departments, and will be based on

ability, industry, and faithfulness of the student. No labor credit will be honored unless the work assignment is authorized in writing by the Finance Counseling Office.

The first two or three weeks at the beginning of each school year are reserved to assign dormitory students to their labor programs. Other students will then be considered for available work opportunities.

BEQUESTS AND DONATIONS

Since it is highly important that the College Board should not be hampered by a lack of funds in its efforts to give the very best training to young people, we invite those whom God has blessed with means to remember the cause of Christian education. The College is authorized to make many types of agreements which might best fit your tax or individual situation. For complete information please contact the Business Manager. All bequests and donations should be made payable to Walla Walla College.

GRADUATES OF 1966

BACHELOR OF ARTS

Eugene Steven Amey
Melvin Wesley Bartholomew
Carolynn Blanche Bennett
Darold F. Bigger
Theodore Weldon Bohlman
Claude Edward Boyatt, Jr.
Orvis Allan Braman
W. James Burgess
Robert Lee Burns
Charles Clinton Bush
Owen Curtis Byers
Neil Arnold Cameron
LaVanna Jean Chickering
Arthur M. Christensen
John Cockburn Christison
Paul LaVerne Cole
Nancy Kay Devitt
Ellen May Dietel
Robert Grayson Dietel
H. Lorraine Dummler
George Egolf
Faiez S. Farag
John Charles Farnsworth
Elisabeth Ann Fritz
Larry Lynn Germany
Donald Dewey Grant
John Joseph Grosboll
Alan L. Harrah
Richard Henry Hart
Jack Carpenter Heisler
Jerry LeRoy Hiner
Ora Jeanette Hoel
Beryl Evonne Irwin
John Douglas Jacobson
Ralph O. Johnson
Ralph Rudy Kneller
Judith Ann Komen
Donauvin Frank Krause
Lowell Harvey Lamberton
Raymond Pei Yue Lin
Paul Edward Lindgren
Lora Lee Long
David Ray Ludden
Ronald Wilbur McDow
W. Dean Martinson
David James Masterjohn
Darrell Dean Munroe
Thomas Brian Munroe
Daryl L. Ochs
Margaret Ann Feyerabend Olmsted
Leslie Norman Palinka
Roberta Rose Palmer
Lynda Lee Randolph
Paul James Rector
Robert Leslie Reynolds
Robert L. Robinson
Robert C. Sanders
Gerald Stanley Schoepflin
Gerald Curtis Schulze
Charles Wayne Scriven
Donald James Scully
Merrill J. Shidler

Gordon Lovell Smith
Kenneth Dale Smith
Ruth Verda Smith
James Harold Stagg
Johan Bjornar Storfjell
Jack Richard Taylor, Jr.
Jesse Eudon Thomas
Halvard Bryan Thomsen
David Anthony Thornsbury
Ralph Edward Turner
Jerrold Allen Vest
Donald Michael Whittle
Gary Alan Wiss
Dale Walter Ziegele

BACHELOR OF MUSIC

Ben Wilder Eby
Norman Edwin Schwisow
Lois M. Stewart
Charles Lynn Wheeler

BACHELOR OF SCIENCE

Roberta E. Adey
Jacqueline Dawn Andersen
Phyllis Lee Brown Andrews
Merle Margaret Balharrie
Donna Jeanne Becker
Vivian Dietrich Bighaus
Linda Lee Blake
Regina Louise Blake
Richard Lee Blank
Jim Eugene Brackett
Robert Stanley Brath
Joy M. Bratvold
Barbara Carol Brown
Shirley Beth Canaday
Patricia Ann Casper
Ruth Marie Christensen
Sondra Lee Christensen
Irene Blain Clarambeau
Vernita Irene Clarambeau
Everett Edmond Clark
Teri Louise Cleveland
Mary Anne Clifford
Keith Kermit Colburn
Phyllis Eileen Collins
Lynda Ann Cook
Annette Cornforth
Roger W. Cox
Gerald Wayne Coy
Diane Laneen Creitz
Myrna Marie Dalke
Marlow W. Dawes
Douglas Grant Dietrich
Judy Anne Dolinsky
L. Elmer Duncan
Robert Joseph Eby
Jeanette Loyce Elliott
Bonita Joy Emmerson
Ruth Ann Enderson
Verland V. Erntson, Jr.
Bradley John Fanning
Sandra Elaine Featherston
William Murle Fields
Jeanne Fish
Wanda Lee Floyd
William John Ford
Paul Allen Francis
Richard Gilbert Garver
Fekede Gemechu
Carol Rose Gray
James Leroy Gregg
Barbara Ann Grubb
Bernice L. Hafner
Shirley E. Hallett
Colleen May Hamilton
Edward Vernon Hamilton
Willard Henry Hanks
Beverly Jean Hatley
Carl Evert Hendrickson
Gloria Mae Hicinbothom
Ardeth Laraine Hoewing
Deanna Lee Hopkins
David G. How
Donald Victor Howell
Bonnie Rose Humphreys
Don Cecil Humphreys
Ronald Fredrick Humphreys
Wallace Neil Ingram
Sharon Carole Jacobsen
Myrtle Wentland Jacobson
Phyllis Jean Jennings
Burton Dean Johnson
Gordon Oliver Johnson
Judith Ann Johnson
Sharon Marguerite Johnson
William Leigh Johnson, Jr.
Edwin Anthony Karlow
Robert John Karmy
Audrey Rose Klein
Edward Eugene Klein
Lorraine Esther Pearl Krause
Ruth A. Kroschel

Catherine Crookes Lambert
Edward W. Lambert
Kiem-Loan Lie
Imogene Branch Lyons
Donalda K. McCartney
David G. Miller
Carol Ann Minden
Sally Verlene Moody
Patricia Marie Moore
Robert Charles Nagele
Timothy Eldon Neufeld
LaVonne Neves
Marilyn Spaulding Norton
Donald Gilbert Oellrich
Jeanette Violet Olson
Barbara Ann Parmele
Carla Eldora Payne
Diane Jeanene Hilde Pearson
Esther Beatrice Perry
Brenda Carol Pifer
Pamela Ann Qualley
Phyllis Rehling
Ronald Ernest Rehling
Twyla Dolores Reimche
Glen Howard Reiswig
W. James Reynolds
David Rogers Rice
Rudolph Robert Rittenbach
Roger Lewis Roderick
Sandra Pauline Schultz
Nola Zoe Siegmann
Betty Jean Skeels
Beverly Jean Smith
Robert Bliss Smith
Vanoy Henry Smith
Erna Spenst
Anna Lea Stonecypher
Judith Irene Storfjell
James D. Stover
Larry Dale Strong
Lana Lee Tadej
Leona Marie Tadla
Norman C. S. Tang
Evelyn Edelle Thompson
Mary Catherine Timmons
Carlene June Traylor
Frederick Willis Troutman
Lois Mae Wade
Donald Richard Wagner
Lawrence H. Waite
Gerald Gordon Wasylyshen
John Louis Waterbrook
Lois Marie Webster
Wendell Eugene Wettstein
Sherry Lynn Wiebold
Albert Wallace Wiggins
Nell Winkle
Judy Ellen Zachrison
Wilda Carnahan Zumwalt

BACHELOR OF SCIENCE IN ENGINEERING

Dale Edward Bartholomew
Yvonne Udell Bulgin
Carlton Edward Cross
James Herbert Flower
Robert B. Griffin, Jr.
David George Heusser
John Martinsen
Wilmer Gerald Radke
Richard Shubert
John Michael Stedman

MASTER OF ARTS

Swannee Hillhouse Beck
Lynette Norma Bramlett
Forris J. Chaney
James E. Codd
Gary Lee Conner
Cardinal Keith Gibbons
Robert D. Huntsman
Philip Dave Klicker
Eric Walter Lindgren
Richard LaVerne McCluskey
Arthur Leroy Moore
Melvin Ernest Northrup
Albert Floyd Penstock
Donald R. Quackenbush
Sandra J. Ritchie
Norman L. Tunnell
David Earl VanDyke
Christine Marie Walker
Carl Roger Wilcox

INDEX

A

Academic Information 31
Acceptance, Letter of 31
Accident Insurance 152
Accreditation 1
Administration 8
Admission by Examination 33
Admission Procedure 31
Admission Requirements 32
Admission to Advanced Standing 34
Admission to Freshman Class 32
Advanced Credit from High Schools 33
Adventist Colleges Abroad 38
Advisers, Academic and Organizations 15, 16
Aims of the College 19
Andrews University 140
Application 31
Application Fee 31, 150
Applied Music 46, 126
Aptitude Tests 33
Art 54
Associated Student Fee 150
Auditing Classes 34, 150
Automobile Parking Fee 153
Automobile Registration 28

B

Bachelor of Arts Degree, Basic Requirements 43
Bachelor of Arts, Music 121
Bachelor of Music 119
Bachelor of Science Degree, Basic Requirements 44
Bachelor's Degree, Second 46
Basic Requirements for Bachelor of Arts Degree 43
Basic Requirements for Bachelor of Science Degree 46
Bequests and Donations 156
Biblical Languages 56
Biological Sciences 58
Biophysics Major 129
Board and Room, Cost of 153
Board of Trustees 8
Books and Supplies, Cost of 153
Buildings 21
Business and Economics 64

C

Calendar for 1967-68 7
Candidacy for a Degree 42
Cars, Use of Vehicles 28

Certification 70
Chapel Attendance 28
Chemistry 68
Church and Sabbath School 24
Citizenship of Students 27
Clara E. Rogers Elementary School 21
Class Attendance 38
Classification of Students 34
Clinical Division, Nursing 23
Clubs Departmental 25
Committees, Faculty 14
Comprehensive Examinations 42
Conduct 27
Correspondence Work 38
Counselors, Personal 16
Course Numbering 36
Courses Offered 42, 53
Credits Explained 35
Credits from Junior College 34
Curriculum, Change of 33

D

Deferment, Credits for Selective Service 36
Degree, Candidacy for 42
Degree Requirements 41
Degrees Offered 41
Degrees, when Conferred 46
Denominational Certification 70
Dormitories, Residence Halls 29

E

Education 70
Education, Elementary 70
Education, Master's Degree in 71
Education, Secondary 71
Elementary Teaching Major 70
Engineering 79
English 86
Entrance Requirements 32
Examination Permits 152
Examinations and Waivers 39
Expenses 150
Extension Courses 38

F

Faculty, The 9
Fee, Appliction 31, 150
Fees, Music 151
Fees, Special 150
Field School of Biology 58
Financial Information 150
Foods and Nutrition 100
French Minor 114

Freshman Orientation 33
Freshman Standing 32, 34

G

General Education, Required 41
German 115
Grade-Point Average Explained 37
Grading System 37
Graduate Study 34, 36
Graduate Study, Biology 58, 62
Graduate Study, Education 71, 75
Graduates of 1966 157
Graduation *in Absentia* 46
Graduation Record Examination 42
Graduation with Honors 38
Graphic Arts 104, 106
Greek 56

H

Health and Physical Education 89
Health Minor 89
Health Center, Student 24, 152
History 94
Home Economics 99
Home Study Institute 38
Honors, Honor Roll and *Cum Laude* 37
Housing 23, 24
Hyphens in Course Numbers 36

I

Industrial Education 104
Industrial Superintendents 17
Interior Design and Decoration 99

J

Journalism 110
Junior College Credits 34
Junior Standing 34

L

Languages, Modern 114
Late Application 31
Late Registration 35
Leaving Campus 29
Letter of Acceptance 31
Library 22
Library Methods and Administration 127
Load of Study and Work 35
Loan Funds 154
Loans and Scholarships 154

M

Majors 41
Marine Biological Station 23, 58
Master of Arts, Biology 58

Master of Education 70, 71
Mathematics 112
Medical Examination 32
Methods Course, General in all departments 74
Minors 41
Modern Languages 114
Music 119
Music Credit Allowed on Degree 46
Music Fee 151
Music Major 119
Music Minor 122

N

Non-Departmental 127
Numbering of Courses 36
Nursing, Courses Required 146
Nursing, Entrance Requirements 32, 146
Nursing, School of 145

O

Organ Rentals 151
Organ, See Music 119
Organizations, Student 25
Orientation, Freshman 33

P

Payments 150
Parking Fees 153
Physical Education 22, 24, 89
Physical Examination 32, 34
Physics 128
Pledge of Cooperation 29
Pledge, Students 29, 31
Political Science 96
Portland Sanitarium and Hospital 23
Preprofessional Curriculums 47
Printing, Graphic Arts 104
Probation, Scholastic 37
Provisional Admission, Special 33
Psychology Tests 33

R

Recreation Courses 93
Refunds 152
Registration 35
Registration, Changes in 35
Religion, General Requirements 44, 45
Religion, Theology 140
Religious Activities 24
Remittance, Payments 152
Repeat Courses 37
Reregistration 35
Residence, for Graduation 42
Residence for Students 29

Residence Hall Expenses 153
Residence Required of Unmarried 29
Rogers Elementary School, Supervisory Instructors 18
Room Reservation and Cost 153
Rooms Available 29
Rooms, Care of 29

S

Sabbath Observance 28
Scholarship Plan 154, 155
Scholarships and Loans 155
Scholastic Probation 37
Secretarial Science 133
Selective Service, Credits for 36
Senior Class Membership and Fee 43
Senior Standing 34
Seventh-day Adventists 19
Social Standards 28
Sociology 97
Sophomore Standing 34
Spanish 116
Speech 136
Sports, Intramural 29
Statistics, Course 63, 66, 77
Student Health Center 23, 152
Student Organizations 24, 25
Study and Work Loads 36
Supervisory Instructors, Rogers Elementary School 18
Swimming Pool 24

T

Teacher Certification 70
Terminal Courses 38, 105
Theology, School of 140
Transcripts 31, 39, 152
Transient Students 33
Tuition and Fees 150

U

Upper-Division Credits, Requirements 36, 41, 53
Upper-Division Credits, Sophomores 36
Upper-Division Numbers 36

V

Vehicles, Use of 28
Vocational and Technical Programs 38
Vocational Arts 104
Vocational Superintendents 17

W

Waivers 39
Withdrawals 35
Work Load 35, 36
Work, Student 155
Worship, Attendance 29

THE IDEAL TEACHER IS ONE

WHO LOVES

HIS STUDENTS ABOVE HIS SUBJECT

BUT TEACHES BOTH WITH

EQUAL SKILL AND CONCERN.



WALLA WALLA COLLEGE LIBRARY
3 1892 00220 5915

9000 COLLEGE PRESS LITHO 99324 U.S.A.

CKED ALCOVE

1892 - 1967

SEVENTY-FIVE

YEARS

OF SERVICE



A

CHRISTIAN

LIBERAL ARTS

COLLEGE