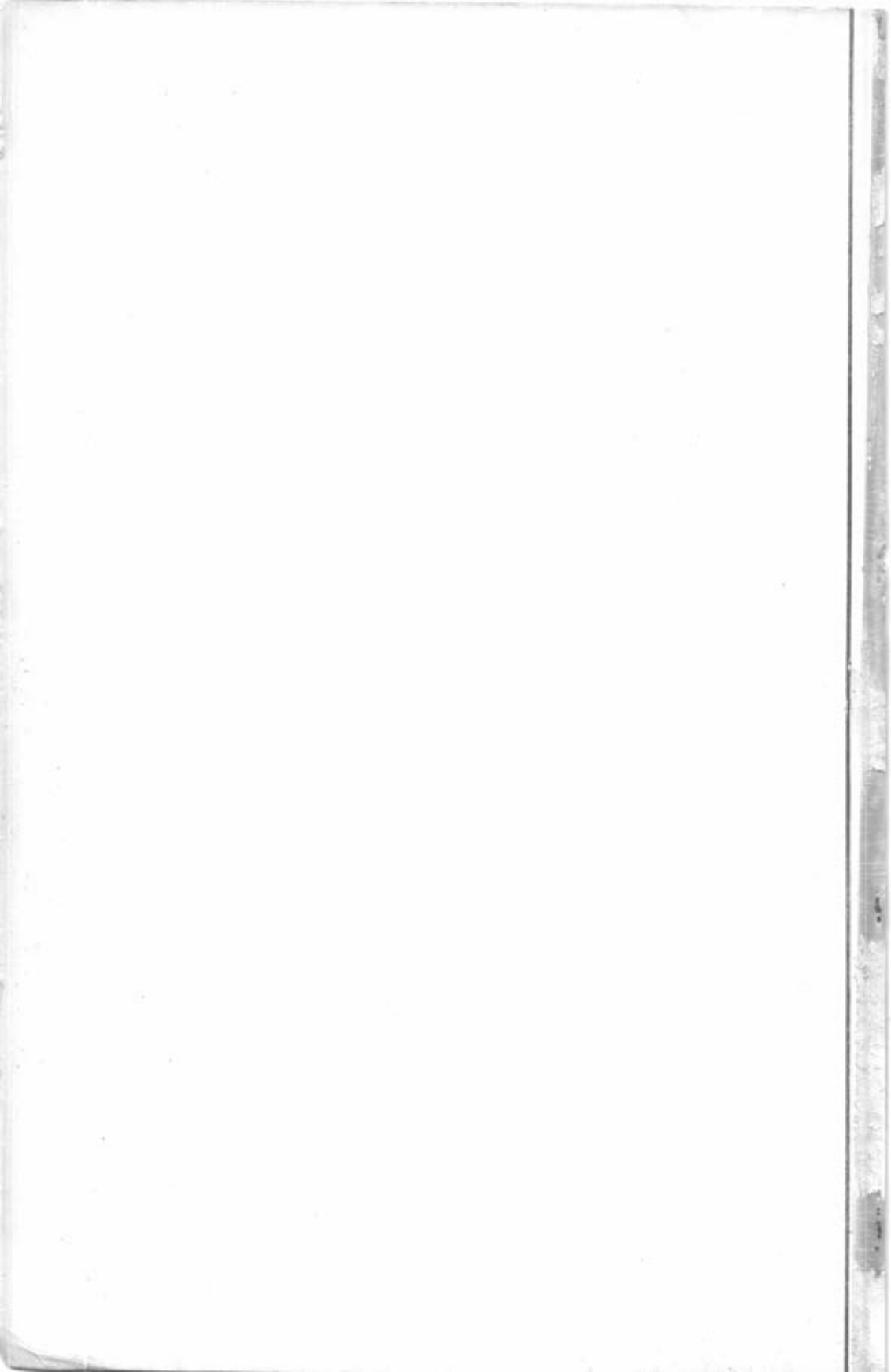


*western
washington
college
bulletin*

**GENERAL
CATALOGUE**



1960 • 1961



General Catalogue

1960 - 1961

**WESTERN WASHINGTON
College of Education**

bellingham, washington

JUNE, 1960

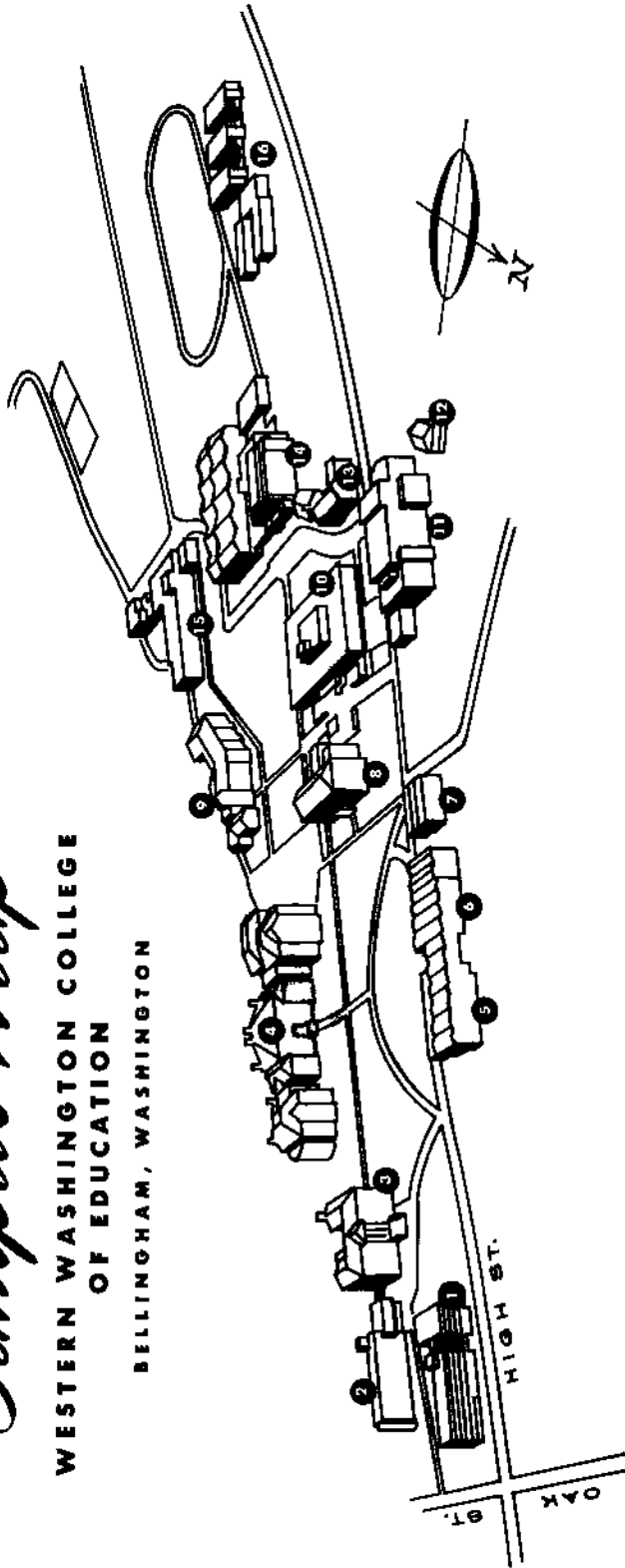
Record for 1959 - 1960

Announcements for 1960 - 1961

Campus Map

WESTERN WASHINGTON COLLEGE
OF EDUCATION

BELLINGHAM, WASHINGTON



LEGEND

- | | | |
|------------------------|-------------------------------|----------------------------|
| 1. Edens Hall West | 9. Campus School | 13. Women's Residence Hall |
| 2. Edens Hall North | 10. Haggard Hall of Science | 14. Gymnasium |
| 3. Edens Hall South | 11. Auditorium-Music Building | 15. Arts Building |
| 4. Old Main | 12. President's Home | 16. Highland Hall |
| 5. Central Dining Hall | | |
| 6. Viking Union | | |
| 7. Book Store | | |
| 8. Library | | |

Table of Contents

Campus Map.....	2
College Calendar—1960-1961.....	4
Directions for Correspondence.....	6
ORGANIZATION AND PERSONNEL	
Governing Boards.....	7
Administration	8
The Faculty, 1959-1960.....	8
The Faculty—New Appointments, 1960-1961.....	22
THE COLLEGE	
History and Development.....	25
Buildings and Facilities.....	26
Objectives of the College.....	27
Program of the College.....	29
THE STUDENT	
Admission	31
Academic Regulations.....	34
Student Living.....	41
Student Activities and Organizations.....	44
Student Finances.....	50
Student Personnel Services.....	57
THE PROGRAM OF INSTRUCTION	
Teacher Education.....	61
Arts and Sciences.....	78
Junior College Studies.....	81
Special Departments and Services.....	82
ACADEMIC DEPARTMENTS, COURSES, and CONCENTRATIONS	
Interdepartmental	85
Art	96
Biology	102
Economics, Business, and Government.....	107
English	116
Foreign Languages.....	124
Geography	128
Geology	132
History	135
Home Economics.....	139
Industrial Arts.....	145
Library Science.....	151
Mathematics	153
Music	158
Philosophy	164
Physical Education, Health Education, and Recreation.....	166
Physics and Chemistry.....	177
Psychology	182
Sociology-Anthropology	186
Speech	190
Professional Education.....	196

WESTERN WASHINGTON COLLEGE BULLETIN

Volume LVI

June, 1960

Number 1

Published in June, October, December, April. Entered as second class matter at the post office in Bellingham, Washington, under the Act of August 4, 1912.

1960

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

1961

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				

college

Fall Quarter, 1960

- September 1, Last day for admission application
- September 21, Wednesday, 8:30 a. m.
New faculty orientation
- September 22, Thursday, 1:30 p. m.
General faculty meeting
- September 25, Sunday, 7:30 p. m.
Convocation for new freshmen
- September 28, Wednesday, 8:00 a. m.-
4:00 p. m.,
Enrollment of returning students
- September 29, Thursday, 8:00 a. m.,
Classes begin
- October 5, Wednesday,
Final day of enrollment
- October 28 and 29, Friday and Saturday,
Homecoming
- November 11, Friday,
Veterans' Day (Holiday)
- November 23, Wednesday, 12:00 noon-
November 28, Monday, 8:00 a. m.,
Thanksgiving recess
- December 13, Tuesday,
Final examinations begin
- December 16, Friday, 3:00 p. m.
Quarter ends

Winter Quarter, 1961

- January 2, Monday, 2:00 p.m.
Dormitories open
- January 3, Tuesday, 8:00 a. m.,
Registration
- January 4, Wednesday, 8:00 a. m.,
Classes begin
- January 10, Tuesday,
Final day of enrollment
- February 22, Wednesday
Washington's Birthday (holiday)
- March 14, Tuesday,
Final examinations begin
- March 17, Friday, 3:00 p. m.,
Quarter ends

calendar

Spring Quarter, 1961

March 27, Monday, 8:00 a.m.

Registration Day

March 28, Tuesday, 8:00 a.m.

Classes begin

April 3, Monday

Final day of enrollment

May 30, Tuesday

Memorial Day (Holiday)

June 4, Sunday

Baccalaureate

June 5, Monday,

Final examinations begin

June 8, Thursday, 3:00 p.m.

Quarter ends

June 9, Friday,

Commencement

Summer Quarter, 1961

June 19, Monday

Registration Day

June 20, Tuesday, 7:30 a.m.

Classes begin

July 4, Tuesday

Independence Day (Holiday)

July 28, Friday

End of six-week session

August 18, Friday, 5:00 p.m.

Quarter ends

1961						
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		

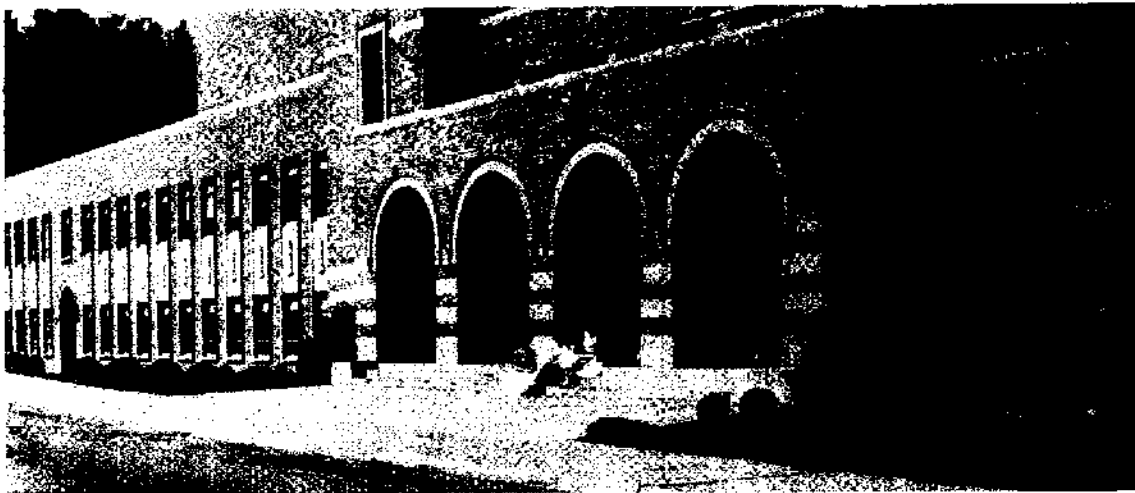
Directions for Correspondence

Inquiries should be addressed to the offices named below:

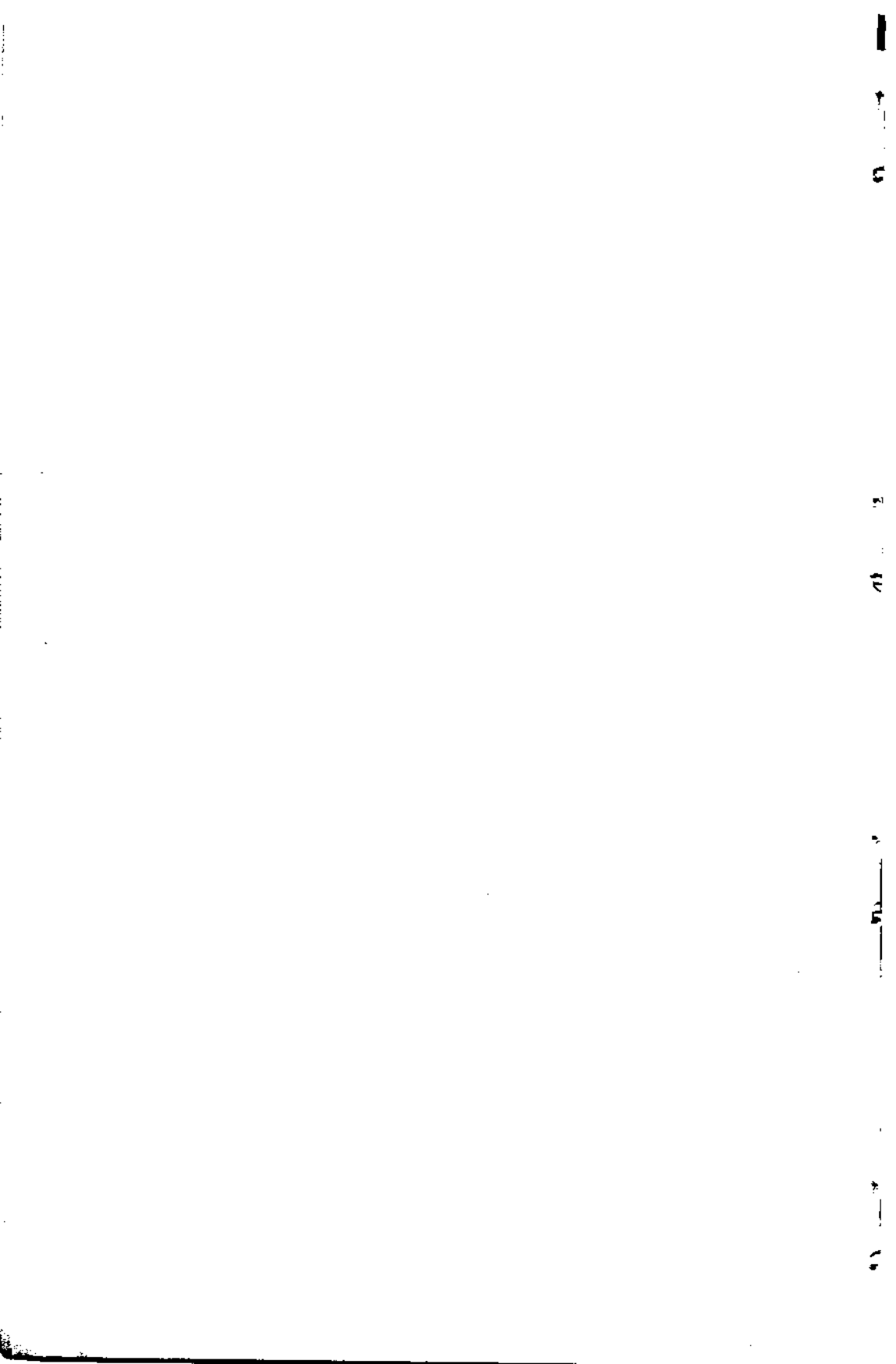
GENERAL POLICY OF THE COLLEGE.....The President
GENERAL INFORMATION.....The Dean of Students
ADMISSION
 Undergraduate.....Admissions Officer
 Graduate.....Director of Graduate Studies
TRANSCRIPTS OF RECORD AND ACADEMIC REPORTS.....Registrar
EXTENSION COURSES.....Coordinator of Extension
CORRESPONDENCE COURSES.....Office of Correspondence Study
HOUSING AND RESIDENCE HALL ASSIGNMENTS.....
 Dean of Men or Dean of Women
SCHOLARSHIPS AND AWARDS.....The Dean of Students
LOANS.....The Dean of Men
PART-TIME EMPLOYMENT.....The Dean of Men
PLACEMENT OF GRADUATES.....Director of the Placement Office
ALUMNI AFFAIRS.....Director of Alumni Services
THE CAMPUS SCHOOL AND STUDENT TEACHING ASSIGNMENTS
 Director, Campus School
FEES OR BUSINESS MATTERS.....The Comptroller



Organization and Personnel



Auditorium-Music Building



Governing Boards, 1959 - 1960

Board of Trustees

JOSEPH T. PEMBERTON.....	Bellingham
Term ends June, 1963	
MARSHALL FORREST.....	Bellingham
Term ends June, 1961	
DAVID G. SPRAGUE.....	Seattle
Term ends June, 1963	
BERNICE M. HALL.....	Bellingham
Term ends June, 1963	
STEPHEN CHASE.....	Everett
Term ends June, 1965	

State Board of Education

LLOYD J. ANDREWS, President Ex-Officio.....	Olympia
WILLIAM P. BOWIE.....	Kirkland
Term ends January, 1963	
FRANK S. EMERT.....	Omak
Term ends January, 1965	
JAMES F. HODGES.....	Winslow
Term ends January, 1961	
MARK E. HOEHNE.....	Longview
Term ends January, 1966	
STANLEY M. LITTLE, JR.....	Seattle
Term ends January, 1964	
FRANK M. LOCKERBY.....	Tacoma
Term ends January, 1966	
WILLIAM M. LEUBKE.....	Chehalis
Term ends January, 1963	
OWEN H. PATTERSON.....	Bremerton
Term ends January, 1961	
HERMAN R. PRAETORIUS.....	Tieton
Term ends January, 1964	
MRS. HELEN RADKE.....	Port Angeles
Term ends January, 1962	
T. G. REAMES.....	Spokane
Term ends January, 1962	
JOHN N. RUPP.....	Seattle
Term ends January, 1964	
PAUL SLUSSER.....	Pullman
Term ends January, 1961	
ROBERT R. WALTZ.....	Snohomish
Term ends January, 1965	

Administrative Officers, 1959-1960

JAMES L. JARRETT, Ph.D.....	President
MERLE S. KUDER, Ph.D.....	Dean of Students and Coordinator of Instruction
J. ALAN ROSS, Ph.D.....	Dean of Summer Session, Director of Graduate Studies
MELVIN A. ALLAN, Ed.M.....	Director of Placement and Alumni Services
S. J. BUCHANAN.....	Comptroller
DOROTHY BUTTON, Ed.M.....	Assistant Registrar
DONALD A. FERRIS, M.A.....	Registrar and Coordinator of Extension
HAROLD A. GOLTZ, M.A.....	Director of Student Activities
RAYMOND F. HAWK, Ph.D.....	Director of the Campus School and Student Teaching
C. W. McDONALD, M.A.....	Dean of Men
WILLIAM J. O'NEIL, Ed.M.....	Admissions Officer
LORRAINE POWERS, M.A.....	Dean of Women

* * * *

Psychological Services and Research Staff

MAURICE F. FREEHILL, Ed.D., Director
WILLIAM C. BUDD, Ph.D.
FRED M. DeBRULER, M.A.
WILLIAM A. HALL, M.D.

Library Staff

MILDRED HERRICK, M.A. in L.S., Librarian
HERBERT R. HEARSEY, M.S. in L.S.
DOROTHY C. HILL, M.A. in L.S.
MIRIAM S. MATHES, M.S.
C. RALPH MORSE, M.A.
ELLEN M. SIEGWARTH, M.L.S.
RUTH SPEARIN, B.A.

The Faculty — 1959 - 1960

Emeriti

- WILLIAM WADE HAGGARD.....President Emeritus of the College
B.A., Maryville College; M.A., University of Michigan; Ph.D., University of Chicago;
Ed.D. (Honorary), Maryville College.
- MAY LOVEGREN BETTMAN.....Instructor Emeritus in Commercial Studies
Vashon College; Washington State University; Western Michigan College of Education,
Kalamazoo; Western Washington College of Education.
- S. E. CARVER.....Associate Professor Emeritus of Physical Education
B.A., Stanford University; M.A., University of Iowa; University of California; University
of Oregon.
- LINDA COUNTRYMAN....Associate Professor Emeritus of Home Economics
B.S., Milwaukee-Downer College; Teachers College, Columbia University; University
of Chicago.
- NORA B. CUMMINS.....Professor Emeritus of Political Science and History
B.A., University of Minnesota; M.A., Columbia University; Northern Normal and
Industrial School.
- GEORGIA P. GRAGG.....Instructor Emeritus of Commercial Studies and
Handwriting
Western Washington College of Education; A.N., Palmer School of Penmanship.
- THOMAS F. HUNT.....Associate Professor Emeritus of Geography
B.A., University of Minnesota; M.A., Clark University; University of Chicago; University
of California.
- PRISCILLA KINSMAN.....Assistant Professor Emeritus of Education
Ph.B., University of Chicago; M.A., Teachers College, Columbia University; University
of Washington.
- IRVING E. MILLER.....Professor Emeritus of Education
B.A., University of Rochester; M.A., Ph.D., University of Chicago.
- ANNA ULLIN.....Assistant Professor Emeritus of Foreign Languages
B.A., University of Washington; M.A., Teachers College, Columbia University; Certificate,
Sorbonne, Paris; Oxford; University of Mexico.
- MABEL ZOE WILSON.....Professor Emeritus, Librarian
B.A., Ohio University; B.L.S., New York State School of Library Science.

NOTE: Date in parenthesis indicates year of initial service with the College.

- HENRY L. ADAMS (1957).....Associate Professor of Psychology
B.A., M.A., University of Kentucky; University of Illinois.
- MARGARET AITKEN (1946)Associate Professor of Physical Education
B.A., University of Washington; M.A., Ed.D., Teachers College, Columbia University.
- MELVIN A. ALLAN (1953).....Associate Professor of Education;
Director of Placement
and Alumni Services
B.A., University of Washington; Ed.M., Western Washington College of Education;
University of Washington.
- ANGELO ANASTASIO (1955).....Assistant Professor of Sociology
A.A., Boston University; M.A., Ph.D., University of Chicago.
- EDWARD J. ARNTZEN (1924).....Professor of History
B.A., University of Washington; M.A., Columbia University; University of Washington;
Columbia University.
- LELA ATTEBERRY.....Acting Instructor in Art
B.S.Ed., Southwest Missouri State College; M.A., University of Missouri.
- P. H. ATTEBERRY (1954).....Professor of Industrial Arts
B.S., Kansas State Teachers College, Pittsburg; M.S., Ed.D., University of Missouri.
- DECLAN BARRON (1946).....Associate Professor of Biological Science
B.A. in Ed., Western Washington College of Education; M.A., Yale University;
Stanford University.
- MARION BESSERMAN (1952).....Associate Professor of Chemistry
B.S., University of Washington; M.S., Purdue University; Ph.D., University of Wash-
ington.
- EDNA BIANCHI.....(Affiliated), Voice
Graduate of the Molajoli School of Bel Canto, Milan, Italy; Artist-teacher in New
York for fifteen years.
- DON F. BLOOD (1951).....Associate Professor of Psychology
B.A. in Ed., Central Washington College of Education; M.A., Ph.D., State University
of Iowa.
- MIRA E. BOOTH (1935).....Assistant Professor of Music
B.A., University of Washington; M.A., Teachers College, Columbia University; Uni-
versity of Southern California.
- RONALD BOYCE (1959).....Acting Instructor of Geography
B.S., M.S., University of Utah.
- BERNARD L. BOYLAN (1956).....*Associate Professor of History
B.A., M.A., University of Washington; Ph.D., University of Missouri.

*Rank effective July 1, 1960.

- LAURENCE W. BREWSTER (1948).....Associate Professor of Speech
B.A., Yankton College; M.A., Ph.D., State University of Iowa.
- CLARK C. BROWN (1956).....Assistant Professor of Education
B.A. in Ed., Western Washington College of Education; M.A., Columbia University.
- DON W. BROWN (1954).....Associate Professor of Education
B.S., M.A., University of Nebraska; Ed.D., Colorado State College.
- WILLARD A. BROWN (1956).....Instructor of Education
B.S., University of Washington; M.A., in Teaching (Physical Science), Washington State University.
- WILLIAM C. BUDD (1953).....Associate Professor of Psychology
and Assistant Director of Psychological Services and Research
B.A., Hamline University; B.S., M.A., Ph.D., University of Minnesota.
- DOROTHY BUTTON (1955).....Assistant Professor of Education;
Assistant Registrar
B.A., University of California; University of Washington; Ed.M., Western Washington College of Education
- DON F. BUTTRICK (1959).....Assistant Professor of History
B.A., M.A., Ph.D., University of California.
- DONALD J. CALL (1958).....Instructor of Sociology
B.A., M.A., University of Oregon.
- SENE R. CARLILE (1947).....Professor of Speech
B.A., B.S., Fort Hays Kansas State College; M.A., Colorado State College; Ph.D., University of Wisconsin.
- KATHERINE M. CARROLL (1958).....*Associate Professor of Education
B.S., Salem Teachers College; Ed.M., Ed.D., Boston University; Harvard University.
- KATHERINE M. CASANOVA (1932).....Associate Professor of Education
B.S., M.A., Teachers College, Columbia University; Stanford University; University of Washington.
- MOYLE F. CEDERSTROM (1935).....Professor of English
B.A., M.A., University of Minnesota; Ph.D., University of Washington.
- EDNA CHANNER (1940).....Associate Professor of Industrial Arts
B.A., M.A., University of Washington; Oregon State College.
- ELEANOR CHESAREK (1957).....Assistant Professor of Music
M.M., University of Southern California.
- RAYMOND A. CISZEK (1948).....*Associate Professor of Physical Education
B.S., M.S., University of Illinois; Ed.D., Boston University.

*Rank effective July 1, 1960.

- KENNETH A. CLOUD.....(Affiliated), Trombone, Trumpet
B.A., Mus. Ed., University of Washington. First Trombone, Seattle Symphony since 1939; Trombone instructor at the University of Washington and Seattle Pacific College.
- GERALD COHEN (1959).....Assistant Professor of English and French
B.A., Brooklyn College; Ph.D., University of Washington.
- HOWARD J. CRITCHFIELD (1951).....Professor of Geography
B.A., M.A., Ph.D., University of Washington.
- FRANK L. D'ANDREA (1945).....Professor of Music
B.S., M.A., New College, Teachers College, Columbia University; Royal Academy of Music; and Mary Datchlor School, London, England; Ed.D., Teachers College, Columbia University.
- FRED M. DeBRULER (1959).....Assistant Professor of Psychology
B.A., Western Washington College of Education; M.A., Teachers College, Columbia University; University of Texas; Stanford University.
- †WILLIAM J. DITTRICH (1951).....Assistant Professor of Physics
B.S., M.S., University of Washington.
- DON J. EASTERBROOK (1959).....Instructor of Geology
B.S., M.S., University of Washington.
- LOWELL P. EDDY (1957).....Assistant Professor of Chemistry
B.S., M.S., Oregon State College; Ph.D., Purdue University.
- WILLIAM E. ELMENDORF (1958).....Instructor of Russian and Spanish
B.S., University of Puget Sound; M.A., University of Washington.
- DONALD A. FERRIS (1947).....Associate Professor of Education;
Registrar and Coordinator of Extension
B.A., M.A., University of Washington; Teachers College, Columbia University; Colorado State College.
- MARK W. FLANDERS (1952).....Assistant Professor of Speech
B.A., Iowa State Teachers College; M.A., State University of Iowa.
- CHARLES J. FLORA (1957).....Assistant Professor of Zoology
B.A., Purdue University; M. Ed., Ed.D., University of Florida.
- IONE A. FOSS (1957).....Instructor of Art
B.S., M.A.A., Montana State College; University of Washington
- MAURICE F. FREEHILL (1948).....Professor of Psychology
B.Ed., University of Alberta, Canada; M.A., Ed.D., Stanford University.

†Leave of Absence, 1959-60.

-
- HARVEY M. GELDER (1948).....Associate Professor of Mathematics
B.A., Colorado State College; M.A., University of Missouri; University of Washington;
University of Chicago.
- GEORGE GERHARD (1959).....Instructor of Psychology
B.S., M.S., University of Oregon.
- JEROME GLASS (1955).....Assistant Professor of Music
B.S., New York University; M. Mus., University of Southern California.
- HAROLD A. GOLTZ (1957).....Assistant Professor of Education and
Director of Student Activities
B.A., Macolester College; M.A., University of Minnesota.
- ELIZABETH GREGORY (1948).....Acting Instructor of Education
B.A. in Ed., Western Washington College of Education.
- WILLIAM A. GREGORY, JR. (1957).....Assistant Professor of Speech
B.S., Central Michigan College; M.A., Michigan State University; Ph.D., University
of Minnesota.
- BYRON E. HAGLUND (1956).....Assistant Professor of Economics
B.B.A., M.A., University of Minnesota; C.P.A., Washington, D.C.; and State of
Washington.
- IRWIN A. HAMMER (1945).....Professor of Education
University of Toulouse, Toulouse, France; B.A., Park College; M.A., University of
Colorado; University of Minnesota; University of Chicago; Ed.D., Teachers College,
Columbia University.
- J. VIGGO HANSEN (1959).....Instructor of English
B.A., Oberlin College; M.A., University of Colorado.
- CHARLES W. HARWOOD (1953).....Associate Professor of Psychology
B.S., M.S., Ph.D., University of Washington.
- JOHN C. HAUSER (1957).....Instructor of Industrial Arts
B.A., Iowa State Teachers College; M.A., Colorado State College.
- RAYMOND F. HAWK (1945).....Professor of Education; Director of
the Campus School and Student Teaching
B.A., DePauw University; M.A., Stanford University; Ph.D., Washington State
University.
- HERBERT R. HEARSEY (1941).....Associate Professor of Library Science;
Reference Librarian
B.A., Ed.M., Tufts College; B.S. in Library Science; M.A. in Library Science, Univer-
sity of Illinois.
- EARL R. HEPLER (1957).....Assistant Professor of Industrial Arts
B.S., M.S., Kansas State Teachers College; Ed.D., University of Missouri.

- PAUL E. HERBOLD (1952).....Associate Professor of Speech
B.A. in Ed., Western Washington College of Education; M.A., University of Washington; Ph.D., University of Minnesota.
- MILDRED HERRICK (1945) Associate Professor of Library Science; Librarian
B.A., Michigan State Normal College; B.A. in L.S., M.A. in L.S., University of Michigan
- ARTHUR HICKS (1933).....Professor of English
B.A., M.A., University of Oregon; Ph.D., Stanford University.
- JAMES L. HILDEBRAND (1952).....Associate Professor of Mathematics
B.A., M.A., North Texas State College; University of Iowa; Columbia University; University of Washington.
- DOROTHY C. HILL (1958).....Instructor of Library Science;
Catalogue Librarian
B.A., University of Kentucky; M.A. in L.S., University of Michigan.
- HARLEY E. HILLER (1957).....Assistant Professor of History
B.A., Westmar College; M.A., University of Minnesota.
- MABEL HODGES (1957).....*Assistant Professor of Education
B.E., Western Illinois State University; M.A., Washington State University.
- ANNIS J. HOVDE (1948).....Assistant Professor of English
B.A., M.A., University of Washington; Stanford University.
- JACKSON M. HUBBARD (1955).....Instructor of Physical Education
B.A. in Ed., Ed.M., Central Washington College of Education.
- RUTH HULL (1957).....Instructor of Physical Education
B.S., University of Texas; M.S., University of Wisconsin.
- LESLIE HUNT (1942).....Assistant Professor of English
B.A. in Ed., Western Washington College of Education; M.A., Teachers College, Columbia University; University of Washington.
- ALICE I. G. IMHOFF (1957).....Instructor of Art
University of Nebraska; B.S. Oregon College of Education; M.A. Columbia University; University of Washington.
- JAMES L. JARRETT (1959).....Professor of Philosophy and
President of the College
B.S., M.S., University of Utah; Ph.D., University of Michigan.
- VIVIAN JOHNSON (1941).....Associate Professor of Education
B.A., M.A., University of Washington; Teachers College, Columbia University.

*Rank effective July 1, 1960.

- ELVET G. JONES (1957).....Assistant Professor of Psychology
B.A., M.A., University of British Columbia; Ph.D., University of Minnesota.
- HENRY W. JONES (1958).....Assistant Professor of Education
B.S., North Dakota Agricultural College; M.S., University of Wisconsin; Ed.D., University of California, Los Angeles.
- LUCY KANGLEY (1928).....Professor of English
B.A., M.A., University of Washington; Ph.D., Columbia University; Cambridge University; University of London; University of Minnesota; University of Colorado.
- HALLDOR C. KARASON (1949).....Assistant Professor of Philosophy
B.A. in Ed., Western Washington College of Education; M.A., University of Washington.
- RUTH KELSEY (1948).....Associate Professor of Art
B.A., Washington State University; University of Oregon; M.A., University of California, Berkeley; University of Washington.
- EMELIA LOUISE KILBY (1956)....*Associate Professor of Physical Education
B.S., The Mary Washington College of the University of Virginia; M.A., New York University; Ph.D., University of Washington.
- ELEANOR KING (1953).....Associate Professor of French and German
B.A., University of British Columbia; M.A., University of Toronto; University of Munich, Germany; Ph.D., University of Wisconsin.
- FLORENCE J. KIRKPATRICK (1925).....Associate Professor of
Biological Science
B.S., University of Washington; M.A., Mills College; University of California.
- FRED W. KNAPMAN (1942).....Professor of Chemistry
B.A., Western Washington College of Education; M.Sc., University of Washington; Ed.D., Teachers College, Columbia University; Post-doctoral, University of Washington.
- MERLE S. KUDER (1937).....Professor of Education and Psychology
Dean of Students and Coordinator of Instruction
B.A., University of Arizona; M.A., Ph.D., Teachers College, Columbia University.
- JOHN A. KULBITSKI (1954).....Assistant Professor of Physical Education
B.S., M.Ed., University of Minnesota.
- M. ALICE MILES LACOCK (1959).....Acting Instructor of Education
B.S., Oregon College of Education.
- ARNOLD M. LAHTI (1955).....Associate Professor of Physical Science
B.A., B.A. in Ed., Western Washington College of Education; Ph.D., University of Minnesota.

*Rank effective July 1, 1960.

- GEORGE LAMB (1958).....Instructor of Education
B.A., Macalester College; M.A., University of Washington.
- CHARLES F. LAPPENBUSCH (1933).....Associate Professor of
Physical Education and Director of Athletics
B.S., M.A., University of Washington; Whitworth College, Boston University, University of Washington.
- EDITH B. LARRABEE (1957).....Instructor of Home Economics
B.S., East Texas State College; M.A., Colorado State College.
- GOLDEN L. LARSEN (1956).....Assistant Professor of English
B.S., M.A., Utah State University; University of Washington.
- EUNICE DAY LEE (1959).....Associate Professor of French and Spanish
B.A., Howard University; M.A., Catholic University of America.
- FREDERICK M. LISTER (1954).....Assistant Professor of Mathematics
B.S., Tufts College; M.A., University of Michigan.
- JAMES R. LOUNSBERRY (1959) *Associate Professor of Physical Education
B.A., Central Washington College of Education; M.S., University of Washington.
- CLYDE W. McDONALD (1946)....Associate Professor of Physical Education
and Dean of Men
B.A., M.S., University of Washington.
- DAVID McDONALD (1948) Associate Professor of Education and Director
of Audio-Visual Center
B.A., Bethany College; M.A., University of Southern California; Ed.D., University of Oregon.
- RUBY D. McINNES (1948).....Assistant Professor of Education
B.A., University of Washington; M.A., Teachers College, Columbia University.
- DAVID F. MARSH.....*Assistant Professor of Art
B.A., Central Washington College of Education; M.S., University of Oregon; Fresno State College; University of Washington.
- JAMES S. MARTIN (1955).....Associate Professor of Botany
B.S., M.S., Ph.D., University of Washington.
- EVELYN P. MASON (1959).....Lecturer in Psychology
B.A., Mills College; M.A., Ph.D., Washington University, St. Louis, Missouri.
- MIRIAM S. MATHES (1934).....Associate Professor, and Librarian of
Children's Literature
B.A., New York College for Teachers, Albany; M.A., Teachers College, Columbia University; B.S., M.S., School of Library Service, Columbia University.

*Rank effective July 1, 1960.

- ERWIN S. MAYER (1953).....Associate Professor of Economics
B.A., Hunter College; Ph.D., University of Washington.
- RODNEY M. MERCADO (1959).....Assistant Professor of Music
A.B., University of California at Los Angeles; M.M., University of Southern California.
- SYDNEY MENDEL (1959).....Instructor of English
B.A., M.A., Cambridge University; University of California.
- CHARLES E. MILLER (1959).....Assistant Professor of Education
B.S. in Ed., Eastern Oregon College; B.S., M.Ed., University of Oregon; Teachers
College, Columbia University.
- ELBERT E. MILLER (1957).....Associate Professor of Geography
B.A., Central Washington College of Education; University of Nebraska; M.A., Ph.D.,
University of Washington.
- HOWARD E. MITCHELL (1955).....Assistant Professor of Economics
B.A., Whitworth College; M.A., Ph.D., University of Washington.
- MERIBETH J. MITCHELL (1957).....Assistant Professor of Biology
B.S., M.S., Northwestern University; University of Minnesota; Ph.D., Washington
State University.
- RALPH A. MOLLISON (1959).....Instructor of Physics
B.S., M.S., Ohio University.
- ROBERT L. MONAHAN (1955).....*Associate Professor of Geography
B.A., University of Washington; M.A., University of Michigan; Ph.D., McGill University.
- C. RALPH MORSE (1955).....Instructor and Circulation Librarian
B.A., M.A., Kansas State Teachers College, Emporia; University of Washington.
- KEITH A. MURRAY (1946).....Professor of History
B.A., Whitworth College; M.A., Ph.D., University of Washington.
- FRANK W. NEUBER (1957).....Assistant Professor of Government
B.A., Beloit College; M.A., University of Illinois; Ph.D., University of Oregon.
- EDWARD F. NEUZIL (1959).....Assistant Professor of Chemistry
B.S., North Dakota State College; M.S., Purdue University; Ph.D., University of
Washington.
- SYNVA K. NICOL (1937).....Assistant Professor of Education
B.A., Fresno State College; M.A., Teachers College, Columbia University; University
of California.
- JAMES H. O'BRIEN (1946).....Associate Professor of English
B.A., Seattle University; M.A., University of Washington; University College, Dublin
Ireland; Ph.D., University of Washington.

*Rank effective July 1, 1960.

- EVELYN ODOM (1936).....Associate Professor of English
B.A., Winthrop College; M.A., Teachers College, Columbia University; University of Washington, University of Minnesota.
- WILLIAM J. O'NEIL (1950).....Assistant Professor of Education and Admissions Officer
B.A. in Ed., Ed.M., Western Washington College of Education; Washington State University.
- MARIE B. PABST (1948).....Associate Professor of Geology; Curator of the Science Museum
B.S., University of Minnesota; University of Chicago; Northwestern University; M.A., University of California.
- FREDERICK PALMER.....(Affiliated), Cello
Student of Alexanian and Casals; former member of New York Philharmonic Orchestra.
- HAROLD O. PALMER (1956).....Associate Professor of Business Education
B.A., College of Emporia, Kansas; Ed.M., University of Oregon; Ed.D., Oregon State College.
- MIRIAM L. PECK (1946).....Associate Professor of Art
B.A., M.A., M.F.A., University of Washington; Cranbrook Academy of Art
- RUTH E. PLATT (1927).....Associate Professor of Zoology
B.S., M.S., University of Washington; University of California.
- HAZEL JEAN PLYMPTON (1926).....Associate Professor of Art
Ph.B., University of Chicago; M.A., Teachers College, Columbia University; Reed College; Portland School of Art.
- V. EMERSON POTTER (1958).....Acting Assistant Professor of English
B.A., University of Washington.
- ANNALENE POWER.....Acting Instructor of Education
B.A., Fresno State College, Fresno, California.
- LORRAINE POWERS (1941).....Associate Professor of Mathematics and Dean of Women
B.A., University of Wisconsin; M.A., State University of Iowa; University of Washington.
- FRANK N. PUNCHES (1948).....Associate Professor of Education
B.A., University of Washington; M.A., Washington State University.
- AUGUST RADKE (1953).....Associate Professor of History
B.A., M.A., Ph.D., University of Washington.
- DOROTHY RAMSLAND.....Associate Professor of Home Economics
Luther College; B.S., University of Wisconsin; M.S., Michigan State University.

- BERNARD W. REGIER (1945).....Associate Professor of Music
B.S.M., Kansas State Teachers College, Emporia; Northwestern University; M.Mus.,
University of Michigan; University of Washington; University of Southern California.
- CHARLES M. RICE (1941).....Associate Professor of Industrial Arts
B.A., M.A., Washington State University; University of Washington; University of
Oregon; Carnegie A.I.A. Art Sessions in 1934 and 1935; Ed.D., Oregon State
College.
- SHELDON T. RIO (1959).....Assistant Professor of Mathematics
B.A., Westmar College; M.A., Montana State University; Ph.D., Oregon State College.
- J. ALAN ROSS (1942).....Professor of Education and Psychology;
Dean of Summer Session; Director of Graduate Studies
B.A. in Ed., Western Washington College of Education; University of Chicago; M.A.,
Ph.D., Yale University.
- WALTER J. SANDERS (1959).....Assistant Professor of Mathematics
B.A., M.A., University of Washington; M.S., University of Illinois.
- DAVID B. SCHAUB (1953).....Associate Professor of Music
B.A., Mus.B., Lawrence College; M.A., Harvard University; Ph.D., University of
California.
- ERHART A. SCHINSKE (1957).....Assistant Professor of Speech
B.A., Hamline University; M.A., University of Minnesota.
- CARL U. SCHULER (1959).....Assistant Professor of History
B.S., M.A., Ph.D., University of Wisconsin.
- RAY A. SCHWALM (1949).....Associate Professor of Industrial Arts
B.S., State Teachers College, Millersville, Pennsylvania; M.S., Ed.D., Oregon State
College.
- VERNON C. SERL (1959).....Instructor of Sociology-Anthropology
B.A., University of British Columbia.
- ELLEN M. SIEGWARTH (1957).....Instructor of Library Science;
Librarian of Children's Literature and Reference Librarian
B.A., Central Washington College of Education; Portland State College; M.L.S.,
University of Washington.
- BEARNICE SKEEN (1947).....Professor of Education
Special and Remedial Education
B.S., M.S., University of Oregon; Ed.D., Washington State University.
- EDNELL M. SNELL (1959).....Assistant Professor of Home Economics
B.S., M.A., Washington State University; Teachers College, Columbia University.
- RUTH SPEARIN (1925).....Acting Instructor of Library Science;
Catalogue Librarian
B.A., Carleton College; New York Library School.

- THOMAS E. STEVENS (1958).....Assistant Professor of Education
B.A., B.Ed., Washington State University.
- NONIE STONEHOUSE.....(Affiliated) Acting Instructor of Music
B.M.E., Northwestern University.
- LEONA M. SUNDQUIST (1923).....Professor of Biological Science
B.A., M.S., University of Washington; Teachers College, Columbia University.
- DONALD C. SWEDMARK (1958).....Instructor of Economics
B.S., Bemidji State College; M.A., University of North Dakota.
- HERBERT C. TAYLOR, JR. (1951).....Associate Professor of Anthropology
B.A., M.A., University of Texas; Ph.D., University of Chicago.
- VIRGINIA F. TEMPLETON (1957) Assistant Professor of Business Education
B.S., Hillyer College; M.S., University of Connecticut; San Francisco State College;
University of California, Los Angeles, University of California, Berkeley; George
Washington University; University of North Dakota.
- ARTHUR THAL.....(Affiliated), Violin
Study under Felix Winternitz, New England Conservatory of Music, Boston; and
under Scott Willits, American Conservatory, Chicago; special study with members
of the Budapest String Quartet.
- PHILIP C. THAYER (1959).....Instructor of Physics
B.S., Lewis and Clark College; M.S., University of Minnesota; University of Oregon.
- RALPH H. THOMPSON (1950).....Professor of Education
B.A., Dickinson College; M.A., University of Delaware; Ed.D., University of Illinois.
- ALBERT VAN AVER (1939).....Professor of English
B.A., Reed College; M.A., Claremont College; Fellow, State University of Iowa; Uni-
versity of Washington; Ph.D., University of Cincinnati.
- STEWART VAN WINGERDEN (1951).....Assistant Professor of Education
B.A. in Ed., Western Washington College of Education; M.A., Colorado State College.
- MARGLEN S. VIKI (1956).....Acting Instructor of Education
B.A. in Ed., Western Washington College of Education; University of Washington.
- DON C. WALTER (1947).....Associate Professor of Music
Iowa State Teachers College; B.A., Wartburg College; M.A., Colorado State College
of Education; Ed.D., University of Oregon.
- MARY W. WATROUS (1957).....*Associate Professor of Education
A.B., University of Nebraska; M.A., Gonzaga University; Ed.D., University of Wash-
ington.

*Rank effective July 1, 1960.

-
- RUTH WEYTHMAN (1924).....Associate Professor of Physical Education
B.S., University of Washington; M.A., Teachers College, Columbia University; University of California, Berkeley; University of Tennessee.
- RICHARD F. W. WHITEMORE (1957).....Assistant Professor of History
B.A., Harvard; M.A., Columbia University.
- GEORGE E. WITTER (1955).....Assistant Professor of Mathematics
B.A., M.A., Miami University; University of Washington; University of Michigan.
- 1PAUL D. WOODRING (1939).....Professor of Psychology
B.S. in Education, Bowling Green State University; M.A., Ph.D., Ohio State University; University of Southern California; Doctor of Humane Letters, Kalamazoo College.

†Leave of Absence, 1959-1960.

New Appointments To The Faculty*

1960 - 1961

GERALD BAILEY, Ed.M.....	Instructor of Industrial Arts
**DAVID BROKENSHA, M.A. (Cantab).....	Visiting Assistant Professor of Sociology-Anthropology
EDWIN CLAPP, Ph.D.....	Professor of English
A. GRAHAM COLLIER, M.Coll.H.....	Associate Professor of Art
ROBERT CHRISTMAN, Ph.D.....	Associate Professor, Chairman, Department of Geology
GERALD EGERER, Docteur en droit.....	Assistant Professor of Economics
FRANCIS EVENHUIS, Ph.D.....	Assistant Professor of English
MONICA GUTCHOW, M.F.A.....	Assistant Professor of Physical Education
FRANCES HANSON, Ed.D.....	Associate Professor of Education
EVELYN HINDS, Ed.M.....	Instructor of Music
MARY IRVIN, B.A.....	Instructor of Education (2nd grade, Campus School)
ROBERT JACOBS, Ed.M.....	Instructor of Physical Education
WILLIAM LAWYER, B.A.....	Instructor of English
KENNETH C. LYMAN, Ph.D.....	Assistant Professor of Speech
ALLAN MATHIESON, B.A.....	Acting Instructor of English
D. PETER MAZUR, M.A.....	Assistant Professor of Sociology
JAMES McFARLAND, Ph.D.....	Assistant Professor of Mathematics
GEORGE MULDRON, Ph.D.....	Assistant Professor of English
ROY MUMME, Ed.M.....	Assistant Professor of Education
JOHN PERADOTTO, M.A.....	Instructor of Foreign Languages
NOREEN PERADOTTO, M.A.....	Instructor of Foreign Languages
G. DALE REUBART, M.M.....	Assistant Professor of Music
WALTER ROBINSON, Ph.D.....	Assistant Professor of Foreign Languages
DONALD SCHWEMMIN, M.A.....	Assistant Professor of Biological Sciences
WILLIAM H. O. SCOTT, A.M.L.S.,	Assistant Professor (Circulation Librarian)
ROBERT B. SIMPSON, Ed.D.....	Associate Professor of Education and Principal of the Campus School
PHILIP SPAULDING, M.A.....	Instructor of Anthropology
HARRY STIVER, JR., M.A.....	Assistant Professor of Speech
HELEN TURCK, M.A.....	Instructor of Home Economics
MARY WORTHYLAKE, Ed.M.....	Assistant Professor of Education

* Prior to June 15, 1960.

** Fall quarter only.

Faculty Council

*Herbert Taylor, Chairman

Margaret Aitken	Donald Brown	*M. S. Kuder
P. H. Atteberry	Sene Carlile	James O'Brien
*Marion Besserman	Frank D'Andrea	Dorothy Ramsland
Don Blood	*Maurice Freehill	*Alan Ross

*Executive Committee

Administrative Council

James L. Jarrett, Chairman

Edward Arntzen	Harvey Gelder	Keith Murray
P. H. Atteberry	Irwin A. Hammer	Hazel Plympton
Sene Carlile	Charles Harwood	Dorothy Ramsland
Raymond Ciszek	Raymond Hawk	Alan Ross
Frank D'Andrea	Mildred Herrick	Leana Sundquist
Danold Ferris	Arthur Hicks	Herbert Taylor
Maurice Freehill	M. S. Kuder	Ruth Weythmon
	Erwin Mayer	

Academic Councils

COUNCIL FOR GRADUATE STUDIES

Alan Ross, Chairman

Marian Besserman	Katherine Corroll	Ray Schwaim
Don Blood	Eleanor King	Herbert Taylor

COUNCIL FOR TEACHER EDUCATION

Ralph Thompson, Chairman

Bernard Boylan	Charles Flora	Fred Knapman
Don Brown	Charles Harwood	Bearnice Skeen

COUNCIL FOR GENERAL EDUCATION

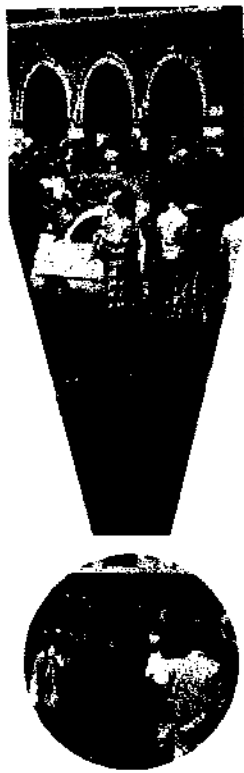
Angelo Anastasio, Chairman Pro Tem

Henry Adams	Lucy Kangley	David Schaub
Gerald Cohen	Arnold Lahti	Mary Watrous
	August Radke	

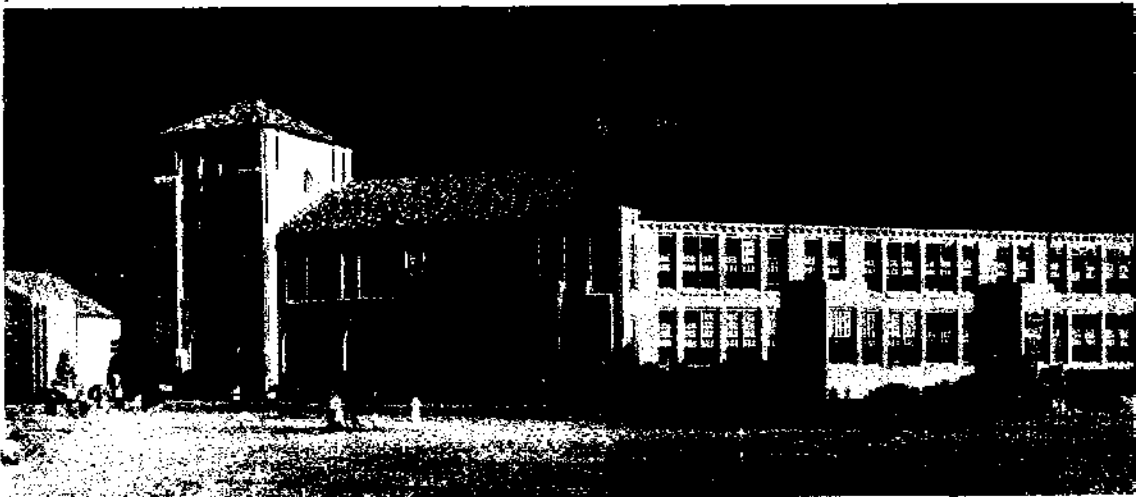
HONORS BOARD

Henry Adams, Chairman

Frank D'Andrea	Arnold Lahti	Sydney Mendel
Charles Flora	Erwin Mayer	



the
College



Campus School

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
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Western Washington College of Education is an integral part of the public school system of the State of Washington encompassing elementary and secondary schools, three colleges of education, and two universities. The College is governed by a board of trustees appointed by the Governor and confirmed by the Senate.

The College is located in Bellingham, a city of 35,000, geographically situated on the seaboard, eighty-seven miles north of Seattle and twenty-three miles from the Canadian border.

History and Development

The College originated as a State Normal School by an act of the Legislature in 1893. However, its doors did not open to students until 1899.

The programs of study offered by the school changed with the increasing of standards required for the preparation of public school teachers. A four-year program was offered for the first time in 1920; the first baccalaureate degrees were authorized in 1933; the name of the institution was changed to Western Washington College of Education in 1937.

As a degree-granting institution meeting standards for accreditation the College continued to expand in both breadth and depth its offerings in the various disciplines. In 1947, the granting of the Bachelor of Arts Degree was authorized and the responsibilities of a liberal arts college was assumed. At the same time the teacher education program was extended to provide preparation for a graduate degree: Master of Education.

Since 1947 the College has further added to its basic teacher education program in meeting the needs for the fifth year of study required for standard certification in Washington. Advanced study for school administrators and other specialized personnel has been added to the curriculum.

In the last decade a rapid but orderly expansion of the entire College program has taken place. The addition of faculty and physical facilities has kept pace with rapidly increasing student enrollment.

Accreditation

Western Washington College of Education is accredited by the Northwest Association of Secondary and Higher Schools and by the National Council for the Accreditation of Teacher Education. It is on the

list of approved colleges and universities of the American Association of University Women.

Buildings and Facilities

The 102-acre campus is situated on Sehome Hill overlooking the City of Bellingham. The location and arrangement of the thirteen major buildings are shown on the campus map, page 2.

During the first twenty-five years in the history of the College plant expansion consisted of a number of additions to the original single building. This entire structure, now known as "Old Main," is devoted to general classroom use and to administrative offices. A library building was added in 1928 and a physical education building with an attached swimming pool in 1936. A laboratory school, with classrooms for children in the elementary grades was completed in 1943 to provide student teaching and observation opportunities.

The construction of buildings for more specialized use began with the Arts Building in 1950. Here are included facilities for both industrial and fine arts. The Auditorium-Music Building was finished in 1951.

The Viking Union which accommodates student government, student publications, and a wide range of student activities and social affairs was completed in 1959. Its construction was financed by student fees.

The W. W. Haggard Hall of Science, now the largest building on the campus, became operational in the summer of 1960. In addition to laboratories and classrooms apropos to all branches of physical and biological science its special features include a museum display area, shops for constructing laboratory equipment, a seismograph, a planetarium, aquarium, roof greenhouses, and facilities for meteorological work.

Residence Halls. There are four on-campus residence facilities: Edens Hall North and Edens Hall South for women, Highland Hall and Mens Residence Hall* for men. There are also limited accommodations for married students some of which are on the campus. Senior Hall, a residence situated about half way between the campus and downtown Bellingham houses twenty-six women.

Buildings Under Construction. An addition to the Physical Education Building will include four basketball courts, closs and seminar rooms, dressing rooms, offices, and a substantial increase in spectator space. Two residence halls, a central food service building, and a book store are also being built. It is anticipated that these five buildings will be

*Temporarily converted for the use of women students, 1960-61.

completed during 1960-61. Their location is indicated on the campus map.

Objectives of The College

In order to relate all college endeavor to clearly defined purposes an official statement of objectives was developed by the faculty and adapted by the Board of Trustees in 1955. Minor revision was effected in 1960.

Western Washington College of Education has as its primary function the preparation of teachers, administrators, and supervisors for the public schools of the state. Both the bachelor's and master's degrees are granted in education. This function provides the major framework for the college objectives.

The College is authorized to grant the bachelor's degree in arts and sciences. It has in addition been designated to perform a junior college function.

In order to accomplish these functions the total college program provides planned experiences in the areas of

1. General education;
2. Professional education of teachers;
3. Subject matter specialization.

The aims of the general education program are:

1. To broaden and intensify the student's understanding of the most significant aspects of man's cultural heritage;
2. To train the student in the methods and tools of thought and expression;
3. To assist the student in integrating his knowledge;
4. To assist the student in developing his powers of aesthetic enjoyment and creativity;
5. To stimulate the student in formulating a philosophy of life based upon knowledge and reflection.

The aims of the teacher education program, developed upon a foundation of general education, are:

1. To develop the student's
 - a. knowledge of the subject matter and techniques appropriate to his teaching fields;
 - b. understanding of individual differences and of the processes of growth and learning in children;
 - c. understanding of the processes whereby personality is formed and maladjustments avoided;
 - d. understanding of the place of school in society and its present organization and administration;
 - e. interest in forming his own philosophy of education.
2. To provide the student, prior to provisional (four-year) certification, with the background and the opportunity to demonstrate his
 - a. skill in planning and in carrying out his ideas independently;
 - b. skill in using established methods of instruction, plus a willingness to experiment with new methods;
 - c. ability to evaluate his own teaching practices;
 - d. ability to work cooperatively with children, colleagues, parents, and others in the community;
 - e. ability to discriminate between the significant and the less significant in education.
3. To provide the student, prior to standard (five-year) certification, with an opportunity
 - a. to extend his knowledge of subject matter appropriate to his teaching fields;
 - b. to obtain training in techniques found lacking after one year of teaching under a provisional certificate.

Subject matter specialization should meet the needs of a person who seeks:

1. Increased depth of subject matter mastery appropriate to his teaching assignment.
2. A sound basis for pursuing further and more advanced study in a specialized field.

Program of the College

Toward implementing stated objectives, the College has developed an integrated program which it is constantly working to refine and improve.

Curricula

Teacher Education — Undergraduate

The four-year program of pre-service preparation for teachers has been developed in accordance with the high standards for certification in the state of Washington. A broad base of prescribed general education encompasses all major subject matter fields. This undergirds a program of courses and extensive laboratory experiences with children at both elementary and secondary levels. Adequate provision is made for specialization.

Teacher Education — Graduate

The program for standard certification in Washington requires a year of study beyond the bachelor's degree subsequent to public school teaching experience. Hence, graduate study is an integral part of the total college program related, in each case, not only to the student's earlier preparation but to the needs that have been demonstrated and the plans that have been developed in the field. There is thus in the graduate program a high sensitivity to the needs of teachers. For all, the fifth or graduate year leads to a Standard General Certificate. Graduate study may culminate in a Master of Education degree as well, for which there are certain special standards and requirements aimed at developing more specialized competency in a selected area of school service.

The Arts and Sciences

The Bachelor of Arts degree traditionally represents a well-rounded, truly liberal, four-year college program. In 1947, the Legislature of the state of Washington extended the opportunity for general higher education in the tax-supported colleges and universities by authorizing the colleges of education to confer the B.A. degree. The College, already well staffed and equipped in the major subject matter divisions, immediately developed a program of studies and awarded its first such degree in August, 1947.

As outlined in greater detail in a later section of the catalogue, the four-year courses now available assure the degree candidate not only a broad base of general education, but ample opportunity for

specialization. Students in increasing numbers are turning to the College for this type of training.

Junior College Studies

For many years the College has offered work to meet the needs of students who desire to undertake their initial college study in the more intimate atmosphere of a small institution. Such students in most instances anticipate further work at the professional schools or universities in such fields as engineering, business administration, journalism, home economics, and the like. Because of the rapidly growing demand for lower division courses in such areas, the College has developed and carefully defined a number of one- and two-year programs leading to advanced standing in other institutions. These offerings are organized under the Junior College Division of Studies.

The Honors Program

The inauguration of an Honors Program in the fall of 1960 provides a challenging opportunity for the student of high academic ability to more nearly realize his potential.

Those selected for honors study participate in much of the general education program required of all degree candidates, particularly the interdepartmental courses, (see page 85). Special sections for honors students are provided.

Students in this program participate each quarter in a colloquium devoted to a broad topic in which primary emphasis is placed on ideas for their own sake. Each honors student is assigned to a tutor to whom he presents papers for subsequent discussion and with whom he confers regularly.

Those interested in more details concerning the Honors Program should write to the Chairman of the Honors Board.

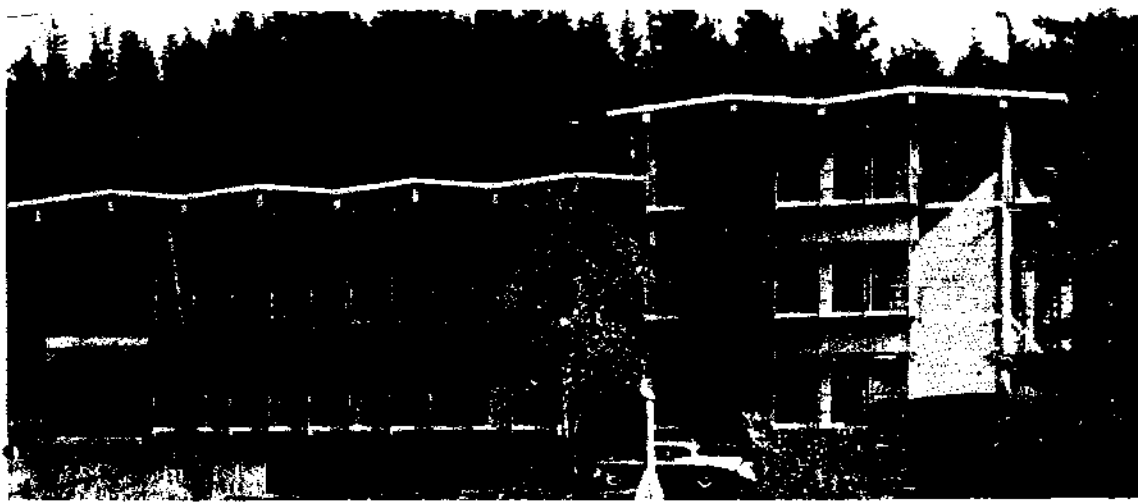
Personnel Services and Student Affairs

The College recognizes as a basic condition for its entire program, the fact of individual differences. It therefore accepts responsibility for (a) guiding the student toward the formulation of educational and career plans that are realistic in the light of his abilities; (b) assisting the student to develop techniques of self-evaluation and personal problem solving that will help him make sound decisions for himself. Orientation, testing, and counseling are among the means used to achieve these ends.

All aspects of student life are recognized as significant in relation to the achievement of college objectives. Group living, student government, social life, athletics and intramural sports, music, art, drama, club activities—each has a recognized place in the total program. Effective stimulation and organization for these out-of-class phases of the college program are provided by coordinated student personnel services.



*the
Student*



the Viking Union

Admission

General Provisions

Health

A thorough health examination is required of all students prior to admission. The College supplies each applicant with a standard form for recording medical history and examination data. Presentation of this form, fully executed by a licensed physician, based on an examination made within 90 days satisfactorily meets this requirement. The adequacy of the examination and thoroughness of the report must meet college standards.

The protection of immunization for smallpox, diphtheria, scarlet fever, and typhoid fever, is strongly urged for all entering students. A requirement of immunization, at student expense, may be instituted at any time at the discretion of the Health Service.

A chest X-ray is required of all who take student-teaching courses. An annual chest X-ray for all students is advised and may be required as facilities are available.

Entrance Tests

All entering freshmen are required to take the Pre-College Differential Guidance Tests *prior* to formal admission. This is a very comprehensive battery made conveniently available to high school students in Washington during the second semester of their senior year. All other freshmen applicants for admission take these tests on campus at a designated date during the summer or on the day immediately prior to the opening of the fall quarter. The cost of administering, scoring, and interpreting these tests (\$5.00) is borne by the student.

The pre-entrance tests are for purposes of classification in scheduling and for counseling. Scores have no bearing on admission.

All transfer students are required to take an academic aptitude test and an English qualifying test at the time of entrance. Those who expect to enroll in any mathematics course are also required to take a qualifying test in mathematics.

Any student failing to take tests as initially scheduled is required to pay an additional service charge of \$3.00 for a specially arranged test.

Special students—those enrolling for less than seven credits—may, at their option, defer the tests until such time as they may register as regular students.

Deficiencies in English and Mathematics

Those who fail to meet minimum standards on the tests in English and/or mathematics must eliminate the deficiency as soon as possible, in any case during the first three quarters of attendance. No student may enroll for a fourth quarter without meeting college standards in these fields. This may be done by (a) independent study followed by a retest, or by (b) passing a non-credit course, (English 3 or Mathematics 3).

Character

The College reserves the right to require that candidates for admission furnish evidence of good moral character.

Admission as Freshmen

Applicants are admitted as freshmen after they have satisfied the general requirements and submitted evidence of graduation from an accredited four-year high school or from a three-year senior high school. Although no specific high school courses are prescribed, the College encourages the election of solid academic subjects as the best preparation for work in this institution. In addition to four years of English, substantial credit in mathematics, science, foreign language, and social studies is advised.

Provisional Admission

Beginning freshmen who are otherwise qualified for admission, but whose high school grade point average is below 2.0 (C), are admitted provisionally. Such students will review with a counselor their total educational plan and will be given as much assistance as possible in analyzing their scholastic difficulties. In the event of continued low scholarship, their enrollment will be terminated.

Procedure for Admission as Freshmen

Time of Application

Prospective freshmen are urged to apply for admission during their final semester in high school. Those recommended by high school authorities will be assured of admission without delay, subject only to evidence of high school graduation. Students thus accepted may make housing arrangements immediately. **All applications for the fall term must be filed prior to September 1.**

Method of Application

An applicant should (a) procure the uniform application blank used by all colleges and universities in the state of Washington either directly from his high school principal or from the Admissions Office of the College; (b) provide the personal data required on this blank; (c) submit the

application form to his high school principal who will supply the academic record and forward all data directly to the College.

The applicant will receive prompt notification of action on his application.

Admission as Nonmatriculated Students

Special provision is made for mature persons, twenty-one years of age or older, who are unable to meet the requirements for admission to the freshman class. Such persons may be admitted as nonmatriculated students after demonstrating adequate aptitude for college work on specified entrance examinations. Students admitted to this status are not candidates for any degree nor may they represent the College in any intercollegiate activity. If, however, after one year of work, a non-matriculated student has maintained a high standard of scholarship and has clearly demonstrated his fitness for college work he may become a regular student.

Admission with Advanced Standing

Students who come to the College after having done work in another college, or a university, will be granted advanced standing for previous work, provided that the institution in question is fully accredited. Those who receive such advanced standing must take the regular tests at entrance. Transfer students whose college achievement is less than 2.0 are admitted only by special action of the Scholastic Standing Committee. Such applicants must submit a formal written petition and have forwarded to the Committee on official record of high school and college grades and the score of at least one approved scholastic aptitude test. For the fall quarter this petition and supporting evidence must be in the hands of the Committee not later than September 1; for all other quarters petitions will not be considered after the first day of the quarter.

Because a large part of the teacher education curriculum is prescribed, it is frequently necessary for a student in this field who enters with three years advanced credit to spend four or five quarters to meet the total requirements for graduation.

Procedure for Admission of Students With Advanced Standing

Procure "application for admission" form from the Admissions office.

Fill out and return the form, indicating the nature of the program to be taken at the College. Procure also the uniform application blank for submission of high school records and complete it as directed. (Graduate students may omit the high school record.)

Submit an official transcript of all credits earned in each collegiate institution previously attended. Failure to submit a complete record is considered a serious breach of honor.

Upon receipt of the application and records the College will notify the applicant as to his admission and his status in regard to graduation requirements.

All applications for fall quarter must be filed prior to September 1.

Admission to Graduate Standing

See section on graduate work, page 71.

Academic Regulations

Dates of Registration

The date of registration for each of the four quarters will be found in the official calendar on pages 4 and 5.

Welcome Week

Very careful provision is made for appropriate induction of new students at the beginning of the academic year. These students are not only introduced to the life and traditions of the College at this time, but are given special assistance in enrolling and getting well established. Any students entering for the first time, whether as freshmen or as transfers from another college, who fail to participate in this opening week program will find themselves at a very serious disadvantage.

Preregistration

During the fall, winter, and spring quarters, students in attendance who plan to continue the succeeding quarters are expected to make out their class schedules for that quarter on the days specified for the purpose. In the spring quarter, students also preregister for the fall.

Registration Day

Except as noted in the preceding paragraphs, registration day for new students will be the first day of each quarter. Earlier registration opportunities are provided for students already in attendance.

Applicants for admission whose credentials have not been filed with the Registrar will not be permitted to complete their registration.

Late Registration

A fee of \$3.00 is charged if a student does not complete final registration by the close of the opening day of the new quarter.

Change in Registration

A fee of \$1.00 for any change in a student's schedule is charged after registration is completed unless such change is made upon the initiative of college authorities.

Entering New Courses

After the close of the first week of class instruction in the fall, winter, and spring quarters, students are not permitted to enter new courses. Special limitations apply to the more brief summer sessions; details are given in the summer bulletin.

Withdrawal from Courses

Formal withdrawal from any course must be made in the Registrar's office. Students leaving a class without formal withdrawal will receive a failing grade in the course.

Students may withdraw from a course with a grade of "W" during the first four weeks of instruction in any quarter. No penalty is attached other than the change of registration fee and the loss of credit.

In unusual circumstances, a student may withdraw from a course after the fourth week of instruction. A grade of WP (passing) or WF (failing) will be posted according to the instructor's evaluation of the student's work up to the time of withdrawal, unless such withdrawal is made at College request. WF grades will be counted as failures in applying minimum scholarship standards.

No withdrawals are permitted during the last two weeks of a quarter.

Withdrawal from College

A student may completely terminate his enrollment at any time prior to the final two weeks of a quarter. Formal withdrawal at the Registrar's Office is necessary. Students who leave the College without official withdrawal will receive failing grades.

The regulations regarding WP and WF grades as stated in the preceding paragraph apply equally to withdrawal from the College.

Credits

The unit of college work, the "quarter hour credit," represents one class hour per week throughout a period of eleven or twelve weeks, which is called a "quarter." Laboratory courses normally meet for additional hours.

Courses carry credit ranging from one to five units or hours, according to the number of class meetings per week. Sixteen credits on this basis constitute the work of a quarter, and forty-eight credits that of the regular school year of three quarters.

The Student Load

Sixteen hours including physical education constitute the standard student load. During the first quarter in residence students are limited to the standard load. Thereafter any program in excess of seventeen credits must be approved by the Registrar.

Students who are permitted to carry an overload must have met the following grade point standard during the previous quarter or in all previous work done in this institution:

18-hour load.....	2.8
19-hour load.....	3.0
20-hour load.....	3.2

A load in excess of twenty hours is not permitted under any circumstances. The maximum load allowed is somewhat less in the summer sessions.

A student doing outside work for three or four hours per day shall not carry more than thirteen hours, including physical education, unless he has demonstrated his ability to carry the load without detriment to his scholarship or health. A student working more than four hours per day is expected to reduce his scholastic program accordingly.

Evening classes or correspondence courses may be taken while a student is in residence only as part of his total allowable load.

Resident Status

Certain college regulations and standards relative to on-campus employment, eligibility for student offices, and requirements for graduation require status as a "full-time resident student." This requires enrollment in regularly scheduled courses totaling not less than twelve quarter hours. However, veterans or students deferred by the Selective Service System are expected to carry loads adequate to constitute normal progress toward a degree.

Special Students

Persons carrying not more than six credits are classed as special students. They pay a smaller fee but do not share in certain student body privileges.

Auditors

Any mature person not desiring to register for credit may, with the consent of instructors and upon payment of a fee of \$15.00 per quarter, enroll as an auditor in any except laboratory courses.

Attendance Regulations

Class attendance is required at all times. Absences are excused only for reasons of illness or injury certified by the Health Service, in cases of emergency allowed by the Registrar, or at the request of some authorized member of the staff.

System of Grading

In reporting grades to the Registrar, instructors use the following marks:

A	Superior	S	Satisfactory
B	High	K	Incomplete
C	Average	W	Withdrawn
D	Low	WF	Withdrawn, Failure
F	Failure	WP	Withdrawn, Passing
U	Unsatisfactory	TF	Technical Failure

A course in which a student has failed must be repeated if credit is desired.

A TF is assigned when a student fails to carry out the prescribed procedure when withdrawing from college, or if he fails to clear a grade of K within the prescribed period.

The grade of S is given in certain courses where it is not practical to use the regular grading system. Credit is allowed as specified but no grade points are assigned and the course is disregarded in computing the grade point average.

The grade of K indicates that the work is satisfactory as far as completed. It permits the student after consultation with the Registrar to complete the work within a reasonable period in the way prescribed by the instructor. The grade of K is given only in cases of illness or other extenuating circumstances which make it impossible to complete all work by the close of the quarter.

If the student remains in college the incomplete must be cleared during the quarter immediately following receipt of the grade; otherwise a grade of technical failure (TF) is assigned automatically. In special circumstances the Registrar may extend the period for removal of the incomplete. The privilege of clearing an incomplete lapses after five years even though the student is not continuously enrolled.

A grade of W is given when the instructor is notified that the student has officially withdrawn. WP or WF grades are assigned in cases of withdrawal after the fourth week of instruction as provided on page 35. If a course has been carried long enough and the work has been of a satisfactory character, the instructor may assign a K or, in exceptional circumstances, a grade carrying credit for the course.

Grade Reports

At the close of each quarter a grade report is mailed to all students. Reports will be mailed to parents of students under 21 years of age upon request of the parent or the student.

Mid-Term Deficiency Report

In the middle of each quarter, any grade below "C" is reported directly to the student, but not recorded.

Grade Points

Grade points serve as a means of objectively stating a given level of scholarship. The point value assigned for each grade is as follows: 4 for A, 3 for B, 2 for C, 1 for D, 0 for F or U. The number of grade points earned in each course is computed by multiplying the number of credits by the grade point value of the letter indicated. Thus a 3-hour course with a grade point of B is assigned 9 grade points. The grade point average is the result of dividing the total number of grade points by the

total number of registered hours. A grade point average of 2.0 represents a letter standard of C. A grade of S and the credit involved in such a course do not enter into the computation of grade point average. Non-college credit courses are also excepted.

Grades for Repeated Courses

In the event a student repeats a course in which he has received a failing or low passing grade, the second grade is used in computing the grade point average, and the first grade is ignored.

Final Examinations

As a matter of College policy, individual students are not permitted to take early final examinations. Failure to take the final examination in any course normally results in a grade of "F." When, for emergency reasons, a student is unable to appear at a final examination at the scheduled time, he may arrange in advance with the instructor to receive a grade of "K" (incomplete). This privilege is to be extended only to students whose achievement in the course is satisfactory. Removal of the "K" grade is to be achieved early in the following quarter (summer excepted).

Correspondence and Extension Credit

Work done by correspondence or extension through a fully accredited college or university may be accepted toward the bachelor's degree up to a maximum of one-fourth of the credits required.

Credit by Examination

Credit for work paralleling courses listed in this catalogue may, with the advance approval of the Registrar and of the department chairman be established by examination.

Application for Graduation

Students must make formal application to the Registrar for any degrees or certificates which are to be issued by the College. It should be noted that completion of requirements does not automatically lead to the issuance of the degree or certificate unless formal application is filed.

Standards Governing Low Scholarship

Termination of Enrollment

At the end of the third quarter of attendance, or of any subsequent quarter, a student is dropped from the College if his cumulative grade point average falls below 2.0. A student whose enrollment is thus terminated may normally petition the Scholastic Standing Committee for reinstatement unless he is on final probation (see below). A student whose cumulative average is below 2.0 will not be dropped at the close of any quarter in which he achieves a 2.0 average or better for the quarter.

Probation

Students are placed on academic probation as follows:

First or second quarter freshmen:

A freshman student, who at the end of his first or second quarter of attendance, has a grade point average of less than 2.0 for the quarter will be placed on academic probation. A freshman student placed on probation for two successive quarters who elects to continue attendance will be required to meet with a member or members of the Scholastic Standing Committee during the first week of the following quarter, at which time the conditions of probation will be determined. A freshman student on probation for the first time must confer with his counselor during the first week of the quarter.

Students admitted to the College on a provisional basis whose grade point average falls below 2.0 at the end of the first quarter of attendance will be placed on final academic probation.

All other students:

- (a) when admitted or readmitted to the College by action of the Scholastic Standing Committee, or
- (b) when subject to scholastic warning for two consecutive quarters (see below).

Final Probation

A student placed on "final probation" by the Scholastic Standing Committee must thereafter meet standards governing minimum scholarship and may not petition for enrollment if he fails to do so.

Restrictions Governing Students on Academic Probation

Students on academic probation (a) are not eligible for remunerative employment on campus; (b) may not hold an elective or appointive office in any student organization nor appear in any performance before the student body or the public; (c) may not repre-

sent the College or student body or any conference nor as a member of any team or organization.

Probationary status is terminated when a satisfactory scholastic average has been obtained.

Warning

Students who are not dropped but who receive less than a 2.0 grade point average during any given quarter are notified of the faculty's concern and encouraged to take advantage of all available assistance. Such warning becomes a matter of permanent record.

Student Living

The College considers living an important phase of the total college experience and is therefore directly concerned in maintaining high standards.

Residence halls for men and women and a large number of approved homes provide adequate accommodations for students. Privately owned boarding places and housekeeping rooms are approved only as they meet the college standards.

All students who are not living at home or with immediate relatives are required to live in college approved residences. Women secure their rooms through the office of the Dean of Women. Men secure their rooms through the office of the Dean of Men.

College Residences

For Women

EDENS SOUTH HALL and **EDENS NORTH HALL**, at the north end of the campus, house and provide food service for 224 women. The dining room also has accommodations for other students, both men and women, living near the campus. **EDENS WEST HALL** will be completed in September, 1961, and will house 216 additional women.

SENIOR HALL is conveniently located midway between the College and the city center, about eight blocks from the campus. Formerly a private residence, the building has been adapted to student living. Senior Hall accommodates twenty-six women. By cooperative assistance with housework, costs are kept comparable with those at other college residences.

WOMENS RESIDENCE HALL on the north side of the campus accommodates 76 women. This building normally serves as a men's dormitory but for 1960-1961 has been converted for the use of women students.

For Men

HIGHLAND HALL including a three-wing addition to be completed by September, 1960, provides quarters for 236 men.

General Information Concerning College-Owned Residences

Each hall is in charge of a qualified house mother. Adequate provision for the social life of student residents is provided.

Board and room are furnished to students at a rate as low as is consistent with proper living conditions.

All rooms are for double occupancy. They are furnished with single beds, pillows, mattresses and pads, as well as study desks and chairs. Bed linen is supplied by the College. Blankets are furnished by the students.

In the women's halls a dresser is available in each room in addition to the items listed above. Towels, dresser scarves, pictures, study lamps, and other accessories are furnished by the student.

Laundry facilities are available in both the women's and men's residences. No electric irons, electric heaters, or electric plates may be used in student rooms.

Students may not move from the halls during a given quarter except in an emergency and only with the consent of the Dean of Men or the Dean of Women.

The residence halls are closed during the college vacations.

On the opening day of each quarter, registration for room and board may be accomplished as part of the regular enrollment procedure.

Off-Campus Housing

Furnished Rooms

Furnished rooms are available in private houses near the College. These are engaged for the entire quarter; no changes are permitted during the quarter except in cases of emergency when satisfactory arrangements must be made with the house mother and either the Dean of Men or the Dean of Women. Single rooms are very scarce. Students are advised to make personal application before entering the College. A list of approved houses will be mailed upon request to the Dean of Men or the Dean of Women.

Housekeeping Rooms

Under special conditions students may be granted permission by the Dean of Women or the Dean of Men to do housekeeping in approved quarters which are supervised by house mothers. A list of approved housekeeping rooms is available in the deans' offices.

The Y.W.C.A. and the Y.M.C.A.

These organizations afford living accommodations for a limited number of students. They also serve as temporary quarters for those who have not found permanent homes in the city.

Financial Arrangements

A room deposit of \$25 is required of all students in both college-owned and college-approved residences. A receipt for this deposit establishes the student's reservation for all three quarters of the academic year. The deposit may be left to apply at a later date following a leave of one quarter or more.

This deposit, less any charges for breakage, is normally refunded when the student checks out at the close of any quarter. Students in college halls obtain a checkout card from the Resident Director and a clearance signature from the Food and Room Service Office.

Since summer reservations are made separately, deposits are carried over for the summer quarter only upon request of the student.

When this deposit is made in advance of actual occupancy it constitutes a reservation fee which in the event of cancellation is non-refundable unless the vacancy is filled without loss of revenue. Consequently, the earliest possible notification of cancellation is advisable. When a student is entitled to such a refund it is made at the beginning of the second week of the quarter for which the room was reserved.

Housing rates are described on page 53.

Housing For Married Students

The College owns and operates seventy-five apartments that are located on or near the campus. These apartments are unfurnished except for an oil-conversion range which provides heat and hot water for the unit. The rent on these units ranges from \$30.00 per month for a one-bedroom to \$35.00 per month for two bedrooms. Application for this type of housing is made through the Business Office. Preference is given to undergraduate veteran students.

Privately-owned apartments and dwellings suitable for married stu-

dents are relatively available. The offices of the Dean of Men and Dean of Women provide lists of known vacancies on request. These lists are prepared for distribution one month prior to the start of each quarter. In the main it is advisable to seek such housing farther in advance.

Food Service

By the spring of 1961 it is anticipated that all boarding facilities will be centralized in a new building adjacent to the Viking Union. In the meantime meals continue to be served at Edens Hall and Womens Residence Hall.

All dormitory residents are required to take their meals in a college dining hall on the seven-day meal plan (twenty-one meals). When the student is required to be off-campus *every* week-end for employment or other excusable reasons, a five-day meal plan may be arranged after clearance with the Dean of Men or Dean of Women.

Food service is available to those living off campus at the same cost as that to dormitory residents. Meal tickets may be purchased on a seven-day, five-day, or five-day lunch-and-dinner basis. Single meals are also available on a cash basis.

Student Activities and Organizations

A total college experience, one which is in Woodrow Wilson's phrase "courses, contacts and contagions," encompasses a great deal that occurs outside the classroom. The program of student affairs of the College is planned and coordinated through the office of the Dean of Students to provide maximum opportunity for student participation in a wide range of genuinely profitable experiences. Student affairs are in no sense incidental in the total plans of the College; rather they are an integral and highly important phase of the total range of experiences aimed at helping students become well integrated, effective people.

Student activities and organizations, in a large measure, are administered by the students themselves with faculty advisement and within the framework of general college policy. The student handbook, *The Navigator*, outlines in detail the frame of reference within which student organizations and activities operate.

ATHLETIC PARTICIPATION is not limited to intercollegiate competition, though the range of varsity sports — football, basketball, baseball, track, swimming, tennis, golf, and skiing — makes it possible for a large number to actually compete. The comprehensive intramural schedule, which is outside of class hours, includes practically all group and individual sports. All students are encouraged to participate and to reap the benefits, not only of healthful recreation, but of increased physical skills.

For students not residing at home, group living, whether in college residence halls or in an organized house, represents an important opportunity for personal growth. Most living groups are organized for self-government.

By virtue of enrollment in the College, every student becomes an active member of at least three organizations:

- a. THE ASSOCIATED STUDENTS, by which the student body is largely self-governing, assumes a vital role in financing and managing a wide range of student activities.
- b. FRESHMEN, SOPHOMORE, JUNIOR, and SENIOR classes which are organized with officers, committees, and a plan of operation.
- c. THE ASSOCIATED WOMEN STUDENTS and the NORSE-MEN which promote common interests and fellowship among women and men respectively. These groups assist in meeting and welcoming new students, and in generally sponsoring student activities.

Broad opportunities for the development of new interests and skills lie in the areas of: MUSIC, where performance organizations include band, orchestra, and a capella choir, as well as quartettes, string ensembles, and other small groups; DRAMA, with the facilities of a theatre-size stage for both acting and production; PUBLICATIONS, which include the *Western Washington Collegian*, a news weekly; the *Klipsun*, the college yearbook; and certain minor publications, and DEBATE, a field in which the College has won considerable eminence.

THE VIKING UNION is the community center of the College. Offices for many student activities, including the Associated Student Body, publications, and the Director of Student Activities, are located in the Union. The Director and the Union Board of Commissioners administer facilities and services which give a new dimension to this aspect of college life. Meeting rooms, lounges, shops and work areas, together with the organization and program represent a well-considered plan for the community life of the college.

There follows a list of other student groups, each with its own

organization, officers, objectives, and program; each affords a special type of opportunity for a student to expand his competencies and enlarge his circle of friends.

*ALPHA RHO TAU—an honorary society for students in the fine arts.

ALPINE CLUB—for all students interested in hiking and mountaineering.

*ASSOCIATION FOR CHILDHOOD EDUCATION—for students, usually prospective teachers, who are seeking a better understanding of the problems of children.

BACHELORS' CLUB—A men's organization to promote campus traditions, interest, and high standards.

BLUE BARNACLES—open to all girls interested in synchronized swimming.

*COLHECONOMIST CLUB—for women students who are interested in homemaking activities.

CRITICS CLUB—a discussion group for students who are interested in increasing their appreciation of literature.

DER DEUTSCHE STUDENTENVEREIN—for students of the German language.

*EPSILON PI TAU—an international honor society in industrial arts.

FOLK AND SQUARE DANCE CLUB—open to all students interested in folk and square dancing.

HELMSMEN—a coeducational service club.

INDUSTRIAL ARTS CLUB—provides opportunity for students of industrial arts to undertake special projects and further their own professional preparation.

*INTERNATIONAL RELATIONS CLUB—open to all students interested in studying and discussing national and international events and issues.

*KAPPA DELTA PI—an honor society in education.

LE CERCLE FRANCAIS—a club to promote interest and understanding of the French people and their language.

*Affiliated with like organizations in other colleges on a regional or national basis.

MATHEMATICS CLUB — open to advanced mathematics students interested in promoting enthusiasm for this area of knowledge.

ORCHESIS—provides an opportunity for men and women to study creative dance as an art form and to compose and perform in the College and community.

***PI KAPPA DELTA** — a forensic honorary society.

RHEBA D. NICKERSON CLUB — a professional organization for women who major or minor in physical education, health education, and recreation leadership.

SCHOLARSHIP SOCIETY—an honorary organization recognizing high scholastic performance and ideals.

***SWEA** — (Student chapter of the Washington Education Association) — provides for education majors a strong professional organization which is affiliated with the Washington Education Association and the National Education Association.

VALKYRIE — a college service club for women, to which members are elected on the basis of interest and participation in college affairs.

VIKING CAMERA CLUB — for those who recognize photography as a fascinating hobby.

"W" CLUB — with membership open to men who have earned a letter in any of the five major sports. It aims to promote good sportsmanship and clean athletics.

WESTERN PLAYERS — those interested in writing for the stage, in acting, make-up, staging, or directorship, or in any aspect of the theatre, are eligible for membership.

***WOMEN'S RECREATION ASSOCIATION** — for women students with special interest in synchronized swimming, dance, sports, and outing activities.

***YOUNG DEMOCRATS** — An affiliated club to stimulate interest in governmental affairs through the ideals and principles of the Democratic Party.

RELIGIOUS ACTIVITIES AND ORGANIZATIONS are open to all students through inter-denominational and denominational groups not directly a part of the college program.

*Affiliated with like organizations in other colleges on a regional or national basis.

Inter-denominational organizations are The Inter-Varsity Christian Fellowship and The United Student Christian Foundation.

Denominations currently represented by student clubs are Baptist, Christian Science, Congregational, Episcopal, Lutheran, Methodist, Presbyterian, and Roman Catholic.

College Artist and Lecture Series

The College brings to the campus distinguished artists, scholars, and speakers from the fields of the arts, letters, sciences, religion, travel, and entertainment. The programs are open to all students. While on campus the visitor may be further engaged by departments of the College.

Musical Artists' Course

The College, in cooperation with the Civic Music Association of Bellingham, offers each year a Civic Music Series, which includes programs by soloists and groups of international standing. College students have the opportunity to attend these programs without cost.

The Recreational Program

A policy of the College is to make ample provision for recreation throughout the year for all students, both men and women. The program, which is under the direction of a faculty committee, includes a wide range of activities.

A strong intramural program provides activities for men and for women as well as on a coeducational basis. The following activities, which vary according to season and student interest, are available: field hockey, volleyball, basketball, softball, swimming, table tennis, tennis, golf, soccer, archery, speedball, shuffleboard, badminton, horseshoes, hiking, flag or touch football, rugby, and fencing.

On one evening a week the physical education building is open for recreation for both men and women. Other co-educational activities include hiking and skiing. Frequent ski trips are taken to the Mt. Baker Lodge area; occasional overnight trips are arranged during the height of the skiing season. The College Ski Shop provides equipment on a rental or purchase basis and has a repair service available.

During the summer session an extensive program of recreation is conducted.

At the LAKEWAY GOLF COURSE, a nine-hole course within easy walking distance of the College, instruction is offered at reduced rates to students, who are allowed playing privileges for a nominal fee. Other golf courses are located within a few minutes drive of the campus.

VIQUEEN LODGE with a thirteen-acre tract of land is on Sinclair Island, one of the San Juan group. The property has a shore line on two sides. The lodge is owned by the Women's Recreational Association, but is available to other college students for day or week-end trips through the Women's Physical Education Department.

KULSHAN CABIN, a mountain lodge located in the Mount Baker region, is owned jointly by the College and the Mount Baker Club of Bellingham. Hikes of varying length and difficulty may be made in the vicinity of the cabin.

LAKEWOOD, owned by the Associated Students, is a nine-acre tract of land, with a quarter-mile waterfront on Lake Whatcom, where swimming, boating, and other outdoor recreation may be enjoyed. Lake Whatcom, a beautiful body of water twelve miles long and a mile wide, is within twenty minutes ride by automobile from the College.

Student Finances

In a period of fluctuating prices, all fees and living charges are subject to change without notice. Such changes, if any, will be moderate. The College will continue its policy of holding student costs to the minimum commensurate with effective services and healthful living.

Tuition

is free to all students.

Fees

Quarterly Fees

All students registered for more than six credits pay quarterly fees amounting to \$59.50. These are itemized as follows:

Student Activities—for the support of athletics, student facilities, social life, student union program, and publications.....	\$13.00
Bookstore	2.00
Lectures and entertainment.....	2.50
Library	3.00
Health	2.00
Physical Education.....	2.00
Mimeograph	1.00
Building	25.00
Incidental—for laboratory supplies and equipment as well as duplicate books and reference material placed in the library for use of students.....	9.00
Total	\$59.50

Special Students—paid quarterly in lieu of other regular fees by those who register for not more than six credits:

Basic	\$ 5.00
Additional, for each credit.....	4.00

Auditors—paid quarterly by those enrolling for one or more courses without credit by permission of the instructor and the Registrar

\$15.00

Music Fees

Applied Music (Individual instruction in piano, violin, band instruments, voice, etc.)

Music 114, 115, 116 (A, B, C, D, E.)	
Music 214, 215, 216 (A, B, C, D, E.)	
Music 314, 315, 316 (A, B, C, D, E.)	
Music 414, 415, 416 (A, B, C, D, E.)	
Music 514, 515, 516 (A, B, C, D, E.)	\$24.00
Pipe organ rental per quarter	10.00
Instrumental rental or practice space per quarter	2.00

Course Fees In Physical Education

P.E. 117	Beginning Skiing	\$25.00
P.E. 133	Beginning Bowling	6.00
P.E. 137	Intermediate Skiing	25.00
P.E. 233	Advanced Bowling	6.00
P.E. 237	Advanced Skiing	25.00

Other Course Fees

Other fees payable for special purposes or by students with irregular status are as follows:

Student Teaching Fee in the following courses:

Education 391, 392, 400, 491, 492, 494, 495	15.00
---	-------

Deficiency courses taken without credit:

Mathematics 3	7.50
English 3	15.00

Miscellaneous Fees

On-campus Parking	3.00
X-Ray Fee, payable once by all students enrolled in practice teaching courses	5.00

Changes of Schedule Fee. After the student has completed his registration, a fee of \$1.00 is charged for any change not made on the initiative of a college official.

Late Registration Fee. A fee of \$3.00 is charged if a student in residence fails to preregister or register at appointed times.

Test Service Fee.....	3.00
Required of those who fail to take the entrance tests at the regularly scheduled time.	
Special Examination Fee for those who seek college credit in a given course through examination.....	2.00
Certificate Fee payable at the time of graduation.....	1.00
Degree Fee payable at graduation.....	5.00
Placement Service Fee, payable at graduation.....	2.00

Transcript fee schedule:

Each student is entitled to one official transcript of his scholastic record at Western Washington College of Education without charge. For subsequent transcript requests, there is a charge of \$1.00. Additional copies requested *at the same time* are issued at a charge of 25c each. When additional credits have been earned, a free supplement will be sent upon request to the same addressee as a previous transcript.

Refund of Fees

In ordinary circumstances if a student withdraws from college during the first week of the quarter, all fees are refunded except for a \$3.00 service and records fee. If withdrawal occurs during the second week, only the student activities and the incidental fees are refunded. After the second week no fees are returned.

Textbooks

The College does not provide textbooks for the personal use of students, but the Cooperative Bookstore is maintained by the Associated Students to furnish all necessary books and supplies at reasonable prices.

Charges For Materials

For the convenience of those in certain courses requiring the extensive use of materials for articles retained by the student, materials are charged to the student at cost. The department issues an invoice for such materials and the student pays the charge of the Business Office.

Lockers

Metal lockers are available without charge to students who provide themselves with the standard type combination lock sold only by the Student Cooperative Bookstore.

Living Costs

Board and Room in College Residence Halls

Board and room charges in college residence halls for both men and women are payable by the quarter in advance. The rates are as follows:

Fall Quarter.....	\$210.00*
(Due September 29)	
Winter Quarter.....	206.00*
(Due January 4)	
Spring Quaretr.....	201.00*
(Due March 28)	

While arrangements for smaller payments at the first of each month may be made, the student is obligated for the total quarterly charge.

* These charges are based on the actual number of meals served during the quarter. Board and room on a Monday-through-Friday basis is available only in cases of regular out-of-town week-end employment. Such arrangements are made through the Dean of Men or the Dean of Women.

Delinquent Accounts

Unpaid room and board accounts are assessed a penalty of 25c per day effective on registration day. The penalty applies each pay period for those who are delinquent in their payments. Registration and payment of room and board is to be made before the student receives meals in the residence halls. The student may pay on a cash basis until his board account is paid. This money is not refundable.

Refunds

Room payments are not refundable. Board refunds or partial refunds are made in case of one full week's illness or when a student teaching assignment conflicts with the meal schedule. Refund cards are issued in the Food and Room Service Office.

Checks and money orders for fees or living charges should be made payable to
WESTERN WASHINGTON COLLEGE OF EDUCATION

Furnished Rooms Off the Campus

Prices for furnished rooms without board range from \$17.50 to \$25 a month for each student in the room. Single rooms are somewhat higher.

Estimate of Total Costs

The total estimated expense for three quarters, including cost of books and supplies as well as a moderate allowance for incidentals, is as follows:

	MINIMUM	AVERAGE
If rooming and boarding.....	\$900.00	\$1,100.00
If housekeeping.....	700.00	900.00
If living at home or working for room and board.....	350.00	450.00

These figures make no provision for clothing costs or travel expense.

In a period of fluctuating prices, all fees and living charges are subject to change without notice. Such changes, if any, will be moderate. The College will continue its policy of holding student costs to the minimum commensurate with effective services and healthful living.

Opportunity For Self-Support

It is the policy of the College to offer as many opportunities as possible to young men and women who must earn part of their expenses. Such opportunities are found in the library and the science laboratories, the dining hall and kitchen of the residence halls, and in janitor service. Eligibility is established by registration for twelve credit hours of academic work and the attainment and maintenance of a satisfactory grade point average before or during attendance at the College.

Living expenses may frequently be met in part by work in private homes and in stores and shops in the city. Also room and board may be provided in exchange for help with household duties. Such opportunities are more available for women than for men. The College makes an effort to assist students in gaining part-time employment through the

office of the Dean of Men, to which all inquiries should be addressed. Students thus employed may be required to lighten their academic loads.

The College Student Loan Fund

STUDENT LOAN FUND—A student loan fund exceeding \$30,000 is held in trust by the Board of Trustees and is made available at a low rate of interest to such students as recommended by a faculty committee. No one is eligible to borrow from this fund until after one quarter's residence.

EMERGENCY LOANS—Under special circumstances small emergency loans are made from the student loan fund through the President, Dean of Women, or Dean of Men. No emergency loan is granted for the payment of fees.

PROCEDURES—Detailed information concerning the Student Loan Fund may be secured from the Dean of Men's Office. Loan application forms are obtained from the Secretary of the Student Loan Committee in the Business Office.

NATIONAL DEFENSE EDUCATION ACT STUDENT LOAN PROGRAM—The College participates in this federal student loan program. Loans are available to all students with proven academic ability who can also demonstrate financial need. The provisions of the Act make this loan program especially attractive for prospective teachers and students majoring in science, mathematics, or a modern foreign language. High school seniors of superior ability who are unable to finance a college education may make application for a loan under this program during the spring semester prior to graduation. All inquiries about the National Defense Student Loan Program should be directed to the Office of the Dean of Men.

Scholarships

Western Washington College of Education annually awards approximately 75 scholarships to outstanding entering freshmen. The awards are sufficient to cover the cost of College fees for one year.

To be eligible for consideration, students must rank in the upper quarter of their graduating class at the time of application and be recommended by their high school principal. Application forms may be secured from the high school principal or counselor after January 15 or by writing directly to the College. All applications must be completed and on file by April 1st.

The awards include:

PROSPECTIVE TEACHER SCHOLARSHIPS: These are available to entering students who plan to enter the teaching profession and who have demonstrated in a high degree those qualities required of superior teachers.

ARTS AND SCIENCES SCHOLARSHIPS: Entering freshmen who do not anticipate a teaching career but who expect to complete requirements for a College degree in another field of study are eligible to apply.

In addition to scholarships offered by the College, the Washington Congress of Parents and Teachers each year makes awards to freshmen students of outstanding merit entering Western Washington College of Education to prepare for teaching careers. For 1960-61, three such scholarships are being granted in the amount of \$700 (\$175 each year for four years).

Also, the Boeing Airplane Company and the Radio Corporation of America have established scholarships at the College for prospective teachers of science and/or mathematics. Applicants for a Boeing or RCA Scholarship must show evidence of interest and outstanding ability in science or mathematics.

A limited number of awards are available to graduates of Washington junior colleges. Detailed information is available on request.

Music Awards

Music scholarships consisting of a full year's individual instruction without cost are awarded to students who demonstrate superior performance ability on an orchestral or band instrument, on the piano or organ, or in voice. Such a scholarship may be extended to a second, third, and fourth year.

Music scholarship students are expected to (a) maintain a minimum grade point average of 2.5 in all college studies; (b) maintain high standards of performance on their major instruments or in voice; (c) participate in one or more of the Department's musical organizations: band, orchestra, or choir; (d) prepare for a recital or concert appearance. A student discontinuing his musical study before the close of any year forfeits his scholarship.

Information For Veterans

The College has made every effort to adopt to the special needs of veterans. Those who are qualified for educational benefits under Public Law 550 (the Korean Bill) enroll under the provisions of that act. All payments are made directly to the veteran. A contract with the Veterans Administration is kept in force for those attending under Public Law 894, the Rehabilitation Act for disabled veterans.

A special advisory service for all veterans is provided through the Dean of Students Office. Special inquiries should be directed to that office.

Matters of eligibility for veterans' benefits should be arranged directly with the Veterans Administration in advance of initial entrance. Veterans may secure a certificate of eligibility by presenting a copy of their discharge to the nearest Veterans Administration Office.

Veterans transferring from one institution to another or from another training situation in which they have been receiving veterans' benefits must notify the regional office of the Veterans Administration servicing their particular area and receive a revised certificate of eligibility.

There is some provision for the housing of married veterans at moderate cost.

Children of deceased veterans who qualify for educational benefits under Public Law 634 should make the necessary arrangements directly with the Veterans Administration.

Student Personnel Services

The College does not consider that its responsibility to students ceases with the provision of good instruction and instructional facilities. There is a keen awareness that all aspects of the student's college experience relate to his development as an increasingly effective person. It is recognized that each student is a unique individual with his own pattern of abilities, circumstances, and needs. The College endeavors through its guidance program to assist a student toward better self-understanding and wise decisions in educational planning.

THE ORIENTATION PROGRAM. At the beginning of each academic year, freshmen and other new students come to the College well in advance of returning students. During this period, known as Welcome Week, all have opportunity to become acquainted with the facilities and academic program, to meet faculty and staff on an informal basis, and to register for classes under expert guidance.

THE FRESHMEN COUNSELING PROGRAM. Approximately fifty-five members of the teaching faculty devote a definite share of their time to consultation with new students during their first year on the campus. The advisory relationship extends on a more informal basis throughout the student's entire scholastic career. Each faculty sponsor accepts responsibility for assisting the individual student to effectively meet the initial problems of adjusting to college, to develop an intelligent career plan, and to select the program of studies most appropriate to that plan.

The aim of all counseling at Western Washington College of Education is to develop in the student himself the capacity and skills necessary for self-guidance.

THE ACADEMIC ADVISEMENT PROGRAM is a natural extension of services through the sophomore, junior, and senior years in all three divisions of study. The student's academic program in the freshman year consists largely of general education courses. As more elective opportunity develops, the student finds it necessary to make important decisions in the matter of course selection. Only by so doing may he realize the greatest returns from his college study in terms of a career objective. Further, for most students, an academic program must be planned within the framework of degree requirements. Through a carefully developed plan, *the College endeavors to provide continuing personalized advisement.* Enrollment and registration are looked upon as highly individualized procedures.

Student Personnel Offices

THE OFFICE OF THE DEAN OF STUDENTS. This office has the responsibility for planning and coordinating the out of class program and the guidance services of the College, bringing together into an effective working relationship the various student personnel offices.

THE ADMISSIONS OFFICE. High school students considering application for admission to Western Washington College of Education usually contact the Admissions Officer during their senior year through the State program of college conferences. In addition to pre-entrance guidance, this office administers admission procedures.

THE OFFICES OF THE DEAN OF MEN AND DEAN OF WOMEN. In these offices students find friendly counsel in meeting with any problems which may arise. The Deans also assume responsibility for providing and regulating living conditions conducive to success in college and for assisting students in finding part-time employment.

OFFICE OF THE REGISTRAR. This office is responsible for the maintenance of complete student records and for administering the ac-

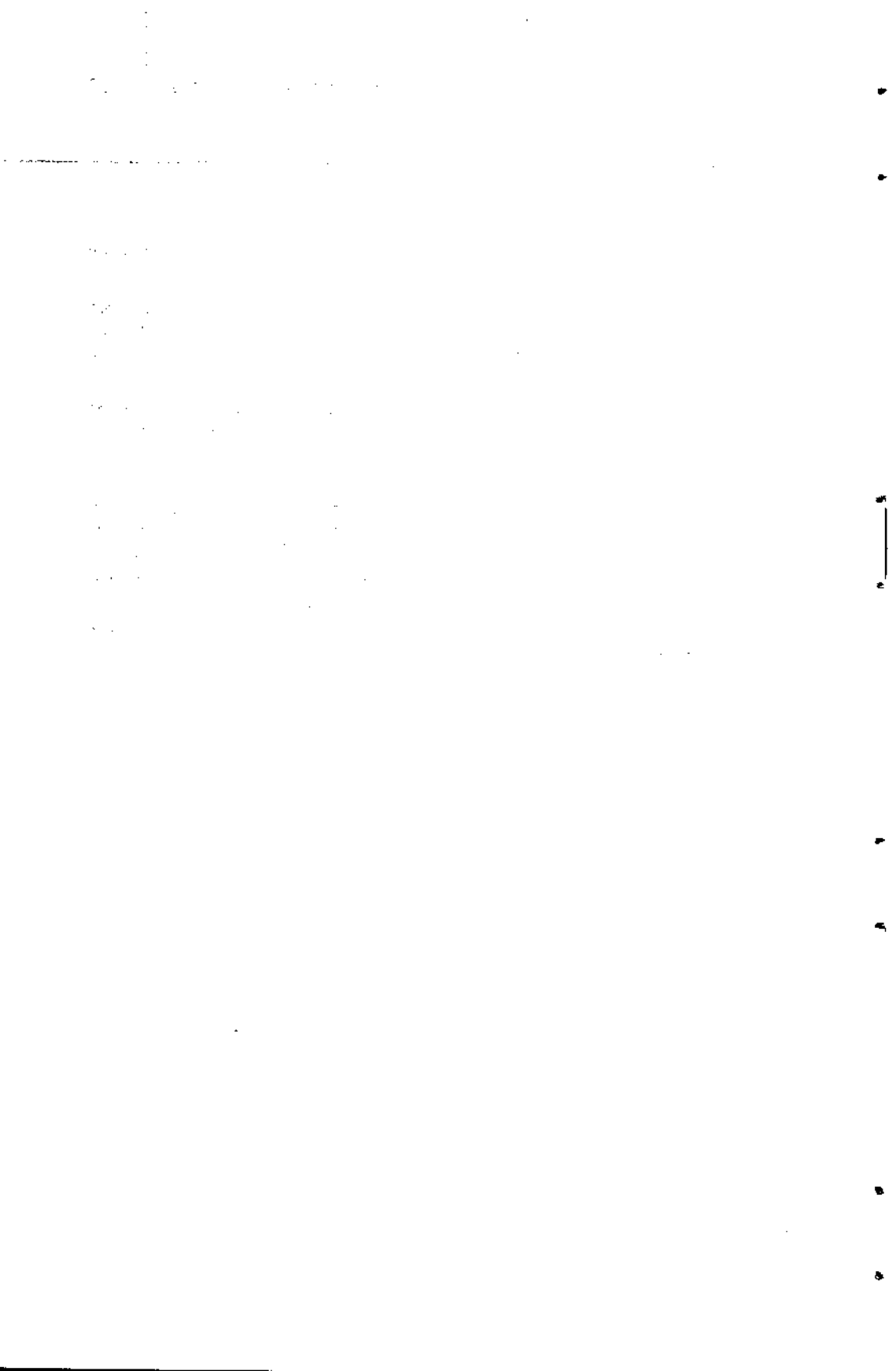
ademic regulations of the College. The Registrar also has important counseling and advisement responsibilities.

PSYCHOLOGICAL SERVICES AND RESEARCH. In addition to other functions, this office makes available a testing and counseling service to students who seek aid in their vocational and personal planning.

OFFICE OF STUDENT AFFAIRS. The encouragement of sound student government and the effective coordination of the extra-curricular program are the major responsibility of the Director of Student Activities.

THE PLACEMENT OFFICE. Through this office, the College assists its graduates and prospective graduates to find full-time positions appropriate to their training and abilities. Placement service is also rendered to graduates who may register for promotion or change of position.

THE HEALTH SERVICE. The College nursing staff is consulted in any instance of illness or accident and is available for guidance in all health matters. Through this office dispensary and infirmary services are also administered.

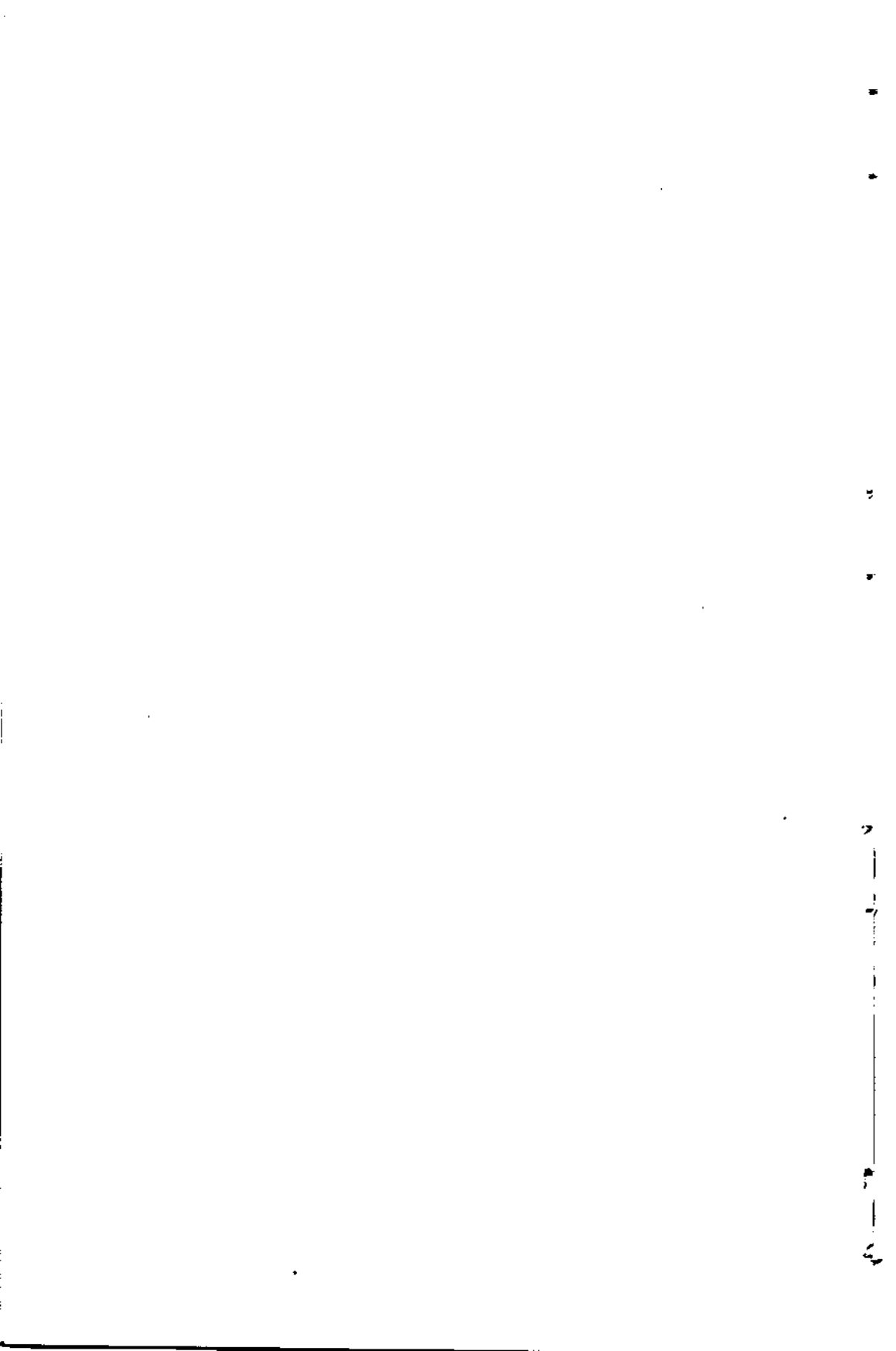




the
Instructional
Program



the Library



Courses of study offered by the College are planned to meet the needs of three distinct groups:

Those preparing for careers in public school teaching and administration. *This is the first responsibility of the College.*

Those seeking a full four years of liberal education as general preparation or as pre-professional training.

Those entering upon well-defined professional training, such as engineering, journalism, and business administration, who prefer to take the first one or two years in the more intimate atmosphere of a smaller college.

Provisions for these three groups are outlined under

1. *The Program of Teacher Education.*
2. *The Arts and Sciences Program.*
3. *The Junior College Division of Studies.*

The Program of Teacher Education

Teacher Certification In Washington

On April 4, 1960 the Washington State Board of Education adopted modifications in the teacher certification program. The new provisional and standard certificates to be issued after July 1, 1961, are to be in many respects comparable to the present general certificates. The provisional certificate is to be issued upon completion of a four-year program and the standard certificate after teaching experience and completion of a fifth college year.

The guidelines and standards adopted by the State Board are designed to stimulate teacher education institutions in sound experimentation in teacher education. Increased responsibility is placed upon the institutions for recommendation of teachers for the specific areas, fields, or subjects of the school program and school levels the teacher is considered best prepared to serve. The wise assignment of teachers is a paramount responsibility of school districts.

As under the current general certificate program, the initial year of teaching experience is considered as part of the teacher's education and is to be followed by a planned program of continued study before the standard certificate is issued.

Pre - Service Program

The state guidelines provide that the pre-service preparation — four years — of all teachers shall include:

1. Broad education in the liberal arts and sciences.

All elementary and secondary school teachers should be liberally educated persons. They should have the understanding, the knowledge, the appreciation, and the sensitivity attainable by study and learning that range across such areas as the humanities, the arts, the social sciences, and the natural sciences and mathematics.

2. Preparation in fields or areas of learning applicable to the curriculum of the public schools.

Every teacher candidate should undertake special study in depth and achieve scholarly competence in same field or area of learning.

This competence should rest upon systematic knowledge, understanding of basic principles, and acquaintance with methods of research appropriate to the field of learning.

3. Preparation in professional education.

Systematic study of education as a profession is necessary for those who would continue to grow in professional stature.

Every elementary and secondary school teacher needs an understanding of the role and possibilities of education in society, the basic social trends and intellectual currents that affect education, and the issues of public policy that bear upon education.

All teachers need an understanding of the processes of human growth and development, the mental, emotional, and physical behavior of learners, and the psychology of learning, adjustment, motivation, and personality. Evaluation of the goals and outcomes of education should be an essential aspect of this area.

All teachers need an understanding of the purpose, structure, administration, control, and operation of the school system and the range of educational programs and curriculum patterns. The teacher needs to know how his own job relates to administrators, guidance counselors, curriculum workers, and the large number of specialists who are needed in a large and complex enterprise. Such understandings are needed in order for the teacher to adequately conceive his own special role in the total educational enterprise, and take his part as an active and responsible member of the profession.

All prospective teachers should engage in thoroughgoing supervised experiences that are planned for induction into the first job. This should include observation, participation, student teaching, and competence in methods of teaching and in the use of instructional resources. Experiences with all phases and levels of the public school system should be included.

The Fifth Year Program

The fifth college year of teacher education is to be planned carefully in the light of the teacher's first teaching experience and/or professional goals. This year of study provides an opportunity for further strengthening teaching competence and for specialized study.

Requirements For The Degree Of Bachelor Of Arts In Education

General

- A. RESIDENCE. A minimum period of one year in residence is prescribed. Not less than forty-five quarter hours must be earned in residence courses on the campus.
- B. FINAL RESIDENCE. The last quarter's work (at least twelve quarter hours) before receiving the degree, must be earned in residence.
- C. SCHOLARSHIP STANDARD. A grade point average of 2.0 in all courses is required. Students must achieve a grade of at least "C" in all professional education courses and in all courses applying to the major or minor concentration.
- D. CREDITS. A total of 192 quarter hours.
- E. UPPER DIVISION CREDITS. Not less than 60 of the 192 quarter hours must be in courses numbered 300 or higher.

The requirements for the Bachelor of Arts in Education degree include (1) 59 prescribed credits in general education; (2) 48 prescribed credits in professional education; (3) subject matter concentration as selected; (4) free electives.

GENERAL EDUCATION COURSES*

Departmental Courses

^a English 100	English Composition.....	3
English 101	English Composition.....	3
Speech 100	Fundamentals of Speech.....	3
Physical Science 101	Matter and Energy.....	4
Biology 104	Principles of General Biology.....	4
^o Mathematics 151†	Foundations of Mathematics.....	3
Physical Education	Selected Activity Courses.....	3

Interdepartmental Courses

General Education 102	Earth Science.....	4
General Education 105	Behavioral Science.....	4
General Education 121	Humanities I..... Hebrew, Classical, and Early Christian Periods	6
General Education 122	Humanities II..... Middle Ages, Renaissance, and Reformation	6
General Education 123	Humanities III..... Ages of Rationalism, the Enlighten- ment, Revolution, and Romanticism	6
General Education 221	Humanities IV..... The Modern World	6
General Education 301	Interdisciplinary Studies.....	2
General Education 401	Interdisciplinary Studies.....	2

*This revised program of general education becomes operative for the first time in the fall quarter of 1960. Adjustments for students in progress are detailed in the published class schedule for 1960-61.

^oNOTE: All students must demonstrate ability to undertake the study of English and mathematics at the college level by tests administered at entrance. Those failing to do so must make up this deficiency before being admitted to English 100 or Mathematics 151. This may be done by independent study or by enrolling in English 3 (Fundamentals of English, fee \$15.00) or Mathematics 3 (Fundamentals of Mathematics, fee \$7.50) without credit. These deficiencies must be cleared before enrolling in the fourth quarter of college study.

†Mathematics 101. Principles of Algebra 5 credits, may be taken in lieu of Mathematics 151.

PROFESSIONAL EDUCATION COURSES

Education 215	Education and American Society.....	3
Education 355	Human Growth and Development.....	5
Education 371	Evaluation in the Public School.....	3
Education 383	Observation and Techniques of Teaching....	3
Education 392	Teaching and Its Techniques.....	8
Education 415	Philosophy and the Curriculum.....	5
Education 455	Psychology for Teachers.....	5
Education 492	Advanced Teaching and Its Techniques.....	16

REQUIREMENTS FOR SUBJECT-MATTER CONCENTRATION

Approximately one-third of the credits required for the Bachelor of Arts in Education degree is devoted to subject-matter concentration. Appropriate course combinations and sequences are described as majors and minors. These concentrations are chosen from five areas or groups of related subject fields classified by the State Board of Education. These areas and their related fields are as follows:

- | | |
|---|---|
| <p>I. PHYSICAL EDUCATION, HEALTH EDUCATION, and RECREATION</p> <ul style="list-style-type: none"> Physical Education Health Education Recreation | <p>IV. SCIENCE AND MATHEMATICS</p> <ul style="list-style-type: none"> Biological Science Chemistry General Science Geology Mathematics Physical Science Physics |
| <p>II. LANGUAGE ARTS</p> <ul style="list-style-type: none"> English Foreign Languages Library Science Speech | <p>V. FINE AND APPLIED ARTS</p> <ul style="list-style-type: none"> Art Home Economics Industrial Arts Music—Applied Music Education |
| <p>III. SOCIAL STUDIES</p> <ul style="list-style-type: none"> Business Education Economics Geography Government History Philosophy Psychology Sociology-Anthropology | |

Specifications for such concentrations are designed to insure the prospective teacher adequate subject-matter competency while avoiding over-specialization in a narrow field.

The student, with his adviser's assistance and approval, selects a plan for the allocation of these credits in such combinations as seem reasonable and realistic in terms of his teaching interests and the demands of the public schools. The following combinations are possible:

- A. Sixty credits in one area, either as a **broad area major** prescribed by the departments concerned: a field major and a related field minor, (e.g., mathematics and physics) or a field major with additional courses in related fields carefully selected under major department advisement.
- B. A major of 36-45 credits and a minor in an area different from that of the major.
- C. Three minors selected from different subject-matter areas.

Specifications for majors and minors are listed in conjunction with the material concerning each department as follows:

BROAD AREA MAJORS: 60 quarter hours.....Interdepartmental

	Page
Fine and Applied Arts.....	92
Physical Education, Health Education, and Recreation.....	167
Science and Mathematics.....	92
Social Studies.....	91

FIELD CONCENTRATIONS

MAJORS		MINORS	
	Page		Page
Art	100	Art	100
Biological Science.....	106	Biological Science.....	106
Business Education.....	112	Business Education.....	113
Chemistry	181	Chemistry	181
Economics	110	Economics	110
English	123	English	123
Foreign Languages.....	127	Foreign Languages.....	127
General Science.....	92	General Science.....	92
Geography	130	Geography	130
Government	115	Geology	134
History	138	Government	115
Home Economics.....	144	Health Education.....	175
Industrial Arts.....	150	History	138
Mathematics	156	Home Economics	144
Music Specialist.....	163	Industrial Arts.....	150
Music—Elementary School....	163	Library Science.....	152
Physical Education (Men).....	175	Mathematics	156
Physical Education (Women)....	174	Music—Elementary School....	163
Physical Science.....	92	Music—Strings	163
Physics	179	Physical Education (Men).....	175
Recreation	175	Physical Education (Women)....	174
Social Studies.....	91	Physics	179
Sociology-Anthropology	189	Psychology	185
Speech	195	Recreation	175
		Social Studies.....	92
		Sociology-Anthropology	189
		Speech	195

The Professionalized Subject-Matter Minor

This concentration may be taken in lieu of one of the minor concentrations listed above. This 20-credit minor consists of courses directly relating specific subject-matter to classroom use, providing a breadth of information appropriate to the grade levels to be taught. Courses are selected from the following list:

DEPARTMENT	COURSE TITLE	CREDIT
Art 260 and.....	Design and Color.....	5
Art 320	Art in the School.....	3
or		
Art 325	Art in Education.....	5
English 425	English for the Elementary School.....	3
English 485.....	Techniques of Reading.....	3
Home Economics 210	Nutrition	2
Industrial Arts 350	Ind. Arts for the Elementary School.....	5
Library 305	Books for Boys and Girls.....	3
Library 306	Introduction of Books to Children.....	3
Library 307	Reading for Young People.....	3
Mathematics 481.....	Arithmetic in the Elementary School.....	5
Mathematics 483	Mathematics in the Secondary School.....	3
Music 150.....	Fundamentals of Elementary School Music.....	2
Music 250	Teaching Elementary School Music.....	3
Physical Ed. 306.....	Physical Education Methods and Materials for the Elementary School	3
Science Ed. 481 and 483.....	Science for the Elementary School.....	2 each
or Science Ed. 482.....	Science for the Elementary School.....	3
Science Ed. 492	Physical Science for the Secondary School.....	3
Science Ed. 493	Biological Science for the Secondary School.....	3
Social Studies Ed. 425	Social Studies for the Elementary School.....	3
Social Studies Ed. 426	Social Studies for the Secondary School.....	3
Speech 355	Introduction to Speech Correction.....	3
Speech 484	Teaching the Integrated Speech Program.....	2
Speech 485	Teaching Speech in the Public Schools.....	3

FREE ELECTIVES

Courses not essential to the general education, professional, or concentration requirements may be selected at the student's discretion to achieve either greater breadth or more specialization. These total from 20-25 credits.

Sequence of Courses

In order that courses required in teacher education be taken in a logical sequence, a student's program is planned in advance. To effect a balanced distribution of students among courses, entering freshmen are classified in three groups according to their rank on the English placement section of the Pre-college Differential Guidance Test. Specifically outlined schedules are printed in the Schedule of Classes. Students are expected to follow the sequence for their group unless enrolled as specialists in music or home economics or as majors in certain fields such as science, mathematics, and foreign languages which require an adjusted pattern.

The following is a typical program for teacher education students enrolling in the fall of 1960:

Freshman Year

FALL	WINTER	SPRING
General Education 121 English 100 Major, minor or elective P. E. Activity	General Education 122 Mathematics 151 Major, minor or elective P. E. Activity	General Education 123 English 101 Physical Science 101 or Major, minor or elective P. E. Activity

Sophomore Year

FALL	WINTER	SPRING
Biology 104 General Education 221 Major, minor or elective	General Education 102 Speech 100 Major, minor or elective	General Education 105 Education 215 Major, minor or elective

The Fifth Year of Study for the Standard General Certificate

The Provisional General Certificate is valid for the student's initial year of experience as a full-time teacher in the field. During this year he is afforded supervisory aid by both the employing school district and the College. On the basis of experience, which is expected to bring new insights and more clearly point up needs, the student in consultation with district and college advisers, develops the general guide lines for the fifth year of study. While the final phase of the teacher's preparation is highly individualized, it is not without plan and well-defined direction. Only after realization of the pre-planned program of study is it possible for a college to recommend the candidate for the Standard General Certificate.

General Credit Regulations

1. Total credits required: 45 quarter hours.
2. Extension credit is limited to 12 quarter hours.
3. At least one-half of the credits must be in graduate or upper division courses.
4. Relation to experience: The fifth year of study normally follows the initial year of experience. However, as much as thirty quarter hours may be taken prior to experience; not more than fifteen of these thirty hours may be taken prior to the approval of a fifth year plan. In any case, at least twelve quarter hours in residence must be completed between the first and third year of teaching. The candidate is allowed five years in which to meet the requirements for the Standard General Certificate.

Regulation Governing Choice of Institution

The student may choose the institution in which to fulfill the fifth year requirement for the Standard General Certificate.

If the student selects a teacher-education institution within the State of Washington for his fifth year of study that institution will develop with him an appropriate program and be responsible for recommending the granting of the certificate.

A candidate selecting an out-of-state college or university for his fifth year of study will rely upon his pre-service institution for advisement and recommendation for the certificate. In such cases approval for the fifth year plan must be secured from the pre-service institution in advance.

At least one semester or two quarters of the work for the fifth year must be completed in residence in one institution.

Note: Under a modification of the certificate provisions recently adopted by the State Board of Education to take effect in 1961, more direction may be included in the selection of a program of study for the fifth college year. The College expects to develop the details of such new specification during 1960-1961.

The Division of Graduate Study

Western Washington College of Education has as its primary purpose the preparation of professional personnel for the schools of the State. In 1947 the legislature authorized the College to offer programs of study leading to the degree of Master of Education. The administration and faculty of the College have interpreted their responsibility as that of developing with candidates advanced subject backgrounds and professional skills in order that they may assume positions of leadership in teaching, administration, supervision, and special services.

Accreditation

The graduate program provided at Western Washington College of Education is accredited by the National Council for Accreditation of Teacher Education for the preparation of teachers, school principals, and specialized school personnel.

The Master of Education Degree

Students working toward a master's degree at this college are admitted to the program in two stages:

1. Admission to graduate status.
2. Admission to candidacy for the degree.

GRADUATE STATUS

Students holding an earned baccalaureate degree from an institution accredited by the National Council for Accreditation of Teacher Education, or by the appropriate regional accrediting agency may be admitted to graduate courses provided their baccalaureate degree embodies a pattern of professional preparation comparable to the requirements for teacher certification in the State of Washington. Admission to graduate courses does not imply graduate status.

Admission

Students desiring admission to graduate status must:

1. file with the Director of Graduate Studies an application for graduate status;
2. furnish two official copies of transcripts covering their baccalaureate degree and any courses taken subsequently;

3. provide scores for the Graduate Record Examination and the Miller Analogies Tests. These are regularly administered at the College prior to summer sessions.

Eligibility

1. Unconditional admission to graduate status requires a grade point average of 3.0 (B) for the last year of undergraduate study.

2. Those students with a grade average from 2.5 to 2.99 for the final undergraduate year who have completed 12 hours of an approved graduate program with a "B" average, are considered by the Graduate Council to have satisfied the scholastic requirement. Credit toward the master's degree may be allowed for those approved courses in which a grade of "A" or "B" is achieved.

3. Those students with a grade point average below 2.5 for the final undergraduate year and who have completed 15 hours of approved upper division courses with a "B" average, are considered by the Graduate Council to have satisfied the scholastic requirement. However, these credits do not apply to the master's degree.

4. If the student's undergraduate course has been deficient in breadth and does not provide a proper foundation for advanced work in his chosen area of concentration, he is required to take specified undergraduate courses, without graduate credit, before he may be admitted to regular graduate status. All such deficiencies must be cleared before the student is admitted unconditionally to candidacy for the master's degree.

5. Work beyond the baccalaureate level taken prior to application for the master's degree will be reviewed in terms of applicability to a master's degree program. In no case will more than 9 hours of such work be accepted as applicable to the master's degree.

6. Students of Western Washington College of Education who require less than sixteen hours for a bachelor's degree may be permitted to earn graduate credit for hours in excess of the 192 required undergraduate credit. For such students the total load during the quarter in question may not exceed sixteen hours.

Advisement

Upon admission to graduate status a student is assigned an interim adviser who approves his program until such time as the student is admitted to candidacy for the master's degree.

Candidacy for the Master's Degree

Admission

1. Students desiring admission to candidacy for the master's degree must file an application with the Director of Graduate Studies. This application should be presented within the last three weeks of the quarter in which Education 501, Introduction to Graduate Study, is completed.

2. Applications for admission to candidacy are acted upon by the Graduate Council.

Eligibility

In addition to the requirements for admission to graduate status the following matters are considered in admission to candidacy for the master's degree:

1. A minimum of one year's approved teaching experience.

2. A minimum of twelve hours of acceptable resident graduate work including Education 501, Introduction to Graduate Study. A grade average of 3.0 (B) is required.

3. Evidence of general maturity and professional promise.

4. The candidate's rating on the Graduate Record Examination and the Miller Analogies Test.

Students approved by the Graduate Council as meeting the above requirements are notified promptly. Where there is doubt, the decision is delayed so that the student may have an opportunity to demonstrate his abilities. In no case will the decision relative to admission to candidacy be delayed beyond the opening of the third quarter of graduate study.

Advisement

Upon admission to candidacy an adviser or a committee will be appointed for each candidate, depending upon the option which he chooses for the completion of the degree requirements. Choice of adviser will be made in accordance with the area of concentration which the candidate chooses.

A graduate student who has, upon admission to candidacy, indicated an area of concentration will be required to notify the graduate office and his graduate adviser of any changes in plans which affect this area of concentration. In the event he changes from one area of concentration to another, his credits will be evaluated in terms of their

applicability to the new area of concentration. The Director of Graduate Studies will in consultation with a representative of the new area of concentration determine the number of credits to be allowed.

Degree Programs

An approved candidate may qualify for the Master of Education Degree by either of two plans. It is the student's responsibility to notify the Division of Graduate Studies, during the second quarter of his graduate program, as to his choice of options. Application forms for this notification may be secured in the Office of Graduate Studies.

Option I:

1. FORTY-FIVE QUARTER HOURS OF CREDIT

A minimum of twenty-three of these hours of acceptable course work must be earned in courses open only to graduate students. (500 numbered).

2. FIELD PROJECT REPORT OR THESIS

Plans must be reported to and approved by the student's graduate committee before research study is begun. Six quarter hours of credit are earned upon approval of the completed report or thesis.

The field project or thesis demonstrates the student's ability to do independent study and to report his investigation or project in writing. At least three weeks before the end of the quarter in which he expects to graduate, the student presents to the Director of Graduate Studies three bound typewritten copies approved and signed by his graduate committee. Two copies become the property of the College. One copy is placed in the College Library and one copy in the Graduate Division Library. The third copy is delivered to the student's graduate adviser.

The candidate is required to submit with his field project or thesis a 200-500 word abstract. A form for this abstract may be obtained from the Office of Graduate Studies.

3. A committee of three is appointed to advise the candidate and approve his thesis program at various stages of its development. The chairman of the committee will approve the candidate's program of study.

4. GENERAL REQUIREMENTS (See below).

Option II:

1. FORTY-EIGHT QUARTER HOURS OF CREDIT

A minimum of twenty-four hours of acceptable course work must be earned in courses open only to graduate students.

2. A COMPREHENSIVE FINAL EXAMINATION

The examination covers professional education and the candidate's area of concentration.

3. An adviser is appointed to approve the candidate's program of study.

4. GENERAL REQUIREMENTS (See below).

General Requirements Related to Both Option I and Option II

Course and Grade Requirements

All courses submitted by a student in fulfillment of the master's degree requirement must be approved by his adviser and must represent a coherent program of study as related to his area of concentration.

1. Not more than 15 hours of graduate credit may be accepted before enrolling in Education 501.

2. Only those courses in the 400 and 500 number series and certain specified 300 numbered courses are counted toward the master's degree. Courses in the 500 number series are open to graduates only and must represent at least half of the candidate's program.

3. The grades for all courses submitted for the master's degree must average not less than "B". No grade below "C" is allowed for graduate work. A grade of "S" is counted as "C" in determining the student's grade average.

4. Three courses are prescribed for all candidates: Education 501, 512, and 513.

5. A degree candidate must complete a minimum of fifteen quarter hours of acceptable graduate credit following his admission to candidacy for the master's degree.

6. Graduate courses taken seven years or more prior to the time for graduation shall be reviewed by the student's adviser to determine their acceptability. He shall make recommendations to the Graduate Council for final action.

Extension and Correspondence

1. No graduate credit shall be allowed for courses taken by correspondence.

2. Not more than nine quarter hour credits of extension work may be allowed for the master's degree. For such courses, the standard of work must be equal to that of the courses offered on the campus and must be taught by regular members of the college staff. Extension courses do not apply in satisfying the residence requirement.

Before enrolling for extension courses the graduate student must secure the approval of his adviser.

The responsibility for the furnishing of transcripts covering extension work rests with the student.

Six quarter hour credits may be earned through supervised field projects. These should include conferences, and a report to be reviewed by the student's adviser or committee.

Residence

1. Residence status requires that the candidate be enrolled on campus at least three quarters and earn a minimum of thirty-six quarter hours. These need not be consecutive quarters. Some modification of the residence requirements is possible for graduates of Western Washington College of Education and limited adjustments may be made for students professionally employed.

2. Students of Western Washington College of Education who require less than sixteen hours for a bachelor's degree may be permitted to earn graduate credit for hours in excess of the 192 required undergraduate credit. For such students the total load during the quarter in question may not exceed sixteen hours.

Transfer

A graduate of Western Washington College of Education, having achieved graduate status, may transfer a maximum of 15 hours of acceptable credit earned at another accredited institution. However, it is desirable that the student take the first quarter of his graduate study at Western Washington College of Education in order that work taken elsewhere may be part of an approved program.

Load

1. The course load of the graduate student shall not exceed 15 hours in any one quarter and may further be limited by the Graduate Council and/or the student's graduate adviser or committee.

2. Students holding what would ordinarily be considered a full-time position may not be permitted to receive graduate credit for more than five quarter hours during any one quarter.

Awarding the Degree

The degree is officially granted at the close of the quarter in which the student has fulfilled all degree requirements. The comprehensive examination, as required in Option II and the bound copies of the field project or thesis as required in Option I must be completed one month before the close of the quarter in which the application for the degree is made. Recommendations for the awarding of the degree are made to the Graduate Council by the student's adviser or by the chairman of his thesis committee.

Graduation

Commencement exercises are held annually in June at the close of the regular school year. All candidates for the master's degree in education are required to participate in the commencement exercises following the granting of the degree irrespective of the quarter in which they complete all degree requirements.

Calendar

THESIS OR PROJECT REPORT UNDER OPTION I:

The thesis or project report must be ready for binding one month before the close of any quarter in which the degree is granted.

EXAMINATION UNDER OPTION II:

The written examination will be held in April and in July or August at the close of the first six-week summer session each year.

The Arts and Sciences Program

The four-year programs in non-professional areas are planned to insure students a background in the broad fields of learning and an opportunity to master the skills of communication. In addition, they provide ample opportunity for specialization as well as elective leeway.

Requirements for the Degree of Bachelor of Arts

GENERAL

- A. **RESIDENCE.** A minimum period of one year of residence is prescribed. Not less than forty-five quarter hours must be earned in residence on the campus.
- B. **FINAL RESIDENCE.** The last quarter's work (at least twelve quarter hours) before receiving the degree, must be earned in residence.
- C. **SCHOLARSHIP.** A minimum grade-point average of 2.0 (C) is required. No course graded below "C" may be counted in a major or minor concentration.
- D. **CREDITS.** A total of 192 quarter hours.
- E. **UPPER DIVISION CREDITS.** At least 60 quarter hours must be in courses numbered 300 or higher.

The requirements for the Bachelor of Arts degree include (1) 59 prescribed credits in general education; (2) subject-matter concentration up to 110 credits; (3) free electives.

GENERAL EDUCATION COURSES*

Departmental Courses

		Credits
^o English 100	English Composition.....	3
English 101	English Composition.....	3
Speech 100	Fundamentals of Speech.....	3
Physical Science 101	Matter and Energy.....	4
Biology 104	Principles of General Biology.....	4
^o Mathematics 151†	Foundations of Mathematics.....	3
Physical Education	Selected Activity Courses.....	3

Interdepartmental Courses

General Education 102	Earth Science.....	4
General Education 105	Behavioral Science.....	4
General Education 121	Humanities I.....	6
	Hebrew, Classical, and Early Christian Periods	
General Education 122	Humanities II.....	6
	Middle Ages, Renaissance, and Reformation	
General Education 123	Humanities III.....	6
	Ages of Rationalism, the Enlight- enment, Revolution, and Romanticism	
General Education 221	Humanities IV.....	6
	The Modern World	
General Education 301	Interdisciplinary Studies.....	2
General Education 401	Interdisciplinary Studies.....	2

*This revised program of general education becomes operative for the first time in the fall quarter of 1960. Adjustments for students in progress are detailed in the published class schedule for 1960-61.

^oNOTE: All students must demonstrate ability to undertake the study of English and mathematics at the college level by tests administered at entrance. Those failing to do so must make up this deficiency before being admitted to English 100 or Mathematics 151. This may be done by independent study or by enrolling in English 3 (Fundamentals of English, fee: \$15.00) or Mathematics 3 (Fundamentals of Mathematics, fee: \$7.50) without credit. These deficiencies must be cleared before enrolling in the fourth quarter of college study.

†Mathematics 101. Principles of Algebra. 5 credits, may be taken in lieu of Mathematics 151.

REQUIREMENTS FOR SUBJECT-MATTER CONCENTRATION

A degree candidate must present one major and one minor field of concentration.

The Major—

Requirements for the major are specified by each department (see page references below). In most cases "supporting courses" are prescribed as a required supplement to the major. The total requirements for a major and supporting courses in no case exceed 85 credits.

The Minor—

From 18 to 25 credits as prescribed by departments are required for a minor.

Students may take additional elective courses in major and minor fields of study.

The application of courses taken in other colleges will be determined by the department chairman concerned. For the most part, it is expected that the work toward the major and minor will be done in this institution.

Specifications for majors and minors are listed in conjunction with the material concerning each department as follows:

MAJORS		Page	MINORS		Page
Art.....	100	Art.....	100	100	
Biological Science.....	106	Biological Science.....	106	106	
Chemistry.....	181	Business Education.....	113	113	
Economics—Business.....	110	Chemistry.....	181	181	
Economics—General.....	110	Economics—General.....	110	110	
English.....	123	English.....	123	123	
Foreign Languages.....	127	Foreign Languages.....	127	127	
Geography.....	130	Geography.....	130	130	
Geology.....	134	Geology.....	134	134	
Government.....	115	Government.....	115	115	
History.....	138	History.....	138	138	
Home Economics.....	144	Home Economics.....	144	144	
Industrial Arts.....	150	Industrial Arts.....	150	150	
Mathematics.....	156	Mathematics.....	156	156	
Music.....	163	Music.....	163	163	
Psychology.....	185	Philosophy.....	165	165	
Physics.....	179	Physical Education—The Dance	175	175	
Recreation.....	175	Physics.....	179	179	
Sociology-Anthropology.....	189	Psychology.....	185	185	
Speech.....	195	Recreation.....	175	175	
		Sociology-Anthropology.....	189	189	
		Speech.....	195	195	

FREE ELECTIVES

The minimum of 23 uncommitted credits may be used by the student for exploration, greater breadth, or additional specialization.

The Junior College Division of Studies

Carefully planned programs of study have been developed under this division to meet the needs of students who are not concerned with teacher education or a full four-year program at this institution.

Two years of general studies with a wide range of electives are available. Chiefly, however, the work of this division is designed for those who plan more advanced specialized study in other colleges and universities. Many such students prefer to begin their college careers in the more intimate atmosphere of a smaller institution, completing one or two years for advanced standing before transferring to a professional school.

A number of specific programs have been developed in close collaboration with Washington State University and the University of Washington.

It is to be clearly understood that in no sense does the College maintain professional schools outside of teacher education. However, students contemplating transfer to one or other of these institutions in the fields listed can, by taking the appropriate courses, transfer without loss of credit.

One or two-year programs lead to advanced standing in the following fields:

Agriculture	Home Economics	Pre-Medical Technology
Architecture	Nursing	Pre-Medicine and
Business Administration	Pharmacy	Pre-Dentistry
Engineering	Pre-Journalism	Pre-Occupational Therapy
Fisheries	Pre-Law	Pre-Physical Therapy
Forestry		Pre-Veterinary

The NURSING CURRICULUM is conducted in cooperation with a local nurses' training center; it includes chemistry, anatomy, microbiology, physiology, dietetics, history of nursing, and a course in English.

Special Departments and Services

The Office of Correspondence Study

This office coordinates the program of course offerings available by correspondence. These courses parallel certain of the offerings given in residence. They are in all cases conducted by regular members of the teaching staff. A special bulletin concerning all phases of correspondence study may be had upon request. Correspondence study is currently administered by the Registrar's Office.

The Office of Extension Study

A considerable number of the courses listed in this catalogue are made available to teachers in their home communities and to other students not in residence. These offerings are taught by regular members of the staff, occasionally with the aid of resident assistants. The standards and requirements are the same as for courses taught on-campus. Extension course service is available to any student group sufficiently large to warrant instruction.

The Audio-Visual Center

The Center serves the entire instructional program of the College by

- A. housing audio-visual equipment and instructional materials and arranging for efficient distribution and use;
- B. arranging for acquisition or rental of equipment and materials;
- C. conducting a laboratory for training college personnel and prospective teachers in effective use and proper maintenance of audio-visual devices.

Production facilities are also maintained to serve faculty and student teachers in the preparation of instructional materials.

The Library

The collection of 100,000 books and periodicals in the library offers opportunity for study and research. Some 5000 volumes were added in 1959; 464 periodicals are received currently. A special unit of the main collection is the large group of books on various phases of education. Another important grouping of 13,000 volumes is the library for the Campus School. As a member of the Pacific Northwest Bibliographic Center, the library supplements its resources through inter-library loans, making available much other material for students and members of the faculty.

The library is open from 7:45 a. m. to 10:00 p. m. Monday through Thursday; 7:45 a. m. to 5:00 p. m. Friday; 2:00 p. m. to 6:00 p. m. Saturday and Sunday.

The Office of Psychological Services and Research

This college agency carries the responsibility of the entire testing program: (a) pre-entrance tests, (b) qualifying tests, (c) tests available to individuals as an aid to guidance. It also provides professional counseling service to students.

Among its other activities:

1. It organizes data dealing with the administrative work of the College, such as the registration of students, problems of scholarship, unit costs, and student personnel.
2. It cooperates with schools and other agencies in matters of testing, diagnosis, and remedial planning.
3. It provides consulting and planning assistance to teachers, schools, and community agencies in work which includes educational measurement or experimental technique.
4. It assists the faculty in the construction of objective tests, the evaluation of individual test items, the scoring of tests, and the interpretation of results.
5. It collaborates with members of the faculty in special investigations.
6. It assists graduate students in the organization of research studies, the tabulation of data, and the use of statistical techniques for reporting and evaluating research.

Health Service

A physical examination is a prerequisite to enrollment for all students.

The records thus obtained form a basis for the work of the department in maintaining the health of each student and in helping him overcome physical defects. The examinations are likewise a necessary protection for the college community.

Illness of students must be reported at once, and each day thereafter, to the Nurses' Office. After an illness, the student must report in person to the Nurses' Office before attending classes.

A dispensary is open to all students during class hours. The College also maintains a hospital on the campus for communicable diseases and minor illnesses. Any student is provided care without charge for five days during the academic year. Thereafter a nominal per diem charge is made.

In cases of severe illness the Health Service reserves the right to request the attendance of a physician chosen by the student. Close cooperation is maintained between the Health Service and the physician. For serious illness there are two city hospitals available to students.

In addition to the health services, the College sponsors a health and accident insurance plan which is available to students on an optional basis. This group policy with a national company provides broad coverage and liberal benefits for a modest premium. Students who do not already carry adequate health and accident insurance are urged to take advantage of this plan.

Academic Departments, Courses, and Concentrations

Course Numbers

Courses numbered from 100 to 299 are classified as lower division; courses numbered from 300 to 499 are classified as upper division. The first digit generally indicates the year for which the course is intended:

0- 99	sub-college courses, without credit
100-199	first-year courses
200-299	second-year courses
300-399	third-year courses
400-499	fourth-year courses
500-599	open only to graduate students

Students are not permitted to take courses more than one year above their class standing except in unusual circumstances.

In general, the numbers 300, 400, and 500 are used to designate individual study or conference courses or special project work in a given field. Such courses are available only through prior arrangement with the instructor and with the approval of the department chairman.

Interdepartmental Courses

With the inauguration of the revised general education program and the honors program in 1960 (see pages 64, 79 and 30) a substantial number of courses were added to the curriculum in which two or more departments share responsibility. For easy reference, all such offerings are for the first time catalogued together. Concentrations — majors and minors — which cross departmental lines or which involve multiple course designations are also indicated in this section.

GENERAL EDUCATION

102. **EARTH SCIENCE** 4 credits. A course designed to broaden the student's understanding of the earth as the home of man. Attention is given to the earth's crust, land forms, the atmosphere, the oceans, soils, vegetation. Laboratory sessions include training in map reading and interpretation and the identification of rocks and minerals.
105. **BEHAVIORAL SCIENCE** 4 credits. A study of man as a biological, psychological, and social organism. Emphasis is given to the processes of perception, learning, and motivation and to the social and cultural context.
121. **HUMANITIES I** 6 credits. Hebrew, Classical, and Early Christian periods.
122. **HUMANITIES II** 6 credits. Middle Ages, Renaissance, and Reformation.

123. **HUMANITIES III** 6 credits. Ages of Rationalism, the Enlightenment, Revolution, and Romanticism.
221. **HUMANITIES IV** 6 credits. The Modern World.
301. **INTERDISCIPLINARY STUDIES** 2 credits. Prerequisites: all required courses in general education or permission.
401. **INTERDISCIPLINARY STUDIES** 2 credits. Prerequisite: General Education 301. General Education 301 and 401 are courses in which the subject matter is taken from several disciplines with instruction provided by a number of departments. While the courses involve both lectures and group discussions, their primary purpose is the cultivation of the capacity for independent study.

HONORS

151. **TUTORIAL I** 2 credits.
161. **SCIENCE COLLOQUIUM I** 2 credits.
162. **HUMANITIES COLLOQUIUM I** 2 credits.
163. **SOCIAL SCIENCE COLLOQUIUM I** 2 credits.
251. **TUTORIAL II** 2 credits.
261. **SCIENCE COLLOQUIUM II** 2 credits.
262. **HUMANITIES COLLOQUIUM** 2 credits.
263. **SOCIAL SCIENCE COLLOQUIUM II** 2 credits.
290. **SUMMER READINGS** 2 credits.

GENERAL SCIENCE

405. **SCIENCE AND CIVILIZATION** 3 credits. Prerequisite: 30 credits of biological and/or physical science. This course is urged for all science majors and required of those who have been excused from Physical Science 101 or Biology 104. This is a seminar course in which upper division students examine the nature, methods, and development of science and the role of science in society.
406. **THE DEVELOPMENT OF THE SCIENTIFIC THOUGHT** 5 credits. A course to develop understanding of the nature and scope of science in terms of historical evolution. The student is provided opportunity to investigate the origin and growth of specific ideas, to examine critically the aims, methods, and modes of thought of selected scientists, to explore the philosophical implications or resulting ideas, and to interpret science as a social phenomenon.

PHYSICAL SCIENCE

101. **MATTER AND ENERGY** 4 credits. A course designed to give an understanding of certain concepts of the physical sciences as derived from the area of matter and energy and their impact upon man's thinking and upon society. The course is organized around (a) the role of science in the modern world, (b) scientific attitudes and scientific methods of thinking and investigating, and (c) man's understanding of the nature of matter and energy. Instruction involves lecture, discussion, demonstrations, and laboratory methods.
105. **INTRODUCTION TO ASTRONOMY** 3 credits. Prerequisite: high school physics or Physical Science 101 or equivalent. An introductory course in astronomy designed to acquaint the student with the earth and how it is affected by celestial bodies; the solar system and its origin; the stars, their apparent and real motion and internal processes. In addition, the course presents the concept of relativity of space and time, curved space, and gravitation.

FOREIGN LANGUAGE EDUCATION

332. **METHODS AND MATERIALS FOR THE TEACHING OF MODERN FOREIGN LANGUAGES** 3 credits. Prerequisite: at least eighteen quarter hours of one modern foreign language, or the equivalent.
333. **THE TEACHING OF MODERN FOREIGN LANGUAGES IN THE PUBLIC SCHOOLS** 5 credits. Prerequisite: two years of any modern foreign language at the high school level, or the equivalent. This workshop course is devised to help prepare teachers of modern foreign languages at any grade level. It aims to develop or improve skills with the newer methods, techniques, and teaching aids. There is opportunity to observe and practice the aural-oral techniques of teaching a modern foreign language at the intermediate grade level. (Offered summer session only).

SCIENCE EDUCATION

Students who are not specializing in science but who need science courses adapted for classroom use may take advantage of courses provided in this area.

Students who are majors in science may select certain of the following courses to fulfill requirements as well as to augment their electives.

- 400-1. **SELECTED TOPICS IN CHEMISTRY, FOR JUNIOR AND SENIOR HIGH SCHOOL** 5 credits. Prerequisite: 10 credits of chemistry. The role of modern chemistry concepts in the teaching of junior and senior high school science.
- 400-2. **SELECTED SCIENCE IN THE PUBLIC SCHOOL** 3 credits. Prerequisite: General Education 102 or Science Education 482T. Concepts, experiences, and course materials from the field of geology adaptable to the elementary and junior high school classroom. Emphasis is on rocks and minerals, more common fossils, history and surface features of the Pacific Northwest. Time is spent in preparing materials for use in classroom situations. Field trips to geologically interesting localities in Whatcom and Skagit counties are included. Offered in the summer only.
430. **ATOMIC AND NUCLEAR STRUCTURE** 3 credits. A non-technical course designed to help teachers of the elementary and secondary schools understand recent advances made in nuclear science and the application that man has made of this knowledge in agriculture, medicine, industry, warfare, and civilian defense. Opportunities are provided for the use of equipment in detecting and measuring radioactivity. Methods for working with young people in the schools are considered.
431. **EQUIPMENT CONSTRUCTION** 3 to 5 credits. Prerequisite: one year of college physics and approved application prior to enrollment. This course is designed for persons interested in physics teaching. Emphasis is given to an analysis of basic principles and concepts in physics and the construction of demonstration equipment which illustrates these principles. Opportunity is provided to learn the care, adjustment, and design of apparatus. Instruction in the use of construction tools is provided in various shops. Equipment is built under supervision of the science and industrial arts staff. The course includes lectures, assigned readings, laboratory, and shop work.
450. **PLANTS OF THE NORTHWEST** 3 credits. A course designed primarily for teachers who desire to become familiar with the common plants of the local region. It

includes the identification and field recognition of plants, and an understanding of their reproduction and adaptations to their environment. Field trips furnish the materials for the course. Students majoring in biological science see Botany 352.

460. **NATURAL HISTORY: ANIMALS OF THE NORTHWEST** 3 credits. This course is designed primarily for teachers interested in using the living materials of the local environment. It includes study of the higher animals of the Pacific Northwest, their identification, life histories, habits, and distribution. Field trips supplement the classroom work. (Sophomores may take this course by permission of the instructor.)
464. **BIRDS OF WASHINGTON** 3 credits. Identification of our common birds, knowledge of their life habits, structural adaptations, problems of food supply, methods of protection, economic importance, and migration. The course is conducted both in the field and laboratory. (Sophomores may take the course by permission of the instructor.)
465. **INSECTS OF THE NORTHWEST** 3 credits. A non-technical course primarily for teachers. Included are the elements of insect classification, identification, life histories, and habits. Field trips furnish much of the materials for study. (This course may be taken by sophomores with permission of the instructor.)
474. **PREPARATION OF BIOLOGICAL MATERIALS FOR CLASSROOM USE** 3 to 5 credits. A course for elementary and secondary classroom teachers in the techniques of preserving, mounting, displaying, and caring for various biological materials. Students in this course have actual experience in the preparation of classroom materials, each according to individual needs. These may range from the care of plant, animal, insect, and bird specimens brought to the classroom by children to the preparation of permanent mounts of microscopic materials and the use of plastic in the display of specimens.
475. **PHYSICAL SCIENCE TECHNIQUES AND MATERIALS** 3 to 5 credits. A laboratory course designed to provide elementary and secondary school teachers with opportunity to supplement their previous training and classroom experiences with materials and techniques in physical science. These materials and techniques are selected from among such activities as glassblowing, simple electrical circuits, radiation counting, instrumental analysis, vacuum techniques, etc. Opportunities are available to use these techniques in the construction of simple classroom equipment.
480. **SPECIAL PROJECTS IN SCIENCE FOR THE ELEMENTARY SCHOOL** 2 to 5 credits. Prerequisites: General Education 102, Biology 104, and one course in Science for the Elementary School, or teaching experience. This course is available to a few students who wish to undertake special projects under supervision. The consent of the instructor is necessary before registration.
481. **SCIENCE FOR THE ELEMENTARY SCHOOL** 2 credits. Prerequisite: Biology 104. The content and materials of the course are determined largely by the environmental offerings suitable for inclusion in a school program in the fall of the year; these tend to be largely biological in character. Included are ecological concepts such as the adaptations of plants and animals, their interrelationships, their struggle for existence, conditions necessary for life, man's dependence upon plants and animals, and problems concerned with the conservation of natural resources.
- 481T. **SCIENCE FOR THE ELEMENTARY SCHOOL** 5 credits. This course is provided for transfer students who are juniors or seniors and have not had Biology 104 or its equivalent. The course may be taken in lieu of Biology 104 and Science Education 481. The purpose of the course is similar to Science Education 481 with opportunity to gain additional background needed in biological science.
482. **SCIENCE FOR THE ELEMENTARY SCHOOL** 3 credits. Prerequisite: General Education 102. The content and materials of the course are largely determined by the environmental offerings suitable for inclusion in a school program in the winter

season of the year. This includes experiences with physical science concepts and materials from the areas of astronomy, geology, weather, chemical and physical changes, and magnetism and electricity.

- 482T. **SCIENCE FOR THE ELEMENTARY SCHOOL** 5 credits. The course is provided for transfer students who are juniors or seniors and have not had Physical Science 101 or its equivalent. The course may be taken in lieu of Physical Science 101 and Science Education 482. The purpose of the course is similar to Science Education 482 with opportunity to gain additional background needed in physical science.
- 4P3. **SCIENCE FOR THE ELEMENTARY SCHOOL** 2 credits. Prerequisite: Biology 104. The content and materials of the course are determined by the environmental offerings suitable for inclusion in a school program in the spring of the year. This includes experiences in the field and laboratory. Materials are concerned with early spring growth of plants, reproduction in plants and animals, study of birds, pond life, and seashore life.
490. **SPECIAL PROJECT IN SCIENCE TEACHING IN THE SECONDARY SCHOOL** 2 to 5 credits. Prerequisite: Science Education 492 or 493 or teaching experience and consent of the instructor before registration.
492. **PHYSICAL SCIENCE FOR THE SECONDARY SCHOOL** 3 credits. Prerequisite: 15 credits of physical science. A course concerned with the teaching of the physical sciences in the junior and senior high schools. Philosophy and learning experiences are developed through readings, discussions, demonstrations, and field trips, while the laboratory work develops skill in teaching the physical sciences.
493. **BIOLOGICAL SCIENCE FOR THE SECONDARY SCHOOL** 3 credits. Prerequisite: 15 credits in biological science. A course concerned with the biological science program in the secondary school. Philosophy and learning experiences are developed through readings, lectures, and discussions, demonstrations, and field trips, while the laboratory work provides opportunities to gain knowledge and skill in working with materials of the biological sciences.
500. **SPECIAL PROJECTS IN SCIENCE** 2 to 5 credits. Prerequisites: graduate standing and consent of the instructor. This course is available to students who wish to undertake special projects under supervision.
501. **DEVELOPMENT OF A SCIENCE PROGRAM IN THE PUBLIC SCHOOLS** 3 to 5 credits. This course is organized for the guidance of principals, superintendents, supervisors, and teachers interested in developing a comprehensive program of science for their respective school systems. The work is concerned with the selection and organization of materials and experiences that will permit the child to develop in his mastery of skills, in his discovery of facts and principles of science, and in his formation and understanding of science projects. Formerly Science 500-1.
511. **EARTH SCIENCE IN-SERVICE INSTITUTE** 16 credits. Prerequisite: 2 years teaching experience and the Director's permission. This course draws its subject material from fields of geology, astronomy, and meteorology and is offered to increase the competence of experienced teachers.
- NOTE: Classes meet from 9 to 12 and from 1 to 3 on Saturday. First meeting October 8, 1960, final class June 3, 1961.
580. **SPECIAL PROBLEMS IN SCIENCE TEACHING IN THE ELEMENTARY SCHOOL** 2 to 5 credits. Prerequisites: teaching experience and consent of the instructor. A course dealing with the relationship of science experience to the program of the elementary school. It provides opportunity for teachers to work with problems concerning content, utilization of community resources, materials of the environment, development of special areas for instruction, integration with other activities in the school program, and with organization of courses of study.

582. **IMPROVEMENT OF SCIENCE INSTRUCTION IN THE ELEMENTARY SCHOOL** 2 to 5 credits. A course designed for teachers, consultants, and administrators. It provides an examination and evaluation of current thinking and practice relative to the science program of the elementary school. Opportunities are provided for developing science programs for a particular school system and for reorganizing science instruction to improve the education of children.
590. **SPECIAL PROBLEMS IN SCIENCE TEACHING IN THE SECONDARY SCHOOL** 2 to 5 credits. Prerequisite: teaching experience and consent of the instructor. A course dealing with the relationship of science experiences to the program of the secondary school. An opportunity for teachers to work with problems concerning content, utilization of community resources, materials of science teaching, and the development of units of instruction is provided.
592. **IMPROVEMENT OF SCIENCE INSTRUCTION IN THE SECONDARY SCHOOL** 2 to 5 credits. Designed for teachers, consultants, and administrators. The course provides an opportunity to examine and evaluate current thinking and practice in the teaching of science at the junior and senior high school levels. Opportunities are provided for developing a science program to meet the needs and circumstances of a specific school situation.

SOCIAL STUDIES EDUCATION

425. **SOCIAL STUDIES FOR THE ELEMENTARY SCHOOL** 3 credits. A professionalized subject-matter course for elementary teachers. Special attention is given to the problem of incorporating social studies material into general classroom organization.
426. **SOCIAL STUDIES FOR THE SECONDARY SCHOOL** 3 credits. A professionalized subject-matter course drawing upon all the disciplines of the social sciences. It is designed to help social studies teachers choose and adapt the materials of instruction to the junior and senior high school level. Contemporary world problems are emphasized in this course.
431. **ECONOMICS FOR TEACHERS** 5 credits. A course designed to present the principles of economics essential to an understanding of contemporary American society and its functioning. Consideration is given to methods and materials suitable for the application of these principles to problems in the social studies program of the schools.
451. **MAPS AND CHARTS IN THE SOCIAL STUDIES** 3 credits. A practical course in the construction of maps and charts for classroom use from sources in history, economics, sociology, and related fields. This study includes the analysis and application of data used in cartographic representation. Laboratory facilities are provided.
470. **MAN AND SOCIETY: AN OVERVIEW OF THE SOCIAL SCIENCES** 3 credits. Prerequisite: any 25 hours from the social studies. Open to juniors, seniors, and graduate students. An integration of the material presented in the various courses from the social studies area; an examination of basic psychological, sociological, and anthropological principles as they apply in each case to the other studies, and a consideration of certain philosophical problems as they relate to the social sciences.
472. **WORKSHOP IN NORTHWEST ANTHROPOLOGY** 5 credits. A field course designed to acquaint teachers in the Northwest with the anthropological resources of the area and utilization in the classroom.
490. **CONTEMPORARY WORLD PROBLEMS** 3 credits. The course aims to develop a method of approach to contemporary problems through the various social science disciplines. It is designed to meet the needs of teachers who assume responsibility for required instruction in this area as well as the needs of other advanced and graduate students.

492. **WORKSHOP: HUMAN RELATIONS IN EDUCATION** 3 credits. This workshop has been designed to give participants an opportunity to examine the backgrounds of human relations, to develop an understanding of inter-group relations in the school and in the community, and to study ways of improving human relations through education.
527. **SOCIAL STUDIES FOR THE MASTER TEACHER** 3 credits. A special offering in professionalized subject-matter for graduate students who intend to concentrate on teaching social studies at any grade level.
531. **ANTHROPOLOGY IN EDUCATION** 3 credits. An adequate background in the social studies is essential to students in this course. The utilization by the classroom teacher of anthropological data and theory as a basis for understanding modern man. This course provides comparative study of social institutions, race, language, and religion.
550. **GEOGRAPHY IN THE SOCIAL STUDIES** 3 credits. A study of methods, materials, and concepts of geography, as applied to social studies teaching of the elementary and secondary levels. Particular attention is given to the role of geography in social studies teaching units. The dual relationship of geography to the social studies and the natural sciences is discussed.

INTERDEPARTMENTAL CONCENTRATIONS

Teacher Education

SOCIAL STUDIES: Broad Area Major (60 credits)

The broad area major is based on the principle of course experience in several fields of the social studies with upper division concentration in at least two fields. In addition to the social studies course requirements in the program of general education, the total of 60 credits should be selected as follows:

- a. History 203 and 204 or acceptable upper division substitutes.
- b. One course from History 223, 224 or from History 332, 333, 334.
- c. One course from Geography 311, 313, 314, 315, 316.
- d. Government 250, Economics 201, Sociology 201.
- e. Additional courses under advisement to total sixty credits.

Social Studies Education 425 or 426 should be selected in line with the professional teaching aims of the student.

Upper division courses must represent not less than 10 credits in each of two different fields.

SOCIAL STUDIES: Area Major

In addition to the social studies course requirements in the program of general education, 40 credits should be selected as follows:

- a. Courses must represent not less than three of the several fields in the area of the social studies.
- b. Courses must include not less than 15 upper division credits representing at least two fields.

- c. Social Studies Education 425 or 426 selected in line with the professional teaching aims of the student.

Consultation with an area or departmental adviser is essential.

NOTE: Those planning to teach social studies in the secondary school should be prepared to teach the following courses listed under the state secondary school requirements: (a) American History and Government; (b) Washington State History and Government; (c) Contemporary World History, Geography, and Problems.

SOCIAL STUDIES: Area Minor

In addition to the general education requirements, 20 credits selected as follows:

- a. History 203-204;
- b. One additional introductory course in a social studies field other than history;
- c. One upper division course selected under advisement.

SCIENCE AND MATHEMATICS: Broad Area Major

(For Junior High School Science-Mathematics Teachers)

Combine the General Science Field Major (see below), and the Mathematics Field Minor (see page 156).

GENERAL SCIENCE: Field Major

(for Elementary and Junior High School Teachers)

In addition to the general education requirements in science, 45 credits selected under departmental advisement to include:

Biological Science	15 to 20 credits
Physical Science	15 to 20 credits
Geological Science	5 to 10 credits
Science Education	a minimum of 6 credits selected from Science Edu- cation 481, 482, 483, 492, 493

GENERAL SCIENCE: Field Minor

(for Elementary School Teachers)

In addition to the general education requirements in science, 20 credits selected under departmental advisement from biological science, physical science, and geological science to include at least 10 credits from one area, 5 credits from a second area, and Science Education 482 and either Science Education 481 or 483.

PHYSICAL SCIENCE: Field Major

(The physical science major combined with a mathematics minor is recommended for the student preparing to teach in the small high school.)

General Science 405 or 406 in lieu of Physical Science 101

45 additional credits to include:

Chemistry 121, 122, 131, 251, 482

Physics 231, 232, 233 (or 131, 132, 133) plus
additional courses in physics to complete the major.

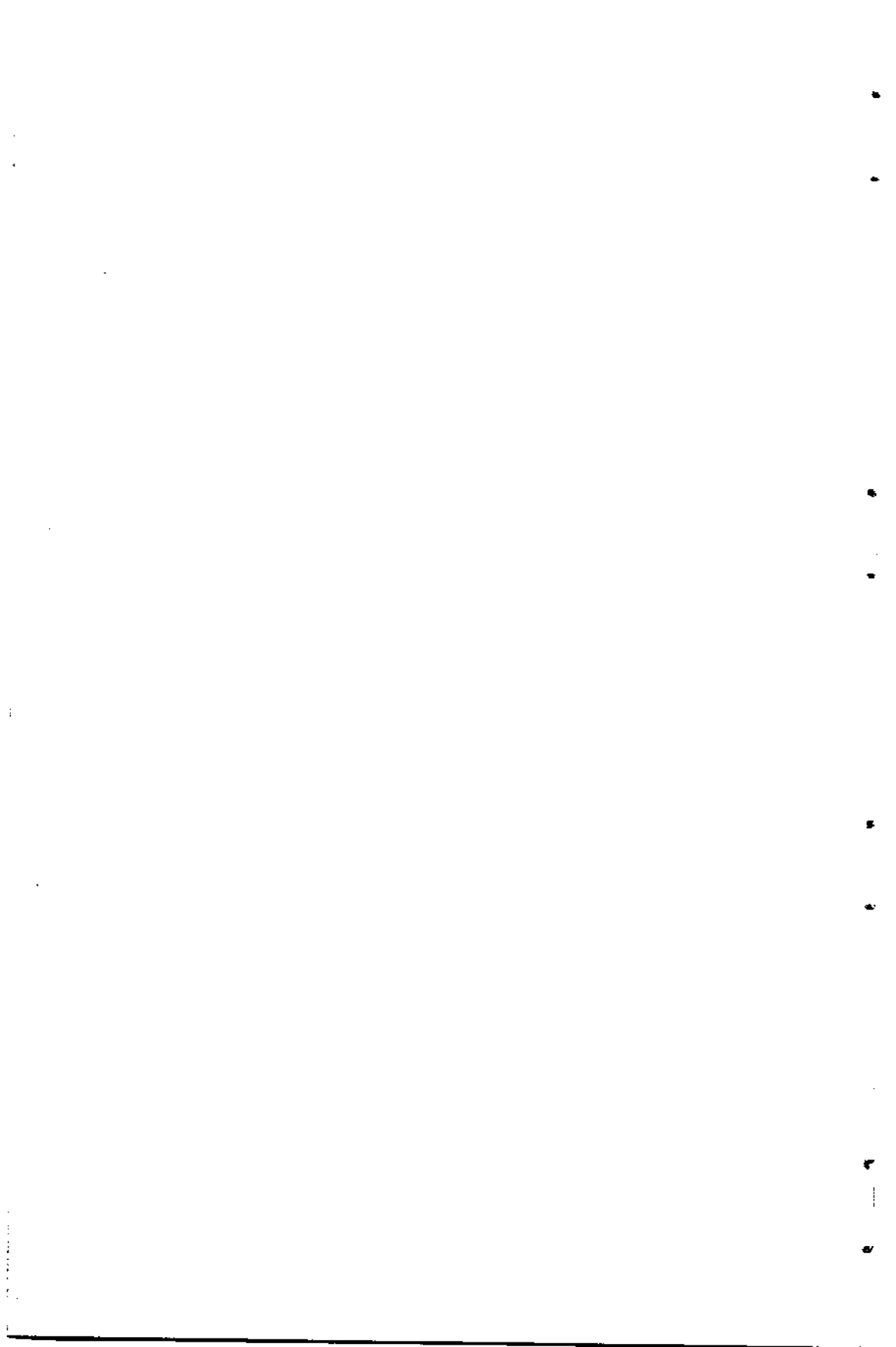
FINE AND APPLIED ARTS: Broad Area Major (60 credits)

A student satisfactorily completing a field major in art, industrial arts, or home economics may qualify for this broad area major by electing fifteen additional credits under advisement from courses in the two alternate fields comprising this area. Early advisement is essential.

GUIDE TO COURSE LISTINGS

In the following pages the material is arranged by alphabetical order of departments. Inasmuch as courses are designated by subjects, oftentimes subsumed under departments, an alphabetical subject guide follows. It also includes reference to interdepartmental course listings in the immediately preceding section.

	Page
Anthropology	187
Art	96
Biology	102
Botany	103
Business Education	111
Chemistry	180
Economics	107
Education	197
English	116
Foreign Language Education	86
French	124
General Education	85
General Science	86
German	124
Geography	129
Geology	132
Government	113
Health Education	173
Health Science	103
History	135
Home Economics	139
Honors	86
Industrial Arts	145
Latin	125
Library Science	151
Mathematics	153
Music	158
Philosophy	164
Physical Education	167
Physical Science	87
Physics	177
Psychology	182
Recreation	173
Russian	125
Science Education	87
Social Studies Education	90
Sociology	186
Spanish	125
Speech	190
Zoology	105



department of ART

Associate Professors: Collier, Kelsey, Peck, Plympton (*Chairman*);
Assistant Professor: Marsh; *Instructors:* Foss, Imhoff.

All students enrolled in the teacher education curriculum are encouraged to elect Art 101 or its equivalent. Courses strongly recommended for the teacher in the elementary school are Art 260, Design and Color and Art 320 or 321, Art in the School.

Those seeking more rigorous specialization with a major or minor in art should consult closely with the chairman of the department (see below).

Candidates for the non-professional Bachelor of Arts degree desiring to specialize in art should consult the major and minor requirements on page 100. The complete four-year program also includes general studies in the humanities, sciences, and social studies.

For those majoring in art the following courses should be taken in the freshman year: Art 151, 152, 153, 210, 212, 270 and 260; in the sophomore year: 361, 362, 380 and either 351, 352, 353, 354 or 355, 356, 357; in the junior and senior years: courses needed to complete sequences, composition, and history. Art 320 or 321 should be taken prior to student teaching.

To help students and advisers in planning sequences, the following classifications are listed:

General Education & History

Art 101, 102, 280, 480, 482

Drawing, Painting and Composition

Drawing and Comp.—Art 151, 152, 153, 252, 253, 451, 453, 490, 491

Oil Painting—Art 351, 352, 353, 354, 452, 550

Water Color—Art 355, 356, 357, 452, 550

Design and Color

General Design—Art 260, 361, 362, 461, 462

Design in Materials—Art 212, 240, 241, 242, 304, 312, 408, 412, 430, 431, 540

Commercial Art

Art 270, 271, 272, 371, 471, 472

Modeling and Sculpture

Art 210, 211, 310, 410, 540

Art Education

Art 320, 321, 325, 421, 422, 423, 425, 426, 429, 520, 521, 522, 540, 550

ART

101. **ORIENTATION** 3 credits. An introductory course dealing with the place and scope of art in our world today.
102. **INTRODUCTION TO ART** 2 credits. A course exploring various types of art expression and their relation to contemporary living.
152. **LIFE DRAWING I** 3 credits. Drawing the human figures in a variety of techniques to interpret contour, gesture, and volume.
153. **DRAWING AND COMPOSITION I** 3 credits. Drawing, employing a variety of media and types of composition with emphasis on landscape.
210. **MODELING I** 3 credits. Techniques of modeling in clays with emphasis on plastic design.
211. **MODELING II** 3 credits. Prerequisite: Art 210. An extension of the techniques learned in Art 210. This course aims to develop a more thorough understanding of sculptural problems.
212. **CERAMICS I** 3 credits. A basic course in ceramics with emphasis on the use of materials and techniques. Laboratory practice is provided in the hand-building processes, non-technical glaze composition, kiln stacking, and firing.
240. **INTERIOR DESIGN** 3 credits. Prerequisites: Art 101 or 102 and 260. A basic course in plans, elevations, and colors for home furnishing.
241. **INTERIOR DESIGN** 3 credits. Prerequisite: Art 240. Further study in interior design, emphasizing the group living area in home furnishing.
242. **INTERIOR DESIGN** 3 credits. Prerequisite: Art 241. Three dimensional study of color and design as related to all aspects of home decoration and furnishing.
252. **LIFE DRAWING II** 3 credits. Prerequisite: Art 152. Drawing of the figure in pencil, charcoal, and ink. This course is a continuation of Art 152 involving more advanced problems.
253. **DRAWING AND COMPOSITION II** 3 credits. Prerequisite: Art 153. An advanced course in drawing in which the student experiments with various types of composition. Media: pencil, conte crayon, charcoal, and pastels.
260. **DESIGN AND COLOR** 5 credits. A course planned to further the student's judgment and abilities to use design and color in various materials and crafts.
270. **LETTERING I** 2 credits. Practice in pen, brush, and show card lettering, employing various styles in contemporary advertising.
271. **LETTERING II** 2 credits. Prerequisite: Art 270. A continuation of Art 270, with emphasis on layout and poster design.
272. **FUNDAMENTALS OF DISPLAY** 2 credits. Design principles, materials, and techniques for planning and executing bulletin boards and three-dimensional display.
300. **SPECIAL PROBLEMS** Variable credit. Prerequisites: 15 credits in art and consent of the instructor. Problems selected and credit earned vary with the interests and needs of the individual student.

304. **JEWELRY DESIGN** 3 credits. Prerequisite: Art 260 or permission of instructor. A course in design and construction of contemporary jewelry in various metals, with emphasis on silver. The work of the course includes the setting of stones. Also offered as Industrial Arts 304.
310. **SCULPTURE I** 3 credits. Prerequisites: Art 152, 210 and 260. Problems in various techniques for creating forms in space involving laboratory practice in clay modeling, wood, and stone carving.
312. **CERAMICS II** 3 credits. Prerequisites: Art 212 and 260. A continuation of Art 212 with emphasis on the use of form and design, and the study of clay bodies. The course provides laboratory practice in the use of the potter's wheel and decorative techniques.
320. **ART IN THE SCHOOL** 3 credits. Prerequisite: Art 260. A study of child development in art from kindergarten through junior high school. Observation of classroom activities in art and experimentation with materials usually available for use in schools are important aspects of the course.
321. **ART IN THE SECONDARY SCHOOL** 3 credits. Lecture discussion, laboratory, and observation relating to the philosophy and techniques of art in the secondary school.
325. **ART EDUCATION** 5 credits. Prerequisite: Art 101 or 102. Not recommended to students who have credit for Art 260. A study of child development in art from kindergarten through high school. Problems in design, drawing, and painting as they relate to school situations are included.
351. **ELEMENTARY OIL PAINTING** 3 credits. Prerequisites: Art 151, 152, 153, 260. A preliminary course in the technique of painting and use of color.
- 352, 353, 354. **OIL PAINTING** 3 credits each. Prerequisite: Art 351. Practice in the technique of oil painting.
- 355, 356, 357. **WATER COLOR PAINTING** 3 credits each. Prerequisites: Art 151 or 153 and Art 260. Practice in the technique of water color in compositions of still life and landscape.
361. **DESIGN AND COLOR** 3 credits. Prerequisite: Art 260. A design course stressing two-dimensional qualities, textures, and color, and using the silk screen medium.
362. **COLOR AND DESIGN** 3 credits. Prerequisite: Art 260. A continuation of experiments and applications in the study of color and design with considerable emphasis on three-dimensional qualities.
371. **COMMERCIAL DESIGN I** 3 credits. Prerequisites: Art 151, 152, 260, 270. A course involving the analysis and design of commercial products. It also provides laboratory practice in the use of the air-brush.
380. **HISTORY OF ART** 3 credits. A survey of the representative masterpieces of the ancient, medieval, and modern periods.
400. **SPECIAL PROBLEMS IN ART** 2 to 5 credits. Prerequisites: senior status and consent of the instructor. Individual instruction for students who wish to undertake special projects under supervision.
- 400M. **ART WORKSHOP IN MEXICO** 6 credits. With a carefully planned itinerary in Mexico this course aims to expand the student's knowledge and understanding of Mexican art through visits to museums and art centers and through study of archeology, history, and folklore.

408. **GRAPHIC DESIGN** 6 credits. Prerequisites: Art 260 and 270 or Industrial Arts 340. The study and application of the principles of layout, design and printing to their commercial applications. Also offered as Industrial Arts 408.
410. **SCULPTURE II** 3 credits. Prerequisite: Art 310. Problems related to the creation of original works in wood, metal, clay, stone, plaster, plastics, or other media may be explored. A survey of sculpture and a study of important artists are required.
412. **CERAMICS III** 3 credits. Prerequisites: Art 212, 312. A continuation of study in ceramics with emphasis on functional design and historical background in the area of ceramics. Laboratory practice in the mixing of glazes, stains, slips, clay bodies, and the stacking and firing of kilns is an important part of the course.
421. **ART IN THE SCHOOL** 3 credits. Prerequisites: Art 320 or 321. This course is a continuation of Art 320 with emphasis on the handling of color and design in terms of their use on both elementary and secondary levels.
422. **MATERIALS OF ART EDUCATION** 4 credits. Prerequisites: Art 320 or 325 and Industrial Art 350. A course exploring media, reference material, and subject matter related to art and its integration with other school subjects.
423. **EVALUATION OF CHILD ART** 2 credits. A study of art problems suitable for children at various stages of development. Evaluation of children's work and the uses of materials usually available for schools are considered.
425. **DRAWING AND PAINTING FOR THE SCHOOL** 4 credits. Prerequisites: at least one course in art and teaching experience. A course exploring various painting media used in relation to school problems, group projects, and individual development. Experiments in mural painting, water color, and tempora are carried on.
426. **DEVELOPMENTAL ART EXPERIENCES** 3 credits. Prerequisite: teaching experience, student teaching, or permission of the instructor. A course designed for teachers with stress on understanding the development of children. It is concerned especially with the elementary and junior high school. It provides practical experience with materials and a teaching philosophy that embraces the potentialities of art in the total school program.
429. **ART WORKSHOP** Variable credit. A program of group endeavor for the elementary or secondary classroom teacher. Using workshop procedures, the class explores (a) art materials, old and new, and (b) methods of adapting art work to the individual differences of children.
430. **DESIGN AND CRAFTS** 3 credits. Prerequisites: Art 260 and 361 or 362. Study and application of color and design to crafts using both modern and traditional techniques and materials. The course is especially recommended for those interested in industrial design and the high school art curriculum.
431. **DESIGN AND CRAFTS** 5 credits. Prerequisite: Art 430. A continuation of Art 430, with greater emphasis on achievement in good design and fine craftsmanship.
451. **ILLUSTRATION** 3 credits. Prerequisites: Art 151, 152, 260 and 270. A course in the techniques of illustration.
452. **LIFE PAINTING** 3 credits. Composition and painting using a variety of media with the human figure as the subject.
453. **DRAWING** 3 credits. Prerequisite: one drawing course or graduate status and permission of the instructor. A course designed to provide experience in drawing and composition using a variety of subjects. The media employed are pencil, charcoal, conte crayon, pastels, and ink.
461. **TEXTILE DESIGN** 3 credits. Prerequisite: Art 361. Color and design in two or three media for textiles.

462. **ADVANCED DESIGN** 3 credits. Prerequisites: Art 362. A continuation of Art 362, with emphasis on the relationship between abstract and functional design in three-dimensional work.
471. **COMMERCIAL DESIGN II** 3 credits. Prerequisites: Art 371 and Industrial Arts 360. A continuation of Art 371 involving laboratory practice in the use of air-brush techniques combined with photography, and the organization and presentation of final products.
472. **POSTER AND DISPLAY** 3 credits. Prerequisites: Art 270 or 271 and 260 or equivalent. The effective display of visual materials. The course includes experimentation with problems of design in posters, bulletin boards, layout, and the production and printing of a poster design.
480. **HISTORY OF AMERICAN ART** 3 credits. The study of art in America from colonial times to the present day.
482. **HISTORY OF MODERN ART** 3 credits. A study of the growth of modern art from the Impressionist movement to the present day.
490. **COMPOSITION** 3 or 5 credits. Prerequisites: Art 151, 152, and 260, or Art 153, and 361, or Art 351, or Art 355. Practice in the development of good structure in line and mass for picture composition.
491. **COMPOSITION** 3 credits. Prerequisite: Art 490. Studies of color qualities in relation to pictorial composition.
520. **APPRAISAL OF DRAWING TECHNIQUES** 4 credits. Prerequisites: graduate standing, teaching experience and 27 credits in art including Art 260 and Art 320 or equivalent. A study and evaluation of approaches to the teaching of drawing through experiments and research.
521. **COMPARATIVE TECHNIQUES IN DESIGN AND COLOR** 4 credits. Prerequisites: graduate standing, teaching experience, and 27 credits in art including Art 260 and 320 or equivalent. Research in a number of techniques and materials for teaching design and color.
522. **CURRICULUM PLANNING** 4 credits. Prerequisites: graduate standing, teaching experience, and 27 credits in art including Art 260 and 320 or equivalent. A course which considers ways to plan, develop, and evaluate art in relation to the total curriculum.
540. **RESEARCH IN ART MATERIALS** 2 to 4 credits. Prerequisites: graduate standing and teaching experience, Art 310 and Art 312 or permission of instructor. Research related to three-dimensional expression in art as a development factor.
550. **RESEARCH AND SEMINAR IN PICTORIAL EXPRESSION** 2 to 4 credits. Prerequisites: graduate standing, teaching experience, Art 320, 351, or 355. Exploring the concepts, media, and techniques of cultural pictorial expression.

CONCENTRATIONS IN ART

Teacher Education

FIELD MAJOR A (with elementary school emphasis):

Two courses from Art 151, 152, 153;
Art 210, 212, 260, 272, 320, 355, and 380;

Additional courses to total 45 hours including ten credits in art education. At least 20 of the 45 hours must be in upper division courses.

FIELD MAJOR B (with secondary school emphasis):

Art 151, 152, 153, 210, 212, 260, 270, 321, 351 or 355, 361, and 380;

Additional courses to total 45 hours including 20 credits in upper division subjects and one sequence of 9 hours from design, ceramics and sculpture, commercial art, or drawing and painting.

FIELD MINOR A (with elementary school emphasis):

Three credits from Art 151, 152, 153;
Art 210 or 212, 260, 272, 320, 355;
Additional electives under advisement to total 20 credits.

FIELD MINOR B (with secondary school emphasis):

Three credits from Art 151, 152, 153;
Art 260;
Additional electives under advisement to total 20 credits.

Arts and Sciences

MAJOR:

Art 151, 152, 153, 210, 212, 260, 270, and one upper division course each in painting, design, and art history;

Two or more sequences selected from drawing and painting, design and crafts, commercial art, interior design, ceramics and sculpture;

Additional courses to total not less than 60 quarter hours.

Supporting courses: fifteen credits selected under advisement from philosophy, foreign languages, industrial arts, or home economics that are related to sequences chosen in the major.

MINOR:

Two courses from Art 151, 152, 153, and 260 with electives under advisement to total 24 quarter hours.

department of BIOLOGY

Professor: Sundquist, (Chairman); Associate Professors: Barron, Kirkpatrick, Martin, Platt; Assistant Professors: Flora, Mitchell, Schwemmin.

The Department of Biology offers courses for students in the Teacher Education, Arts and Sciences, and Pre-professional curricula.

Teacher Education:

For students planning to teach in the elementary or junior high school the General Science major or minor is recommended (see page 92). Courses may be selected under advisement from the three divisions of biology as well as from the science education courses which are specially adapted for the classroom teacher. Students wishing greater specialization in biology may select a field major or minor in biological science (see page 106).

There is an opportunity for graduate work leading to the degree of Master of Education with major emphasis in science education. This program is intended to equip master teachers as well as the specialist interested in working as a science education consultant in the public schools.

Arts and Sciences:

For the person not wishing to teach in the public schools courses are offered leading to a major or minor in biological science (see page 106). While it is required that a student have work in both the botanical and zoological aspects of biology, it is possible to select courses to emphasize whichever area the student prefers. The major in biology is recommended to the student wishing to enter various professional schools in dentistry, medicine, and veterinary medicine, as a basis for work in some aspects of forestry and agriculture, for employment by several governmental agencies, and as a basis for graduate work in the various biological sciences.

Since biology is becoming increasingly based on chemistry and physics, it is recommended that a biology major carry a minor in one of these two areas and that he not neglect mathematics.

Nurses Training: See page 81.

General Education:

With the exception of Physical Science 101, all students, including biology majors and minors, are required to include the general education science courses in their programs. It is suggested that Chemistry 121 or 125 be substituted for Physical Science 101.

Program Planning:

It is strongly recommended that a student planning a program involving a major or minor in biology consult an adviser in the Biology Department at the beginning of the freshman year so that sequences of courses can be established. The following program is suggested for the first two years:

First Year	Chem. 121 or 125 or Phys. Sci. 101 Mathematics as recommended	Zoology 261 Biology 104	Zoology 262 Gen. Educ. 102
Second Year	Botany 252	Botany 251	Biology 265

BIOLOGY

- 104. PRINCIPLES OF GENERAL BIOLOGY** 4 credits. Prerequisite: Physical Science 101 or Chemistry 121 or 125. This course is designed to give students an understanding of some of the major concepts of biology and their contributions to man's thinking and culture. The properties common to all life are specially emphasized. Answers are sought to such questions as: What is life? How did it originate? How is it perpetuated? How does it change? How are living things dependent on one another? Attention is devoted to the methods by which the science of biology is advanced. This course includes those basic concepts of cell physiology, growth, development, and speciation commonly included in beginning botany and zoology courses. All students majoring or minoring in biology should consider Biology 104 as a prerequisite to botany and zoology courses.
- 265. PRINCIPLES OF ECOLOGY** 5 credits. Prerequisites: 10 credits in biological science. An introduction to the study of the factors of the environment as they affect the distribution of life. The basic principles and concepts are derived from experiences in the field through the study of fresh water, salt water, and land communities. Not open to students having credit in Zoology 461 or 463.
- 300. SPECIAL PROJECTS IN BIOLOGY** 2 to 5 credits. Prerequisite: 15 credits in biological science and consent of the instructor. An opportunity is available to students who wish to undertake special projects under supervision.
- 371. GENETICS** 5 credits. Prerequisite: Biology 104. Consideration of the basic theories, principles, and laws of heredity, and a study of recent investigations with special reference to human development and social improvement. Laboratory experiments are conducted with drosophila.
- 399. SEMINAR IN BIOLOGY** 1 credit. Prerequisite: 25 credits in biological sciences and permission of the instructor. Papers are presented and discussion centered around outstanding developments, past and present, in the biological sciences.
- 400. SPECIAL PROJECTS IN BIOLOGY** 2 to 5 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
- 453. MONTANE BIOLOGY** 5 credits. Prerequisites: Botany 252 and Zoology 262. A field course which provides opportunity for the student to concentrate on the flora and fauna of the Cascade Mountains. Intensive field work at different elevations with laboratory study of collected material combined with lectures are

intended to give the student an understanding of the variety of plants and animals of the Cascades and of their distribution and interactions with the environment. A number of Saturday field trips are required.

- 473. HISTOLOGICAL TECHNIQUES** 5 credits. Prerequisite: 10 credits in biology. Preparation of microscopic slides, both of plant and animal tissues. A student completing this course in good standing should have a basic set of microscope slides of his own preparation.
- 477, 478. GENERAL CELLULAR PHYSIOLOGY** 5 credits each. Prerequisites: 20 credits in biological sciences, Chemistry 121-122 and 251 or 351-352, or permission of the instructor. A study of the structural and functional basis of living matter, the cell. This includes a study of energy transformations in living systems, the transport of water and solutes, the characteristics of excitable tissue, the mechanism of muscle contraction, and the effect on and emission by organisms of light.

BOTANY

- 251. GENERAL BOTANY** 5 credits. A course designed to give students a grasp of the important facts concerning the life of plants as living organisms; a study of the structures and functions of typical spermatophyte plants. A study of heredity and the biology of the cell are included in Biology 104 and are not repeated here.
- 252. GENERAL BOTANY** 5 credits. (Botany 252 may be taken without Botany 251 as a prerequisite.) A comparative study of the major phyla of the plant kingdom, with a view to interpreting present structure in terms of ecological adaptation and past evolutionary heritage. The basic study of evolution is included in Biology 104, which should be taken before Botany 252.
- 300. SPECIAL PROJECTS IN BOTANY** 2 to 5 credits. Prerequisite: 15 credits in biological science and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
- 352. SYSTEMATIC BOTANY** 5 credits. Prerequisite: Botany 252. An historical survey of classification systems; the use of taxonomic keys in the identification of plants; the evolutionary development of flowering plants; the recognition of common plants and plant communities. Field trips furnish materials for the course.
- 400. SPECIAL PROJECTS IN BOTANY** 2 to 5 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
- 456. ALGAE** 5 credits. Prerequisite: 10 credits in biology. Collection, identification, classification, distribution, and economic importance of algae. This course includes study of both marine and fresh water forms. Field trips are a required part of the course.
- 458. MOSSES AND FERNS** 5 credits. Prerequisite: 10 credits in biology. Collection, identification, distribution, and evolution of mosses and liverworts, and ferns and their allies. Numerous field trips are a regular part of and furnish the material for the course.
- 479. PLANT PHYSIOLOGY** 5 credits. Prerequisite: Biology 478. This course includes more detailed study of those particular aspects of cell physiology pertaining to plants and also study of mineral nutrition, water economy, soils, auxins, and other items of special importance to plant growth.

HEALTH SCIENCE

Students may use certain health science courses to satisfy requirements in health and physical education, home economics, and nursing. Students interested in health career areas, in psychology, and in biology may elect courses from this area.

- 141, 143. ANATOMY AND PHYSIOLOGY** 5 credits each. A study of the structure and function of the human body by use of anatomical charts, models, and the human skeleton supplemented by dissection of the cat. This course is designed for students in the health science area such as student nurses, laboratory technicians, and physiotherapists. Health Science 141 is a prerequisite for 143.
- 241. HUMAN ANATOMY** 5 credits. Prerequisite: Biology 104 is recommended. A course designed for teacher education, physical education, and psychology students. Charts and models of the human body are used as instructional aids. Cat dissection is an important phase of the course. (Not open to students who have had Health Science 141).
- 243. HUMAN PHYSIOLOGY** 5 credits. Prerequisite: Biology 104 is recommended. A course designed to give teacher education, physical education, home economics, and psychology students an understanding of the normal functions of the human body and the various bodily processes which aid in adjustment. Significant advances in the sciences of physiology and medicine are considered in the discussions. Laboratory work provides suitable illustrations of principles of physiology and opportunities for consideration of individual interests. (Not open to students who have had Health Science 143.)
- 245. GENERAL MICROBIOLOGY** 5 credits. Prerequisites: 2 quarters of chemistry. A survey course for students of nursing, home economics, education, and others interested in a one-quarter general course with minimal background in chemistry.
- 247. HEALTH SCIENCE** 3 credits. Prerequisite: Biology 104. Health information which affords a base for intelligent guidance in the formation of health habits and attitudes. Stress is laid upon how the body functions.
- 249. HISTORY OF NURSING** 3 credits. A general survey of the history of nursing from ancient times to our own day; the development of traditions and professional ideals; discussions of special fields of nursing with a survey of opportunities, recent trends, and problems in nursing today.
- 300. SPECIAL PROJECTS IN HEALTH SCIENCE** 2 to 5 credits. Prerequisites: 15 credits in biological science and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
- 345. FUNDAMENTALS OF MICROBIOLOGY** 5 credits. Prerequisites: Chemistry 121, 122, and 351-352 or 251, and 10 credits in botany or zoology, or permission of the instructor. Basic bacteriology; comparative morphology or zoology, or physiology, and chemistry of bacteria. This is a course for students majoring in biology and others interested in biological and chemical aspects of microbes.
- 400. SPECIAL PROJECTS IN HEALTH SCIENCE** 2 or 5 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
- 447. COMMUNITY HEALTH AND HYGIENE** 3 credits. Prerequisites: ten hours of a biological science. A course in the practical application of the principles of personal and group hygiene; the analysis of community problems of health and sanitation, such as food, water, restaurant inspection, garbage and sewage dis-

posal, etc.; the study of the application of the pure food and drug acts; the examination of national and international health problems; and the study of the contributions of the great personalities who have worked in the fields of health, sanitation and medicine. (Sophomores may take this course by permission of the instructor.)

ZOOLOGY

- 261, 262. **GENERAL ZOOLOGY** 5 credits each. (Zoology 262 may be taken without Zoology 261 as a prerequisite by those who have had Biology 104). An introductory course in the study of animals with the basic adaptability of protoplasm in mind. Representative forms of the principal phyla from protozoa through chordata are studied from a comparative standpoint. Emphasis is placed on the evolutionary significance of physiological and structural modification which lead to a better understanding of the human organism. Genetics, evolution, and biology of the cell are included in Biology 104 which should be taken to complete the study of general zoology.
300. **SPECIAL PROJECTS IN ZOOLOGY** 2 to 5 credits. Prerequisites: 15 credits in biological science and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
361. **ORNITHOLOGY** 3 credits. Prerequisite: Biology 204 or equivalent. The structural and morphological adaptations of birds, their evolution, classification, distribution, and economic importance. Field trips are concerned with the identification of permanent and winter residents.
362. **ORNITHOLOGY** 3 credits. Prerequisite: Biology 204 or equivalent. The migrations, foods, and nesting behavior of birds. The need for and types of bird protection are also studied. Field work emphasizes the spring migrants and the accurate recording of observations. It is recommended that Zoology 361 be taken before Zoology 362.
363. **MAMMALOLOGY** 5 credits. Prerequisite: Zoology 262. Study of the life habits, identification, distribution, and classification of mammals of the Northwest. Laboratory stresses methods of collection in the field, preparation of study skins, and the use of taxonomic keys.
366. **COMPARATIVE VERTEBRATE ANATOMY** 5 credits. Prerequisite: Zoology 262. A comparative study of the morphology and evolution of the organ systems of the major vertebrate groups.
368. **GENERAL VERTEBRATE EMBRYOLOGY** 5 credits. Prerequisites: Biology 104 and Zoology 262. The principles of the development of the vertebrates; laboratory study of the embryos of the chick and pig with application to human development.
400. **SPECIAL PROJECTS IN ZOOLOGY** 2 to 5 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
461. **MARINE INVERTEBRATE ZOOLOGY** 5 credits. Prerequisite: Zoology 261. A laboratory and field study of local marine invertebrates. Biological principles are demonstrated and techniques for the study of marine biology are elaborated throughout this course. Consideration is given to life histories, structures, their functions and development, collection, and identification. Special emphasis is placed on examination of various interrelationships of organisms to each other and to their environment.

CONCENTRATIONS IN BIOLOGICAL SCIENCE

Teacher Education

FIELD MAJOR (for high school biology teachers):

General education requirements in the sciences: Chemistry 121 or 125 in lieu of Physical Science 101; Biology 104; General Education 102 and 105.

Major Requirements:

Botany 251 or Zoology 261 (preferably both); Botany 252, Zoology 262; Biology 265.

At least 5 credits from Biology 371, 473, 477, 478, Botany 479, Health Science 345, Zoology 366, 368.

At least 5 credits from Biology 453, Botany 352, 456, 458, Science Education 450, 460, 464, 465, 474, Zoology 361, 362, 363, 461.

Science Education 481 or 483 or 493.

General Science 405.

Additional electives from the courses above or from other biological science courses, chosen under advisement, to total not less than 40 credits.

Note: It is strongly recommended that all biological science majors include Chemistry 121-122 (or 125 and 251), and Geology 211 in their programs.

FIELD MINOR (a second teaching field for high school teachers):

General Education requirements in the sciences: same as for major.

Minor Requirements:

Botany 252 and/or Zoology 262.

At least 5 credits from Biology 371, 473, 477, 478, Botany 479, Health Science 345, Zoology 366, 368.

At least 5 credits from Biology 265, 453, Botany 352, 456, 458, Science Education 450, 460, 464, 465, 474, Zoology 361, 362, 363, 461.

Selected courses under departmental advisement to total with the above minor requirements not less than 20 credits. Science Education 493 is recommended as an elective.

Arts and Sciences

MAJOR: General education requirements in science (Chemistry 121 or 125 in lieu of physical Science 101; Biology 104, General Education 102 and 105.)

Fifty additional credits selected under departmental advisement to include: (a) Botany 251 and 252, Zoology 261 and 262; (b) 10 credits from Biology 371, 473, 477, 478, Botany 479, Health Science 345, Zoology 366, 368; (c) 10 credits from Biology 453, Botany 352, 456, 458, Zoology 361, 362, 363, 461; (d) General Science 405; (e) electives from above or other biological science courses or Geology 316.

Supporting courses: (a) 5 credits in anthropology or sociology; (b) Chemistry 122 and 251 or 352; (c) Geology 211; (d) at least 15 credits in physics, 15 in a foreign language, and additional mathematics including statistics are strongly recommended.

MINOR: General education requirements in science (same as for major). Additional credits to be selected from either of the following:

1. 25 credits in biological science selected under departmental advisement to include Botany 252 and Zoology 262.
2. 25 credits in biological science selected under departmental advisement to include: (a) Zoology 261 and 262; (b) 5 credits from Biology 371, 477, 478, Zoology 366, 368; (c) 5 credits from Zoology 361, 362, 363, 461; (d) 5 credits from Health Science 243 or 345.

department of
**ECONOMICS, BUSINESS,
and GOVERNMENT**

Associate Professors: Mayer, (*Chairman*), Palmer; *Assistant Professors:* Egerer, Haglund, Mitchell, Neuber, Templeton, _____; *Instructor:* Swedmark.

ECONOMICS

101. **INTRODUCTION TO BUSINESS** 5 credits. A foundation course in elementary business organization dealing with various types of ownership, location of business plants, labor problems, marketing problems, long and short-term financing, and managerial controls.
151. **PRINCIPLES OF ACCOUNTING** 4 credits. Prerequisite: clearance in mathematics qualifying test or concurrent enrollment in Mathematics 3. An introduction to the theory of accounting, including bookkeeping and financial statements.
152. **PRINCIPLES OF ACCOUNTING** 3 credits. Prerequisite: Economics 151. A continuation course with emphasis on depreciation, the voucher system, partnership and corporation accounting.
153. **PRINCIPLES OF ACCOUNTING** 3 credits. Prerequisite: Economics 152. A continuation course covering manufacturing accounting, financial analysis, and interpretation of accounting data.
200. **GENERAL ECONOMICS** 3 credits. A survey of American economic institutions. This course is designed for those who need basic economics as a foundation for study in other areas. Not open to students who have had Economics 201.
201. **INTRODUCTION TO ECONOMICS** 5 credits. A survey of the organization and operation of the American economy. Consideration is given to the basic problems of economics; to the role of business, labor, and government, of money and the banking system; and to problems of inflation and deflation.
202. **PRINCIPLES OF ECONOMICS** 5 credits. A study of the principles of price and distribution of income with particular application to the structure of American industry. Also considered are problems of the world economy and of alternate economic systems.
250. **INCOME TAX FOR THE EMPLOYEE AND SMALL PROPRIETOR** 3 credits. This is a non-technical course for wage earners, small businessmen, and students who do not plan to major in economics. The fundamental principles of the federal income tax law are discussed and simple returns completed. This course may be audited without credit.
271. **BUSINESS LAW** 5 credits. A course designed to give the student an elementary knowledge of those legal principles that are of use in everyday business dealings, with emphasis upon contracts, agency and negotiable instruments.
272. **BUSINESS LAW** 5 credits. Prerequisite: Economics 271. A continuation course with emphasis upon sales, personal property, partnerships, and corporations.
275. **STATISTICAL METHODS I** 3 credits. Prerequisites: Economics 101 or 201 and Mathematics 100 or its equivalent. A study of elementary statistical techniques and their application to economic and business problems. This course gives prin-

- cipal emphasis to the description of frequency distributions and to the analysis of time series.
301. **NATIONAL INCOME ANALYSIS** 5 credits. Prerequisites: Economics 201 and 202. An analysis of the determinants of the level of income, employment, and output in the economic system.
 302. **INTERMEDIATE ECONOMIC THEORY** 5 credits. Prerequisites: Economics 201 and 202. A systematic treatment of the theory of markets and price under conditions of competition and of monopolistic competition. Also treated are the relation of prices and costs and the functional distribution of income.
 311. **MONEY AND BANKING** 5 credits. Prerequisite: Economics 201. The nature and functions of money, credit, and banking and the relationship of money and bank deposits to the economy with special reference to the United States.
 322. **PERSONNEL MANAGEMENT** 5 credits. Prerequisite: Economics 101 or 201. A survey of principles and practices involved in obtaining and maintaining an effective working force. Attention is given to such topics as job evaluation, hiring practices, and wage administration.
 325. **ECONOMICS OF LABOR** 5 credits. Prerequisite: Economics 101 or 201. A study of the economic factors in labor problems. This course deals with the problems of labor organizations in their relation to the total economy and to industry in particular.
 333. **PRINCIPLES OF PRODUCTION** 5 credits. Prerequisite: Economics 101. Principles and procedures of the manufacturing enterprise. Consideration is given to organization and administration, to location and layout, and to planning and control.
 335. **PRINCIPLES OF MARKETING** 5 credits. Prerequisite: Economics 101 or 201. An analytical survey of institutions, functions, problems, and policies in the distribution of industrial and consumer goods. Pricing, costs, and governmental regulations are studied.
 341. **PRINCIPLES OF TRANSPORTATION** 5 credits. Prerequisite: Economics 201. A study of the economic principles and problems relative to the transportation and communication system of the United States.
 350. **INCOME TAX ACCOUNTING** 3 credits. Prerequisite: Economics 151 or permission of the instructor. This course covers the legal requirements and practical problems arising in connection with the preparation of individual and partnership income tax returns.
 352. **COST ACCOUNTING** 5 credits. Prerequisite: Economics 153. A study of historical factory job and process cost systems, distribution cost systems, fixed and flexible budgeting and other controls over business operations available to management from the accounting records. This course is available to students who have taken Economics 353 only with permission of instructor.
 353. **MANAGEMENT CONTROLS** 3 credits. Prerequisite: Economics 153. Not open to students who have taken Economics 352. A survey of cost systems, fixed and flexible budgeting, and other controls over business operations available to management from the accounting records.
 354. **INTERMEDIATE ACCOUNTING** 5 credits. Prerequisite: Economics 153. The analysis and interpretation of financial statements, including advanced theory of inventories, depreciation, and the application of funds.
 355. **ADVANCED ACCOUNTING** 5 credits. Prerequisite: Economics 354. A continuation course with the application of accounting theory to partnerships, branch accounting, installment sales, and other accounting problems.
 361. **ECONOMIC PRINCIPLES OF FOREIGN TRADE** 5 credits. Prerequisite: Economics 201. A study of the economic and commercial relationships of nations. The course includes a consideration of the basic principles and practices of foreign trade.

375. **STATISTICAL METHODS II** 3 credits. Prerequisite: Economics 275 or equivalent. A continuation course introducing the concepts of sampling, statistical inference, and statistical decision making as they apply to problems in economics and business.
401. **PRINCIPLES OF BUSINESS MANAGEMENT** 5 credits. Prerequisites: Economics 352 or 353 or permission of instructor. An evaluation of the types of management organization responsible for over-all company operations. The role of the board of directors, committees, and the functions of top management in organizing, staffing, directing, planning, and controlling company operations are discussed.
403. **THE HISTORY OF ECONOMIC THOUGHT** 5 credits. Prerequisite: 10 hours of economics or permission of the instructor. A study of the development of economic thought with major emphasis placed upon the period following Adam Smith.
405. **COMPARATIVE ECONOMIC SYSTEMS** 5 credits. A survey of the economic systems of the leading nations of the world. Emphasis is placed upon a comparison of private competitive enterprise in democratic countries with the systems that prevail in other countries.
406. **ECONOMIC GROWTH IN UNDERDEVELOPED COUNTRIES** 5 credits. This course investigates the conditions necessary for and the progress of economic development in underdeveloped countries. It deals with such topics as resource allocation and development, effects on the international economy, and the significance of foreign-aid programs for economic development.
408. **THE ROLE OF BUSINESS IN AMERICAN SOCIETY** 3 credits. An investigation of the development of American capitalism and of its legal, philosophical, and ethical foundations. This course covers such topics as the ethics of the profit system, philosophies of management, and the responsibilities of business toward society at large. It is particularly appropriate for teachers of the social studies.
410. **PUBLIC FINANCE AND TAXATION** 5 credits. Prerequisites: Economics 201 and 202 or permission of the instructor. The principles of taxation and problems of tax administration. Special attention is given to the effect of government taxation, expenditure, and debt management policies upon employment, income, prices, and the structure of the economy.
411. **BUSINESS ORGANIZATION AND FINANCE** 5 credits. Prerequisites: Economics 101 or 201 and Economics 153 or permission of the instructor. A study of the major forms of business organization and problems dealing with the sources, uses, and control of funds in business enterprises. Major emphasis is devoted to sources of long and short-term funds, policies relating to working capital, income management, and the financing of growth and expansion.
412. **BUSINESS CYCLES** 5 credits. Prerequisite: Economics 201 or permission of instructor. A study of the characteristics and the major explanations of the prosperity-depression cycle in business; a survey of policy proposals.
415. **PROBLEMS AND PRACTICES IN STATE AND FEDERAL FINANCE** 3 credits. A detailed study of the problems of governmental expenditures, budgets, taxation, and borrowing. Local, state, and federal problems and practices are considered.
421. **PROBLEMS IN PERSONNEL ADMINISTRATION** 3 credits. A discussion of a limited range of problems in personnel administration. The topics covered include problems of wage and salary administration, employee rating, and employee selection.
426. **LABOR RELATIONS AND THE LAW** 3 credits. Prerequisite: Economics 325 or permission of the instructor. A non-technical course in the elements of labor law. Particular attention is given to the federal law with respect to labor relations.

442. **GOVERNMENT AND BUSINESS** 5 credits. Prerequisites: Economics 201 and 202, or permission of the instructor. Public policy and business enterprise. Particular attention is devoted to the anti-trust laws and their interpretation.
490. **SPECIAL PROBLEMS IN ECONOMICS** 1 to 4 credits. Prerequisite: 20 credits in economics and junior standing. This course is designed to afford the student an opportunity to read in any area of economics under the general supervision of the instructor. The student must consult with the instructor before registering for this course.

CONCENTRATIONS IN ECONOMICS

Teacher Education

FIELD MAJOR:

Economics 151, 152, 153, 201, 202, 408. In addition, to be selected under advisement, (a) 10 credits from Economics 311, 325, 335, and 350; and (b) 8 credits from Economics 350, 361, 405, 442, and 491.

Note: Students who have credit for Economics 101 may be exempt from Economics 408 under special circumstances.

FIELD MINOR A:

Economics 201.

Additional courses under advisement to total at least 20 credits of which at least 10 must be in upper division courses.

FIELD MINOR B (for specialists in Business Education):

(This minor is taken in conjunction with the field major in Business Education as part of the total program for teachers of the business subjects.)

Economics 151, 152, 153, 201, 271. Those with acceptable equivalents may, under departmental advisement, complete the minor with courses elected from Economics 311, 335, 350, 353, 354, 355, 411.

Arts and Sciences

MAJOR: Economics (Business)

Economics 101, 151, 153, 201, 202, 271, 275, 311, 352, 375. Two courses selected from Economics 322, 333, 335, 411. Additional courses under advisement to total 60 credits.

Supporting Courses: Geography 207, History 347, Mathematics 101, Government 101, and Sociology 201 are strongly recommended.

MAJOR: Economics (General)

Economics 151, 152, 153, 201, 202, 275, 301, 311, 375. Additional upper division courses under advisement to total 50 credits.

Supporting Courses: Geography 207, History 347, Mathematics 101, Government 101, and Sociology 201 are strongly recommended.

MINOR: Economics (General)

Economics 201 and 202. Additional courses under advisement to total 25 credits of which at least 10 must be upper division.

BUSINESS EDUCATION

115. **BEGINNING TYPEWRITING** 2 credits. For those with no previous instruction in typewriting. A beginning course in touch typewriting, with emphasis on the development of basic skills, form, style, and arrangement of typewritten materials.
116. **INTERMEDIATE TYPEWRITING** 2 credits. Prerequisite: Business Education 115 or equivalent or one year of high school typewriting. An introduction of simple office typewriting problems with continued emphasis on the development of speed and accuracy.
117. **ADVANCED TYPEWRITING** 2 credits. Prerequisite: Business Education 116 or equivalent or advanced high school study in typewriting. A continuation of Business Education 116 with more advanced work on rough drafts, tabulation, and business communications.
120. **BEGINNING SHORTHAND** 3 credits. A beginning course in the fundamentals of Gregg Simplified Shorthand, including correct reading and writing techniques.
121. **INTERMEDIATE SHORTHAND** 3 credits. Prerequisite: Business Education 120 or equivalent. This course covers the more advanced forms of shorthand and completes the fundamental principles of the Gregg system.
122. **ADVANCED SHORTHAND** 3 credits. Prerequisite: Business Education 121 or equivalent. A course for the development of skill in dictation and typed transcripts. Considerable emphasis is placed on correct English and the production of mailable business letters.
150. **ACCOUNTING FOR SECRETARIES** 5 credits. This course relates to the theory and practice of bookkeeping and accounting with emphasis on both cash and accrual systems. The problems of a secretary in a small business office are considered.
201. **BUSINESS CORRESPONDENCE** 3 credits. Prerequisite: English 100 or equivalent. Development of skill in the use of correct English for business purposes. Attention is given to the writing and handling of business correspondence. Also offered as English 201.
215. **BUSINESS TYPEWRITING** 2 credits. Prerequisite: Business Education 117 or equivalent. An advanced course for the development of proficiency in speed and control. It includes arrangement and production of business communications and forms, tabulation, reports, legal forms, and masters, typed under office conditions for production standards. The course is designed both for business teaching and secretarial students.
222. **SHORTHAND SPEED BUILDING** 3 credits. Prerequisite: Business Education 122 or equivalent of two years of high school shorthand. Intensive dictation and transcription practice on business correspondence are offered for those who wish to acquire the ability to take and transcribe shorthand rapidly and accurately in a wide number of business fields. The development of a comprehensive business vocabulary is also an aim of this course.
223. **TRANSCRIPTION** 3 credits. Prerequisite: Business Education 122 or equivalent or two years of high school shorthand. Further study of shorthand principles with emphasis on the development of ability to take and transcribe shorthand rapidly in adequate volume.
224. **SECRETARIAL PRACTICE** 3 credits. Prerequisite: Business Education 223 or equivalent. An advanced course in secretarial training dealing with further development of speed and accuracy in transcription, office techniques, and the duties and problems of the secretary in business and professions.
241. **OFFICE MACHINES** 3 credits. Prerequisite: Business Education 115 or equivalent. An introductory course in the operation of rotary and key-driven calculators, duplicating machines, adding machines, transcribing and recording machines, and electric typewriters. The principles and practices of filing are also included.

242. **SPECIALIZED OFFICE MACHINES** 3 credits. Prerequisite: Business Education 241 or equivalent. Advanced training on selected office machines.
319. **BUSINESS EDUCATION IN THE SECONDARY SCHOOL** 3 credits. A study of the secondary school business education program. This course introduces the student to curriculum planning with consideration of philosophy, scope, and objectives.
320. **TEACHING TECHNIQUES IN SECRETARIAL SUBJECTS** 3 credits. Principles underlying the development of skill in typewriting, shorthand, and related subjects. This is a study of current trends and techniques involving the use of the newest instructional aids and equipment.
321. **TEACHING TECHNIQUES IN BOOKKEEPING AND BASIC BUSINESS SUBJECTS** 3 credits. The teaching of bookkeeping, general business, and business law through an analysis of objectives, materials, and method of presentation.
400. **DIRECTED STUDY IN BUSINESS EDUCATION** 1 to 3 credits. Prerequisites: senior standing and consent of instructor. Individual instruction for students who wish to undertake special projects by conference arrangements.
471. **CURRENT TRENDS IN THE TEACHING OF TYPEWRITING** 3 credits. Problems underlying the development of typewriting skills. In addition to the emphasis given to student motivation, the course deals with the skillful use of supplementary materials and special audio-visual devices. Electric typewriting techniques are also studied. Consideration is given to the problems of both beginning and experienced educators.
481. **PROBLEMS AND ISSUES IN BUSINESS EDUCATION** 3 credits. A study of the trends in the business programs of secondary schools. Attention is given to research studies as well as to analysis of the problems and issues of concern to business educators.
501. **SPECIAL PROJECTS IN BUSINESS EDUCATION** 2 or 3 credits. Supervised planning and development of practical and creative projects in business education. The course encompasses directed reading, conferences, and appropriate related experiences carried out, as far as possible, in actual school situations.

CONCENTRATIONS

IN

BUSINESS EDUCATION

Teacher Education

FIELD MAJOR:

The program of studies for teachers of business education consists of this field major taken in conjunction with a field minor made up of courses drawn from the field of economics. (FIELD MINOR B—Economics.) The whole program constitutes a major-minor combination of 60 credits.

Required courses consist of: Business Education 115, 116, 117 or 215, 120, 121, 122, 201, 223 or 224, 241 or 242, 319, 320, 321, Economics 101.

Those who have taken typing and/or shorthand in high school are placed, under departmental advisement, as high in the sequence as their backgrounds permit. Additional courses under departmental advisement to complete the business education major may be drawn from Business Education 401, 471, 481.

FIELD MINOR:

(See also FIELD MINOR 8—Economics)

Required: Business Education 319, 320. Under departmental advisement, additional courses in shorthand, typing, and secretarial practice to total 20 credit hours.

Arts and Sciences**MINOR:**

Under advisement, courses in typewriting, shorthand, secretarial accounting, and secretarial practice to total 25 credits.

GOVERNMENT

101. **INTRODUCTION TO GOVERNMENT** 5 credits. An introductory course in the principles and problems of government as they exist in the contemporary world.
250. **INTRODUCTION TO AMERICAN NATIONAL GOVERNMENT** 5 credits. A comprehensive survey of American national government designed for those who need a course in basic principles as a foundation for study in other areas. Students may not receive credit for both Government 250 and 251-252.
251. **AMERICAN NATIONAL GOVERNMENT: PRINCIPLES** 5 credits. A study of the structure, functions, and major principles of the federal government.
252. **AMERICAN NATIONAL GOVERNMENT: PROBLEMS** 5 credits. A study of current governmental problems in the area of civil liberties, foreign policy, public administration, and government in the economic order.
253. **AMERICAN STATE AND LOCAL GOVERNMENT** 5 credits. An analysis of the development, nature, and problems of American government and politics at various levels other than the national, with emphasis on intergovernmental relations and the role of the citizen.
273. **INTERNATIONAL RELATIONS** 5 credits. A basic survey of the international relations area including international politics, international organization, and international law. Students may not receive credit for both Government 273 and 450.
353. **URBAN GOVERNMENT AND ADMINISTRATION** 3 credits. The problem of government in the cities, the forms of city government, municipal management, relationships among levels and areas of government, and emerging patterns of urban regionalism.
401. **GOVERNMENT AND POLITICS OF THE U. S. S. R.** 3 credits. An analysis of the political system of the Union of Soviet Socialist Republics, with particular attention to the role of the Communist Party, the nature of the constitutional system, and foreign relations since 1917.
402. **GOVERNMENTS AND POLITICS OF CONTINENTAL EUROPE** 3 credits. An analysis of the political systems of France, West Germany, East Germany, and/or other countries selected at the discretion of the department.
403. **GOVERNMENT AND POLITICS OF BRITAIN** 3 credits. The nature of the British Constitution; the Commonwealth; the Crown, Ministry, and Cabinet; Parliament and elections; the party system; law and the courts; and local governments are among topics considered in this course.
420. **INTRODUCTION TO PUBLIC ADMINISTRATION** 5 credits. Prerequisite: Political Science 420. A study of selected administrative problems such as: intergovernmental administrative relationships in finance and in particular functions; the place

of unofficial organization in administrative functions; the techniques, advantages, and disadvantages of decentralization; the future of the government corporation; and the problem of responsibility and control in administration.

441. **PUBLIC OPINION** 3 credits. Prerequisites: 8 hours in American government, economics, or Sociology 201 or Anthropology 201 or consent of the instructor. A study of the factors involved in the formation of public opinion; propaganda analysis; agencies of mass impression; opinion measurements; and the role of leadership. Also offered as Sociology 441.
450. **FUNDAMENTALS OF INTERNATIONAL POLITICS** 5 credits. An examination of the nature of the state system, of the forces affecting international politics, of the sources of conflicts in the international community, and of the possibilities for their solution by "power politics" and/or international organization. Not open to students who have received credit for Government 273.
451. **POLITICAL PARTIES AND ELECTIONS** 5 credits. A course considering the manner in which political parties function in the United States in relation to government, selection of candidates, and elections.
452. **INTERNATIONAL ORGANIZATION** 3 credits. A study of the development, organization, and operation of various types of international institutions, including the League of Nations and the United Nations.
453. **CONTEMPORARY WORLD POLITICS** 3 credits. An examination of the course of international politics since 1941, with emphasis upon the impact of continuing crises upon the external policies of the United States and upon the operation of the United Nations.
454. **FOREIGN POLICIES OF MAJOR POWERS** 3 credits. A survey of the foreign policies of the major world powers, with particular emphasis on the United States.
468. **POLITICAL THEORY: ANCIENT AND MEDIEVAL** 3 credits. Prerequisites: History 105, 106 or equivalent or consent of the instructor. A systematic description and analysis of the origins and evolution of the major concepts in Western political thought from the time of Pericles to that of Niccolo Machiavelli.
469. **POLITICAL THEORY** 3 credits. Prerequisites: History 105, 106 or equivalent or consent of the instructor. A systematic description and analysis of the origins and evolution of the major concepts in Western political thought from the time of Machiavelli to that of Edmund Burke.
470. **POLITICAL THEORY: RECENT** 3 credits. Prerequisites: History 105, 106 or equivalent or consent of instructor. A systematic description and analysis of the origins and evolution of the major concepts in Western political thought from the time of Edmund Burke to the present, with primary emphasis on the development of modern conservatism, liberalism, Marxism, and Fascism or national socialism.
471. **AMERICAN POLITICAL THEORY** 5 credits. The historical evolution of American political theory in its relation to American political institutions.

CONCENTRATIONS IN GOVERNMENT

Teacher Education

FIELD MAJOR:

Government 251, 252, and a minimum of 8 credits in each of the following areas:

- a. State and Local Governments (253, 353)
- b. International Relations (273, 450, 452, 453, 454)
- c. Foreign and Comparative Governments (101, 401, 402, 403)
OR Political Theory (468, 469, 470, 471)

Additional or alternate courses under departmental advisement to total 40 credits.

FIELD MINOR:

Government 251, 252, and a minimum of five credits in each of the following areas:

- a. State and Local Governments (253, 353)
- b. International Relations (273, 450, 452, 453, 454)

Additional or alternate courses under departmental advisement to total 20 credits.

Arts and Sciences

MAJOR:

Government 251, 252 and a minimum of eight credits in each of the following areas:

- a. Foreign and Comparative Governments (101, 401, 402, 403).
- b. International Relations (273, 450, 452, 453, 454).
- c. Political Theory (468, 469, 470, 471).
- d. State and Local Governments (253, 353) OR Public Administration (420, 421).

Additional or alternate courses under departmental advisement to total 42 credits.

Supporting Courses: courses in economics, geography, history, philosophy, psychology, sociology, anthropology, and/or other areas under departmental advisement.

MINOR:

Government 251, 252 and a minimum of five credits each in three of the following areas:

- a. Foreign and Comparative Governments (101, 401, 402, 403).
- b. International Relations (273, 450, 452, 453, 454).
- c. Political Theory (468, 469, 470, 471).
- d. State and Local Governments (253, 353).
- e. Public Administration (420, 421).

Additional or alternate courses under departmental advisement to total 25 credits.

department of ENGLISH

Professors: Cederstrom, Clapp, Hicks (*Chairman*); Van Aver; *Associate Professors:* *O'Brien, Odom; *Assistant Professors:* Cohen, Evenhuis, Hovde, Hunt, Larsen, Muldrow; *Instructors:* Hansen, Lawyer, Mathieson, Mendel.

Courses offered by the English Department may be divided into two groups: (a) literature and composition and (b) journalism.

Composition

The basic English requirements for all degree candidates are

English 100, 101, English Composition, 6 quarter hours.

In order to enroll in English 100, a student must achieve a satisfactory English sub-score in the pre-entrance tests. Those failing to do so may clear this deficiency by studying independently and passing a retest or by passing a remedial non-credit course: English 3, Fundamentals of English. This deficiency must be cleared before a student may enroll for a fourth quarter of residence study.

ENGLISH COMPETENCY TEST

In addition to the required courses in English composition, teacher education students must pass an English competency test in order to be eligible for student teaching. The test is given *the eighth week* of every quarter, but may not be taken prior to the student's fifth quarter of college. Transfer students, *provided* they have at least *fifth-quarter status* and have had the required composition courses, may take the test during the eighth week of any quarter in residence.

The test is strictly a performance test and does not require memory of grammatical terms. It consists of two parts:

- I. An objective test, which includes the following:

Spelling, punctuation, written usage, outlining, bibliographical and footnote form, vocabulary, and penmanship.

- II. The writing of a theme, which is graded in terms of the following criteria:

Mechanics, which includes correct spelling, punctuation, and usage;

Style, which includes effective sentence structure, the use of transition, and exactness of word choice;

*On leave, 1960-1961.

Organization, which includes the arrangement or sequence of the major idea-blocks of the theme;

Reasoning, which includes the development of the points *within* the main blocks of the paper's organization. It also includes the use of examples or inferences to support the points made.

Students are notified of the test results as promptly as possible so that those who need to bring their performance up to standard will have maximum opportunity to do so. While such students have the option of independent study or enrolling in a composition course, a satisfactory score on a competency retest is required.

Journalism

Offerings of the English department include a limited number of courses appropriate to those who aim to develop special competency in journalism. These are of special interest not only to those who anticipate more advanced professional study and a journalistic career but to prospective teachers and advisers of student publications. These courses are as follows:

- 200. News Writing
- 205, 206, 207. Newspaper Staff
- 235, 236, 237. Yearbook Staff
- 305, 306, 307. Advanced Newspaper Staff
- 335, 336, 337. Advanced Yearbook Staff
- 400. Special Problems in Journalism.
- 413. Advising and Preparing the School Newspaper
- 414. Advising and Preparing the School Yearbook

Note for pre-journalism students who plan to transfer to the University of Washington:

1. Those planning on editorial sequence should include among their electives Geography in World Affairs, Modern European History, Theory and Practice of Government in the State of Washington.
2. Those planning an advertising and management sequence should take Introduction to Business, Drawing, and Principles of Marketing.
3. All journalism students must complete a total of 9 credits in English Literature at same time during their four years.

ENGLISH

3. **FUNDAMENTALS OF ENGLISH.** A non-credit course offered to students failing to receive a satisfactory score on the English placement tests. The more important aspects of English usage which are included in the elementary and junior high school curricula are emphasized along with the development of reading skills.
100. **ENGLISH COMPOSITION 3 credits.** Prerequisite: English 3 or a satisfactory grade in English placement tests. A practical approach to the writing problems of the average student on the college level.
101. **ENGLISH COMPOSITION 3 credits.** Prerequisite: English 100 or equivalent. A continuation of English 100. Emphasis is given to methods of gathering material culminating in the writing of a term paper.
102. **ENGLISH COMPOSITION 3 credits.** Prerequisites: English 100 and 101 or equivalent. A third quarter of English composition designed to complete the standard nine-hour freshman composition requirement of many colleges and universities.
- 110 A or B. **DEVELOPMENTAL READING 2 credits.** A course designed to help the student who wants to increase his reading speed and comprehension. Students are sectioned, (A or B) on the basis of their ability as determined by a reading test. This test is administered prior to registration each quarter and results are made available.
200. **NEWS WRITING 3 credits.** A course in writing for newspapers. Subjects included are news elements and values, methods of gathering news, structure and style of news stories, the covering of speeches and meetings, interviewing, and laws affecting the press.
201. **BUSINESS CORRESPONDENCE 3 credits.** Prerequisite: English 100 or equivalent. Development of skill in the use of correct English for business purposes. Attention is given to the writing and handling of business correspondence. Also offered as Business Education 201.
- 205, 206, 207. **NEWSPAPER STAFF* 1 credit each.** Prerequisite: English 200 or permission of the instructor. A course designed to give practice in writing or editing copy for the college newspaper. Weekly conferences with the adviser are required.
- 235, 236, 237. **YEARBOOK STAFF* 1 credit each.** A practice course in annual production. Weekly conferences with the adviser are required.
- 263, 264, 265. **GENERAL LITERATURE 3 credits each.** Readings extending from the classical period, with special emphasis on Homer and the Greek dramatists, through the Middle Ages, the Renaissance, and the Romantic Movement in European literature to the contemporary period. This sequence will ultimately be replaced as a General Education requirement by the readings segment of the Humanities course.
281. **SHAKESPEARE: EARLIER COMEDIES 3 credits.** Also offered as Speech 281.
282. **SHAKESPEARE: HISTORICAL PLAYS—ENGLISH AND ROMAN 3 credits.** Also offered as Speech 282.
283. **SHAKESPEARE: TRAGEDIES AND LAST COMEDIES 3 credits.** Also offered as Speech 283.
301. **ENGLISH LITERATURE 5 credits.** An introduction to English literature through a study of the greater figures and more important works from Anglo-Saxon times to the late eighteenth century.
302. **ENGLISH LITERATURE 5 credits.** A continuation of English 301 dealing with the Romantic Period.

*Not more than six one-credit staff courses may be applied toward the English major.

303. ENGLISH LITERATURE 5 credits. A continuation of English 302; study of the Victorian Period and after.
- 305, 306, 307. ADVANCED NEWSPAPER STAFF* 1 credit each. Prerequisite: English 204, 205, 206 or 207, or permission of the instructor. An advanced practice course in writing or editing copy for the college newspaper. Weekly conferences with the adviser are required.
311. INTRODUCTION TO MODERN WORLD LITERATURE 3 credits. An introduction to modern World Literature, emphasizing a comparative perspective of writings produced in several countries. Translations are used. All types of literature are read and instruction is given on the special problems posed by each type and by each literary tradition. The principal aim is to encourage an approach to a work of literature on its own terms as an index to the thought of its time and for increased reading pleasure.
312. CLASSICAL MYTHOLOGY 3 credits. Prerequisite: permission of the instructor required for sophomores; no prerequisites for upper division students. A study of the nature of mythical thought, its development among the Greeks and Romans, and its influence on Western literature. Selected readings in English in ancient sources are used.
322. DRAMA FROM 1660 TO 1850 3 credits. A survey of European and American drama beginning with that of the Restoration period. A critical study is made of the plays and their relationship to historical and sociological events. Also offered as Speech 322.
323. MODERN DRAMA 3 credits. A study of the plays of Ibsen and Strindberg as the founders of the modern drama. Selected plays of the early twentieth century playwrights are included. Also offered as Speech 323.
324. MODERN AMERICAN DRAMA 3 credits. A comprehensive study of the plays, playwrights, and related movements of artists of the American theater, beginning with O'Neill and concluding with playwrights of the present. Also offered as Speech 324.
330. THE ENGLISH NOVEL 5 credits. A survey of the growth of the novel as a form of literature; some attention to the technique of the type, and the reading of representative novels.
331. INTRODUCTION TO RUSSIAN LITERATURE 3 credits. A study of the more important work of a few major figures of the modern period.
- 335, 336, 337. ADVANCED YEARBOOK STAFF* 1 credit each. Prerequisite: English 234, 235, 236 or 237, or permission of the instructor. An advanced practice course in annual production. Weekly conferences with the adviser are required.
340. CONTEMPORARY POETRY 5 credits. A survey of tendencies in modern American and British poetry with extensive reading in the field.
345. MODERN IRISH LITERATURE 3 credits. A study of the poetry, drama, and fiction of Irish writers since 1890, with emphasis on Yeats, Synge, O'Casey, and Joyce.
350. THE SEVENTEENTH CENTURY 3 credits. An intensive study of seventeenth century English literature exclusive of the drama.
351. EIGHTEENTH CENTURY PROSE 3 credits. Prerequisite: English 301 or equivalent. English prose—exclusive of the novel and drama—of the Age of Reason. This course deals with the work of such men as Swift, Defoe, Addison, Shattisburg, Berkeley, Bolingbroke, Samuel Johnson, Lord Chesterfield, Horace Walpole, and others.
352. EIGHTEENTH CENTURY POETRY 3 credits. Prerequisite: English 301 or equivalent. English poetry of the eighteenth century—the age of Pope and the precursors

*Not more than six one-credit staff courses may be applied toward the English major.

- of the Romantic Movement—such figures as Pope, Gay, Goldsmith, Collins, Gray, Shenstone, Bishop, Percy, Macpherson, and others.
360. **ADVANCED COMPOSITION 3 credits.** Prerequisite: six hours of college credit in English composition. Practice in the writing of the familiar, informal essay and of the critical book review. The course also deals with the techniques of descriptive and narrative writing.
 370. **CREATIVE WRITING 3 credits.** Prerequisite: English 100 or its equivalent. A practical approach to the problems of writing through class and conference. The technical aspects of English are taken up only as they occur as problems to the individual student.
 380. **AMERICAN LITERATURE 1800-1860 3 credits.** Emphasis is placed upon the romantic and nationalistic tendencies of the period as they are expressed in the poetry and prose of the times.
 381. **AMERICAN LITERATURE 1860-1900 3 credits.** Emphasis is placed upon the growth of realistic and naturalistic tendencies in American fiction and poetry of the period.
 382. **AMERICAN LITERATURE 1900-1930 3 credits.** Emphasis is placed upon the numerous social and literary ideas expressed in the prose and poetry of the period.
 385. **THE CONTEMPORARY AMERICAN NOVEL 3 credits.** Prerequisite: English 382 desirable but not required. The American novel since 1940. This is primarily a reading course.
 390. **THE BIBLE AS LITERATURE 3 credits.** A study of the cultural background of the Old and New Testaments and a literary analysis of selected passages.
 400. **SPECIAL PROBLEMS IN JOURNALISM 1-3 credits.** A course providing opportunity for journalism students to work in special areas of interest. Approval of the adviser and weekly conferences are required.
 402. **ROMANTIC POETS 3 credits.** An intensive study of major English poetry in the Romantic Period with provision for collateral reading and reports. Offered only in the summer.
 403. **VICTORIAN PROSE 3 credits.** A study of Victorian thought as expressed by the major prose writers of the period.
 407. **MATTHEW ARNOLD 3 credits.**
 408. **MILTON 3 credits.**
 409. **CHAUCER 3 credits.** A study of the poet's major works with emphasis on literary values. Less attention is given to philological problems.
 410. **LITERARY CRITICISM AND APPRECIATION 5 credits.** Prerequisite: fifteen credits in literature or an equivalent satisfactory to the instructor. An analysis of literary theory from ancient to modern times.
 413. **ADVISING AND PREPARING THE SCHOOL NEWSPAPER 3 credits.** Prerequisite: English 200. A practical course in the preparation of a typical secondary school newspaper. Included is a review of the principles and techniques of journalism, with an emphasis on responsible reporting and newswriting. The planning and staffing of the paper and the actual processing of both the duplicated and printed school journal compose the bulk of the course.
 414. **ADVISING AND PREPARING THE SCHOOL YEARBOOK 3 credits.** A course in the production of the secondary school "annual," with stress being placed on the practical processes of yearbook composition; the scheduling of the divisions of the book; the selection of efficient staff members; the planning of "dummies" and "logs."

419. **GREEK LITERATURE IN TRANSLATION** 3 credits. Selected major works of Greek literature are analyzed with reference to their historical and cultural setting, literary merit, and subsequent influence. The course involves lectures, discussions, and readings in English.
420. **LATIN LITERATURE IN TRANSLATION** 3 credits. Selected major works of Latin literature are analyzed with reference to their historical and cultural setting, literary merit, and subsequent influence. The course involves lectures, discussions, and readings in English.
421. **INTRODUCTION TO ORIENTAL LITERATURE** 5 credits. A study of the literature of India and China; examination of the Indian epics and philosophies of India; Chinese literature, especially the ideals of Confucius; relation of oriental literature to the thought of our times.
425. **ENGLISH FOR THE ELEMENTARY SCHOOL** 3 credits. This is a course in the teaching of the language arts—reading, writing, speaking, and listening—at the elementary school level. Methods of instruction appropriate to a formal English class and to the more informal unit teaching are explored. Consideration is given to methods of stimulating creative expression as well as to the teaching of such specific skills as spelling and usage. Appraisal of textbooks and curricular material is part of the work.
427. **GRAMMAR AND COMPOSITION FOR THE SECONDARY SCHOOL** 3 credits. Problems of teaching grammar in connection with writing. Some attention is given to recent research in linguistics. A brief review of grammatical terminology is included.
428. **LITERATURE FOR THE SECONDARY SCHOOL** 3 credits. This is a course in the teaching of literature in the junior and senior high school. It deals with (a) methods of instruction appropriate to formal English classes and (b) the integrated core program approach to literature.
430. **THE CONTEMPORARY BRITISH NOVEL** 3 credits. The British novel since 1920 with emphasis on Lawrence, Forster, Huxley, Woolf, and Graham Greene.
431. **NINETEENTH CENTURY RUSSIAN FICTION** 3 credits. A course emphasizing the novel but also including some short stories. Only Gogol, Turgenev, Dostoevsky, and Tolstoy are considered.
433. **FOUR MODERN POETS** 2 credits. An intensive study of a few important poets of our time.
434. **CONTEMPORARY POETS** 3 credits. A study of Eliot, Frost, Crane, Auden and Stevens. Emphasis is placed upon textual analysis of the poems; a term paper is required.
440. **DESCRIPTIVE ENGLISH GRAMMAR** 3 credits. This course is designed primarily for English majors in teacher education. It is concerned with the principles of English grammar and conventional English usage in oral and written communication.
460. **STRUCTURAL LINGUISTICS** 3 credits. A descriptive analysis of the structure of American English which takes into account the linguistic search of recent years and its impact on traditional grammar.
470. **WRITING SEMINAR** 3 credits. An advanced course in the practical problems of writing for publication.
475. **HISTORY OF THE ENGLISH LANGUAGE** 3 credits. A course concerned with the development of the English language from the standpoints of morphology, syntactical relationship, and semantics.
483. **SOCIAL CHANGE AND THE MORAL ORDER IN RECENT LITERATURE** 4 credits. Also offered as Philosophy 483 and Sociology 483.

485. **TECHNIQUES OF READING** 3 credits. Prerequisite: student teaching experience. Emphasis is placed on the importance of attitudes in maintaining normal progress in the acquisition of reading skills. Study is made of the factors conducive to desirable attitudes. The specific skills which constitute general reading ability are analyzed as are the procedures suited to their development. Each student is expected to study some problems of reading specifically connected with his own field of teaching. Also offered as Education 485.
501. **RESEARCH WRITING** 2 credits. A graduate course designed primarily to aid the candidate for the master's degree in preparing his thesis. It is to be taken by the student only upon recommendation of his graduate adviser.
520. **PRINCIPLES OF LITERARY CRITICISM** 3 credits.
583. **SEMINAR IN SHAKESPEARE** 3 credits. This course involves a close examination of two plays together with collateral reading and reports.
584. **SEMINAR IN AMERICAN LITERATURE** 2 credits. The background of the New England Romantic Movement in American literature, 1830 to 1860.
586. **SEMINAR IN AMERICAN LITERATURE** 2 credits. Prerequisites: English 380 and 381 or equivalent. A study of the social, economic, and political writers and philosophers of America during the period 1870 to 1910 and of their influence on American literature. Consideration is given to such figures as Edward Bellamy, Henry George, Henry Adams, William James, Lincoln Steffens, and others.

CONCENTRATIONS IN ENGLISH

Teacher Education

FIELD MAJOR:

- a. Select two: English 301, 302, 303
- b. Select two: English 380, 381, 382
- c. Select one: English 425, 427, 428
- d. Select one: English 200, Speech 204, Speech 230
- e. Elect courses dealing with major authors to total 6 credits
- f. Elect an upper division writing course
- g. Additional English electives under advisement: 8 to 10 credits

FIELD MINOR:

Choose two of the following alternatives:

1. Courses in major authors—6 credits
2. Five credits from English 301, 302, 303
3. Six credits from English 380, 381, 392

A course in the teaching of English—3 credits

Additional English electives under advisement: 5 to 6 credits

Arts and Sciences

MAJOR:

English 301, 302, 303, 380, 371, 382, 450;

Courses dealing with major authors—6 credits

An upper division writing course

Additional upper division courses under advisement to total 55 credits

Supporting Courses: the equivalent of two years of college study in French or German for those English majors who plan to do graduate work.

MINOR:

Choose two of the following alternatives:

1. Courses in major authors—6 credits
2. Five credits from English 301, 302, 303
3. Six credits from English 380, 381, 382
4. Courses in recent or contemporary literature — 6 credits

Additional upper division courses under advisement to total 25 credits.

department of
FOREIGN LANGUAGES

Associate Professors: King, (Chairman), Lee; Assistant Professors: Cohen, Robinson; Instructors: Elmendorf, J. Peradotto, N. Peradotto.

FRENCH

- 101, 102, 103. **FIRST YEAR FRENCH*** 5 credits each. Fundamentals of the French language: pronunciation, grammar, aural comprehension, reading, and speaking.
- 201, 202, 203. **SECOND YEAR FRENCH** 3 credits each. Prerequisite: French 101, 102, 103, or two years of high school French, or the equivalent. Review of fundamentals, reading, aural comprehension and speaking.
210. **CONVERSATIONAL FRENCH** 2 credits. Prerequisites: French 101, 102, 103, or two years of high school French or the equivalent. Training in speaking and understanding spoken French. This course may be taken concurrently with French 201.
211. **CONVERSATIONAL FRENCH** 2 credits. Prerequisite: French 210. A continuation of French 210.
- 230A. **REFRESHER COURSE IN FRENCH** 3 credits. Prerequisite: two years of high school or one year of college in French. A review of the fundamental structure of French with particular attention given to the improvement of speaking, listening, and reading skills. Offered summer session only.
- 230B. **MATERIALS AND METHODS IN THE LANGUAGE LABORATORY (FRENCH)** 2 credits. Open to all students in French 230A. An evaluation of electronic equipment, materials and methods currently used in the teaching of French. Classroom teachers of French and administrators may obtain special permission to register for this course only. Offered summer session only.

GERMAN

- 101, 102, 103. **FIRST YEAR GERMAN*** 5 credits each. Fundamentals of the German language: pronunciation, grammar, aural comprehension, reading and speaking.
- 201, 202, 203. **SECOND YEAR GERMAN** 3 credits each. Prerequisites: German 101, 102, 103, or two years of high school German or the equivalent. Review of fundamentals, reading, aural comprehension and speaking.
210. **CONVERSATIONAL GERMAN** 2 credits. Prerequisites: German 101, 102, 103, or two years of high school German, or the equivalent. Training in speaking and understanding spoken German. This course may be taken concurrently with German 201.
211. **CONVERSATIONAL GERMAN** 2 credits. Prerequisite: German 210. A continuation of German 210.

*Students with one year of high school credit in this foreign language may take the second quarter of the first year work (102) for 2½ credits and 103 for full credit.

300. **READINGS IN CONTEMPORARY GERMAN LITERATURE** 2-5 credits. Prerequisite: nine credits of second year German, or permission of the instructor. Reading and discussion of selected works of present-day German writers.
301. **INTRODUCTION TO THE CLASSICAL PERIOD** 3 credits. Prerequisite: at least nine credits of second year German, or the equivalent. A study of selected works of Lessing, Goethe, and Schiller.
302. **INTRODUCTION TO NINETEENTH CENTURY LITERATURE (to 1870)** 3 credits. Prerequisite: nine credits of second year German or the equivalent. Reading and interpretation of representative drama, poetry and narrative prose works. Lectures, partly in German, discussions, and student reports.
303. **INTRODUCTION TO MODERN LITERATURE (1870-1950)** 3 credits. Prerequisite: nine credits of second year German, or equivalent. Selected reading from representative authors, lectures, partly in German, discussions and student reports.
310. **GERMAN COMPOSITION AND CONVERSATION** 2 credits. Prerequisite: German 211 or equivalent.
311. **GERMAN COMPOSITION AND CONVERSATION** 2 credits. Prerequisite: German 310, or the equivalent.
312. **GERMAN COMPOSITION AND CONVERSATION** 2 credits. Prerequisite: German 311 or the equivalent.
400. **SPECIAL PROBLEMS** 2 to 5 credits. Advanced individual study for students majoring in the department.

LATIN

- 101, 102, 103. **FIRST YEAR LATIN*** 5 credits each. A structural approach designed to provide not only a foundation in grammar and an elementary reading knowledge of Latin, but also an introduction to the general laws of language.

Courses in Latin Literature in Translation (English 420), Greek Literature in Translation (English 419), and in Classical Mythology (English 312) are available in the English Department.

RUSSIAN

- 101, 102, 103. **FIRST YEAR RUSSIAN*** 5 credits each. Fundamentals of the Russian language: pronunciation, grammar, aural comprehension, reading, and speaking.
- 201, 202, 203. **SECOND YEAR RUSSIAN** 3 credits each. Prerequisites: Russian 101, 102, 103, or two years of high school Russian, or equivalent. Review of fundamentals, reading, aural comprehension, and speaking.
- 220, 221, 222. **RAPID READING IN RUSSIAN** 2 credits each. Prerequisites: Russian 101, 102, 103, or two years of high school Russian or the equivalent. These courses may be taken concurrently with Russian 201, 202, and 203.

SPANISH

- 101, 102, 103. **FIRST YEAR SPANISH*** 5 credits each. Fundamentals of the Spanish language: pronunciation, grammar, aural comprehension, reading, and speaking.

*Students with one year of high school credit in this foreign language may take the second quarter of the first year work (102) for 2½ credits and 103 for full credit.

-
- 201, 202, 203. **SECOND YEAR SPANISH** 3 credits each. Prerequisites: Spanish 101, 102, 103, or two years of high school Spanish or equivalent. Review of fundamentals, reading, aural comprehension, and speaking.
210. **CONVERSATIONAL SPANISH** 2 credits. Prerequisites: Spanish 101, 102, 103, or two years of high school Spanish or equivalent. Training in speaking and understanding spoken Spanish. This course may be taken concurrently with Spanish 201.
211. **CONVERSATIONAL SPANISH** Prerequisite: Spanish 210. A continuation of Spanish 210.
- 230A. **REFRESHER COURSE IN SPANISH FOR TEACHERS** 3 credits. Prerequisite: two years of high school Spanish or one year of college Spanish. A review of the fundamental structure of Spanish with particular attention given to the improvement of speaking, listening, and reading skills. Offered summer session only.
- 230B. **MATERIALS AND METHODS IN THE LANGUAGE LABORATORY (Spanish)** 2 credits. Open to all students enrolled in Spanish 230A. Classroom teachers of Spanish and administrators may obtain special permission to register for Spanish 230B only. An evaluation of electronic equipment, materials, and methods used currently in the teaching of Spanish. Offered summer session only.
301. **INTRODUCTION TO SPANISH-AMERICAN LITERATURE** 3 credits. Prerequisite: nine credits of second year Spanish or equivalent. A survey of the literature of Spanish America from the Colonial Period to the present. The important works, prose and poetry, are studied in an historical and sociological framework.
302. **THE SPANISH-AMERICAN NOVEL** 3 credits. Prerequisite: nine credits of second year Spanish or equivalent. The development of the novel in the late nineteenth and twentieth centuries in Mexico and the South American republics. Special emphasis is placed on the regional character of the Spanish-American novel and the political and social atmosphere in which it was developed.
303. **THE CLASSICAL DRAMA OF SPAIN** 3 credits. Prerequisite: nine credits of second year Spanish or equivalent. An appreciation of some of the masterpieces of the Siglo de Oro from Cervantes to Calderon. Special attention is given to those qualities of the drama characteristic of Spanish mentality and mores as these are revealed in the dramatic works of Spain's Golden Age.

CONCENTRATIONS IN FOREIGN LANGUAGES

Teacher Education

FIELD MAJOR A (with concentration in French)

27 credits beyond the first year in French plus 15 credits in a second foreign language.

FIELD MAJOR B (with concentration in German)

27 credits beyond the first year in German plus 15 credits in a second foreign language.

FIELD MAJOR C (with concentration in French or German)

40 credits beyond the first year in either language. This major may currently be arranged only with the inclusion of a limited number of approved transfer credits.

FIELD MINOR

20 credits in one language selected under advisement.

Note: All students intending to teach a foreign language are expected to take Foreign Language Education 332 (see page 86).

Arts and Sciences

MAJOR A (with concentration in French)

30 credits beyond the first year in French plus at least 15 credits in a second foreign language.

MAJOR B (with concentration in German)

30 credits beyond the first year in German plus at least 15 credits in a second foreign language.

Supporting Courses (for either major): appropriate courses in English, history, or philosophy selected under departmental advisement.

MINOR

25 credits in one language selected under departmental advisement.

department of
GEOGRAPHY

Professor: Critchfield, (Chairman); Associate Professors: Miller, Monahan.

GEOGRAPHY

201. **HUMAN GEOGRAPHY** 5 credits. The interrelations of man and his environment treated on a world-regional basis. Specific areas and types of man-land relationship are studied as examples of the world variety of human adjustments to and adaptation of the natural environment.
207. **ECONOMIC GEOGRAPHY** 5 credits. A world survey of resources, industries, commodities, and commerce.
311. **GEOGRAPHY OF ANGLO-AMERICA** 5 credits. Prerequisite: Geography 201. Regional geography of North America north of the Rio Grande.
313. **GEOGRAPHY OF CARIBBEAN AMERICA** 3 credits. Prerequisite: Geography 201. Landforms, climate, vegetation, and soils of Mexico, Central America, and the West Indies and their relationship to history, settlement patterns, and current economic conditions. The emphasis on the modern way of life as it has been developed from the ancient civilizations makes the course of special interest to the future teacher or the traveler.
314. **GEOGRAPHY OF SOUTH AMERICA** 5 credits. Prerequisite: Geography 201. A study of the South American nations, emphasizing their cultural backgrounds, natural environment, economic activities, and regional differences. The increasing importance of South America in the economy of the United States is stressed.
315. **GEOGRAPHY OF ASIA** 5 credits. Prerequisite: Geography 201. A regional study of Asia's settlement, population, economic resources and activities, and the associated problems.
316. **GEOGRAPHY OF EUROPE** 5 credits. Prerequisite: Geography 201. A regional study of Europe, emphasizing economic, political, and cultural problems.
318. **GEOGRAPHY OF THE PACIFIC** 3 credits. Prerequisite: Geography 201. A geographic interpretation of the physical environment, resources, and settlements of the Pacific Islands, Australia, and New Zealand. Special attention is given to the problems common to the Pacific islands and the lands which border the Pacific.
320. **GEOGRAPHY OF THE U.S.S.R.** 3 credits. Prerequisite: Geography 201. A regional study of the physical environment, resources, industries, population, and settlement of the Soviet Union with emphasis on the nation's role in world affairs.
331. **WEATHER AND CLIMATE** 5 credits. A survey of the elements of weather and climate as a part of man's geographic environment. Considered in the course are the controls of climate, types of climate and climatic regions, interrelationships between climate and other elements of the natural environment, climate and man, and the use and interpretation of climatic data and maps.

333. **BIOGEOGRAPHY** 3 credits. Geographic aspects of the origin, distribution, and adaptation of plant and animal associations. The course examines representative plant and animal forms in relation to their physical environment and to man.
341. **URBAN GEOGRAPHY** 3 credits. The geographic relations of the modern city. Emphasis is placed upon the development, functions, and problems of American cities.
351. **CARTOGRAPHY** 5 credits. An introduction to map making. The course includes practical experience in map and chart construction as well as study of the principles of grid representation, scale, symbols, lettering, design, and reproduction.
353. **INTERPRETATION OF MAPS AND AERIAL PHOTOGRAPHS** 3 credits. An introduction to the reading and interpretation of maps and aerial photos. Using various classes of maps and aerial photographs, techniques are presented which are used to identify geographic features of the landscape such as cultural objects, vegetation, land utilization, and land forms. The course program includes field work as well as study in the classroom.
401. **GEOGRAPHY OF THE PACIFIC NORTHWEST** 3 credits. Prerequisite: Geography 201. A regional survey of Pacific Northwest resources and industries and problems in resource development. Materials and aids for teaching local geography are discussed and evaluated.
421. **CONSERVATION OF NATURAL RESOURCES** 5 credits. Principles and practices in the wise management and economic use of our natural resources with emphasis on the Pacific Northwest. Materials and objectives in conservation, education, and the application of sound conservation principles to community and regional problems are considered. The course provides opportunities for field observation of resource problems and conservation practices.
422. **GEOGRAPHY OF WATER RESOURCES** 3 credits. Prerequisite: Geography 201. Principles and practices in water use and water conservation. Special attention is given to the distribution of water resources and the problems of water conservation in the United States.
435. **HISTORICAL GEOGRAPHY OF THE UNITED STATES** 3 credits. Prerequisite: Geography 311 or American History. A study of the relation of settlement of the United States to geographic factors. The correlation of history and geography is stressed.
452. **ADVANCED CARTOGRAPHY** 3 to 5 credits. Prerequisite: Geography 351 and permission of the instructor. Advanced problems and laboratory projects in map and chart construction.
470. **GEOGRAPHY AND WORLD AFFAIRS** 3 credits. Prerequisite: Geography 201. An examination of the geographical basis of contemporary world problems and international relations. Military strategy, tension zones, natural resources, boundaries, and other aspects of political geography are considered with special attention given to the current problem areas of the world.
480. **PROBLEMS IN GEOGRAPHY** 2 to 5 credits. Prerequisites: Geography 201 and senior standing or teaching experience. Topics of special interest to the student are studied under the direction of the instructor. Opportunities are provided for development of teaching units but total allowable credit may not exceed 5 credit hours.
481. **READINGS IN THE HISTORY AND THEORY OF GEOGRAPHY** 3 credits. Prerequisite: 20 hours in geography. Directed readings from the works of leading geographers of the past and present on the nature and development of geography.

**CONCENTRATIONS
IN
GEOGRAPHY**

Teacher Education

FIELD MAJOR

General Education 102 or Geography 103, Geography 201; Additional courses under advisement to total 40 credits.

FIELD MINOR

Geography 201; additional courses under advisement to total 20 credits.

Arts and Sciences

MAJOR

General Education 102 or Geography 103; Geography 201; additional courses under advisement to total 50 credits.

Supporting Courses: courses in statistics and foreign language study are strongly recommended.

MINOR

Geography 201; additional courses under advisement to total 25 credits.

department of GEOLOGY

Associate Professors: Christman, (*Chairman*); Pabst; *Instructor:* Easterbrook.

The Department of Geology offers courses for students in the Teacher Education, Arts and Sciences and Pre-professional curricula.

Teacher Education

For students planning to teach in the elementary or junior high school the General Science major or minor is recommended (see page 92). Courses may be selected under advisement from geology as well as from the science education courses which are specially adapted for the classroom teacher. Students wishing greater specialization in Geology may select a field minor in geology (see page 134).

There is an opportunity for graduate work leading to the degree of Master of Education with major emphasis in science education. This program is intended to equip master teachers as well as the specialist interested in working as a science education consultant in the public schools.

Arts and Sciences:

For the person not wishing to teach in the public schools courses are offered leading to a major or minor in geology (see page 134). Professional careers include: exploration for minerals, petroleum, and coal; research in earth materials in government and industry, and college teaching. Nearly all professional positions require graduate work leading to the M.S. or Ph.D. degree. A function of the professional program in the Arts and Sciences Division is to prepare the student for graduate study.

The undergraduate major in geology should be supported by a well rounded background in mathematics, chemistry, physics, and biology which are necessary supporting fields to geologic study. Students who plan eventually to work toward the Ph.D. degree should gain a reading knowledge of French or German during their undergraduate years. Geology majors contemplating field work must be of sound physique and be prepared to work under difficult conditions.

General Education:

With the exception of Physical Science 101, all students choosing geology majors and minors are required to include the general education science courses in their programs. It is suggested that Chemistry 121 be substituted for Physical Science 101.

Program Planning:

The student interested in a geology major should consult early in his college career with a member of the department for assistance in planning his course. Most graduate schools now require a "B" average in science for entrance. The following program is suggested for the first two years:

First	Chem.	*121, 122, 131
Year	Math.	*101, 102, 103
	Biol.	104
	Gen. Ed.	102
Second	Physics	231, 232, 233
Year		(or 131, 132, 133)

GEOLOGY

211. **PHYSICAL GEOLOGY** 5 credits. The origin, composition, and structure of the earth; identification of common rocks and minerals; the evolution of the surface features of continents, and interpretation of land forms from maps.
217. **MINERALOGY** 4 credits. Prerequisite: Geology 211. Elements of crystallography, comprehensive study of chemical and physical properties of minerals, identification of rock-forming minerals and other common minerals.
300. **SPECIAL PROJECTS IN GEOLOGY** 2 to 5 credits. Prerequisites: 10 credits in geology and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
310. **GEOMORPHOLOGY** 5 credits. Prerequisite: Geology 211 or Geography 103. Study of the landscape features, the sculpturing of mountains, hills, plains, and plateaus by surface processes.
311. **COMMON ROCKS AND MINERALS** 3 credits. Prerequisite: General Education 102 or permission of the instructor. A course designed for students desiring more detailed work with rocks and minerals than is afforded in General Education 102 or Geology 211. The material to be considered includes the origin, occurrence, and identification of minerals and their associations, the uses of the more common species of rocks, emphasizing those occurring locally.
312. **HISTOLOGICAL GEOLOGY** 5 credits. Prerequisite: General Education 102; Geology 211 and Geology 316 desirable. The history of the earth as interpreted from the rocks and the story of the development of its inhabitants. Emphasis is upon the geologic history of North America and the Pacific Northwest. Field trips supplement classroom work.
313. **IGNEOUS PETROGRAPHY AND PETROLOGY** 3 credits. Prerequisite: Geology 318. Origin, occurrence, and classification of igneous rocks and minerals; use of thin sections in identifying igneous minerals.
314. **SEDIMENTARY PETROGRAPHY AND PETROLOGY** 3 credits. Prerequisites: Geology 318 and preferably Geology 313. Origin, occurrence, and classification of sedimentary rocks and minerals; use of thin sections in identifying sedimentary minerals.

*Students eligible for advanced placement in chemistry or mathematics should consult with an adviser in the appropriate department before enrolling in the introductory courses.

315. **METAMORPHIC PETROGRAPHY AND PETROLOGY** 3 credits. Prerequisites: Geology 318, 313, and preferably 314. Origin, occurrence, and classification of metamorphic rocks and minerals; use of thin sections in identifying metamorphic minerals.
316. **PRINCIPLES OF PALEONTOLOGY** 5 credits. Prerequisites: General Education 102, Biology 104, or their equivalents. Survey of life on the earth as revealed by its inhabitants past and present. The course includes field trips to accessible fossil-collecting localities.
318. **OPTICAL MINERALOGY** 4 credits. Prerequisite: Geology 217. Study of optical phenomena as related to mineralogy; identification of minerals from optical properties with the use of the polarizing microscope.
319. **ECONOMIC GEOLOGY** 3 credits. Prerequisite: Geology 217. Study of economic minerals and ore deposits, their genesis and occurrence.
399. **SEMINAR IN GEOLOGY** 1 credit. Prerequisites: junior standing, 20 credits in geology, and permission of the instructor. Geological reports, papers, and discussion.
400. **SPECIAL PROJECTS IN GEOLOGY** 2 to 5 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
410. **FIELD GEOLOGY** 3 or 5 credits. Prerequisites: Geology 312 and 416. Practical training in methods of geological field investigations, use of field instruments, and making of geologic maps. Field work consists of a supervised geologic investigation of a local area.
413. **GEOMORPHOLOGY OF WESTERN UNITED STATES** 5 credits. Prerequisite: 5 credits in geology or Physical Geography. A course for students interested in geology and for teachers interested in utilizing materials of a local geologic character in the classroom. This course is concerned with understanding the geological forces and processes that have shaped the landscape of the West. Field trips are emphasized as an essential part of the course. This course is offered in even numbered years.
416. **STRATIGRAPHY** 5 credits. Prerequisite: Geology 312. Analysis of physical and biologic characteristics of stratified rock sequences; principles of correlation, determination of geologic age, facies relationships.
417. **STRUCTURAL GEOLOGY** 5 credits. Prerequisite: Geology 312. Description, classification, and interpretation of earth structures. Laboratory work emphasizes solution of structural problems by use of geologic maps.

CONCENTRATIONS IN GEOLOGY

Teacher Education

FIELD MINOR (A second teaching field for high school teachers): General Education science requirements: (General Science 405 or 406 in lieu of Physical Science 101 if student elects Chemistry 121 or 125, or Physics 131 or 231); General Education 102.

Selected courses in geology and related subjects under departmental advisement to total not less than 32 credits, including general education science requirements.

Arts and Sciences

MAJOR: General education science requirements: (General Science 405 or 406 in lieu of Physical Science 101 if student elects Chemistry 121 or 125, or Physics 131 or 231); General Education 102.

50 credits in geology and related subjects selected under departmental advisement to include program (a) or (b).

(a) Emphasis in Paleontology: Geology 211, 312, 316, 416 and 30 additional credits;

Supporting courses: Botany 252, 352; Zoology 262, 366; Biology 265 or Zoology 461.

(b) Emphasis in Physical Geology: Geology 211, 217, 312, 313, 314, 315, 318, 416 and additional courses to total not less than 50 credits.

Supporting courses: Two one-year sequences from the fields of mathematics, chemistry, or physics. A minor should be taken in the third field.

MINOR: General education science requirements—(General Science 405 or 406 in lieu of Physical Science 101 if student elects Chemistry 121 or 125, or Physics 131 or 231); General Education 102.

25 credits in geology selected under departmental advisement to include Geology 211, 312.

department of HISTORY

Professors: Arntzen, Murray, (*Chairman*); *Associate Professors:* Boylan, Radke; *Assistant Professors:* Buttrick, Hiller, Schuler, Whittemore.

HISTORY

- 105, 106. HISTORY OF CIVILIZATION 5 credits each. A comprehensive survey of human development from earliest times to the present. The basic viewpoint of this course is an orientation to the contemporary life and culture based on a study of the growth of human culture. Institutions, arts, and ideas, as well as a review of the course of human events. (Not open to entering freshmen.)
203. AMERICAN HISTORY TO 1865 5 credits. A survey of American history from the European background to the end of the Civil War. (Not open to students having credit for History 205 or History 206.)
204. AMERICAN HISTORY SINCE 1865 5 credits. A survey of American history from the end of the Civil War to the present. (Not open to students having credit for History 206 or History 207.)
211. ANCIENT HISTORY 5 credits. The Ancient Near East, Greece, and Rome are reviewed with special attention to those elements of ancient civilization contributing most vitally to the civilization of the medieval and modern world. The course terminates with the breakdown of Roman authority in the West.
223. HISTORY OF ENGLAND, 1485-1783 5 credits. A survey of the political, social, economic, and diplomatic history of England from the accession of the Tudors to the end of the War of the American Revolution. Special attention is given to the constitutional developments of the period.
224. HISTORY OF ENGLAND, 1783 TO THE PRESENT 5 credits. A survey of the political, social, economic, and diplomatic history of England from the Age of Pitt and Fox to the present. Special attention is given to the development of parliamentary institutions in this period.
300. HISTORICAL RESEARCH 3 credits. A course designed to introduce the student to historical research methods. A particular historical field is chosen for analysis and the student then assigned a specific project.
312. EUROPEAN ECONOMIC HISTORY 5 credits. A survey of European economic development from the origins of capitalism to the present. Special emphasis is placed on the period since 1750, marking the emergence of modern industrialism.
332. MODERN EUROPE, 1648-1815 5 credits. A course including the main currents of European history in the seventeenth and eighteenth centuries. Emphasis is placed on the development of the modern state system and the conflict between the monarchs and the growing middle class.
333. MODERN EUROPE, 1815-1914. 5 credits. A course including the main currents of the nineteenth century. Emphasis is placed upon the political, economic, social, and diplomatic developments that led up to the first World War.
347. AMERICAN ECONOMIC HISTORY 5 credits. A study of American economic development from colonial times to the present with particular emphasis upon the later periods.

363. **ASIA IN THE TWENTIETH CENTURY** 3 credits. The impact of the western world on the Orient in the light of Asiatic development since 1900. Special consideration is given to Asiatic developments which underly the relationship of Asia to the world.
381. **DIPLOMATIC HISTORY OF THE UNITED STATES** 5 credits. A survey of the relationship of the United States to world politics from colonial times to the present, with special emphasis given to the major episodes in American diplomatic history.
382. **AMERICAN CONSTITUTIONAL HISTORY** 5 credits. A study of the constitutional development of the United States from the Revolutionary era to the present.
388. **THE PROGRESSIVE MOVEMENT** 5 credits. A survey of economic, social, and political protest in America from the Civil War to 1920. Major emphasis is placed on the growth and decline of the Progressive Party between 1900 and 1916.
416. **HISTORY OF THE WEST** 5 credits. A study of the westward movement from the Allegheny Mountains to the Pacific Ocean with special emphasis upon the Far West.
417. **HISTORY AND GOVERNMENT OF WASHINGTON** 3 credits. This course is designed to provide a background for those who teach state history and government in the public schools. The general history of the Pacific Northwest is covered as well as state development, samples of local history, and state and local government. This course meets the requirements for state certification.
420. **ANCIENT NEAR EAST** 5 credits. The genesis of Western Civilization: our cultural debt to the ancient Mesopotamians, Egyptians, Hittites, Phoenicians, Aramaeans, Hebrews, Assyrians, and Persians.
421. **GREECE** 5 credits. The Greek World from the Minoan-Mycenaean Period to about 220 B. C.
422. **ROME** 5 credits. From the Foundation of Rome (753 B. C.) to the death of Theodosius I (395 A. D.) and the division of the Empire.
423. **THE BYZANTINE EMPIRE** 5 credits. From the dedication of Constantinople to its fall (330-1453).
430. **WESTERN MEDIEVAL EUROPE** 5 credits. Political, social, economic, and cultural developments in Western Europe from the death of Theodosius I (395 A. D.) to the eve of the Hundred Years War (1337).
431. **THE RENAISSANCE AND THE REFORMATION** 5 credits. The transition from the Medieval to the Modern: Western Europe from the eve of the Hundred Years War to the Treaty of Westphalia (1337-1648).
434. **MODERN EUROPE, 1914-1945** 5 credits. A course designed to give an understanding of Europe in the 20th century. It considers the results of World War I, attempts at world organization, the Succession States of Central Europe, the disintegration of world order leading to World War II, and the global conflict that followed.
435. **EUROPE SINCE 1945** 3 credits. A survey of the major political, economic, and social developments since the end of the Second World War. The origin and operation of the cold war and the attempts of Europe to adjust to the changing status of the continent are stressed.
442. **GREAT PERSONALITIES OF AMERICAN HISTORY** 3 credits. A biographical approach to American history based on an evaluation of the careers of typical American leaders in public affairs, the arts, and ideas.
446. **THE ERA OF THE FRENCH REVOLUTION AND NAPOLEON, 1789-1815** 5 credits. Europe on the eve of the Revolution; benevolent despotism, the Enlightenment,

ideas and course of The Revolution; consolidation and changes under Napoleon; the impact of the Revolution on Europe; fall of Napoleon; lasting results of the era.

451. **AMERICAN COLONIAL HISTORY** 5 credits. A study of the colonial period of American History from the discovery of America to the end of the American Revolution.
453. **THE AGE OF JEFFERSON AND JACKSON** 5 credits. A study of the history of the United States from the Jefferson Administration through the times of Andrew Jackson to the sectional controversy that produced the Civil War.
454. **THE CIVIL WAR AND RECONSTRUCTION** 5 credits. A study of (a) the development of rival nationalisms in the mid-nineteenth century in the United States, (b) the problems of the war in the North and the South, (c) the efforts toward reunion, (d) the new problems in the United States in 1877.
458. **THE UNITED STATES IN THE TWENTIETH CENTURY** 5 credits. A history of the political, economic, social, and intellectual development in the United States from 1900 to 1945.
459. **THE UNITED STATES SINCE 1945** 3 credits. A survey of the internal and international consequences of the rise of the United States as a world power since the end of the Second World War.
460. **HISTORY OF RUSSIA, 1689-1905** 3 credits. A survey of the political, social, economic, and diplomatic history of Russia from Peter the Great to the Revolution of 1905. Particular attention is given to those attitudes and factors which have continued to influence the policy and development of the modern Russian state.
461. **HISTORY OF RUSSIA, 1905 TO THE PRESENT** 5 credits. A survey of the political, social, economic, and diplomatic history of Russia in the twentieth century. The course emphasizes the period since the Bolshevik Revolution.
462. **HISTORY OF FRANCE SINCE 1815** 5 credits. A survey of the political, social, and economic development of France in the nineteenth and twentieth centuries. The focus of the course is on the Second Empire and the Third Republic. The course is designed to explain the historical background of one of the leading states in Europe.
464. **HISTORY OF GERMANY** 5 credits. A survey of German history from the Thirty-year War to the present time. Emphasis is placed on the rise of Brandenburg-Prussia and the role Germany has played in the international state system.
471. **HISTORY OF CANADA** 5 credits. A general history of Canada from the period of French colonization to the present.
475. **HISTORY OF LATIN AMERICA** 5 credits. A survey of the historical development of the Latin-American nations from the period of early Spanish and Portuguese colonization to the present.
501. **THE STUDY OF HISTORY** 3 credits. An introduction to a study of history and historians, including the historical method and the sources and development of history.
502. **WRITING SEMINAR IN HISTORY** 3 credits. Prerequisites: 36 hours of history and departmental permission. An introduction to material and methodology of historical research. This course involves research and writing, and is particularly appropriate for those who plan to teach in the field of history.
529. **HISTORY IN THE SOCIAL STUDIES** 3 credits. Prerequisite: A basic undergraduate foundation in the social studies. This course encompasses a complete study of the United States from colony to world power. It is designed to provide a depth of understanding and comprehensive subject matter background for the

secondary teacher of social studies. Consideration is given to historical literature, to great periods in American history, and to the contribution of historical study to the social studies in general.

530. **GENERAL FIELD COURSE — EUROPEAN HISTORY** 3 credits. Prerequisite: not less than 36 hours of history or departmental permission. A study of historical literature in modern European history. The course is designed for the master teacher of history or general social studies.
588. **SPECIAL FIELD COURSE — AMERICAN HISTORY** 3 credits. Prerequisite: not less than 36 hours of history with a major in social studies or in the field of history. A study of the historical literature in the American Progressive movement.

CONCENTRATIONS IN HISTORY

Teacher Education

FIELD MAJOR:

History 203-204 or acceptable upper division substitutes.

Additional courses under advisement to total 45 credits.

FIELD MINOR:

History 203-204. Additional courses, including one upper division course, under advisement to total 20 credits.

Arts and Sciences

MAJOR:

History 203-204 plus additional courses in history to total not less than 50 credits of which 20 must be upper division.

Supporting courses: Government 250 and one or more basic courses in other fields of the social studies. A foreign language is highly recommended.

MINOR:

History 203-204 with additional courses in history to total not less than 25 credits.

department of HOME ECONOMICS

Associate Professor: Ramsland, (*Chairman*); *Instructors,* Larrabee, Turck.

The study of home economics relates to the three major curricula of the College as follows:

Teacher Education

1. A field major in home economics qualifies the student to teach homemaking at the junior high level or non-vocational senior high school level.

Students anticipating a home economics vocational teaching certificate at the end of the fifth year of study at an institution granting the vocational certificate, may complete the requirements for the bachelor's degree at Western Washington College of Education. A specified program of studies is followed with a 45-hour major in home economics and required supporting courses.

2. A field minor in home economics may be taken as a general or specialized minor to meet the needs of the student. Elementary education teachers, physical education teachers, industrial arts teachers, and art teachers may find a minor especially appropriate. A field minor in home economics is not designed for teaching home economics at either the junior high school or the senior high school levels.

Arts and Sciences

A major or a minor in home economics is appropriate to those who anticipate a career in home making.

Courses in home economics represent five divisions:

- Foods and Nutrition
- Textiles and Clothing
- Family Relationships and Child Development
- Family Economics and Home Management
- Housing, Home Furnishings, and Equipment

Those who select a major or minor in home economics are required to take courses in all divisions.

Junior College Division

A one- or two-year program may be planned for the student who anticipates transfer to more specialized study at another college or university.

A student may elect courses for a one- or two-year program to meet personal needs.

Many of the department offerings are open to both men and women on an elective basis.

HOME ECONOMICS

100. **INTRODUCTION TO HOME ECONOMICS** 1 credit. A course required of all freshmen planning to major or minor in home economics. This course aims to orient the student in the five areas of home economics and to review the field in terms of history, philosophy, and professional opportunities. The American family and its problems are emphasized as the primary concern in the study of home economics.
112. **TEXTILES FOR THE CONSUMER** 3 credits. Prerequisite or concurrent: Art 102 or Art 260. An evaluation of various fabrics used for clothing and household purposes. Sources of textiles and the manufacture, finishes, identification, selection, and care of fabrics are considered.
123. **THE PRE-SCHOOL CHILD IN THE FAMILY** 2 credits. Study and observation of the intellectual, physical, social, and emotional development of the pre-school child. The course emphasizes the relationship of the child to the family in all these aspects.
- 126N. **NUTRITION FOR NURSES** 3 credits. Open to pre-nursing students only. A course in the fundamental principles of human nutrition and the planning of dietaries to meet normal standards.
151. **MEAL PREPARATION** 4 credits. A laboratory course in meal preparation covering the basic principles of food preparation, the purchasing of food and the serving of meals.
160. **CLOTHING SECTION** 2 credits. Prerequisite: Art 102 or 260. Home Economics 112 is a desirable prerequisite. The selection of clothing from both aesthetic and consumer aspects, wardrobe planning guided by fashion, color, design, texture, personality, occasion, and income. This course is not open to those majoring in home economics.
161. **BEGINNING CLOTHING CONSTRUCTION** 3 credits. Prerequisite: Home Economics 112 recommended but not required. Beginning sewing techniques are taught in the construction of two garments. This course is not open to those majoring in home economics.
201. **WEAVING** 3 credits. The study of weaving through the use of a variety of looms and materials. This course may be taken as Industrial Arts 201.
210. **NUTRITION** 2 credits. The fundamental principles of human nutrition and the study of modern dietary standards as applied under normal conditions of everyday living. Emphasis is given to nutrition education in the modern school.
251. **FAMILY MEAL MANAGEMENT** 3 credits. Prerequisites for majors: Home Economics 151 and 210. A laboratory course in planning, preparing, and serving meals for the family and guests. Emphasis is on management of time, energy, and money and on creativity in planning and serving meals.

252. **MEAL PREPARATION (Men)** 2 credits. A course to help men who are interested in learning to plan, prepare, and serve simple, appetizing meals. Emphasis is on meal management.
260. **CLOTHING SELECTION AND CONSTRUCTION** 5 credits. Selection of clothing from both the aesthetic and consumer aspects. Wardrobe planning guided by color, design, texture, and personality is included. This is a laboratory course in clothing construction incorporating new construction techniques and methods.
261. **INTERMEDIATE CLOTHING CONSTRUCTION** 3 credits. Prerequisite: Home Economics 161; Home Economics 112 is recommended but not required. This laboratory class is concerned with the actual construction of garments. Pattern adaptation, principles of fitting, advanced sewing techniques, and manipulation of present-day fabrics are stressed. This course is not open to those majoring in home economics.
265. **NEEDLECRAFT** 2 credits. Prerequisite: Art 102 or 260. A laboratory class in which various embroidery stitches and needlework designs are applied to household linens and clothing.
272. **HOUSEHOLD EQUIPMENT** 3 credits. Modern household equipment; its selection, operation, and care. Demonstrations, field trips, and laboratory experiences are included in the course.
300. **SPECIAL PROBLEMS IN HOME ECONOMICS** 1-5 credits. (See Home Economics 400).
310. **PROBLEMS IN NUTRITION** 3 credits. Prerequisites: Home Economics 151 and 210. A study of significant problems in human nutrition including (a) those related to the family, such as food for infants, children, and expectant mothers, and adequate family diet in relation to cost; (b) the school lunch program, its objectives and management; (c) nutrition education in the school; (d) the use of experimental animals for nutrition research; (e) a review of current developments in the field.
312. **NEW FABRICS AND FINISHES** 2 credits. Home Economics 112 is a desirable prerequisite. A study of the newer synthetic fabrics used for clothing and household purposes. Consideration is given to chemical and physical properties, special finishing processes, identification, selection, use, and care of the newer fabrics. This course is offered only in the summer session.
320. **FAMILY FINANCE** 3 credits. Prerequisites: General Education 105 and Economics 201. The management of family income and expenditures in the changing family circle. The financial problems of the family as a social and economic unit in the community are considered.
321. **CONSUMER ECONOMICS** 2 credits. Prerequisites: General Education 105 and Economics 201. The intelligent selection of consumer goods; the understanding of the consumer's obligations and of the aids and protections available to him.
343. **HOME ECONOMICS EDUCATION** 3 credits. Prerequisites: junior standing and 20 hours of prescribed home economics. This course is required of all students who do student teaching in home economics. A study of the philosophy, teaching methods, and curriculum in the homemaking programs of the junior and senior high school.
351. **FAMILY MEAL MANAGEMENT** 3 credits. Prerequisites for majors: Home Economics 151 and 210. A laboratory course in planning, preparing, and serving meals for the family and guests. Social functions such as teas, buffet meals, and other group functions are included. Emphasis is on management of time, energy, and money and creativity in planning and serving meals. This course is offered only in the summer session.

353. **DEMONSTRATION TECHNIQUES** 2 credits. Prerequisite: 20 credits of prescribed courses in home economics. The study and practice of the basic demonstration techniques in various areas of home economics. Opportunity is given for individual demonstrations of materials and equipment.
362. **FAMILY CLOTHING** 2 credits. Prerequisite: Home Economics 161 or 260 or consent of the instructor. Important considerations in the selection of clothing for the family and in the construction of children's garments. This is a lecture and laboratory course.
364. **HISTORY OF COSTUME** 2 credits. Prerequisite: Art 102 or 260. The history of costume from the Egyptian period to the present day and its influence on modern fashions.
366. **FLAT PATTERN AND DRAPING** 3 credits. Prerequisite: Home Economics 161 or 260 or 261. This is a laboratory course dealing with the basic theory and principles of pattern making and draping techniques.
370. **THE HOUSE; ITS PLANNING AND ARCHITECTURE** 5 credits. Prerequisite: Art 102 or 260. This course includes a study of the history of architecture and housing problems for various groups. Home planning in terms of construction, space, and equipment is considered. Laboratory experience and field trips are included.
375. **HOME FURNISHING** 5 credits. Prerequisite: Art 102 or 260; Home Economics 112 is recommended but not required. The selection and arrangement of furniture and furnishings from aesthetic and economic aspects. The history of furniture and decoration from traditional to contemporary times is discussed. Laboratory experiences and field trips are included.
400. **SPECIAL PROBLEMS IN HOME ECONOMICS** 1-5 credits. Prerequisite: consent of the department chairman. Advanced students who have a creditable record in home economics may work on a special problem by conference arrangement with the instructor.
423. **CHILD CARE AND DEVELOPMENT** 3 credits. A course dealing with the development of the child from pre-natal through the pre-school age with emphasis on guidance by the family. Observation of children of various ages and a nursery school laboratory experience are included. The teaching of child development in the home economics curriculum is considered.
427. **FAMILY RELATIONSHIPS** 3 credits. Prerequisites: General Education 105, Home Economics 123 and 423, and Sociology 351 are recommended but not required. Fundamental principles and attitudes which underlie satisfactory family life and the adjustment to personal, economic, and social problems which concern the family are studied. The teaching of family life education in the home economics curriculum is considered.
430. **HOME MANAGEMENT** 2 credits. Prerequisites: junior standing, Home Economics 251, 320, 375. A study of the development and methods of home management. Both practical and experimental problems in home management are considered. Attention is given to work simplification involving time and motion studies.
446. **TEACHING PROBLEMS IN HOME MAKING EDUCATION** 2 credits. An intensive workshop course dealing with present-day problems in the teaching of home-making. This course is offered only in the summer session.
447. **SEMINAR IN HOME ECONOMICS** 1-5 credits. Prerequisites: 36 hours in home economics and permission of the instructor. Readings and discussion of the recent literature and research in the five divisions of home economics.

451. **EXPERIMENTAL COOKERY** 3 credits. Prerequisites: Home Economics 151, Chemistry 125 and 226. The application of scientific principles and experimental procedure to the cooking processes.
461. **TAILORING** 3 credits. Prerequisite: Home Economics 260 or 261; Home Economics 112 is recommended but not required. A laboratory course in which modern tailoring techniques are applied to the construction of garments.
462. **SPECIAL PROBLEMS IN CLOTHING CONSTRUCTION** 3 credits. Prerequisite: Home Economics 161 or 260. A course concerned with sewing and fitting problems, designer patterns, and tailoring techniques. Consideration is given to man-made and hard-to-handle fabrics. New methods in the teaching of clothing construction and the use of modern sewing machines are also presented. Two garments are constructed in the laboratory class, the choice of the garment depending on personal or teaching needs. This course is offered only in the summer session.
465. **THE BISHOP METHOD OF CLOTHING CONSTRUCTION—beginning course—3 credits.** An introductory course to familiarize students with the Bishop method of clothing construction and to develop some skill in its application. Emphasis is placed on the Bishop scientific short-cut techniques and on application of method for teaching.
466. **THE BISHOP METHOD OF CLOTHING CONSTRUCTION—advanced course—3 credits.** Prerequisite: Home Economics 465 or its equivalent by an authorized teacher. Further application of beginning skills plus advanced Bishop sewing and tailoring methods. Personal and general pattern fitting techniques are stressed in this course.
475. **ADVANCED HOME FURNISHING** 3 credits. Prerequisites: Home Economics 112 and 375. A study of traditional and contemporary furniture and furnishings with emphasis on fabrics, wall coverings, floor coverings, accessories, color, and arrangement. The course involves both individual projects and field trips.
476. **SURVEY OF CONTEMPORARY DESIGN IN HOME FURNISHINGS** 2 credits. Prerequisite: Home Economics 375. A study of American, European, and Oriental influences on contemporary design in home furnishings with attention to new developments in materials, fabrics, and finishes used in decorative and useful objects.
500. **SPECIAL PROBLEMS IN HOME ECONOMICS** 1-5 credits. (See Home Economics 400.)

**CONCENTRATIONS
IN
HOME ECONOMICS**

Teacher Education

FIELD MAJOR:

Home Economics 100, 112, 123, 151, 210, 251, 260, 272, 320, 321, 345, 375, 423, 427, 430, 447.

Students anticipating vocational certification have the following supporting courses to take in addition: Chemistry 125, 251; Economics 201; Health Science 247.

FIELD MINOR:

20 credits taken under departmental advisement. Preliminary consultation with an adviser is essential before undertaking the minor.

Arts and Sciences

MAJOR:

Home economics 100, 112, 123, 151, 210, 251, 260, 272, 320, 321, 370, 375, 423, 427, 430, 466 and one course from 362, 366, or 461.

Supporting courses: Art 102, 260; Economics 201; Sociology 201, 351.

MINOR:

Home Economics 100, 123, 151, 210, 260, 320, 375, and either 423 or 427.

department of INDUSTRIAL ARTS

Professor: Atteberry, (Chairman); Associate Professors: Channer, Rice, Schwalm; Assistant Professor: Hepler; Instructors: Bailey, Hauser.*

INDUSTRIAL ARTS

100. **ORIENTATION TO INDUSTRIAL ARTS** 3 credits. This is a prerequisite to other courses in the department for those majoring in industrial arts. The course provides an overview of industrial arts education for all students and an introduction to our industrial culture.
110. **GENERAL DRAFTING** 3 credits. An introductory course in the fundamentals of mechanical and freehand drawing and the techniques of planning. It includes a brief survey of construction design and provides opportunity for practice in its techniques. Awareness of good design is developed through the aid of audio-visual methods and materials. This is a basic course for industrial arts teachers and is a prerequisite to all courses in the major. However, it is appropriate for students in other fields.
111. **INDUSTRIAL ARTS DESIGN** 2 credits. Prerequisite: Industrial Arts 110. A course which gives opportunity for the design of industrial products. The emphasis is placed on creativeness or inventiveness in the functional, practical application of tools, machines, and materials in the solution of problems.
201. **WEAVING** 3 credits. A course dealing with the study of weaving through the use of a variety of looms and materials. This course may be taken as Home Economics 201.
210. **ENGINEERING DRAWING** 3 credits. This course introduces the use of drafting instruments and involves the art of freehand lettering, geometrical construction, and technical sketching. Included are the principles of orthographic projection, sections, isometric and oblique pictorial drawing, and duplication methods.
211. **ENGINEERING DRAWING** 3 credits. Prerequisite: Ind. Arts 210. Continuation of drafting techniques, emphasizing working drawings of machine parts, double auxiliary views, fasteners, developments, pictorial representations, and duplication methods.
212. **DESCRIPTIVE GEOMETRY** 3 credits. Prerequisites: Ind. Arts 210 and 211. Theory and problems with practical application and the projection of points, lines, surfaces, and solids.
223. **GENERAL METALS** 5 credits. An introductory course which includes work in the following metal areas: art metal, bench metal, sheet metal, forging, pattern making, foundry, welding, and the machining of metals. Projects suitable for all school levels are designed and constructed.
231. **GENERAL WOODS** 5 credits. A beginning course in elementary hand woodworking and the use of common power equipment. Experiences in woods are provided in problems related to materials, processes, production, tool maintenance, shop management, and demonstrations.
270. **APPLIED ELECTRICITY** 3 credits. A first course related to theory and practice in the field of electricity. Projects and related studies involving the principles of

*On leave, 1960-1961.

electricity, electrical construction, repair, and maintenance comprise the activities of the course.

280. **POWER MECHANICS** 3 credits. The basic operating principles of heat engines involving the practical application of theory learned on automotive, small gas, outboard motors, and aircraft engines.
300. **SPECIAL PROBLEMS** 1-5 credits. Prerequisite: consent of the instructor. A student may extend his competencies in areas not offered through group instruction such as: wood carving, showcard writing, plastics, copper enameling, etc.
301. **CRAFTS** 2-3 credits. Prerequisite: Ind. Arts 350 or consent of the instructor. A course planned to give some fundamental skills useful in children's summer recreation, summer camp activities, and club programs. Experiences include weaving, simple wood carving, tin-can craft, toy making, puppets, the making of booklets, and the use of wood and clay. Remedial teachers find a knowledge of this work useful.
302. **JEWELRY AND LAPIDARY** 3 credits. This course provides an introduction to the skills of stone cutting and jewelry making, with a general presentation of the techniques of shaping gem stones, forming and joining of metal shapes, and enameling on metal. Attention is given to the development of an appreciation for creative design through the use of color, form, and texture.
303. **LEATHER** 3 credits. A course in which students have experience using the various techniques in cutting, tooling, and fabricating projects of leather.
304. **JEWELRY DESIGN** 3 credits. A course in design and construction of contemporary jewelry in various metals, with emphasis on silver. The work of the course includes the setting of stones. Also offered as Art 304.
312. **ADVANCED DRAFTING** 3 credits. Prerequisite: Ind. Arts 110. Problems are completed in machine drawing, pattern drafting, boat drawing, and lofting. This course is designed for prospective industrial arts teachers.
313. **ARCHITECTURAL DRAWING AND HOUSE PLANNING** 3 credits. Prerequisite: one course in technical drawing at the college level. The practical application of the steps and drawing techniques required for a knowledge of small house architecture. The course is planned to meet the needs of the student who may be required to teach architectural drawing techniques in the secondary school. A detailed set of house plans is required of each student in the course.
314. **GRAPHIC GEOMETRY FOR INDUSTRIAL ARTS TEACHERS** 3 credits. Prerequisites: Industrial Arts 110 or 210 and 211. Problem solving in drafting technical solutions through the use of descriptive geometry techniques.
320. **ADVANCED GENERAL METALS** 3 credits. A continuation of Ind. Arts 223.
331. **ADVANCED WOODS** 3 credits. Prerequisite: Ind. Arts 231. An advanced course to develop further skills and knowledge in the broad area of woodworking.
332. **FURNITURE CONSTRUCTION** 3 credits. A course in the design and construction of period and contemporary furniture.
333. **PLASTIC** 3 credits. The use of plastic materials in the manufacture of a variety of objects.
340. **GENERAL GRAPHIC ARTS** 5 credits. This course provides an introduction to relief printing (typography, press work, wood cuts, linoleum cuts, relief line etchings, stereotype plates, electrotypes, wood engravings, and rubber stamp making); intaglio printing (etchings and gravure); planography (offset lithography—direct and photo) screen process printing, and bindery practices.

342. **PRODUCTION PRINTING** 3 credits. Prerequisites: Industrial Arts 340, 341, and 343 or permission of the instructor. This is a laboratory course providing practical experience in job printing, estimating printing costs, and ordering supplies and equipment.
343. **OFFSET LITHOGRAPHY** 5 credits. Prerequisite: Ind. Arts 340 or permission of the instructor. A survey course in offset lithography providing laboratory experiences in offset photography, plate making, cold type composition, and press work.
350. **INDUSTRIAL ARTS FOR ELEMENTARY SCHOOLS** 5 credits. This course is designed primarily to give students experience with materials and processes in the industrial arts field which will enable them to help elementary school children gain increased understanding of the world in which they live. It is also planned as an aid to students in developing ability to plan and organize work in this field for the levels at which they expect to teach.
352. **SPECIAL INDUSTRIAL ARTS FOR ELEMENTARY SCHOOLS** 3 credits. Open only to experienced teachers who have had work in industrial arts and who wish to gain additional experience with materials and processes suitable for the elementary school.
360. **PHOTOGRAPHY** 3 credits. A basic course providing extensive laboratory experience. It deals with such matters as operation of cameras; development of negatives, prints, and enlargements; special toning, intensification, and reduction of negatives. The technique of taking pictures with good composition is emphasized.
372. **INDUSTRIAL ELECTRONICS** 4 credits. A course dealing with the industrial uses of electronics, including a study of electron tubes, control devices, relays, and closed loop systems.
375. **MOTORS AND GENERATORS** 3 credits. A course concerned with the theory and practical uses of motors and generators. Special attention is given to maintenance and repair.
381. **ADVANCED POWER AND TRANSPORTATION** 5 credits. A course in the service, repair, and maintenance of power machines with the primary emphasis on understanding the basic principles of operation.
382. **AUTOMOTIVE ELECTRICITY** 2 credits. A course in the repair and maintenance of the electrical components of the automobile and other small gasoline engines. The emphasis in this course is on the understanding of basic principles of operation.
384. **MECHANICS OF MATERIALS** 3 credits. Study and experimentation in stress, strain, torsion, shear-bending, pure bending, plane stress, and design of members.
391. **DRIVER EDUCATION FOR INSTRUCTORS** 3 credits. This course is planned to prepare teachers to conduct driver education classes in the public schools. In addition to practice teaching utilizing a dual control automobile, the course involves lectures and demonstrations. Students completing the course satisfactorily receive a certificate of proficiency from the American Automobile Association.
400. **SPECIAL PROBLEMS** 1-5 credits. (Open only to industrial arts majors.) Prerequisite: consent of the instructor. This course affords opportunity for specialized advanced study through individual instruction. (See Industrial Arts 300.)
401. **INDUSTRIAL ARTS CERAMICS** 3 credits. Techniques in working with clay, experimenting with glazes, and operating a kiln.
402. **ADVANCED GENERAL SHOP** 5 credits. The planning and completion of projects and problems appropriate to the general shop type of class organization. This course is required of all teacher education students majoring in industrial arts.

403. **UPHOLSTERY AND SURFACE FINISHES** 3 credits. A course to develop an awareness of the needs and problems involved in finishing and upholstering. Practice is provided in planning and applying finishes to wood, metals, and other materials. A term project involving some construction and an appropriate choice of finish is a minimum requirement for satisfactory completion of the course.
404. **TOOL AND MACHINE MAINTENANCE** 3 credits. Prerequisites: Industrial Arts 223 and 237 or equivalent. A course involving the service, repair, and operation of shop tools, materials, and machines. Procurement and instructional use are also considered.
408. **GRAPHIC DESIGN** 6 credits. Prerequisites: Art students—Art 260 and 270; Industrial Arts students—I. A. 340. The principles of layout, design, and printing in relation to their commercial applications. Also offered as Art 408.
411. **PRACTICAL LETTERING TECHNIQUES** 3 credits. Open to any student who may desire to develop skill in hand lettering. The course is of special value to the teacher concerned with developing effective displays involving the use of commercial lettering methods.
419. **ADVANCED UNITS IN DRAFTING** 1 to 3 credits. Prerequisite: Industrial Arts 110 or 210. Sheetmetal drafting, descriptive geometry, architectural drawing, furniture design, and machine drafting are included in the units which may be studied in this course.
429. **ADVANCED UNITS IN METAL** 1 to 3 credits. Typical of the wide range of units which may be studied in this course are the following: sheet metal, machine metal, welding, forging, art metal, patternmaking, and foundry.
439. **ADVANCED UNITS IN WOOD** 1 to 3 credits. Among units which may be selected by the student: wood turning, furniture construction, small boat building, tool and equipment maintenance.
447. **PUBLICATIONS PRODUCTION** 5 credits. Prerequisite: Industrial Arts 340 or permission of instructor. This provides experiences in design and layout, composition, general and process photography, and presswork in the production of publications.
449. **ADVANCED UNITS IN GRAPHIC ARTS** 1-3 credits. Prerequisite: Industrial Arts 340 or permission of the instructor. The following are some of the areas which may be studied in this course: advanced offset lithography, advanced lithography, advanced typography, advanced press work, dry offset, graphic arts crafts, screen printing, and bookbinding. This does not constitute the entire list of areas which may be undertaken.
459. **ADVANCED UNITS IN INDUSTRIAL ARTS FOR THE ELEMENTARY SCHOOL** 1 to 3 credits. A course designed to assist in developing industrial arts units according to individual needs and interests of students. Special emphasis is given to the relationship between industrial arts and the social studies, language, literature, and other activities of the elementary grades. Laboratory work is planned to give the student experience with new materials and new techniques.
461. **ADVANCED PHOTOGRAPHY** 3 credits. Prerequisite: Ind. Arts 360 or equivalent. Selected problems in advanced photographic techniques.
- *469. **ADVANCED UNITS IN PHOTOGRAPHY** 1 to 3 credits. Prerequisite: industrial Arts 360. Among other units which may be selected by the students are the following: photographic re-touching, manual coloring of photographs, graphic arts photography, the production and use of visual teaching materials.
477. **THEORY AND OPERATION OF ELECTRONIC TEST EQUIPMENT** 4 credits. Theory and practice in the operation of electronic test equipment common to industrial arts electronic programs. Special attention is given to the use of test equipment as it applies to industrial technology projects and experiments.

*These courses may be repeated as often as needed to develop special areas. Each student is required to make a written report of special visual aids for the Industrial Arts Department.

478. **PRACTICAL RADIO AND TELEVISION** 4 credits. A course dealing with the theory of radio and television transmitters and receivers. Special attention is given to repair and maintenance concerned with radio, television, and related test equipment.
- *479. **ADVANCED UNITS IN ELECTRICITY** 1-3 credits. Prerequisite: Industrial Arts 370. Advanced study of problems in electricity involving motors, generators, and electronics.
- *489. **ADVANCED UNITS IN POWER AND TRANSPORTATION** 1-3 credits. Possible units to be studied in the course are the following: sources of power, transmission of power vehicles, and air transportation.
491. **SELECTION AND ORGANIZATION OF SUBJECT MATTER IN INDUSTRIAL ARTS** 3 credits. This is a curriculum course for teachers of industrial education designed to give a knowledge of problems, techniques, and procedures in the selection and organization of subject matter for instructional purposes.
492. **CONSTRUCTION AND USE OF VISUAL AIDS** 3 credits. This course deals with elementary photo techniques, scale models, charts and graphs; construction of visual aids materials; the use and maintenance of slide and motion picture projectors; making of slides, film strips, and 8 mm. or 16 mm. motion pictures for classroom use.
493. **THE TEACHING OF INDUSTRIAL ARTS** 3 credits. Prerequisites: all department laboratory requirements in the major. This course is designed to acquaint the student with the problems involved in teaching industrial arts in the various types of class organization, and to develop an understanding of the tested principles and procedures in solving these problems.
494. **INDUSTRIAL TOURS** 1-5 credits. Through carefully planned visitation to selected plants in the Pacific Northwest, students acquire first-hand understanding of all regional industry. There is opportunity for thorough analysis of processes, product, design, and materials. Distribution also is studied. Approximately one-half of the course time is spent with the industrial concerns, the balance on campus in organizing materials for teaching. Personnel from industry participate in the planning and operation of this experience. Offered in summer only.
495. **PROJECT SELECTION AND DESIGN** 5 credits. Open only to students who have completed the requirements for the major. This course is designed to aid the student in developing a critical attitude in project design and selection. Part of the course is devoted to the reproduction of the various designs.
496. **ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL EDUCATION** 3 credits. Problems and procedures in organizing and administering industrial education programs; the interrelationships, on all levels of operation, of industrial arts, industrial-vocational education, adult education, technical education, and apprentice training. This course is for teachers, supervisors, and school administrators.
498. **SEMINAR IN INDUSTRIAL ARTS DESIGN** 3-5 credits. This course is designed to aid the industrial arts teacher to develop an analytical attitude in industrial arts design and project selection. Group sessions are devoted to a discussion of the principles of design, with participation by the entire staff of the department. Students then disperse to the various industrial arts laboratories to execute designs as applied to several materials, working with a number of instructors.
499. **EQUIPMENT CONSTRUCTION** 3-5 credits. To be taken only concurrently with Science Education 431. Opportunity is provided in this course to learn the care,

*These courses may be repeated as often as needed to develop special areas. Each student is required to make a written report of special visual aids for the Industrial Arts Department.

- adjustment, and design of apparatus which illustrates basic concepts in physics. Instruction is given in the use of tools and machines needed for working the materials used in the construction of apparatus.
590. **CURRICULUM PROBLEMS OF INDUSTRIAL EDUCATION** 3 credits. A course for classroom teachers, supervisors, principals, and superintendents who wish to acquaint themselves with the curricular problems involved in teaching modern industrial education courses in the elementary and secondary schools.
591. **INDUSTRIAL TECHNOLOGY** 3 credits. The development of trade, technical, and industrial technology. A study of motivating forces, philosophical concepts, issues, and trends.
592. **SUPERVISION AND ADMINISTRATION OF INDUSTRIAL TECHNOLOGY** 3 credits. Prerequisite: permission of the instructor and approval of the department chairman. This advanced study is arranged to include instruction, conferences, guided reading, and research.
593. **READING AND CONFERENCE IN INDUSTRIAL ARTS** 1-5 credits. Prerequisite: permission of the instructor and approval of the department chairman. This advanced study is arranged to include instruction, conferences, guided reading and research.
594. **SEMINAR IN INDUSTRIAL ARTS** Credit variable. A course providing opportunity to study special problems using recognized techniques of research.
599. **PROBLEMS IN INDUSTRIAL ARTS** 3 credits. Prerequisite: permission of the instructor. This course deals with the organization of suitable shop equipment and teaching materials. It provides experiences in study, selection, and development of projects in the various areas of industrial arts. Teaching experience under supervision may be included. Each student selects a pertinent problem for which research is needed and submits a paper on his findings.

CONCENTRATIONS IN INDUSTRIAL ARTS

Teacher Education

FIELD MAJOR:

Industrial Arts 100, 402, 491, 493, plus 31 additional credits under departmental advisement.

FIELD MINOR:

Industrial Arts 100 and 493, plus 20 additional credits under departmental advisement.

Arts and Sciences

MAJOR:

Industrial Arts 100 plus additional courses under departmental advisement to total 45 credits.

MINOR:

Industrial Arts 100 plus additional courses under departmental advisement to total 20 credits.

department of
LIBRARY SCIENCE

Associate Professors: Hearsey, Herrick, (*Chairman*), Mathes; *Assistant Professor:* Scott; *Instructors:* Spearin, _____, _____

LIBRARY SCIENCE

125. **LIBRARY RESEARCH** 2 credits. A course to introduce college students to techniques in the use of a college library for term paper research. It provides lectures and practice exercises on such categories of library use as locations, regulations, classification and organization of the book collections, use of the card catalogue, use of periodical indexes, etc. The preponderance of the course time is devoted to learning the use of standard reference tools.
305. **BOOKS FOR BOYS AND GIRLS** 3 credits. Examination, reading, and discussion of the books found to be most generally useful in work with boys and girls in the elementary and junior high school. Picture books, folklore, biography, imaginative literature, social science, fiction, poetry, plays, reference books, magazines and the like are considered. Special emphasis is given standards for the selection of books, book lists, reviews of current books, modern trends in book production, and the relation of books to the curriculum and to the reading interests of children.
306. **INTRODUCTION OF BOOKS TO CHILDREN** 3 credits. Prerequisite: Library 305. Opportunity for students to read more intensively and to discuss in greater detail books appropriate for primary, intermediate, and junior high school boys and girls. Emphasis is on the preparation of bibliographies, on reading problems of individual children, and on methods of arousing interests in books in general.
307. **READING FOR YOUNG PEOPLE** 3 credits. A course paralleling Library 305. Examination, reading, and discussion of books most suitable for use with boys and girls in the secondary schools. Emphasis is on development of appreciation and methods of arousing interest in reading, with material drawn from both the juvenile and adult levels. As in Library 305, attention is given to the standards for selection of books, book lists, reviews, and particularly to the relation of books to the curriculum.
400. **LIBRARY WORKSHOP** 1-3 credits. Lectures, group discussions and individual conferences deal with problems in selection of materials, organizing, administering and making maximum use of both the elementary and secondary school library. This is a summer course for teachers, curriculum and audio-visual specialists, and school administrators.
401. **THE LIBRARY IN THE SCHOOL** 3 credits. Prerequisite: Library 305. A survey of the place of the library in the modern elementary and secondary schools, designed to give students some knowledge of existing standards, and a thorough acquaintance with the problems of organizing and maintaining effective library service.
402. **PREPARATION OF MATERIALS** 3 credits. Prerequisites: Library 305 and Library 401. An introduction to the principles of classification and cataloguing with much practice in handling the types of books and materials found in school libraries. Training is given in making unit cards, adapting printed ones, and in organizing a shelf list and dictionary catalogue.

403. **CURRICULUM ENRICHMENT MATERIALS** 3 credits. Prerequisite: Library 305. Exploration of all the resources of a school library with emphasis on the instructional aids other than books. Units of study are selected and bibliographies of varied materials prepared for use in the classrooms of the elementary and secondary schools. Opportunity for the evaluation of reference books is also afforded.
404. **HISTORY OF BOOKS AND LIBRARIES** 3 credits. A study of the development of the book in its various forms from the earliest times and a survey of the world's great libraries—past and present.
405. **WORK WITH CHILDREN** 1 to 3 credits. Prerequisites: Library 305 and Library 306 or 307, Library 401, 402, and 403. Actual practice and responsibility in the administration of a school library. This involves circulation of books, keeping of records, reading guidance, preparation of bulletin boards, and informal teaching of children the use of the more important library tools.
-

Courses numbered 305 through 404 comprise the program for teacher librarians and is designed to prepare librarians for the smaller elementary and secondary schools of the state. The Superintendent of Public Instruction recommends that librarians in elementary, junior and senior high schools with an enrollment of less than 400 have at least 18 quarter hours of specialized professional preparation. For those serving larger schools a degree from a library school is required.

Superior scholarship, demonstrated leadership and ability to work with children as evidenced through successful teaching, student teaching, or equivalent experience with children are expected of those who enroll for this program. Library 125 should be taken as a prerequisite for this program and courses in audio-visual materials, curriculum planning, the teaching of reading, child and adolescent psychology offered by other departments are recommended.

CONCENTRATIONS

IN

LIBRARY SCIENCE

Teacher Education

FIELD MINOR A (for elementary schools):

Library Science 305, 401, 402, 403, 404. Additional electives suggested: Library Science 306, 307, 400, 405.

FIELD MINOR B (for secondary schools):

Library Science 307, 401, 402, 403, 404. Additional electives suggested: Library Science 305, 306, 400.

department of MATHEMATICS

Associate Professors: Gelder, (*Chairman*), Hildebrand; *Assistant Professors:* Lister, McFarland, Rio, Sanders, Witter.

Deficiencies

A satisfactory score in a mathematics test taken at entrance is a prerequisite to enrollment in college mathematics courses. A deficiency in mathematics may be cleared by independent study followed by a re-test or by passing a non-credit course: Mathematics 3. Such deficiency must be cleared not later than the third quarter of enrollment.

Advanced Placement

Entering students having completed an accelerated secondary program in mathematics with superior success are encouraged to apply to the Chairman of the Department of Mathematics for advanced placement if they intend to complete a major or a minor in the field.

MATHEMATICS

3. **BASIC MATHEMATICS** 0 credits. This course is a review of the mathematics—concepts and techniques—necessary to general college study.
100. **INTERMEDIATE ALGEBRA** 3 credits. This course is provided for students who do not have sufficient preparation for Mathematics 101. Topics covered include: fundamental operations, factoring, exponents and radicals, linear and quadratic functions, graphs, and linear systems of equations.
101. **PRINCIPLES OF ALGEBRA** 5 credits. Prerequisite: Mathematics 100 or one and one-half years of high school algebra. The topics of logic, number systems, sets, groups, fields, equations and inequalities, partial fractions, and determinants are studied.
102. **ELEMENTARY FUNCTIONS** 5 credits. Prerequisite: Mathematics 101. An introduction to the theory of functions; a study of polynomial, algebraic, trigonometric, logarithmic, and exponential functions and their graphs; selected topics from the theory of equations.
103. **ANALYTICAL GEOMETRY AND CALCULUS** 5 credits. Prerequisites: Mathematics 102 or advanced placement. An introduction to coordinate geometry of the plane. Limits, the derivative, differentiation, the differential, and elementary applications of differential calculus and an introduction to integration are included in the course.
111. **ENGINEERING PROBLEMS** 3 credits. Prerequisites: Mathematics 102 taken either previously or concurrently or advanced placement. A first course in methods of analyzing and solving engineering problems in the field of elementary dynamics. The systematic and clear presentation of problems is given special emphasis. This course constitutes general orientation to engineering and engineering reports.

112. **ENGINEERING PROBLEMS** 3 credits. Prerequisite: Mathematics 111. The fundamental principles of statics, mathematical and graphical analysis of simple force systems, stresses, trusses, and simple mechanics.
151. **FOUNDATIONS OF MATHEMATICS** 3 credits. Prerequisite: clearance on the mathematics placement test. This is a general education course for students not intending to take further work in mathematics. An introduction to mathematics as a study of axiom systems. Such topics as logic, sets, groups, fields, the real number system, algebra, and geometry are discussed as examples of axiom systems. This course is not open to those who have credit in Mathematics 101.
200. **MATHEMATICS SEMINAR** 1 to 3 credits. Prerequisite: Mathematics 103. This course provides the student an opportunity to present and discuss topics which are extensions of the content of the lower division courses in mathematics.
- 201, 202, 203. **ANALYTIC GEOMETRY AND CALCULUS** 5 credits each. Prerequisite: Mathematics 103. This sequence of courses completes an elementary treatment of the coordinate geometry of the plane and solid spaces and the calculus. In Mathematics 201 the study of the integral and integration is continued, the differentiation of transcendental functions is introduced, and parametric equations are studied. In the latter two courses, methods of integration, improper integrals, ideterminant forms, infinite series, series expansion of functions, partial differentiation, and multiple integration are discussed.
241. **PROBABILITY AND GAMES** 3 credits. Prerequisite: one and one-half years of high school algebra or Mathematics 100. An elementary and intuitive development of the formal theory of probability. The many applications of probability in games, and the biological and behavioral sciences are given introductory treatment.
301. **MATRICES AND DETERMINANTS** 5 credits. Prerequisite: Mathematics 103. Properties of matrices and determinants implied by definitions; fundamental operations; applications to algebra and geometry; transformations; canonical forms; invariants.
302. **LINEAR ALGEBRA** 3 credits. Prerequisite: Mathematics 301. Properties of number systems; groups; rings, fields; equivalence, congruence, isomorphism relationships; extension fields; linear spaces; linear transformations and their invariants.
310. **HIGHER ANALYTICAL GEOMETRY** 3 credits. Prerequisite: Mathematics 103. This course is a development of the analytic geometry of two and three dimensions. Curves, surfaces, coordinate transformations, point transformations, and invariants are discussed.
311. **FOUNDATIONS OF GEOMETRY** 3 credits. Prerequisite: Mathematics 103. A discussion of projective geometry: the postulates of incidence, models, duality, perspectives, projectivities, figures, quadrangular and harmonic sets, coordinate systems, transformations, lines, and conics.
312. **FOUNDATIONS OF GEOMETRY** 3 credits. Prerequisite: Mathematics 103. Analytic projective geometry; a study of matrices, cross-ratio, groups, projective transformations, polarities, and conics; affine geometry, euclidian and non-euclidian geometries.
331. **ORDINARY DIFFERENTIAL EQUATIONS** 5 credits. Prerequisite: Mathematics 203. A discussion of n -th order linear equations, operators; the Laplace transform; solution by series, successive approximation; numerical solutions; systems of equations.
- 341, 342. **MATHEMATICAL STATISTICS** 5 and 3 credits, respectively. Prerequisite: Mathematics 203. A mathematical development of the normal, binomial, and

- Poisson distributions; averages, moments, and measures of dispersion; linear regression, correlation, analysis of variance; confidence intervals, sequential analysis; tests of hypotheses and statistical inference.
361. **VECTOR ANALYSIS** 5 credits. Prerequisite: Mathematics 203. An introduction to the algebra of vectors and of vector spaces; vector calculus; line integrals; divergence and curl; Stoke's Theorem; the application of vectors to the study of work, potential theory, and fluid flow.
400. **MATHEMATICS SEMINAR** 1 to 3 credits. Prerequisites: Mathematics 203. Students in this course have opportunity to present and discuss topics related to the content of the undergraduate program in mathematics.
- 411, 412. **ADVANCED CALCULUS** 3 credits each. Prerequisite: Mathematics 203. A discussion of the function theory of the real variable; sequences, limits, convergence, and continuity; derivatives; the Riemann integral; improper integrals; set functions; implicit function theorems, functional dependence; the theorems of Gauss, Green, and Stokes.
- 431, 432. **FUNCTION THEORY OF THE COMPLEX VARIABLE** 3 credits each. Prerequisite: Mathematics 411. A development of the complex numbers as a field; function theory including analytic functions, exponential and logarithmic functions; derivatives; linear and bilinear transformations. The complex integral calculus; Cauchy-Goursat Theorem, Cauchy Integral Formula; power series, residues and poles; conformal mappings.
451. **MATHEMATICAL LOGIC AND SETS** 5 credits. Prerequisite: permission of the instructor. An introduction to formal symbolic logic and to set theory.
452. **ALGEBRA** 5 credits. Prerequisite: permission of the instructor. An introduction to linear algebra, matrices and determinants, linear transformations, and canonical forms.
453. **GEOMETRY** 5 credits. Prerequisite: permission of the instructor. A discussion of the foundations of euclidean geometry; Euclid's postulates, Hilbert's postulates, the parallel postulate; non-euclidean geometrics.
454. **ANALYSIS** 5 credits. Prerequisite: permission of the instructor. A detailed study of convergence of sequences and series, continuity of functions, and the theory of differentiation and integration.
481. **ARITHMETIC IN THE ELEMENTARY SCHOOL** 5 credits. A discussion of the topics of arithmetic presented in grades 1 to 8 in the public schools from the point of view of the teacher.
483. **MATHEMATICS IN THE SECONDARY SCHOOL** 3 credits. Prerequisite: Mathematics 103 or permission of the instructor. This course presents the mathematics content of the advanced courses offered at the high school level from the point of view of the teacher. A discussion of the major experimental programs is given.
- 490, 491. **SEMINAR ON EXPERIMENTAL PROGRAMS IN MATHEMATICS** 6 credits each. Prerequisite: permission of the instructor. These seminars are specifically designed to prepare teachers in the content of the program of the University of Illinois Committee on School Mathematics. Mathematics 490 is devoted to the study of the teaching of Units 1-4 and the lectures are supplemented with the observation of a demonstration class of children. Mathematics 491 is a continuation of this study, the emphasis is given to Units 5-14. This course is available during the summer quarter only.
500. **MATHEMATICS CURRICULUM SEMINAR** 1 credit. Prerequisite: admission to the Master-Teacher Program. A seminar on the mathematics curriculum in the

public schools. Present content of this curriculum is considered and a study is made of new recommendations for revision.

501. **NUMBER SYSTEMS** 5 credits. Prerequisite: permission of the instructor. A postulational development of the real and complex number systems and an introduction to the theory of groups, fields, and rings.
502. **THEORY OF NUMBERS** 5 credits. Prerequisite: permission of the instructor. Introduction to the properties of the natural numbers, divisibility, the euclidean algorithm, congruences, primitive roots, quadratic residues, and diophantine equations.
503. **PROBABILITY AND STATISTICS** 5 credits. Prerequisite: permission of the instructor. An introduction to probability; combinatorial analysis; conditional probability; independence; distribution functions, random variables, and expectation.

CONCENTRATIONS IN MATHEMATICS Teacher Education

FIELD MAJOR:

Mathematics 103, 201, 202, 203, and 20 credits from Mathematics 101, 102, and upper division courses. In addition, Mathematics 481 or 483 shall be substituted for the mathematics requirement in the general education program.

FIELD MINOR:

Mathematics 103 and 15 credits from Mathematics 101, 102, 201, 202, 241, 301, and 311. In addition, Mathematics 481 or 483 shall be substituted for the mathematics requirement under the general education program.

Arts and Sciences

MAJOR:

Mathematics 103, 201, 202, 203, and 36 credits from Mathematics 101, 102, and upper division courses as advised.

Supporting courses: Physics 231, 232, 233.

MINOR:

Mathematics 103 and 20 credits from Mathematics 101, 102, 201, 202, 241, and upper division courses as advised.

department of MUSIC

Professor: D'Andrea, (Chairman); Associate Professors: Regier, Schaub, Walter; Assistant Professors: Glass, Mercado, Reubart, _____; Instructor: Hinds.

MUSIC

The Music Department performs two functions in the College. First, it provides specialized education for those students who wish to major or minor in music or music education. Second, it enhances the cultural, recreational, and social life of the student through concerts, recitals, and other performances and music activities.

Students wishing to major in music should have the following qualifications:

1. A strong interest in pursuing the study of music seriously.
2. Musical sensitivity such as a good sense of pitch and rhythm.
3. The ability to sing and to play the piano or an orchestral or band instrument, representing several years of study and a sufficient degree of performance skill.
4. Musical background as a result of private study or successful public school music experiences.
5. A desire to make music a vital experience in the lives of others.

Department Approval

Students who wish to major or minor in music are required to have a preliminary conference with a member of the music staff. Classification as a music major or minor requires departmental approval. Final approval as a music major will be made after a year of successful study.

As a prerequisite to graduate study in music the department requires the successful completion of a sixty-credit undergraduate concentration encompassing both music education and applied music.

Music Scholarships

Scholarships for students specializing in music are available for individual instruction in voice as well as band and orchestral instruments. (See page 56).

Provision for the Use of Special Facilities and Equipment

There are special fees levied for practice rooms, instrument rental, and organ practice. Fees must first be paid in the Business Office before

arrangements for use of music facilities are made in the Music Office. (See page 51).

Music Organizations

All music majors participate in both choral and instrumental organizations. Participation in music organizations is required throughout the four years. This experience is considered an integral and important part of the student's professional training in music.

Recitals and Concerts

Hearing and evaluating performances are a vital part of a student's musical growth. There are numerous recitals given by students and faculty as well as concerts by the Music Department and visiting artists. All music students are required to attend the college recitals and concerts. They are also expected to perform as soloists or in a small ensemble.

Pipe Organ

The College owns three organs: the Memorial three-manual Moeller organ in the Auditorium, a Moeller practice organ and a Conn electric organ. Frequent organ concerts are given by visiting organists, faculty, and advanced organ students.

Music Education

101. **ORIENTATION IN MUSIC** 3 credits. A course intended to introduce the general student, as listener, to the art of music and its place in the past and contemporary civilization. Attention is directed to salient phases of music's historical development, its special vocabulary, literature on music, and radio and concert usages.
- 131, 132, 133. **MUSIC FUNDAMENTALS** 2 credits each. These three courses constitute the first year's study of theory, ear-training, and dictation as well as the reading and writing of melodic, rhythmic, and harmonic material. The subject matter is taught through standard thematic material and vocal literature, including folk and art song, choral, and oratorio.
150. **FUNDAMENTALS OF ELEMENTARY SCHOOL MUSIC** 2 credits. Training in singing, playing, reading, writing, and hearing music. These skills and knowledges are taught through the experiences and literature generally used in the elementary grades.
- 231, 232, 233. **CORRELATED HARMONY** 3 credits each. Prerequisite: Music 133. An extension of Music 131, 132, 133 with increased emphasis on written harmony, literature analysis, creative writing and historical development of harmony. Advanced work is continued in ear-training, dictation, and reading.
- 240, 241, 242. **MUSIC HISTORY AND LITERATURE** 3 credits each. A study of musical styles and literature in music's development from ancient times to the present. The development of intelligent listening and criticism is stressed.
250. **TEACHING ELEMENTARY SCHOOL MUSIC** 3 credits. Prerequisite for non-music majors or minors: Music 150. Teaching techniques, materials, and organization of the elementary music program are taught through the experiences and literature generally used in the elementary grades.

310. **THE ART OF LISTENING TO MUSIC** 3 credits. A non-technical course that attempts to find a basis for enjoyable listening to music through the discovery of stylistic differences among composers and the awareness of performance practices related to symphony orchestras, instrumental ensembles, opera, choral groups, and solo performance.
320. **MUSIC IN RECREATION** 3 credits. Pleasurable music-making for the layman. Included is a study of (a) music's role in bringing more enjoyment, participation and sociability to recreation, (b) useful, simple vocal and instrumental skills, (c) appropriate literature and activities for numerous types of recreational opportunities in the school and community.
- 336, 337. **CONDUCTING** 3 credits each. Introductory laboratory courses providing the necessary baton technique, interpretative analysis, and score reading ability needed for work with school instrumental and choral groups. Opportunity is given to conduct music groups.
373. **OPERA PRODUCTION** 3 credits. The preparation and public presentation of a major opera.
404. **STRING TECHNIQUES AND MATERIALS** 3 credits.
405. **BRASS TECHNIQUES AND MATERIALS** 3 credits.
406. **WOODWIND TECHNIQUES AND MATERIALS** 3 credits.
407. **PERCUSSION TECHNIQUES AND MATERIALS** 3 credits.

Music 404, 405, 406, and 407 constitute a series of laboratory courses designed to give the teacher an effective method of dealing with the numerous problems encountered in teaching band and orchestral instruments. Special concern is given to the means of using these instruments most effectively in both small and large groups.

- 408, 409. **PIANO FOR THE CLASSROOM TEACHER** 3 credits each. Courses for the teacher with little or no previous piano background. Major emphasis: (a) the playing of materials used in teaching music; (b) the piano skills needed for simple accompaniment; (c) the use of the piano in general classroom activities.
- 431, 432, 433. **ORCHESTRATION** 3 credits each. Orchestration with special reference to the needs of the instrumental director.
445. **MUSIC IN THE HUMANITIES** 3 credits. A course appropriate to all students, including music majors. A broad study of music and allied arts which shows their interrelationship and their place in historical and cultural setting. The major art periods with their stylistic characteristics and developments are reviewed. Great masters and works are discussed and illustrated.
450. **MUSIC EXPERIENCES FOR CHILDREN** 3 credits. A music workshop for classroom teachers and administrators. Included is a study of musical techniques as applied to the teaching of children. Appropriate activities and materials which can be used by the general teacher to carry on an effective music program are reviewed. The course involves observation of elementary music classes.
451. **MUSIC LISTENING ACTIVITIES IN THE ELEMENTARY SCHOOL** 3 credits. A workshop for elementary teachers and music supervisors. Included are (a) a study of literature, activities, and teaching techniques, (b) correlation with other classroom studies, (c) out-of-classroom activities and programs.
452. **MUSIC LITERATURE FOR ELEMENTARY SCHOOLS** 3 credits. A study of appropriate literature to be used in the elementary school music activities of singing, listening, rhythms, outside reading, programs.
460. **MARCHING BAND TECHNIQUES** 3 credits. A course dealing with all phases of marching band organization, parade marching, and show routine. Special emphasis is placed on rehearsal procedures and on the training of drum majors.

-
462. **INSTRUMENT METHODS AND MATERIALS** 3 credits. A study of the problems, organization, techniques, and materials of an elementary and secondary program in instrumental music.
464. **CHORAL METHODS AND MATERIALS** 3 credits. A study of the problems, organization, techniques, and materials of the elementary and secondary program in choral music.
465. **SCHOOL MUSICAL PRODUCTIONS** 3 credits. This workshop experience encompasses a wide range of new ideas, materials, and techniques for presenting all types of musical productions.
471. **BIRCH BAY ORCESTRA MUSIC WORKSHOP** 2 credits. (Summer).
472. **BIRCH BAY BAND MUSIC WORKSHOP** 2 credits. (Summer).
473. **BIRCH BAY CHORAL MUSIC WORKSHOP** 2 credits. (Summer).
474. **PHYSICS OF MUSICAL INSTRUMENTS** 3 credits. A study of the production and transmission of musical tone and the acoustical problems of musical performance. Emphasis is upon the physical and psychological properties of voice, string, and wind instrument tone.
501. **SUPERVISION OF ELEMENTARY SCHOOL MUSIC** 3 credits. Advanced work in methods, materials, organization, and supervision of the music program in the elementary school.
503. **DIRECTED READINGS AND RESEARCH** 3 credits. This course should be taken concurrently with Education 501. Seminar discussion of areas of needed research in music education. Emphasis is placed upon reading and individual projects.
507. **ADMINISTRATION OF SCHOOL MUSIC** 3 credits. A reappraisal of music's purpose and place in today's schools. Stress is placed on viewing the total music program as a unified and developmental part of the curriculum. Topics include current philosophic issues, new curricular developments, problems of supervision and instruction, development of community and professional relations.
508. **ARRANGING FOR SCHOOL INSTRUMENTAL GROUPS** 3 credits. A course designed to give the school instrumental director practical techniques in arranging and composing for large and small ensemble groups.
510. **PSYCHOLOGY OF MUSIC** 3 credits. This course reviews the recent advances made in the psychological foundations of tonal organization, perception, and function which underlie music education's objectives and procedures.
513. **CHORAL TECHNIQUES** 3 credits. A study of methods and devices to be used in the teaching of the fundamentals of good tone production in groups varying from small voice classes to large choral ensembles.
517. **CHORAL LITERATURE AND INTERPRETATION** 3 credits. A practical course for community and school choral directors. Included is an extensive review of established and recent literature, interpretative analysis of scores, conducting and rehearsal technique, and laboratory rehearsal.
518. **ARRANGING FOR SCHOOL CHORAL GROUPS** 3 credits. A course designed to give the school choral director practical techniques in arranging and composing for large and small ensemble groups.
519. **INSTRUMENTAL CONDUCTING AND REHEARSAL TECHNIQUES** 3 credits. Advanced work in conducting school band and orchestra music. Included are baton technique, interpretation, score preparation, and rehearsal techniques. The course provides conducting experience with a laboratory group.

Applied Music — Individual Instruction

Training in applied music is available through class or individual instruction in piano, organ, voice, band, and orchestral instruments. This work may be taken with the regular college music staff or with selected teachers who have private studios in the city of Bellingham. The fee for individual music lessons taken from these private studios is paid in advance directly to the teachers at the rate of their current fee. Registration for these lessons, however, must be made through the College if credit is to be earned. Students taking individual music instruction from the regular college music staff remit fees in advance to the college Business Office. In both cases, the student must take ten one-half hour lessons per quarter to receive college credit. Class instruction in applied music carries no fee. Practice rooms may be rented for \$2.00 per quarter for one hour daily.

Individual Instruction in Music

- 114, 115, 116A, B, C, D, or E. First Year. 1 credit.
 214, 215, 216A, B, C, D, or E. Second Year. 1 credit.
 314, 315, 316A, B, C, D, or E. Third Year. 1 credit.
 414, 415, 416A, B, C, D, or E. Fourth Year. 1 credit.
 514, 515, 516A, B, C, D, or E. Graduate Study. 1 credit.

A (Piano)	D (Voice)
B (String Instruments)	E (Organ)
C (Band Instruments)	

Applied Music — Class Instruction

To prepare the prospective music teacher to handle band, orchestra, and choir, as well as class instrumental and vocal instruction in the schools, classes in all band and orchestra instruments and voice are offered. The courses in beginning instrumental playing serve as a practical introduction to the technical problems involved in the performance of stringed, brass, and woodwind instruments. Instruction is carried on as in the public schools, the student thereby becoming familiar with class organization, procedure, and materials as well as the technique of the various instruments. College instruments may be rented at \$2.00 per quarter.

- 108, 109, 110. **ELEMENTARY CLASS PIANO INSTRUCTION** 1 credit each. Courses in the fundamentals of piano technique, tone production, rhythm, sight-reading, interpretation, general musicianship, and keyboard facility, for those who have little or no previous piano experience. These classes are particularly helpful for elementary teachers who would like to be able to play and use the piano as another resource in their class and school activities.
111. **ELEMENTARY CLASS VOICE INSTRUCTION** 1 credit. A course in the fundamentals of tone production, song repertoire and interpretation for those students who have had little or no previous vocal instruction. This class is particularly helpful

for elementary teachers who would like to use singing as another resource in their class and school activities.

- 201, 202, 203. **GROUP VOICE INSTRUCTION** 1 credit each. Groups of four students each are organized for the purpose of providing more individualized instruction than is available in Music 111, Elementary Class Voice Instruction. Each course carries a twelve dollar fee.
301. **STRING CLASS INSTRUCTION** 1 credit. Students rotate study of string instruments.
304. **BRASS CLASS INSTRUCTION** 1 credit. Students rotate study of brass instruments.
306. **WOODWIND CLASS INSTRUCTION** 1 credit. Students rotate study of woodwind instruments.
308. **PERCUSSION INSTRUCTION** 1 credit.
- BEGINNING ORCHESTRA AND BEGINNING BAND** No credit. Practical application of instrumental techniques in larger ensemble; taken in conjunction with the above instrumental classes.

Applied Music — Music Organizations

173. **COLLEGE CHOIR** 1 credit. A cappella and accompanied singing of music of all periods, both short and large works. This course is open to all students who have the desire to sing. Previous choral experience is valuable but not essential if the student has a good natural voice and inborn musical ability.
174. **CHAMBER ORCHESTRA** 1 credit. Open to all students who can qualify. Prerequisite: permission of the instructor.
175. **VARSITY BAND.** 1 credit. Open to all students with previous band experience.
176. **INSTRUMENTAL ENSEMBLE** 1 credit. Credit is granted for participation in small string and wind ensembles. String trio, quartet, brass, and woodwind ensembles are available for student participation. These groups find ample opportunity for performance on and off the campus.
177. **VOCAL ENSEMBLE** 1 credit. Credit is granted for participation in small vocal ensembles, such as trios, quartets, and madrigal groups. There is ample opportunity for these groups to perform at college functions and in the community.
271. **CONCERT CHORALE** 1 credit. A selected group chosen from the membership of the college choir. Admission is based upon auditions in which the factors of voice, reading skill, musicianship, and interest are tested.
273. **GENERAL CHORUS** 1 credit.
274. **SYMPHONY ORCHESTRA** 1 credit. Open to all students who can qualify. Prerequisite: permission of the instructor.
275. **CONCERT BAND** 1 credit. Open to all students who can qualify. Prerequisite: permission of the instructor.

CONCENTRATIONS IN MUSIC

Teacher Education

FIELD MAJOR A (for Music Specialists):

Courses in Music Education: Music 131, 132, 133, 231, 232, 233, 240, 241, 242, 250, 366, 367, 462, 464;

Courses in Applied Music: Music 301, 304, 306, 308;

Major instrument or voice: minimum of nine quarters;

Voice: minimum of one quarter;

Piano: minimum of three quarters;

Music organizations: choral and instrumental.

FIELD MAJOR B (Elementary School Music):

Courses in Music Education: Music 131, 132, 133, 241, 242, 250, 366.

Applied Music:

Major instrument or voice: minimum of six quarters;

Voice: minimum of one quarter;

Piano: minimum of three quarters;

Music organizations—choral and instrumental: six quarters.

FIELD MINOR A (Elementary School Music):

Music 131, 132, 133, 250, 366.

Piano: minimum of three quarters;

Voice: minimum of one quarter;

Choral organization: three quarters.

FIELD MINOR B (Strings):

Music 131, 132, 233, 301, 366, 462;

Applied Strings: three quarters;

Piano: three quarters.

FIELD MINOR C (General):

Music 131, 132, 133, 240, 241, 242;

Major instrument or voice: minimum of 3 credits.

Organizations: 2 credits.

Arts and Sciences

MAJOR:

Music 131, 132, 133, 231, 232, 233, 240, 241, 242, 366, 367, 440, 441, 442;

Major instrument: minimum of nine quarters;

Piano: minimum of six quarters;

Voice: minimum of one quarter;

Music organizations: choral and instrumental.

MINOR:

Music 131, 240, 241, 242, 366.

Major instrument: minimum of three quarters;

Music organizations.

department of PHILOSOPHY

Professor: Jarrett; *Associate Professor:* _____; *Assistant Professor:* Karason.

PHILOSOPHY

201. INTRODUCTION TO PHILOSOPHY 5 credits. An elementary course introducing the great recurrent philosophical problems and some of the answers which have been developed through the ages.
202. LOGIC OF LANGUAGE 3 credits. A consideration of words, their combinations, functions, and malfunctions. The course is designed to have a practical effect in improving the communication of meanings.
203. INDUCTIVE LOGIC 2 credits. A study of methods applicable to formulating valid generalizations from experience with particular emphasis on the method of science.
305. HISTORY OF PHILOSOPHY: ANCIENT AND MEDIEVAL 5 credits. A study of the great philosophical thinkers from the early Greeks to the Middle Ages, with especial attention paid to Plato and Aristotle.
306. HISTORY OF PHILOSOPHY: RENAISSANCE AND MODERN 5 credits. A study of the great philosophical thinkers from the late Middle Ages to the Enlightenment, with especial attention paid to Descartes and the rationalists and to Locke and the empiricists.
307. HISTORY OF PHILOSOPHY: THE NINETEENTH AND TWENTIETH CENTURIES 5 credits. A study of the great philosophical thinkers from Kant to the present.
320. INTRODUCTION TO THE PROBLEMS OF ETHICS 3 credits. A consideration of the meanings of such key concepts as "goodness," "rightness," "evil," "duty," and "happiness".
404. STUDIES IN THE HISTORY OF PHILOSOPHY 2-5 credits. This course concentrates attention for a full quarter upon the thought of an individual philosopher such as Plato or a particular school of thought, such as American Pragmatism.
405. AESTHETICS 3 credits. A philosophical study of beauty and of the creation, appreciation, and criticism of works of art.
406. PHILOSOPHY OF LITERATURE 2 credits. A consideration of the nature of literature, and the relation of its aesthetic to its moral and cognitive values.
411. PHILOSOPHY OF SCIENCE 3 credits. A study of varying theories as to the nature, presuppositions, limitations, and interrelations of the empirical sciences.
420. ETHICAL THEORY 3 credits. A critical analysis of writings of several major theorists in ethics—ancient, modern, and contemporary—and their treatment of ethical problems.
450. PHILOSOPHY OF RELIGION 3 credits. A study of the major religious concepts, such as "God," "immortality," and "freedom of the will," and some of the answers which have been proposed, historically and in our own times, to the problems which such concepts suggest.

483. **SOCIAL CHANGE AND THE MORAL ORDER IN RECENT LITERATURE** 4 credits. Also offered as English 483 and Sociology 483.
515. **PHILOSOPHY OF EDUCATION** 5 credits. A philosophical study of beliefs, arguments, assumptions, and judgments concerning such topics as teaching and learning, intellect and moral training, subject matter and skills, desirable ends and appropriate means of schooling. The course deals with both the historical and contemporary aspects of educational theory. It involves: (1) an examination and comparison of the writings on educational theory of outstanding contributors from Plato to Dewey; (2) an examination of selected contemporary commentaries on American education. Also offered as Education 515.

**CONCENTRATIONS
IN
PHILOSOPHY**

Arts and Sciences

MINOR: 20 credits selected under departmental advisement.

departments of
**PHYSICAL EDUCATION,
HEALTH EDUCATION,
and RECREATION**

MEN—*Associate Professors:* Ciszek, (*Chairman*); Lappenbusch, Lounsberry; *Instructors:* Hubbard, Jacobs.

WOMEN—*Associate Professors:* Aitken, Kilby, Weythman, (*Chairman*); *Assistant Professor:* Gutchow, _____.

The departments for men and for women offer major and minor programs in these three fields. The total departmental program encompasses (a) professional preparation for health and physical education teachers and recreation leaders, (b) service courses to meet basic general education standards for lower division students, (c) intramural sports for all students in the College, (d) intercollegiate athletics.

A wide variety of studies is open to students in these fields. Both a major and a minor in recreation and a minor in dance are available under the arts and sciences program. Prospective teachers concerned with comprehensive preparation in physical education, health education, and recreation may plan their work in terms of a broad area major; those interested in greater specialization may select a field major or minor in health or physical education or recreation.

Students majoring in the area of physical education, health education, and recreation, or in any one of the fields, should add to their competencies by active participation in intramural sports and professional club activities. They are also expected to develop special proficiency in swimming, dancing, or an individual sport.

Candidates for the arts and sciences degree should seek department advisement and approval of their total programs. Teacher education students should have their programs approved by the department in fulfilling major and minor requirements.

Required Physical Education

Physical Education is required of all freshmen regularly enrolled in the College, whether degree candidates or not.

In contributing to the general education of the student, the departments' objectives are four-fold: (1) to provide a background of skills and knowledges in fundamental movements; (2) to provide vigorous activities to improve physical fitness; (3) to develop skills for recreational use; (4) to insure at least minimum swimming proficiency.

The student has opportunity to choose activities within the framework of the required program and is encouraged to elect additional courses after the requirement is satisfied. Courses may be taken in any order.

Courses for Women

1. Movement Fundamentals—P.E. 102w.
2. Aquatics*—1 credit selected from P.E. 112, 113, 192, 214, 215, 293.
3. Sports and Dance—1 credit selected from P.E. 127, 129, 131, 132w, 136, 139, 141w, 142w, 145w, 227, 229, 231, 236.

(Women thirty years of age and over may fulfill the above requirement, or work out an individual plan of activities under the guidance of the Women's Physical Education Department.)

Courses for Men

1. Aquatics*—1 credit selected from P.E. 112, 113, 192, 214, 293.
2. Team Sport—1 credit selected from P.E. 142m, 143m, 144m, 145m, 146m, 147m, 280m, 281m, 282m.
3. Individual Sports and Dance—1 credit selected from P.E. 127, 129, 131, 132m, 136, 138, 139, 227, 229, 231, 236, 283m, 285m, 286m.

PHYSICAL EDUCATION

- 101w. **FALL TEAM SPORTS** 2 credits. Majors only. Knowledge of rules and development of personal skills in soccer, field hockey, and basketball.
- 102w. **MOVEMENT FUNDAMENTALS** 1 credit. A course designed to develop fundamental mechanics of body movement and skill in basic rhythms.
- 103w. **SPRING TEAM SPORTS** 2 credits. Majors only. Knowledge of rules and development of personal skills in volleyball, speedball, speed-away, and softball.

*A student who satisfactorily passes the aquatic test is exempt from this requirement and may select any other physical education activity.

105. **HISTORY OF PHYSICAL AND HEALTH EDUCATION AND RECREATION** 3 credits. In addition to study of the historical backgrounds, this course aims to develop breadth and depth of understanding concerning the range of opportunities in the field, essential qualifications, and professional preparation.
112. **BEGINNING SWIMMING** 1 credit.
 - (a) For non-swimmers.
 - (b) For those students who cannot swim 25 yards and cannot support themselves in deep water.
113. **INTERMEDIATE SWIMMING** 1 credit.
 - (a) For those who have successfully passed a course in beginning swimming.
 - (b) For those who can swim 25 yards and support themselves in deep water.
117. **BEGINNING SKIING** 1 credit. Instruction in beginning techniques. Classes are held at Heather Meadows in the Mt. Baker area. Students furnish their own equipment. The fee of \$25.00 includes transportation.
118. **SKI CONDITIONING** 1 credit. An activity course to prepare the skier for participation in this sport. Exercises for leg and body control are included together with some of the fundamental ski positions. Students must furnish their own boots and skis.
125. **BEGINNING SOCIAL DANCE** 1 credit. Current ballroom dance steps.
127. **MODERN DANCE** 1 credit. Techniques, rhythms, and patterns of the modern dance. Stress is placed on creativity, development of the individual, and personal enjoyment.
129. **BEGINNING FOLK AND SQUARE DANCE** 1 credit. Basic folk dance steps and square dance patterns.
131. **BEGINNING BADMINTON** 1 credit. Class instruction.
- 132w. **GYMNASTICS, TUMBLING AND TRAMPOLINING** 1 credit. Instruction in stunts, pyramid formation, trampoline, and elementary gymnastics suitable for women. Not open to P. E. majors and minors.
- 132m. **APPARATUS, STUNTS, AND TUMBLING** 1 credit. This course emphasizes the development of basic skills in the apparatus, in stunts and tumbling. Not open to physical education majors and minors.
133. **BEGINNING BOWLING** 1 credit. The development of the fundamental skills. Fee \$6.00.
135. **BEGINNING GOLF** 1 credit. The development of fundamental skills.
136. **BEGINNING TENNIS** 1 credit. Development of fundamental skills. The student furnishes his own equipment.
137. **INTERMEDIATE SKIING** 1 credit. Instruction in intermediate skiing techniques. The skier should be able to execute stem turns and ride a rope tow. Classes are held at Heather Meadows in the Mt. Baker area. The student furnishes his own equipment. The fee of \$25.00 includes transportation.
138. **ARCHERY** 1 credit. Techniques and skill in archery.
139. **FENCING** 1 credit. Fundamentals and techniques in fencing.
- 141w. **FIELD HOCKEY (Women)** 1 credit. Techniques and skills of field hockey.
- 142m. **BASKETBALL (Men)** 1 credit. Fundamentals and skills in basketball.

- 142w. BASKETBALL (Women) 1 credit. Techniques and skills in women's basketball.
- 143m. SOFTBALL (Men) 1 credit. Fundamentals and skills in softball.
- 143w. SOFTBALL (Women) 1 credit. Techniques and skills in women's softball.
- 144m. SPEEDBALL AND SOCCER (Men) 1 credit. Fundamentals and skills in speedball and soccer.
- 144w. SPEEDBALL AND SOCCER (Women) 1 credit. Techniques and skills in speedball and soccer.
- 145w. VOLLEYBALL (Women) 1 credit. Techniques and skills in volleyball.
- 146m. BODY CONDITIONING AND VOLLEYBALL (Men) 1 credit. Conditioning exercises to develop body strength and flexibility; techniques and skills in volleyball for men.
- 147m. TOUCH FOOTBALL 1 credit. Fundamentals and skills in touch football.
- 174m. ATHLETIC INJURIES AND TRAINING (Men) 3 credits. Treatment for injuries common to the playfield, gymnasium, and athletic field; training and safety measures for the prevention of injuries, especially during severe exercise; procedures for building physical stamina; practical experiences in taping procedures.
192. LIFE SAVING AND WATER SAFETY 2 credits. Life saving skills and techniques for advanced swimmers. Completion of this course qualifies the student for an American Red Cross Senior Life Saving Certificate.
214. ADVANCED SWIMMING 1 credit
(1) For those who have successfully completed a course in intermediate swimming.
(2) For those who can swim 25 yards in reasonably good form using the following strokes: front crawl, elementary back, back crawl, side stroke, and can swim 100 yards utilizing one of these strokes.
215. SYNCHRONIZED SWIMMING 1 credit. Prerequisite: advanced swimming or equivalent. Techniques in synchronized swimming with emphasis on choreography.
225. ADVANCED SOCIAL DANCE 1 credit. Prerequisite P. E. 125 or equivalent. Instruction in ballroom steps for advanced dancers.
227. INTERMEDIATE MODERN DANCE 1 credit. Prerequisite: P. E. 127 or equivalent. Development of intermediate dance skills, group dance forms, and the cultural place of dance in society.
228. DANCE COMPOSITION AND PRODUCTION 2 credits. Individual and group creative work in dance forms and approaches to composition. This course provides practical experience in formulating, developing, and presenting dance programs.
229. ADVANCED FOLK AND SQUARE DANCE 1 credit. Prerequisite: P. E. 129 or equivalent. Advanced folk and square dances for secondary school and adult recreation groups. Opportunity is given for the student to practice calling.
231. ADVANCED BADMINTON 1 credit. Prerequisite: P. E. 131 or equivalent.
- 232m. GYMNASTICS 2 credits. A course for physical education majors and minors with emphasis on beginning and intermediate performance skills. Opportunity is provided for each student to teach several basic stunts and calisthenics.
- 232w. TEACHING OF GYMNASTICS AND TUMBLING FOR WOMEN 2 credits. Methods and materials for elementary gymnastics, stunts, tumbling, trampolining, and marching tactics. Not open to freshmen.
233. INTERMEDIATE BOWLING 1 credit. Fee, \$6.00. Prerequisite: P. E. 133 or equivalent. Class instruction for those who are not beginners.

235. **ADVANCED GOLF** 1 credit. Prerequisite: P. E. 135 or equivalent. A greens fee of \$3.00 is levied at the course. Equipment is furnished by the student.
236. **ADVANCED TENNIS** 1 credit. Prerequisite: P. E. 136 or its equivalent. The student supplies his own equipment.
237. **ADVANCED SKIING** 1 credit. Prerequisite: P. E. 137 or equivalent. Instruction in advanced skiing techniques including parallel turns. Classes are held at Heather Meadows in the Mt. Baker area. The student furnishes his own equipment. The fee of \$25.00 includes transportation.
- 280m. **VARSITY FOOTBALL** 1 credit.*
- 281m. **VARSITY BASKETBALL (Men)** 1 credit.*
- 282m. **VARSITY BASEBALL (Men)** 1 credit.*
- 283m. **VARSITY TRACK (Men)** 1 credit.*
- 285m. **VARSITY GOLF (Men)** 1 credit.*
- 286m. **VARSITY TENNIS (Men)** 1 credit.*
- 287m. **VARSITY SKIING (Men)** 1 credit.* The fee of \$25.00 includes transportation.
- 288m. **VARSITY SWIMMING (Men)** 1 credit.*
293. **WATER SAFETY INSTRUCTOR'S COURSE** 2 credits. Prerequisite: a current American Red Cross Senior Life Saving Certificate or P. E. 192. The theory and practice of teaching swimming strokes and life saving techniques. The course conforms to American Red Cross standards and leads to a rating of Water Safety Instructor.
300. **SPECIAL PROBLEMS IN THE AREA OF PHYSICAL EDUCATION** 2 to 5 credits. Prerequisite: consent of the department chairman. Upper division students who have a creditable record in physical education may extend their competencies in this area by conference arrangement with the instructor.
305. **METHODS AND MATERIALS FOR TEACHING DANCE** 2 credits. Prerequisites: Physical Education 125, 127, and 129 or equivalent. This course includes methods and materials used in teaching modern folk, social, and square dancing.
306. **PHYSICAL EDUCATION METHODS AND MATERIALS FOR THE ELEMENTARY SCHOOL** 3 credits. Prerequisites: P. E. 105, Education 355. A course designed to give the student acquaintance with physical education activities desirable in an elementary school program and to provide the opportunity for practice in the presentation of these activities. Required of all physical education majors and minors. (Not open to freshmen).
- 307w. **TEACHING OF GIRLS' TEAM SPORTS** 3 credits. Prerequisites: P. E. 141w, 142w, 143w, 145w, or equivalent. Methods and materials in teaching the following sports to secondary school girls: hockey, basketball, softball, speedball, soccer, and volleyball. The course is required of women majoring or minoring in physical education.
309. **TEACHING OF INDIVIDUAL SPORTS** 3 credits. Prerequisites: P. E. 131, 133, 135, 136, and 138 or equivalent. Methods and materials used in teaching archery, badminton, bowling, golf, and tennis.
- 310m. **OFFICIATING TEAM SPORTS** 2 credits. Prerequisites: P. E. 142m, 143m, and 146m, or equivalent. This course is designed to develop a basic

*Not more than one credit may be earned in any one varsity sport.

understanding and interpretation of the rules applying to games situations. The course also deals with the mechanics of officiating. Laboratory experience is provided in officiating class or intramural games.

- 310w, 311w, 312w. **OFFICIATING WOMEN'S TEAM SPORTS** 1 credit each. Prerequisites: P. E. 141w, 142w, 143w, 145w, or equivalent. Officiating techniques of basketball, field hockey, softball, and volleyball.
322. **KINESIOLOGY** 3 credits. Prerequisite: Health Science 241. A study of the important muscles of the body, including origin, insertion, action and structure; principles of body mechanics; analysis of leverage in body movements and problems of readjustment in relation to posture and to physical activities.
323. **PHYSIOLOGY OF MUSCULAR EXERCISE** 3 credits. Prerequisite: consent of the instructor. The physiology of muscular exercise as related to physical activities; the application of physiological facts to the problems of conditioning. This course includes a study of muscular efficiency, fatigue, recovery, chemical changes, and neuro-muscular control with special reference to games, sports, and adaptive activities.
327. **RHYTHMICAL ANALYSIS** 2 credits. Prerequisite: P. E. 127. An analysis of the inherent factors of rhythm; the application of the rhythmic analysis of all forms of movement including sports, dance, aquatics, and stage techniques.
- 365m. **METHODS AND MATERIALS OF PHYSICAL EDUCATION FOR BOYS (Men)** 3 credits. Prerequisites: service courses in physical education (see page 167). A course stressing the selection of activities and appropriate methods of instruction for secondary school boys. Opportunity is given for actual teaching of these activities. Required of those majoring or minorng in physical education.
- 367m. **THEORETICAL FOOTBALL (Men)** 2 credits. A course in the theory and appreciation of football with methods and materials of organization. Special consideration is given to passing, blocking, tackling, formations, position play, styles of play, and game tactics founded upon present day game rules.
- 368m. **THEORETICAL BASKETBALL (Men)** 2 credits. A practical course in coaching of basketball. Consideration of passing, ball handling, screening, pivoting, shooting, styles of offense and defense, present-day rules, and rule changes.
- 369m. **THEORETICAL BASEBALL** 2 credits. A course dealing with the coaching of baseball with special emphasis given to batting, pitching, fielding, position play, team offense and defense, and other technical and strategical procedures of play.
- 370m. **THEORETICAL TRACK (Men)** 2 credits. A course in the theory of the various track and field events and material on organization and administration of a track meet.
- 374m. **PREVENTION AND REHABILITATION OF ATHLETIC INJURIES** 3 credits. Prerequisite: P. E. 174m or consent of the instructor. An advanced course dealing with the origin, effects, and prevention of athletic injuries. Care of injuries, including techniques of taping, is stressed. Special emphasis is given to rehabilitation after injury.
400. **SPECIAL PROJECTS IN PHYSICAL EDUCATION** 2 to 5 credits. Prerequisites: senior status and consent of the instructor and department chairman. Individual instruction for students who wish to undertake special projects under supervision.
- 407w. **SEMINAR IN GIRLS' PHYSICAL EDUCATION ACTIVITIES** 3 credits. Prerequisite: teaching experience. An advanced course aimed at extending the skills and understanding of activities which are used in girls' physical education.

- 410w. **EXTRA-CLASS ACTIVITIES IN PHYSICAL EDUCATION FOR GIRLS (Intramurals)** 2 credits. Prerequisite: active participation in the intramural program. The study of intramural programs, tournaments, play days, sports days, and G.A.A. for secondary school girls.
- 414w. **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION FOR SECONDARY SCHOOL GIRLS** 3 credits. Prerequisites: P. E. 105 and 307w. A course aimed to give the student an understanding of the problems involved in organizing and administering a physical education program for secondary school girls.
- 465m. **ADMINISTRATION OF PHYSICAL EDUCATION IN SCHOOLS** 3 credits. Prerequisites: service courses in physical education (see page 167). A course aimed to give the student an understanding of the problems involved in the construction of a physical education program; a detailed study of the service, intramural, recreational, and athletic programs for secondary school boys.
- 467m. **GENERAL COACHING PROBLEMS (Men)** 2 credits. Modern systems in athletics. Specific problems in all sports are considered.
470. **PRINCIPLES OF PHYSICAL EDUCATION** 3 credits. Prerequisites: Physical Education 105, 306, 307w or 365m. A course concerned with the scientific and philosophical principles related to physical education: its purposes, scope, and curriculum.
- 474w. **PROBLEMS IN BODY MECHANICS FOR GIRLS** 3 credits. Prerequisites: P. E. 102w, 322. Methods and materials used in teaching body mechanics to secondary school girls. It includes the study of relaxation, conditioning, and physical fitness for girls and women. Attention is also given to the problems of girls with physical disabilities, postural defects, or menstrual disorders.
477. **PHYSICAL EDUCATION EQUIPMENT AND FACILITIES** 1 credit. A workshop on planning indoor and outdoor physical education facilities and equipment for schools. It deals with (1) the design and construction of gymnasiums and other facilities for the physical education program; (2) the design, construction, surfacing, and drainage of athletic fields and courts; and (3) the purchase and care of athletic and physical education equipment.
489. **TECHNIQUES FOR EVALUATING PHYSICAL ABILITIES** 3 credits. Prerequisites: Education 470 and consent of the instructor. The application of measurement theory to physical education; the selection and administration of appropriate tests, and the interpretation of results of fundamental statistical procedure are studied. Emphasis is placed upon tests of physical fitness, body mechanics, sport skills and knowledge.
498. **STRAIGHT LINE PHILOSOPHY** 3 credits. A classroom lecture, illustration, and discourse open to senior and graduate men and women with or without experience in athletics; study of the administration of human conduct in activities on straight line enclosures.
499. **PHYSICAL FITNESS AND THE PUBLIC SCHOOL** 3 credits. Prerequisite: senior or graduate status or teaching experience. The organization and development of physical fitness programs in the public schools; practical considerations in instruction and administration.
500. **PROBLEMS IN PHYSICAL EDUCATION** 2-5 credits. This course is designed for teachers with experience in physical education. It reviews controversial issues in the field. Attention is given to the professional problems which are pertinent to the individual members of the group.
- INTRAMURAL SPORTS (Men)** No credit. Opportunity for participation in the following seasonal sports: basketball, volleyball, swimming, tennis, softball, golf, badminton, table tennis, boxing, and bowling.

INTRAMURAL SPORTS (Women) No credit. Time is set aside and tournaments are arranged for organized participation in the following seasonal sports: hockey, volleyball, basketball, swimming, modern and folk and square dancing, softball, tennis, badminton, archery, hiking, table tennis, golf, and bowling.

MIXED RECREATION. A seasonal program of hiking, picnicking, and skiing is offered for men and women. On Thursday evening the Physical Education Building is open for swimming and for games in the gymnasium suitable for men and women playing together. These include badminton, volleyball, table tennis, and shuffleboard. Square dancing is held in the recreation hall.

Health Education

252. **FIRST AID** 2 credits. First aid treatment of common injuries and illnesses based on the American Red Cross standard and advanced first aid courses. The course includes lecture, discussion, and laboratory work. Students who qualify receive American Red Cross certificates.
301. **HEALTH EDUCATION IN THE PUBLIC SCHOOLS** 3 credits. Prerequisite: Health Science 247. A course dealing with methods and materials. Special consideration is given to basic principles of health councils, and to the study and evaluation of source material.
- 400.-1. **WORKSHOP: HEALTH EDUCATION IN THE PUBLIC SCHOOLS** 5 credits. Prerequisite: teaching experience. This course provides wide latitude for individual endeavor in dealing with problems of health education; teaching, administration, and coordination with the total school program. It is best suited for those who have had a background of experience in the field.
453. **THE FIRST AID INSTRUCTOR** 1 credit. Prerequisite: Health Education 252, or a current advanced Red Cross First Aid Certificate. Students who qualify receive the American Red Cross First Aid Instructor's Certificate. Minimum age is 20 years.
500. **PROBLEMS IN HEALTH EDUCATION** 2-5 credits. A course designed to meet the needs of the graduate student concerned with a special problem in the field of health education.

Recreation

Those preparing for careers as recreation specialists outside of public education may complete their professional preparation in teacher education or under the arts and sciences program. Specifications for the major and minor involving courses in art, industrial arts, music, and speech as well as in health, physical education, and recreation are outlined on the following pages.

104. **CAMPSCRAFT** 2 credits. Skills and information contributing to the enjoyment of outdoor living, with emphasis on woodsmanship, camp cookery, shelters, safety, and conservation. The class is expected to participate in cook-outs and a week-end camping trip.
275. **RECREATIONAL GAMES** 2 credits. Practice of skills and leadership techniques in games such as: deck tennis, paddle tennis, aerial darts, shuffleboard, table tennis, etc. Opportunities are given for planning and conducting informal recreational hours and parties.

290. **CAMP LEADERSHIP** 3 credits. Prerequisite: Recreation 104. A study of the organization and program in private, agency, and school camps. This course includes leadership techniques in camping, informal singing, games, special events, and other phases of the camp program and is intended for camp counselors.
412. **ORGANIZATION AND ADMINISTRATION OF SCHOOL AND COMMUNITY RECREATION PROGRAM** 3 credits. Prerequisites: P. E. 306 and one of the following: Recreation 275, P. E. 307w, 309 or 365m. A study of the organization and administration of activities for school and community recreation programs. Opportunity is given for observation of teaching playground and recreation activities to children whenever possible.
- 450, 451, 452. **FIELD WORK IN RECREATION** 1 or 2 credits each. Prerequisites: P. E. 306, Recreation 275, 412. Recreation 412 may be taken concurrently with Recreation 450, 451, or 452. Practical experience in a community recreation program. Hours are arranged with the instructor at the time of enrollment.
500. **PROBLEMS IN RECREATION** 2 to 5 credits. A course for experienced recreation leaders with opportunity for individualized study of problems growing out of their professional experience.

CONCENTRATIONS IN PHYSICAL EDUCATION—RECREATION

Teacher Education

BROAD AREA MAJOR (Women): Physical Education, Health Education, and Recreation

P. E. 101w, 103w, 105, 232w, 305, 306, 307w, 309, 310w or 311w or 312w, 322, 410w, 414w, 470, 474w;

2 credits in physical education to include P. E. 227 or equivalent, and 113 or equivalent;

Recreation 275, 290, 412; Health Education 252, 301; Health Science 241, 243, 247, 447.

BROAD AREA MAJOR (Men):

P. E. 105, 174m, 232m, 306, 309, 322, 323, 365m or 465m, 470.

Select three from the following alternatives:

P. E. 367m, 368m, 369m, 370m;

Recreation 275, 412, 450;

Health Education 252, 301;

Health Science 241, 243, 447.

FIELD MAJOR (Women): Physical Education

P. E. 101w, 103w, 105, 232w, 305, 306, 307w, 309, 310w or 312w, 311w, 322, 410w, 414w, 470, 474w;

Health Education 252, 301;

2 credits to include P. E. 227 and 113 or equivalent.

Health Science 241, 247.

FIELD MAJOR (Men): Physical Education

P. E. 105, 129 or 229, 174m, 232m, 306, 322, 323, 365m, 465m, 470;
Select three from: P. E. 367m, 368m, 369m, 370m;
Health Education 301;
Health Science 241.

FIELD MINOR (Women): Physical Education

P. E. 105, 305, 306, 307w, 414w;
Select 6 credits from: P. E. 309, 410w, 470, and Health Ed. 252 or 301.

FIELD MINOR (Men): Physical Education

P. E. 105, P. E. 174m or Health Ed. 252, P. E. 232m, 306, 365m, 465m;
Select two from: P. E. 367m, 368m, 369m, 370m.

FIELD MINOR: Health Education

Health Education 252, 301; Health Science 243, 247, 447; Home Economics 210; two to three credits under departmental advisement.

FIELD MAJOR: Recreation

P. E. 105, 232w or 232m, 305, 306, 309;
Recreation 104, 275, 290, 412, and 5 credits from Recreation 450, 451 and 452;
Health Education 252; Industrial Arts 301 or 350;
Electives suitable to recreation selected under advisement from courses in art, industrial arts, music, and speech to total 45 credits.

FIELD MINOR: Recreation

P. E. 306; Recreation 104, 412, and 3 credits from Recreation 450, 451, and 452;
Industrial Arts 301 or 350;
Electives suitable to recreation selected under advisement from courses in art, industrial arts, music, and speech to total 20 credits.

Arts and Sciences

MINOR: Physical Education: The Dance

P. E. 125, 127, 129, 225, 227, 228, 305, 327, and 8 additional credits under departmental advisement.

MAJOR: Recreation

P. E. 105, 305, 306, 309; Recreation 104, 275, 290, 412, and 5 credits from Recreation 450, 451, and 452; Health Education 252; 10 additional credits under departmental advisement. Supporting courses: Art 101 or Music 101, Art 270, Education 355, Industrial Arts 301 or 350.

MINOR: Recreation

P. E. 306; Recreation 104, 275, 412, and 3 credits from Recreation 450, 451, and 452; Industrial Arts 301; 5 credits under departmental advisement.

department of PHYSICS and CHEMISTRY

Professor: Knapman; Associate Professors: Besserman, Lahti; Assistant Professors: Dittrich, Eddy, Neuzil, _____, _____; Instructor: Thayer.

The Department of Physics and Chemistry offers courses for students in the Teacher Education, Arts and Sciences, and preprofessional curricula.

For students planning to teach in the elementary or junior high school the general science major or minor is recommended (see page 92); while for students planning to teach in the senior high school the chemistry, physics, or physical science major or minor is recommended. The upper division courses in these areas are also available under advisement for students working toward the Master of Education degree or the fifth year program.

For students planning to continue their studies in graduate school or to enter business or industry, majors and minors in chemistry and physics are offered. Many of the courses in these areas are applicable to the various preprofessional programs.

It is strongly recommended that a student planning a program involving a major or minor in chemistry or physics consult an adviser in the department at the beginning of the freshman year so that sequences of courses can be established. The following programs are recommended:

	CHEMISTRY MAJOR	PHYSICS MAJOR
First Year	Chem. *121, 122, 131 Math. *101, 102, 103	Math. *101, 102, 103 Chem. *121, 122 (recommended)
Second Year	Chem. 351, 352, 233 Chem. 354, 355 Phys. 231, 232, 233 Math. 201 (202, 203 recommended)	Phys. 231, 232, 233 Math. 201, 202, 203

*Students eligible for advanced placement in chemistry or mathematics should consult with an adviser in the appropriate department before enrolling in the introductory courses.

PHYSICS

(Since several courses have been renumbered for the current year, numbers previously borne by the same course in immediately preceding years are indicated in parentheses.)

- 131, 132, 133. **INTRODUCTORY PHYSICS** 5 credits each. Prerequisite: 1½ years of high school algebra or Mathematics 100 or 151. An introductory course in physics for elementary and junior high school teachers, for persons majoring in biology, geology, medicine, forestry, industrial arts, and other areas not requiring mathematics into the calculus. (Students taking the calculus see Physics 231, 232, 233.) Physics 131 includes topics selected from the various classical areas of physics, such as simple machines and mechanics, sound, heat and temperature, magnets, electrostatic charges, reflections, and refraction. Physics 132 and 133 are courses which are designed to show levels of unification of the basic ideas which were developed in Physics 131. Physics 132 includes the unification of the wave theory of sound and light, the unification of motion by a vector model. In Physics 133 electrical theory and alternating currents are developed. The classical concepts which have been introduced previously are utilized to develop the appropriate molecular atomic and nuclear models. Physics 131 is a prerequisite for Physics 132 and 133. (Those planning to teach physical science in the senior high school should take Physics 231, 232, 233.)
155. **ELEMENTARY ELECTRONICS** 2 credits. Prerequisite: 1½ years of high school algebra or Mathematics 151 or Mathematics 100. An introductory course designed to give an understanding of the basic principles of electron tubes and their use in electrical circuits. Emphasis is placed on construction of simple circuits.
221. **PHYSICS OF THE AIR** 3 credits. Prerequisite: 1 year of college physics. Physics (235) 221 is an introductory course in the physics principles necessary for the understanding of meteorology. These principles are then utilized in weather analysis and forecasting.
- 231, 232, 233. **GENERAL AND ENGINEERING PHYSICS** 5 credits each. Prerequisite: Mathematics 201 must be taken before or concurrently with Physics 231. This course is designed primarily for persons who plan to major in some field of science or engineering and for those who plan to teach physical science at the secondary level. Emphasis is placed upon derivation of relationships and their application in the solution of problems.
255. **ELEMENTARY ELECTRONICS** 2 credits. Prerequisite: Physics 155. An extension of (234) the study of electronics made in Physics 155 to more complex circuits.
300. **SPECIAL PROJECTS IN PHYSICS** 1 or 2 credits. Prerequisites: 15 credits in physics and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
- 341, 342. **ANALYTICAL MECHANICS** 3 credits each. Prerequisites: Physics 233 and (237) Mathematics 203 or permission for Physics 341; Physics 341 and Mathematics 331 for Physics 342. An intermediate course introducing analytical methods in the solution of problems of statics and dynamics.
343. **ANALYTICAL MECHANICS LABORATORY** 1 credit. Prerequisite: Physics 341 before or concurrently. A course designed to familiarize the student with advanced experimental techniques in analytical mechanics. The student chooses from a number of experiments those which are closely associated with his interests.
- 351, 352. **OPTICS** 3 credits each. Prerequisites: Physics 233 and Mathematics 203 or (331) permission for Physics 351; Physics 351 and Mathematics 331 for Physics 352. The course deals with geometrical and physical optics.

353. OPTICS LABORATORY 1 credit. Prerequisite: Physics 351 before or concurrently. The laboratory is so designed that the student may develop experimental skills for the solution of problems.
- 355, 356. ELECTRICITY AND MAGNETISM 3 credits each. Prerequisites: Physics 233 (334, 335) and Mathematics 203 or permission for Physics 355; Physics 355 and Mathematics 331 for Physics 356. A presentation of elementary electromagnetic field theory, of electrical and magnetic properties of matter, and of electrical circuit theory.
357. ELECTRICITY AND MAGNETISM LABORATORY 1 credit. Prerequisite: Physics 355 before or concurrently. A course designed to familiarize the student with advanced experimental techniques in electricity and magnetism.
- 361, 362. THERMODYNAMICS 3 credits each. Prerequisites: Physics 233 and Mathematics 203 or permission for Physics 361; Physics 361 and Mathematics 331 for Physics 362. A presentation of the laws of thermodynamics and of the concepts of classical statistical mechanics.
363. THERMODYNAMICS LABORATORY 1 credit. Prerequisite: Physics 361 before or concurrently. A course designed to familiarize the student with advanced experimental techniques in thermodynamics.
- 381, (332) INTRODUCTION TO MODERN PHYSICS 3 credits. Prerequisite: Physics 133 or 233 or permission. A course designed to introduce the student to the developments in physics since the turn of the century. The survey deals with atomic, nuclear, and solid state physics from a non-rigorous point of view.
399. SEMINAR IN PHYSICS 1 credit. Prerequisite: 25 credits in physics and permission of the instructor. Credit is allowed only to students who participate in the presentation of papers or similar activities.
400. PROJECTS IN PHYSICS 1 to 3 credits. Prerequisite: consent of instructor. This course is available to a few students who wish to undertake special projects under supervision.
- 481, 482. ATOMIC AND NUCLEAR PHYSICS 3 credits each. Prerequisites: Physics 342 and 356 or permission. A course designed to give physics and mathematics majors a comprehensive treatment of the theoretical and experimental aspects of atomic and nuclear physics.
483. MODERN PHYSICS LABORATORY 1 credit. Prerequisite: Physics 381 or 481. A course designed to familiarize the student with advanced experimental techniques in modern physics.
- 485, 486, 487. THEORETICAL PHYSICS 3 credits. Prerequisites: Physics 342 and 356 and Mathematics 361 or permission. A course designed for the advanced physics and mathematics majors. Classical topics are analyzed with advanced mathematical rigor.

CONCENTRATIONS IN PHYSICS

Teacher Education

FIELD MAJOR:

General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

45 additional credits in physics to include Physics 231, 232, 233 (or equivalent by departmental permission).

FIELD MINOR:

For science majors: Physics 231 in lieu of Physical Science 101 in the required general education program;

For non-science majors: General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

20 additional credits in physics to include Physics 231, 232, 233 (or equivalent by departmental permission).

Arts and Sciences

MAJOR:

General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

50 additional credits in physics to include Physics 231, 232, 233 (or equivalent by departmental permission).

4 credits of advanced physics laboratory courses;

6 credits of 400-level physics lecture courses.

Supporting courses: Mathematics 101, 102, 103, 201, 202, 203, 331. Also recommended: Chemistry 121, 122, and a reading knowledge of a foreign language.

MINOR:

For science majors: Physics 231 in lieu of Physical Science 101 in the required general education program;

For non-science majors: General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

25 additional credits in physics to include Physics 231, 232, 233 (or equivalent by departmental permission).

CHEMISTRY

(Since several courses have been renumbered for the current year, numbers previously borne by the same course in immediately preceding years are indicated in parentheses.)

- 121, 122. **GENERAL CHEMISTRY** 5 credits each. Prerequisite: satisfactory score on science-mathematics pretest or Mathematics 100, 101, or 151. A study of the principles and laws developed from the properties, structure, and reactions of matter.
125. **GENERAL CHEMISTRY** 5 credits. Prerequisite: a satisfactory score on a mathematics pretest or satisfactory completion of Mathematics 3. A study of the principles and laws developed from the properties, structure, and reactions of matter. The course is primarily for persons studying general science, biological science, nursing, home economics, and other fields requiring an abbreviated course in general chemistry.
131. **QUALITATIVE ANALYSIS** 5 credits. Prerequisite: Chemistry 122 or permission (123) of the instructor. A course designed to introduce a more detailed description of present chemical theories. Emphasis is placed on the theory of electrolytic solutions and its application to systematic separations in qualitative analysis.
233. **QUANTITATIVE ANALYSIS** 5 credits. Prerequisite: Chemistry 131. The theory (224) and practice of gravimetric, volumetric, colorimetric, and electrolytic quantitative analysis.
251. **ELEMENTARY ORGANIC CHEMISTRY** 5 credits. Prerequisite: Chemistry 121 or (226) 125. A study of the nomenclature, reactions, and uses of organic compounds. The course is primarily for persons studying general science, biological science, nursing, home economics, and other fields requiring an abbreviated course in organic chemistry.
300. **PROJECTS IN CHEMISTRY** 1 or 2 credits. Prerequisites: 20 credits in chemistry and the consent of the instructor. An opportunity available to students who wish to undertake special projects under supervision.
305. **GLASS WORKING** 1 credit. Prerequisite: permission of the instructor. A laboratory course in the basic techniques of glass working and the construction of simple glass apparatus.
344. **INORGANIC PREPARATIONS** 2 or 3 credits. Prerequisite: Chemistry 233. The preparation of selected inorganic compounds of high purity by diverse methods.
- 351, 352. **ORGANIC CHEMISTRY** 3 credits each. Prerequisite: Chemistry 122 or permission for Chemistry 351; Chemistry 351 for 352. A study of the chemistry of carbon compounds emphasizing structure, reactions, and theory.
- 354, 355. **ORGANIC CHEMISTRY LABORATORY** 2 credits each. Prerequisite: Chemistry 351 for Chemistry 354; Chemistry 352 for Chemistry 355. Reactions and synthesis of organic compounds. Some opportunities for projects are provided in Chemistry 355.
357. **QUALITATIVE ORGANIC ANALYSIS** 5 credits. Prerequisites: Chemistry 131, (328) 362, 354. The identification and characterization of organic compounds.
399. **SEMINAR IN CHEMISTRY** 1 credit. Prerequisites: 25 credits in chemistry and permission of the instructor. Credit is allowed only to students who participate in the presentation of papers or similar activities.
400. **PROJECTS IN CHEMISTRY** 1 to 3 credits. Prerequisite: consent of the instructor. This course is available to a few students who wish to undertake special projects under supervision.
435. **INSTRUMENTAL ANALYSIS** 3 credits. Prerequisite: Chemistry 463 or permission of the instructor. The theory and application of optical and electrical methods of instrumental analysis.
441. **INORGANIC CHEMISTRY** 3 credits. Prerequisite: Chemistry 463 or permission of the instructor. A study of the elements in relationship to the periodic system.

- 461, 462, 463. **PHYSICAL CHEMISTRY** 461 is 5 credits, 462 and 463 are 3 credits (421, 422, 423) each. Prerequisites: Chemistry 233, one year of college physics, and Mathematics 201, or permission of the instructor. Lectures, discussion, and problems in atomic and nuclear structure, states of matter, solutions, chemical thermodynamics and equilibria, chemical kinetics, and electro-chemistry.
- 364, 465. **PHYSICAL CHEMISTRY LABORATORY** 2 credits each. Prerequisites: Chemistry (424, 425) 461, 462, 463. Chemistry 464 and 465 may be taken concurrently with Chemistry 462 and 463 respectively.
482. **NUCLEARCHEMISTRY** 3 credits. Prerequisites: Chemistry 131, Physics 381, and Mathematics 103, or permission of the instructor. A course designed to introduce the student to the various aspects of nuclear chemistry and radiochemistry. The content deals with the theory and application of nuclear stability and interactions as well as with the statistical nature and uses of these processes.
483. **NUCLEONICS LABORATORY** 2 credits. Prerequisite: Physics 381 or permission of the instructor. The general purpose of this course is to introduce the student to the experimental techniques of nuclear physics and nuclear chemistry. The basic parts of the course deal with instrumentation techniques and procedures and with techniques of nuclear and radiochemistry.

CONCENTRATIONS IN CHEMISTRY

Teacher Education

FIELD MAJOR:

General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

45 additional credits in chemistry to include Chemistry 121, 122, 131, 233, 351, 352, 354, 461, 462, 463.

FIELD MINOR:

For science majors: Chemistry 121 in lieu of Physical Science 101 in the required general education program;

For non-science majors: General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

20 additional credits in chemistry to include Chemistry 122, 131, 233, 251 (or 351 and 354).

Arts and Sciences

MAJOR:

General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

50 additional credits in chemistry to include Chemistry 121, 122, 131, 233, 351, 352, 354, 435, 461, 462, 463, 464.

Supporting courses: one year of college physics; Mathematics 101, 102, 103, 201; reading knowledge of a foreign language is recommended.

MINOR:

For science majors: Chemistry 121 in lieu of Physical Science 101 in the required general education program;

For non-science majors: General Science 405 or 406 in lieu of Physical Science 101 in the required general education program;

25 additional credits in chemistry to include Chemistry 122, 131, 233, 251 (or 361 and 354).

department of PSYCHOLOGY

Professor: Freehill; Associate Professors: Adams, Blood, Budd, Harwood (Acting Chairman); Assistant Professors: DeBruler, Jones, _____; Instructor: Gerhard; Lecturer: Mason.

A major in psychology is the first step toward any of a number of professional opportunities. In addition to college teaching and research, these include personnel work in industry and government, vocational and personal guidance in schools and colleges, and clinical work with either children or adults in guidance clinics, juvenile and criminal courts, and mental hospitals including Veterans Administration hospitals. Nearly all of these positions require graduate work in a university leading to the M.A. or the Ph.D. degree. The function of the program in the Arts and Sciences Division is that of preparing the student for later graduate work in the field.

The undergraduate major in psychology should be supported by a well-rounded background in all the major fields of knowledge with particular emphasis upon sociology and the biological sciences. Students who plan eventually to work toward the Ph.D. degree should gain a reading knowledge of French and German during their undergraduate years.

Students whose average falls below "B" are not usually advised to continue in the field of psychology.

PSYCHOLOGY

200. **GENERAL PSYCHOLOGY** 5 credits. Not open to first quarter freshmen. An introduction to such basic psychological concepts as learning, motivation, emotion, perception, thinking, and personality, and an application of the scientific method to psychological problems.
201. **GENERAL PSYCHOLOGY** 4 credits. Prerequisite: General Education 101. (Not open to students who have taken Psychology 200.) An experimentally oriented study of the basic psychological concepts.
261. **THE PSYCHOLOGY OF ADJUSTMENT** 3 credits. Prerequisite: Psychology 200 or General Education 101. (Not open to education majors). The study of the adjustments in normal human life. Typical problems and reactions are considered. The development of personality and its relation to the adequacy of adjustment is studied.
302. **COMPARATIVE PSYCHOLOGY** 3 credits. Prerequisite: Psychology 200 or 201. (Not open to students who have had Psychology 305.) The application of evidence generated from the laboratory experiments and the ecological studies of animal behavior to general psychology. Particular emphasis is given to study of the sensory processes, motivation, learned and unlearned behavior.

320. **INDUSTRIAL PSYCHOLOGY** 3 credits. Prerequisite: Psychology 200 or 201. (Not open to individuals who have had Psychology 220.) A study of the application of psychological principles to such industrial problems as personnel selection and appraisal, human relations, marketing, training and engineering psychology.
355. **HUMAN GROWTH AND DEVELOPMENT** 5 credits. Prerequisites: Psychology 200, Biology 104 or equivalent, and at least sophomore status. A study of physical, social, and emotional growth and development from birth to adulthood. Emphasis is placed upon the implications of facts and principles for curriculum content and classroom procedures. Also offered as Education 355.
371. **EVALUATION IN THE PUBLIC SCHOOL** 3 credits. Prerequisite: junior status and student teaching experience. A course dealing with the evaluation of the outcomes of school experience. It includes a consideration of the function of standardized and teacher-made tests. Also offered as Education 371.
373. **ELEMENTARY STATISTICAL METHODS IN EDUCATION** 5 credits. Prerequisite: permission of the instructor. A first course in statistical procedures for educational research. Emphasis is given to the criticism of evidence, the design of simple studies, and the basic techniques of statistical inference. It is concerned with informed reading as well as with the application of statistics to original research. Also offered as Education 373.
405. **RECENT PSYCHOLOGICAL LITERATURE** 3 credits. Prerequisite: twenty hours of psychology. The course is planned to familiarize the student with recent research and writings in the field of psychology. Use is made of the Psychological Abstracts, the various psychological journals, and of significant recent books in the field. This course is required of psychology majors and may be elected by graduate students in education.
406. **SYSTEMATIC PSYCHOLOGY** 3 credits. Prerequisite: fifteen hours of psychology. An examination and evaluation of the various contemporary viewpoints in psychology.
408. **THE PSYCHOLOGY OF LEARNING** 5 credits. Prerequisite: Psychology 355, or permission of instructor. A course dealing with the theories of learning, their experimental supports, and implications for instruction. Also offered as Education 408.
431. **INTRODUCTION TO GUIDANCE AND PSYCHOLOGICAL SERVICES** 3 credits. Prerequisite: 15 hours of psychology. An introduction to the organization and implementation of guidance and psychological services in the schools. The roles of the teacher, principal, psychologist, counselor, and other specialists in an integrated program are discussed. Various guidance and counseling techniques are examined and evaluated. Professional problems and trends are studied. Also offered as Education 431.
440. **SOCIAL PSYCHOLOGY** 3 credits. Prerequisites: ten hours of psychology or Psychology 200 and five hours of sociology. The psychology of human institutions with special reference to the impact on individual behavior.
452. **THEORY OF PERSONALITY** 5 credits. Prerequisite: fifteen hours of psychology. An examination of theoretical approaches to personality. Major philosophic assumptions, historical position, and experimental data are considered in evaluating personality theories.
- *453. **INDIVIDUAL DIFFERENCES** 3 credits. A study of the behavioral differences found among individuals.

*Offered in summer session only.

464. **ABNORMAL PSYCHOLOGY** 3 credits. Prerequisite: Psychology 261 or 455, or permission of the instructor. A study of the psychoses, neuroses, and other forms of behavior deviation; conceptions regarding these conditions.
474. **EXPERIMENTAL PSYCHOLOGY** 5 credits. Psychology 200, 473, and approval of the instructor. A study of the experimental techniques employed in psychology; participation in conducting simple experiments and in the interpretation of data.
- *491. **PSYCHOLOGY OF OCCUPATIONS** 3 credits. Prerequisite: Psychology 431 or permission. A study of the psychological and social factors in occupational choice. The course presents research and theory on occupational choice as background for counseling. Sources of occupational materials are reviewed. Interest and aptitude tests for occupational counseling are evaluated.
- *531. **SUPERVISED PRACTICE IN GUIDANCE AND COUNSELING** 3 credits. Prerequisite: Psychology 431 and 572. A course in which the student critically examines and practices under supervision various guidance and counseling techniques including the use of tests, case studies, and conferences. Also offered as Education 531.
- *533. **THEORY AND TECHNIQUES OF INTERVIEWING** 3 credits. Prerequisite: permission of the instructor. A study of psychological and social factors in interviewing with laboratory opportunities for the development of interviewing skills. Theoretical foundations of different approaches to interviewing, special techniques available, and research methods for evaluating interviews are critically reviewed.
- *535. **PRINCIPLES AND ORGANIZATION OF PSYCHOLOGICAL SERVICES** 3 credits. Prerequisite: Psychology 431. A review of the philosophy underlying specialized psychological services for the schools and an examination of organizational patterns and operating practices. Also offered as Education 535.
- *536. **FOUNDATIONS FOR PSYCHOLOGICAL SERVICES** 3 credits. This course establishes guiding principles for psychological work in the schools through the study of social conditions, learning theory, and personality theory as these are related to specialized techniques and procedures.
- *537. **READING AND CONFERENCE IN COUNSELING** 1 credit. Discussion and readings related to ethics and current problems in counseling. These are directed toward establishing a critical and informed professional worker.
548. **FIELD INTERNSHIP IN COUNSELING** 0-3 credits. Prerequisites: Psychology 578 and approval of the Director of Psychological Services. This provides for an academic year of college-supervised work in counseling. Arrangements must be made in cooperation with the school administration involved.
555. **ADVANCED CHILD PSYCHOLOGY** 3 credits. Prerequisite: Psychology 355 or its equivalent. The purpose of this course is to provide an accurate and coherent picture of some of the most important aspects of research in the psychology of human development. A study is made of important information about the growth, adjustments, and capacities of children from conception through childhood. Procedures for observing children and for recording and evaluating data are critically examined. Also offered as Education 555.
556. **PSYCHOLOGY OF ADOLESCENCE** 3 credits. Prerequisite: Psychology 355 or its equivalent. An advanced course dealing with the developmental characteristics, behavior problems, personal and social adjustments of children and youth, with implications for secondary education and guidance programs. Also offered as Education 556.

*Offered in summer session only.

- *560. **SEMINAR IN PUPIL ADJUSTMENT** 3 credits. Prerequisites: graduate status and teaching experience. This course is concerned with the problems of personal and social adjustment in the teaching and learning situation. The group examines the principles of psychological adjustment in relation to the classroom. Attention is given to the evaluation of research with a view to its practical application.
572. **INDIVIDUAL TESTING** 5 credits. Prerequisite: Psychology 373 or 473 or permission of the instructor. A study of the theory and principles underlying the construction of individual intelligence tests together with supervised practice in the administration of some of the most important of these tests.
575. **STATISTICAL INFERENCE FOR PSYCHOLOGY AND EDUCATION** 3 credits. Prerequisite: Psychology 373 or 473; open to senior psychology majors by permission of the instructor. A consideration of some advanced statistical methods with emphasis on the statistical inferences that may be drawn from the analysis of research data. Also offered as Education 575.
577. **ADVANCED APPRAISAL TECHNIQUES** 3 credits. Prerequisite: Psychology 572; open to senior psychology majors by permission of the instructor. A consideration of approaches to measurement with special attention to value and limitations of objective and observational aptitude, interest, and personality measures. The student manipulates sample instruments under laboratory conditions.
- *578. **ADVANCED CLINICAL PRACTICUM** 3 credits. Diagnostic and interpretive work using a variety of techniques as a team member in a central and responsible role with several complete cases.

CONCENTRATIONS IN PSYCHOLOGY

Teacher Education

FIELD MINOR:

Fifteen credits under advisement in addition to courses in psychology taken as part of the programs of general and professional education.

Arts and Sciences

MAJOR:

Psychology 200 or 201, 373, 473, 405; additional credits in psychology to total at least 36 credits selected in consultation with a departmental adviser.

Supporting courses: Sociology 201, Philosophy 201, 15 credits in the field of biological science.

MINOR:

Psychology 200 or 201; additional credits in psychology to total at least 20 credits selected in consultation with a departmental adviser.

*Offered in summer session only.

department of
SOCIOLOGY - ANTHROPOLOGY

Associate Professor: Taylor*, (*Chairman*); *Assistant Professors:* Anastasio, Brokensha, Mazur; *Instructors:* Call, Serl, Spaulding.

SOCIOLOGY

201. **CULTURE AND SOCIETY** 5 credits. Prerequisite: General Education 105. The nature and growth of culture; a survey of the range and variety of culture phenomena including social customs, social organization, political institutions, religion, art, language, and other topics. Also offered as Anthropology 201.
212. **EDUCATION AND AMERICAN SOCIETY** 3 credits. A study of the role of the school as a major institution in American society. Particular emphasis is placed upon education and social change in the last 50 years. Also offered as Education 212.
270. **INTRODUCTION TO RESEARCH METHODS** 3 credits. Prerequisite: Sociology-Anthropology 201 or Sociology 301. The nature of scientific inquiry; the development of social research; the basic methods and techniques of data-gathering, processing, and analysis. Also offered as Anthropology 270.
301. **THEORY OF SOCIAL GROUPS** 3 credits. The study of the social organization of man: small groups, formal organizations, social institutions, and social processes. The course is intended primarily to serve as an introduction to the field of sociology for students who major in sociology-anthropology.
341. **CONTEMPORARY SOCIAL PROBLEMS** 3 credits. Prerequisite: Sociology-Anthropology 201, or Sociology 301. The causes and consequences of the major social problems in American society. Emphasis is on the relation of personal and group maladjustment to conditions in a rapidly changing social system.
346. **JUVENILE DELINQUENCY** 3 credits. This course surveys individual, family, and community factors in delinquency; programs for treating delinquents in schools, social agencies, juvenile courts, and correctional institutions; community organizations for the control of delinquency. Field trips are conducted to representative agencies and institutions. Not open to students who have previously had Sociology 445.
351. **THE FAMILY** 3 credits. Prerequisite: Sociology 101. This course considers the evolution of the family; the family as a social institution in varied cultural settings; the cycle of dating, courtship, engagement, marriage and family; the problems of the family today under conditions of rapid social change.
366. **THE COMMUNITY** 3 credits. Prerequisite: Sociology 201. Patterns of social life in representative communities and their influence on the individual.
375. **STATISTICAL METHODS** 5 credits. Prerequisite: Sociology-Anthropology 201, or Sociology 301. An introduction to statistical methods and their application to the research problems of sociology and anthropology. Also offered as Anthropology 375.

*On leave 1960-61.

411. **WORLD POPULATION** 3 credits. Prerequisites: Sociology-Anthropology 201 or Sociology 301, Sociology 375. The growth, distribution, and composition of the population of the world; the theoretical and practical implications of conditions and trends in problem areas.
412. **AMERICAN POPULATION** 3 credits. Prerequisite: Sociology-Anthropology 201 or Sociology 301; Sociology 375, Sociology 411 recommended. The population of North America with particular emphasis on the United States. Growth, distribution, and composition; social and economic implications of demographic trends.
431. **SOCIAL CHANGE** 5 credits. Prerequisite: Sociology 201. A relatively detailed examination of social change in the United States (1900-1960) followed by an analysis of contemporary theories of culture change. The last section of the course is devoted to a consideration of the problems of prediction of future change. Also offered as Anthropology 431.
441. **PUBLIC OPINION** 3 credits. Prerequisites: 8 hours in American government, economics, or Sociology 201 or Anthropology 201 or consent of the instructor. A study of the factors involved in the formation of public opinion; propaganda analysis; agencies of mass impression; opinion measurement; and the role of leadership. Also offered as Government 441.
447. **RACIAL AND CULTURAL MINORITY GROUPS** 3 credits. A study of sociological and social-psychological aspects of the relationship among racial and cultural minority groups, especially in the United States.
470. **RESEARCH** 2-6 credits. Prerequisite: instructor's consent. This course is intended for the student who wishes to investigate a problem of his choice through field or library research.
483. **SOCIAL CHANGE AND THE MORAL ORDER IN RECENT LITERATURE** 4 credits. Also offered as English 483 and Philosophy 483.
485. **READING AND DISCUSSION** 3 credits. Prerequisite: 15 hours in sociology-anthropology, or instructor's consent. Selected readings in major works in the fields of cultural anthropology and/or sociology. Discussion centers on a specific topic chosen for the quarter.
490. **SEMINAR IN SOCIAL THEORY** 3 credits. A critical examination of selected problems in social theory with emphasis upon contemporary literature in the field. Also offered as Anthropology 490.

ANTHROPOLOGY

200. **HUMAN EVOLUTION AND PREHISTORY** 5 credits. The development of man; culture, origins and prehistory; criteria and theories of race and race classifications; race diffusion, contacts and problems.
201. **CULTURE AND SOCIETY** 5 credits. Prerequisite: General Education 105. The nature and growth of culture; a survey of the range and variety of culture phenomena including social customs, social organization, political institutions, religion, art, language, and other topics. Also offered as Sociology 201.
270. **INTRODUCTION TO RESEARCH METHODS** 3 credits. Prerequisite: Sociology-Anthropology 201 or Sociology 301. The nature of scientific theory; the development of social research; the basic methods and techniques of data-gathering, processing, and analysis. Also offered as Sociology 270.
360. **PEOPLES OF THE WORLD** 5 credits. A survey of the principal cultures and races of mankind.
361. **PEOPLES OF THE AMERICAS** 3 credits. A study of native Indian culture and native cultural areas in the New World.

362. **PEOPLES OF EURASIA** 3 credits. A study of European and Asiatic racial and cultural distribution.
363. **PEOPLES OF AFRICA** 3 credits. A study of the races and cultures of Africa: (a) Africa, south of the Sahara; (b) Africa, north of the Sahara.
375. **STATISTICAL METHODS** 5 credits. Prerequisite: Sociology-Anthropology 201, or Sociology 301. An introduction to statistical methods and their application to the research problems of sociology and anthropology. Also offered as Sociology 375.
431. **SOCIAL CHANGE** 5 credits. Prerequisite: Sociology 201. A relatively detailed examination of social change in the United States (1900-1960) followed by an analysis of contemporary theories of culture change. The last section of the course is devoted to a consideration of the problems of predicting future change. Also offered as Sociology 431.
448. **CULTURE CONTACT** 3 credits. A consideration of the social, economic, political, and administrative problems characteristic of cultures in contact, with particular emphasis on the processes of cross-cultural communication and ethnic relations.
470. **RESEARCH** 2-6 credits. Prerequisite: instructor's consent. This course is intended for the student who wishes to investigate a problem of his choice through field or library research.
481. **APPLIED ANTHROPOLOGY** 5 credits. Prerequisite: Sociology 201 or Anthropology 201. The utilization of anthropological theory in the practical problems of government, industry, education, and social welfare; the administration of colonial and dependent peoples.
485. **READING AND CONFERENCE** 1-5 credits. Prerequisite: 15 hours in sociology, anthropology, or instructor's consent. Selected readings in the major works in the fields of cultural anthropology and/or sociology. Discussion centers on a specific topic chosen for the quarter.
486. **READING AND CONFERENCE IN PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY** 1-5 credits. Selected reading in the major works on human paleontology or morphology or genetics, prehistory, and archaeological field techniques. The topic to be discussed in a given quarter will be determined by the professor.
487. **CULTURE AND PERSONALITY** 3 credits. Prerequisite: 12 credits in sociology, anthropology or permission of the instructor. A consideration of current theories of culture and personality with particular attention to the question of cultural influence on motivation, perception, and valuation.
490. **SEMINAR IN SOCIAL THEORY** 3 credits. A critical examination of selected problems in social theory with emphasis upon contemporary literature in the field. Also offered as Sociology 490.

**CONCENTRATIONS
IN
SOCIOLOGY — ANTHROPOLOGY**

Teacher Education

FIELD MAJOR:

Anthropology 200, Sociology 201 or Anthropology 201; Sociology 375 or Anthropology 375 recommended.

Additional courses under departmental advisement to total 40 credits.

Note: Students intending to teach in the secondary schools must receive special departmental permission to major in sociology-anthropology.

FIELD MINOR:

Sociology 201 or Anthropology 201;

Additional courses under departmental advisement to total 20 credits.

Arts and Sciences

MAJOR:

Anthropology 200, Sociology 201 or Anthropology 201, Sociology 301, Sociology 375 or Anthropology 375, Sociology 490 or Anthropology 490;

Additional courses under advisement to total 50 credits of which 20 must be upper division;

Supporting courses: two selected from the following: Biological Science 371 or General Science 406, Psychology 440 or 453, Geology 211, Geology 316, History 458, Geography 453, Geography 470, Economics 403.

MINOR:

Anthropology 200, Sociology 201 or Anthropology 201;

Additional courses under departmental advisement to total 25 credits.

department of SPEECH

*Professor: Carille, (Chairman); Associate Professors: Brewster, Herbold;
Assistant Professors: Flanders, Lyman, Schinske, Stiver.*

SPEECH

1. **REMEDIAL SPEECH** No credit. Establishment of good habits of articulation and phonation through laboratory practice. This course may be elected by any student but is required of all teaching candidates adjudged deficient in speech or voice. Establishment of good speech and voice habits is required before admission is granted to student teaching.
100. **FUNDAMENTALS OF SPEECH** 3 credits. A functional approach to effective communication. The student is given opportunity to apply principles to practical problems of speech. The aim of the course is to develop good speech and to understand the use of it as a factor in human behavior.
105. **VOICE AND ARTICULATION IMPROVEMENT** 3 credits. This is primarily a laboratory course providing the student with systematic work designed to improve voice and articulation patterns.
130. **INTRODUCTION TO THE THEATRE** 3 credits. A course aimed to increase appreciation of the art of theatre, cinema, and television. Special attention is given to play analysis, play production, and dramatic criticism. Required reading includes dramas ranging from the Greek to the contemporary theatre.
200. **SPEECH ANALYSIS** 3 credits. Prerequisites: Speech 100 and sophomore status. An analytical study of the speech process enabling the student to improve his own speech and to deal more intelligently with the refinement, rehabilitation and application to problems of others. Laboratory work includes use of recording facilities, study of sounds, oral reading improvement, and group dynamics.
201. **EXTEMPORE SPEAKING** 3 credits. Theory and practice in an extemporaneous mode of speaking. Purposeful speaking, utilizing simulated real-life situations, with close attention to the organization of ideas and their adaptation to specific audiences and occasions, is the central objective of the course. Attention is given to the speaker's needs through criticism, problems, and drill.
202. **PARLIAMENTARY LAW** 1 credit. The study of parliamentary principles and procedures. The course is designed to develop the skill in leading and participating in meetings where such procedures are used.
204. **DISCUSSION AND DEBATE** 3 credits. Forms of public discussion; debate theory and practice. The student has opportunity to apply problem solving techniques to topics of current interest. The aim of the course is to provide the student with a knowledge of and proficiency in the techniques of effective speaking and thinking on controversial issues.
- 206, 207, 208. **INTERCOLLEGIATE FORENSICS** 2 credits each. A course covering all phases of the forensic field; impromptu, extempore and after-dinner speaking, oratory, debate, etc. Students may receive a maximum of 6 credits by participating in intercollegiate forensics.

- 230, 231, 232. **THE ACTED DRAMA** 1 to 3 credits each. Admission by tryout only. A course taken by students participating in plays offered for public production. A maximum of 3 credits may be allowed for major work, with 1 or 2 credits for minor parts or responsibilities. A maximum of 6 credits may be earned in these courses.
233. **ORAL INTERPRETATION** 3 credits. The course affords practice in reading prose, poetry, and drama. It is designed to help the student determine the logical and emotional meaning of a selection and project that meaning to his listeners. A portion of the time is spent in voice development.
236. **STAGECRAFT** 3 credits. This course explores the theory and practice of planning, building, and painting scenery. Department productions each quarter provide opportunity for laboratory experiences.
237. **STAGE LIGHTING** 2 credits. Concurrent enrollment in Speech 236 is recommended. This course gives the student an opportunity to study the technical and artistic aspects of light and color as applied to stage productions. Department productions each quarter provide opportunity for laboratory experience.
238. **STAGE MAKE-UP** 1 credit. This course is designed to meet the needs of students working in drama, music, dance, and other activities involving stage production. Both theory and practice are included. Emphasis is given to actual application of make-up.
281. **SHAKESPEARE: EARLIER COMEDIES** 3 credits. Also offered as English 281.
282. **SHAKESPEARE: HISTORICAL PLAYS—ENGLISH AND ROMAN** 3 credits. Also offered as English 282.
283. **SHAKESPEARE: TRAGEDIES AND LAST COMEDIES** 3 credits. Also offered as English 283.
302. **ADVANCED PARLIAMENTARY LAW** 1 credit. Prerequisite: Speech 202. An extension and more technical development of Speech 202.
305. **ADVANCED PUBLIC ADDRESS** 3 credits. Prerequisite: Speech 100. This course combines a study of traditional and modern theories of persuasion with practical application in speaking situations. Model speeches of great American orators are studied as background for contemporary critics in the areas of composition, organization, proof, language, and delivery. Studio recording facilities permit detailed analysis of the student's speaking.
322. **DRAMA FROM 1660 TO 1850** 3 credits. A survey of European and American drama beginning with that of the Restoration period. A critical study is made of the plays and their relationship to historical and sociological events. Also offered as English 322.
323. **MODERN DRAMA** 3 credits. A study of the plays of Ibsen and Strindberg as the founders of the modern drama. Selected plays of the early twentieth century playwrights are included. Also offered as English 323.
324. **MODERN AMERICAN DRAMA** 3 credits. A comprehensive study of the plays, playwrights, and related movements of artists of the American theater, beginning with O'Neill and concluding with playwrights of the present. Also offered as English 324.
336. **DESIGN FOR THE STAGE** 3 credits. Prerequisite: Speech 236. Advanced study of the physical theatre with emphasis on creative stage and lighting design for various types of theatres and productions.

337. **ACTING 3 credits.** Prerequisite: Speech 233 or consent of the instructor. Special emphasis is given to interpretation and action on the stage. The basic aim of the course is to develop greater freedom of action and variety of voice and to apply the basic techniques of acting.
338. **COSTUMING 3 credits.** The history of costume and its adaptation to the needs and limitations of the stage. Students have opportunity to do laboratory work on dramatic productions.
340. **RADIO SPEECH 3 credits.** Prerequisite: Speech 100. An introduction to the field of radio broadcasting; discussion of and practice in the technical skills involved in producing a radio broadcast. Students are given practice in all types of radio speech activity with special emphasis on pronunciation, inflection, and general voice development. Practice in the writing of radio script and continuity is offered. Students participate in regularly scheduled broadcasts.
341. **RADIO AND TELEVISION BROADCASTING 3 credits.** Prerequisite: Speech 340 or consent of the instructor. An advanced course in the techniques of radio production and direction, with introductory treatment of television. Program preparation, direction, and evaluation, in both commercial and educational broadcasting fields, are included.
350. **SPEECH SCIENCE 3 credits.** Prerequisite: Speech 200. A course designed to give the student an understanding of the speech and hearing mechanisms, the physical aspects of speech, and the sounds of language. This course serves as both background and supplement to work done in the field of speech correction.
355. **INTRODUCTION TO SPEECH CORRECTION 3 credits.** Prerequisite: Speech 200 or equivalent. A survey of speech disorders and defects including identification, classification, diagnosis, and fundamentals of therapy. The course deals with (a) psychological and physiological nature of deviant speech; (b) development by the classroom teacher and the beginning therapist of skills instrumental in recognizing and analyzing speech handicaps and in undertaking basic therapy. Opportunity to observe a variety of clinical cases is provided. Enrollment may be concurrent with Speech 357.
356. **ARTICULATION AND VOICE DISORDERS AND DEFECTS 3 credits.** Prerequisite: Speech 355 or consent of the instructor. A study of the symptomatology, etiology, and therapy appropriate for articulation and voice deviation. Major attention is given in this course to (a) identification and differential diagnosis of children and adults with sound substitutions, distortions, omissions, and additions; (b) analysis of abnormal pitch, quality and intensity voice involvements; (c) conduction articulation and voice tests and inventories, with interpretation of results; (d) examination of functional, organic, and psychogenic causes of disorders and defects. Consideration is given to principles of treatment and techniques of therapy. Numerous cases are available for observation in class and clinic. Concurrent enrollment in Speech 357 is recommended.
- 357, 358, 359. **CLINICAL PRACTICE IN SPEECH CORRECTION 2 credits each.** Prerequisite or concurrent enrollment: Speech 355 or Speech 356. Laboratory and supervised clinical practicum dealing with the instruments, materials, methods, and techniques applicable in therapy for the more prevalent voice and articulation cases—chiefly, infantile perseveration, lisping, lolling, and delayed speech.
384. **PROGRAM MATERIALS FOR THE PUBLIC SCHOOL 2 credits.** A study of the materials, organization, and production of assembly programs in the elementary and secondary schools.
400. **SPECIAL PROBLEMS 1-3 credits.** Prerequisite: consent of the instructor. This course is available to advanced students who wish to investigate, with consultation, special problems in the fields of speech.

404. **DRAMA IN THE SECONDARY SCHOOL** 2 credits. A survey course designed to provide a general dramaturgical background for teachers who supervise dramatic activities in the junior and senior high school.
423. **CONTEMPORARY EUROPEAN DRAMA** 3 credits. A study of selected plays from the post World War I dramatists to the present. Sartre, Pirandello, Giraudoux, Eliot, O'Casey, and Beckett are among the playwrights studied.
430. **CREATIVE DRAMATICS** 3 credits. This course is designed for classroom teachers or creative dramatics leaders. It centers around the developing of original dramatizations with children. The student has opportunity to observe children's classes in creative dramatics. Emphasis is given to story selection, story telling, and story dramatization.
433. **CHILDREN'S THEATRE** 3 credits. A course dealing with the various aspects of presenting plays with children as well as plays for children. Play selection, play direction, and play production are given emphasis.
437. **PLAY DIRECTION** 3 credits. The theory and practice of stage direction including play selection, casting, and blocking. A prompt book of a one-act play is required. The reading of selected plays is also an important part of the course.
438. **ADVANCED PLAY DIRECTION** 3 credits. Prerequisite: Speech 437. Continued study of the theory and practice of direction with special emphasis on working with the actor. Each student is required to select, cast, and direct a one-act play for public presentation.
442. **RADIO WRITING** 3 credits. Prerequisite: Speech 340 or 341. Writing continuity, adapting stories and plays for radio production; opportunity for production of scripts.
450. **PHONETICS** 3 credits. A study of the sounds of the English language. Extensive use is made of the International Phonetic Alphabet in analyzing pronunciation patterns and regional dialects.
453. **INTRODUCTION TO HEARING** 3 credits. Prerequisites: Speech 355, 356. Basic consideration of the structure and functioning of the auditory mechanism; a study of the acoustics of hearing; symptomatology and pathology of hearing disorders; diagnostic techniques of pure-tone and speech audiometry; clinical rehabilitation and classroom management including fundamentals of speech, reading, and auditory training for children and adults with hearing loss involvements. Observation of clinical cases is provided.
454. **DISORDERS OF RHYTHM** 3 credits. Prerequisites: Speech 355, 357. Systematic study of stuttering, cluttering, and related disorders of rhythm. Consideration is given to the nature, classifications, and characteristics of stuttering. Theories of etiology are evaluated with emphasis on neurologic, physiologic, semantogenic, and psychogenic dimensions. Principles of therapy and techniques in clinical procedures and classroom treatment are explored. Observation of primary and secondary stutterers is a part of the course.
455. **THE SPEECH CLINIC** 3 credits. Prerequisites: Speech 355, 357. Detailed consideration of the diagnostic instruments, methods, materials, procedures, and techniques used in a clinical speech program. Attention is given to such matters as organizing a new speech clinic; integrating as a new clinician into an established program; establishing and maintaining favorable relationship with classroom teachers, administrators, parents, and public; ethics of practice and principles of professional growth and conduct.
456. **ADVANCED SPEECH CORRECTION** 3 credits. Prerequisites: Speech 355, 357. Intensive study of the complex neuropathologies and organic pathologies of speech, primarily dysarthric, dysphasic, and dysphonic involvements. Emphasis

is placed on symptoms, etiology, and therapy for cerebral palsy, aphasic and cleft palate cases. Laryngectomy and laryngo-fissure problems are considered. A variety of cases is provided for observation.

457. **458, 459. ADVANCED CLINICAL PRACTICE IN SPEECH CORRECTION** 2 credits each. Prerequisites: Speech 357 or 358 or 359 plus a minimum of 6 additional credits in the field. Laboratory and supervised clinical practicum dealing with the instruments, materials, methods, and techniques applicable in therapy for more complex cases in voice, articulation, rhythm or symbolization—chiefly, stuttering, cleft palate, aphasia, cerebral palsy, and hard of hearing.
484. **TEACHING THE INTEGRATED SPEECH PROGRAM** 2 credits. A course designed for classroom teachers providing for the development, organization, and teaching of the combined communication skills of reading, writing, speaking, and listening.
485. **TEACHING SPEECH IN THE PUBLIC SCHOOL** 3 credits. Prerequisite: consent of the instructor. This course is planned in relation to the public school program. It includes examination of materials and methods useful in teaching drama, interpretation, public address, and speech correction. Students are given opportunity to work in their field of special interest.
486. **RADIO AND TELEVISION IN THE SCHOOL** 2 credits. A course designed primarily for teachers and school administrators; it includes consideration of (1) radio and television in the school curriculum; (2) utilization of radio and television in the classroom; (3) cultural and educational aspects of radio and television. Students have opportunity to work on individual problems.
487. **DISCUSSION TECHNIQUES FOR TEACHERS AND ADMINISTRATORS** 3 credits. A course demonstrating discussion as a means to better understanding and action in human affairs. Its major aim is to cultivate attitudes and skills which will aid teachers and school administrators to engage in and lead discussions with greater competency.
488. **PUBLIC SPEAKING FOR TEACHERS AND ADMINISTRATORS** 3 credits. Advanced public speaking designed to develop additional skill in meeting speech situations in the field of education. Emphasis is on delivery, composition, audience analysis, and interests.
489. **EDUCATIONAL TELEVISION WORKSHOP** 5 credits. A laboratory course providing practical experience and the opportunity to develop skills in utilizing television as an effective educational instrument.
500. **SPECIAL PROBLEMS** 1 to 3 credits. Prerequisite: graduate status and consent of the instructor. This course is available to advanced students who wish to investigate, with consultation, special problems in the fields of speech.
558. **HEARING REHABILITATION** 2 credits. Prerequisite: Speech 453 or consent of the instructor. A study of the methods, procedures, and techniques of rehabilitating the aurally handicapped. The course provides practice in the measurement of hearing loss and the evaluation of hearing tests. Laboratory experience in speech reading and auditory training is provided.
590. **SPEECH CORRECTION FOR THE CLASSROOM TEACHER** 2 credits. Prerequisite: consent of the instructor. A course for teachers and school administrators dealing with diagnosis and correction of speech defects and disorders encountered in the classroom. Students have opportunity to observe clinical practice and to work on individual problems.

**CONCENTRATIONS
IN
SPEECH**

Teacher Education

FIELD MAJOR:

Speech 201, 204 or 206, 233, 236, 340, 355, 437, 450, 485, plus additional courses under advisement to total 40 credits.

FIELD MINOR:

Speech 204 or 206, 233 plus additional courses under advisement to total 20 credits.

Arts and Sciences

MAJOR:

Speech 201, 204 or 206, 233, 236, 340, 355, 437, 450, plus additional courses under advisement to total 40 credits.

MINOR:

Speech 204 or 206, 233, plus additional courses under advisement to total 20 credits.

department of PROFESSIONAL EDUCATION

Professors: Hammer, Hawk, Ross, Skeen, Thompson; *Associate Professors:* D. Brown, Carroil, Casanova, Hanson, Johnson, McDonald, Panches, Simpson, Watrous; *Assistant Professors:* C. Brown, W. Brown, Hodges, H. Jones, McInnes, Miller, Mumme, Nicol, Stevens, *Van Wingerden, Worthylake, _____; *Instructors:* Gregory, Irvin, Lamb, _____, _____

Courses in the Department of Professional Education are designed primarily to meet the needs of students preparing to teach. In addition to courses required in teacher education, elective courses are offered to serve individual interests and to make for better professional competence.

The pre-service teacher will find in the course offerings of the department information and experiences basic to success in the teaching profession. As an integral part of the program, contacts and experiences with children, the community, and teachers are provided in order to develop professional understanding. Students preparing to teach should follow the program of required courses as outlined on page 64. Students are urged to consult frequently with members of the Department of Teacher Education relative to their programs and preparation for teaching.

STUDENT TEACHING

Preliminary application for student teaching is made during the sophomore year with the Director of Student Teaching.** At this time, the student should have tentative plans for correlating his two student teaching experiences with other courses during the junior and senior years. The application consists of a conference, completing an information booklet, checking eligibility, discussing probable level of first teaching and areas of concentration.

Final application is made during the quarter before the first student teaching.

*On leave, 1960-61.

**Note: Transfer students with junior or senior standing must make preliminary application at the earliest date possible after enrolling in the College.

Eligibility for any student teaching course requires:

- a) minimum of junior standing
- b) minimum scholastic grade point average of 2.0
- c) completion of the following academic prerequisites or equivalents:

Education 215 and 355

A satisfactory score on an English competency test

Approval of the Director of Student Teaching is required before enrolling in the following courses: 391, 383, 392, 496, 497, 421, 492, 493, 494, 495, 561, 549.

The designations "o", "b", "c", "d", after certain course numbers indicate the education levels "primory," "intermediate," "junior high," and "senior high" respectively.

All first student teaching is scheduled between 8:30 a. m. and 1:50 p. m. Additional classes are chosen from those available at the two or three o'clock periods.

Second student teaching, Education 492, **ADVANCED TEACHING AND ITS TECHNIQUES**, is taken during the senior year. It calls for a full teaching day, Monday through Friday.

NOTE: with the merging of two departments—Education and Teaching Techniques—into the Department of Professional Education, new numbers have been assigned to courses previously listed. In order to avoid confusion or possible duplication, the previous number designation is shown in parenthesis.

EDUCATION

212. **EDUCATION AND AMERICAN SOCIETY** 3 credits. A study of the role of the school as a major institution in American society. Particular emphasis is placed upon education and social change in the last fifty years. Also offered as Sociology 212.
215. **AMERICAN EDUCATION AND THE TEACHER** 3 credits. Prerequisite: sophomore status or permission of the instructor. This course deals with the development of the American school system stressing its unique characteristics in comparison with the school systems of other nations. Special attention is given to the legal provisions for the organization, administration, and functioning of the schools in the State of Washington; the state manual requirement is thus satisfied. The role of the teacher as a member of a profession is studied. NOTE: This course is not open to freshmen. It is a prerequisite to the first student teaching experience. Education 215 replaces Education 101 or 301, and Education 341 and is not open to those who have credit in one or more of these courses.
341. **WASHINGTON STATE SCHOOL LAW** 2 credits. Prerequisite: junior status. This course considers the laws and regulations pertaining to the organization, administration, and functioning of the public schools in the State of Washington. A brief summary of the development of the public school system in America is provided as background. This course is open only to transfer students who must satisfy the state requirement in state school law or students who have credit in Education 101 or Education 301.

355. **HUMAN GROWTH AND DEVELOPMENT** 5 credits. Prerequisites: Psychology 200, Biology 104 and at least sophomore status. A study of physical, social, and emotional growth and development from birth to adulthood. Emphasis is placed upon the implications of facts and principles for curriculum content and classroom procedures. Also offered as Psychology 355.
371. **EVALUATION IN THE PUBLIC SCHOOL** 3 credits. Prerequisite: student teaching experience. A course dealing with the evaluation of the outcomes of school experience. It includes a consideration of the function of standardized and teacher-made tests. Also offered as Psychology 371.
373. **ELEMENTARY STATISTICAL METHODS IN EDUCATION** 5 credits. Prerequisite: (473) permission of the instructor. A first course in statistical procedures for educational research. Emphasis is given to the criticism of evidence, the design of simple studies, and the basic techniques of statistical inference. It is concerned with informed reading as well as with the application of statistics to original research. Also offered as Psychology 373.
- 383a, b, c, d. **OBSERVATION AND TECHNIQUES OF TEACHING** 3 credits. This course (317) is to be taken in conjunction with Education 392. It is integrated with the student teaching course to provide study of and laboratory experiences in the development of children through a public school program.
- 391a, b, c, d. **TEACHING AND ITS TECHNIQUES** 16 credits. Prerequisite: (318) Education 383 or equivalent. A supervised teaching experience taken during the junior year. The course provides observation, participation, and actual teaching under conditions similar to those for the regularly employed teacher. Study of the psychological and educational principles upon which modern teaching is based accompany the actual practice.
- 392a, b, c, d. **TEACHING AND ITS TECHNIQUES** 8 credits. This course is to be (328) taken in conjunction with Education 383. A supervised teaching experience taken during the junior year. The course provides observation, participation, and actual teaching under conditions similar to those for the regularly employed teacher. Study of the psychological and educational principles upon which modern teaching is based accompany the actual practice.
400. **SPECIAL PROJECTS IN EDUCATION** 2 - 6 credits. Prerequisite: senior status or teaching experience. In this course, individual students may undertake special supervised projects for credit. These projects must suit the purpose of the student and not be directly related to any of the regular courses offered in the catalogue.
408. **THE PSYCHOLOGY OF LEARNING** 5 credits. Prerequisite: Education 355 or permission of the instructor. A course dealing with the theories of learning, their experimental supports, and implications for instruction. Also offered as Psychology 408.
412. **PRINCIPLES OF SECONDARY EDUCATION** 3 credits. A course concerned with the evolution of the secondary school, its purpose, scope, and curriculum. Special emphasis is given to the problems of the modern secondary school as related to career planning, human relations, personal behavior, and the program of studies.
413. **HISTORY OF AMERICAN EDUCATION** 5 credits. A study of the historical development of formal education emphasizing the impact of cultural forces on the evolution of the American system of public education.
414. **COMPARATIVE EDUCATION** 3 credits. An analysis of educational systems in the major countries in terms of backgrounds, aims, types, and present functions. An effort is made to point up the significant differences and similarities existing between these systems and the American system of education.
415. **PHILOSOPHY AND THE CURRICULUM** 5 credits. Prerequisites: student teaching and senior status. This course provides a study of the traditional philosophic assumptions concerning knowledge, truth and value, and of societal conditions in-

- fluencing curriculum development. Course work involves a study of four areas: 1) development of skill in philosophical analysis; 2) application of philosophical concepts to curriculum design; 3) application of philosophical concepts to instructional content and method; 4) application of sociological concepts to curriculum development and implementation.
420. CURRICULUM WORKSHOP 5 credits. Prerequisite: a course in student teaching (438) or teaching experience. This course provides some observation of children, laboratory work in various skills, opportunity to develop integrated curriculum materials, and work on individual projects. It may be accepted as a part of the student teaching requirement or taken as an elective.
421. THE ELEMENTARY SCHOOL CURRICULUM 3 credits. Prerequisite: teaching experience or departmental permission. The primary concern of the course is a consideration of current theories and practices in curriculum organization.
422. THE JUNIOR HIGH SCHOOL CURRICULUM 3 credits. Prerequisite: teaching experience or departmental permission. A course comparable to Education 421, but designed for teachers in the junior high school. Special attention is given to the core curriculum as well as to other types of curricular organization.
423. THE SECONDARY SCHOOL CURRICULUM 3 credits. Prerequisite: teaching experience or departmental permission. This course deals with several basic curricular organizations and the implementation of secondary school principles through the curriculum. Curriculum planning and construction are fundamental aspects of the course.
424. LANGUAGE ARTS IN THE CURRICULUM 3 credits. Prerequisite: teaching experience or departmental permission. A study of the functions of the language arts in the curriculum involving a review of research, an analysis of current trends, and a formulation of programs.
428. COMMUNITY RESOURCES AS MATERIALS OF INSTRUCTION 3 credits. The major purpose of this course is to develop an intelligent and effective use of community source materials in instruction. The immediate community is used as a laboratory for projects in the use of source materials.
429. THE CORE CURRICULUM IN THE SECONDARY SCHOOLS 3 credits. Prerequisite: Education 415 or teaching experience. This course provides (1) an examination of the principles, procedures, and types of core organization, (2) an intensive study of instructional procedures in the language arts and social studies core programs, and (3) practice in the development of core materials.
431. INTRODUCTION TO GUIDANCE AND PSYCHOLOGICAL SERVICES 3 credits. Prerequisite: 15 hours of psychology. An introduction to the organization and implementation of guidance and psychological services in the schools. The roles of the teacher, principal, psychologist, counselor, and other specialists in an integrated program are discussed. Various guidance and counseling techniques are examined and evaluated. Professional problems and trends are studied. Also offered as Psychology 431.
442. SCHOOL AND COMMUNITY RELATIONS 3 credits. A study of the principles of (416) human behavior in school-community situations. This course involves a critical examination of the human relations factors and how they impinge upon the school. These factors include clearing the lines of communication, defining issues and responsibilities, resolving personnel difficulties, and techniques for developing good working relationships. The course also includes a study of techniques for conducting the teacher-parent interview and for interpreting school policies and objectives.
447. THE DEVELOPMENT OF INTEGRATED INSTRUCTIONAL PROGRAMS IN THE ELEMENTARY SCHOOL 5 credits. Prerequisites: teaching experience or student teaching. A workshop type course in which the members of the class develop programs of instruction that integrate materials, skills, and understandings from

several of the usual subject areas. Readings and discussions around some unifying problem or topic are also centered on how an integrated program functions in a school.

455. **PSYCHOLOGY FOR TEACHERS** 5 credits. Prerequisites: Education 355 and 392. (This course and first student teaching may be taken concurrently.) This course is concerned with application of psychological principles to: (1) problems of personality formation and psychological adjustment, and (2) problems of classroom learning.
461. **ROLE OF THE CLASSROOM TEACHER IN THE EDUCATION OF THE EXCEPTIONAL CHILD** 3 credits. Prerequisite: senior or graduate standing. A workshop in the identification, instruction, and development of children with mild or moderate handicaps or with exceptional ability. The areas of study include orthopedic problems, speech, hearing, vision, low vitality, and epilepsy. Problems of the gifted and of the dull child are also studied. This course is designed for the regular classroom teacher who is facing the problems of the exceptional child and provides as far as possible some appropriate educational opportunities. Laboratory activities include demonstrations, observations, clinics, and field trips.
462. **METHODS AND MATERIALS FOR EXCEPTIONAL CHILDREN** 3 credits. In addition to providing a working definition of objectives for teaching exceptional children this course deals with organization, facilities, and materials needed for their classes and with the development of programs appropriate for them.
463. **METHODS AND MATERIALS FOR REMEDIAL READING** 3 credits. Prerequisite: Education 485 or teaching experience. This course deals with the following: identification of the causes of reading difficulty; selection of children who may profit through work in remedial reading; organization, facilities, and materials needed for learning situations which will meet the learner's needs; techniques especially adapted to remedial reading.
466. **THE BRIGHT AND GIFTED CHILD** 3 credits. Prerequisite: teaching experience or permission of the instructor. A study of identification procedures, curriculum, and teaching methods suited to the education of children with superior and special abilities.
471. **THE CLASSROOM USE OF STANDARDIZED TESTS** 3 credits. Prerequisite: Education 371 or permission of the instructor. This course is designed to acquaint teachers with a variety of available standardized tests for classroom use. Consideration is given to problems involved in the selections of tests, in their administration, and in the interpretation of norms.
472. **CLASSROOM DIAGNOSIS** 3 credits. Prerequisites: student teaching and senior standing. This course is aimed at the development of teacher skills in (a) observing human behavior and determining the underlying causes of this behavior; (b) identifying the characteristics of the bright and talented child, those with physical handicaps, and those with emotional, social, and educational maladjustments. A critical survey is made of the instruments useful to classroom teachers in evaluating these characteristics. The development of skill in administration of evaluative instruments is not an objective of the course.
481. **TEACHING ELEMENTARY SCHOOL SUBJECTS** 3 credits. Prerequisite: senior status or teaching experience. A study of the organization, content, and instructional practices appropriate to the elementary school subjects. The course stresses the relation of research in child development and instructional techniques to the practical problems of instruction.
482. **THE CONSTRUCTION OF AUDIO-VISUAL MATERIALS FOR THE CLASSROOM** 2 credits. Prerequisite: Education 489 or equivalent, recommended. A course in which students become acquainted with a wide variety of techniques for the production of instructional materials by teacher and/or pupils. This is a laboratory workshop course in which students engage in the construction of instructional aids.

- 483a, b, c, d. **ADVANCED OBSERVATION AND TECHNIQUES FOR EXPERIENCED TEACHERS** 3 credits. Offered only in the summer session. This course, based upon observation in the Campus School, provides for a study of children in a school-room situation and deals with problems of the school curriculum. (417)
484. **ADVANCED OBSERVATION AND TECHNIQUES. THE TEACHING OF SOCIAL STUDIES IN THE ELEMENTARY SCHOOL** 3 credits. Prerequisite: teaching experience. Emphasis in this course is placed on preparation of social studies units with attention to related fine arts and communicative skills. This is a laboratory experience involving observation in the Campus School. (407)
485. **TECHNIQUES OF READING** 3 credits. Prerequisite: student teaching experience. Emphasis is placed on the importance of attitudes in maintaining normal progress in the acquisition of reading skills. Study is made of the factors conducive to desirable attitudes. The specific skills which constitute general reading ability are analyzed as are the procedures suited to their development. Each student is expected to study some problems of reading specifically connected with his own field of teaching. Also offered as English 485. (405)
486. **CLASSROOM TECHNIQUES IN CONSERVATION EDUCATION** 2 credits. A course devoted to the study of conservation materials and the techniques of using them in the classroom. This course is always taken in conjunction with Education 496. It provides actual camp living and field trips as well as seminars in classroom techniques. (449)
487. **INSTRUCTIONAL PROBLEMS OF ELEMENTARY TEACHERS** 5 credits. Prerequisite: teaching experience or departmental permission. The course is concerned with a critical examination of pupil-teacher relationships, selection and organization of instructional materials, curriculum development, and group planning. (425)
488. **INSTRUCTIONAL PROBLEMS OF SECONDARY TEACHERS** 3 credits. Prerequisite: teaching experience or departmental permission. A course comparable to Education 425 but designed for teachers in the secondary school. It includes a critical examination of the problems of pupil-teacher relationships, curriculum developments, group planning, and supervision of co-curricular activities. (426)
489. **AUDIO-VISUAL INSTRUCTION** 3 credits. A course designed to acquaint the student with varied types of audio-visual aids, technical processes, educational procedures, and the administration of audio-visual instruction. Students are instructed in operation of motion, opaque, and slide-film projectors, tape recorders, and other sound and visual apparatus. (465)
- 491a, b, c, d. **ADVANCED TEACHING AND ITS TECHNIQUES** 8 credits. Prerequisite: student teaching experience. A supervised teaching experience taken during the senior year. The work of the course is built for each student upon the strengths and weaknesses of his first student teaching course and should round out his practice in all phases of the total program of a public school teacher. (418)
- 492a, b, c, d. **ADVANCED TEACHING AND ITS TECHNIQUES** 16 credits. Prerequisite: Education 392. A supervised teaching experience taken during the senior year. The student is expected to have attained a maximum preparation for this final student teaching which usually is done at the preferred educational level. (428)
494. **TEACHING REMEDIAL READING** 5 credits. Prerequisite: Education 463 or equivalent (may be taken concurrently) and senior standing. Observation and teaching in an elementary age remedial reading room. (478)
495. **TEACHING EXCEPTIONAL CHILDREN** 5 credits. Prerequisites: teaching experience and at least senior standing; Teaching Techniques 462 (may be taken concurrently). This course provides laboratory opportunities to work with exceptional children both individually and in a group situation. (488)

496. **ADVANCED TEACHING AND ITS TECHNIQUES IN OUTDOOR EDUCATION**
(448) 8 credits. Prerequisite: approval of the Director of Student Teaching. In general, this course is appropriate for experienced teachers who wish to acquire the point of view and specific skills which are essential for effective outdoor education. The course may be accepted as a part of the student teaching requirement or may be taken as an elective.
497. **ADVANCED TEACHING AND ITS TECHNIQUES IN OUTDOOR EDUCATION**
(468) 5 credits. Prerequisite: approval of the Director of Student Teaching. In general, this course is appropriate for experienced teachers who wish to acquire the point of view and specific skills which are essential for effective outdoor education. The course may be accepted as a part of the student teaching requirement or may be taken as an elective. This course is the same as Education 496, except that it is offered for a shorter period and for less credit.
500. **SPECIAL PROJECTS IN EDUCATION** 3-5 credits. In this course, individual students may undertake special, supervised projects for credit. These projects must suit the purpose of the student and not be directly related to any of the regular courses offered in the catalogue.
501. **INTRODUCTION TO GRADUATE STUDY** 4 credits. Prerequisite: graduate status. An examination and study of experimental, documentary, case study, survey, and other methods of educational research and investigation. This course is required during the first quarter of the student's program toward the master's degree.
511. **EDUCATIONAL SOCIOLOGY** 3 credits. A course concerned with the analysis of the major problems in American culture as they relate to education. Problems considered include social stratification, individual-group interaction, the family, social attitudes and prejudices, public health and welfare.
512. **BASIC CONCEPTS OF EDUCATION** 4 credits. Prerequisite: Education 501. A course devoted to the study of philosophical, psychological, and sociological concepts basic to a deeper understanding of education. Philosophical concepts are developed in relation to the structures and functions of philosophy, major philosophical positions, and contemporary expressions of the experimental and classic theses. Psychological concepts relate to behavioristic and holistic theories of learning and their influence on educational method. Cultural concepts are studied and applied to the problems of societal pressures on the school, social change, and the role of the school, freedom, and control in education.
513. **CURRENT EDUCATIONAL ISSUES AND TRENDS** 4 credits. Prerequisite: Education 501. A course in which current educational issues, involving aims, functions, and agencies, are examined. This course is primarily concerned with problems which involve clashing points of view and their constructs as related to philosophical, psychological, and sociological concepts.
515. **PHILOSOPHY OF EDUCATION** 5 credits. A philosophical study of beliefs, assumptions, and judgments concerning such topics as teaching and learning, intellect and moral training, subject matter and skills, desirable ends, and appropriate means of schooling. The course deals with both the historical and contemporary aspects of educational philosophy. It involves: (1) an examination and comparison of the writings on educational theory of outstanding contributors from Plato to Dewey; (2) an examination of selected contemporary commentaries on American education. Also offered as Philosophy 515.
521. **SEMINAR IN CURRICULUM DEVELOPMENT** 5 credits. Prerequisite: teaching experience or Education 421 or Education 423. A course concerned with the problems of initiating, developing, and evaluating curricular programs.

522. **SEMINAR IN CURRICULUM PLANNING AND ADMINISTRATION** 3 credits. Prerequisite: 3 hours credit in a basic curriculum course. This is a course primarily for curriculum directors, principals, and teachers having the major responsibility for developing a program consistent with a stated philosophy of education. The seminar is concerned with a total pattern for grades one through twelve. Among the matters dealt with are (a) the planners and their respective responsibilities; (b) administrative policies and community understanding; (c) educational goals and pupil achievement; (d) the achievement of continuity and coordination in the school program; (e) experimental and evaluation procedures.
531. **SUPERVISED PRACTICE IN GUIDANCE AND COUNSELING** 3 credits. Prerequisite: Education 431 and Psychology 572. A course in which the student critically examines and practices under supervision various guidance and counseling techniques, including the use of tests, case studies, and conferences. Also offered as Psychology 531.
535. **PRINCIPLES AND ORGANIZATION OF PSYCHOLOGICAL SERVICES** 3 credits. Prerequisite: Psychology 431. A review of the philosophy underlying specialized psychological services, and an examination of organizational patterns and operating practices. Also offered as Psychology 535.
541. **PUBLIC SCHOOL ORGANIZATION AND ADMINISTRATION** 3 credits. This course stresses practical problems related to administration of school personnel, plant, and program. The structure and organization of the school system is considered.
542. **WORKING WITH STUDENT TEACHERS** 3 credits. A course for experienced teachers who have worked or may be working with student teachers in cooperation with a college teacher-education program. It includes a study of the literature of the field, techniques for the orientation of student teachers, study of the major problems which confront student teachers, and evaluation of achievement in student teaching. The program of study is of value also to teachers who have responsibility for working with beginning teachers, and to curriculum coordinators.
543. **SUPERVISION IN THE PUBLIC SCHOOLS** 3 credits. Supervision is studied as educational leadership in the development and periodic revision of plans for the continuous evaluation and improvement of school practice. Emphasis is upon problems growing out of supervisor-teacher relationships.
544. **ORGANIZATION AND ADMINISTRATION OF AUDIO-VISUAL MATERIALS** 3 credits. (565) Prerequisite: Education 489, or permission of the instructor. Basic problems and principles in establishing and directing an audio-visual service center. Special attention is given to coordinating, staffing, financing, housing and evaluating the service as well as to assisting in the proper use of audio-visual aids.
545. **PUBLIC SCHOOL FINANCE** 3 credits. Prerequisite: Education 541. A study of the problems involved in school finance, including budgetary and accounting procedures. Concentration is upon problems of particular school systems.
546. **PUBLIC SCHOOL BUILDINGS AND FACILITIES** 3 credits. Prerequisite: Education 541. Planning of school building programs through analysis of population trends in the community; examining the relationship of school plant to the educational program of the school; and exploration of problems in utilization of school facilities.
547. **SCHOOL DISTRICT PLANNING** 3 credits. Prerequisite: graduate status or permission of the instructor. This course is concerned with programs for school district planning; it deals with materials and methods in the graphic presentation of data. Class work includes lectures, discussion, and laboratory work.
548. **FIELD EXPERIENCE IN ADMINISTRATION FOR THE SCHOOL PRINCIPAL** 1-5 credits. This course is open to applicants for the principals' credential who have been

admitted to candidacy for the master's degree. It meets the State Board of Education requirement that credential candidates be provided programs of observation and participation in administrative activities. Plans and procedures are developed jointly by the candidate, the local school district, and the College. An agreement is filed covering the activities to be provided by the district and the requirements of the College in reading and reporting. The time requirement, exclusive of study, reporting, and travel is 22 clock hours per quarter-hour credit.

551. **SEMINAR IN PUPIL ADJUSTMENT** 3 credits. Prerequisite: graduate status and teaching experience. This course is concerned with the problems of personal and social adjustment in the teaching and learning situation. The group examines the principles of psychological adjustment in relation to the classroom. Attention is given to the evaluation of research with a view to its practical application.
- (560)
555. **ADVANCED CHILD PSYCHOLOGY** 3 credits. Prerequisite: Education 355 or its equivalent. This course covers important research in the psychology of human development. A study is made of the growth, adjustments, and capacities of children from conception through childhood. Also offered as Psychology 555.
556. **PSYCHOLOGY OF ADOLESCENCE** 3 credits. Prerequisite: Education 355 or its equivalent. An advanced course dealing with the developmental characteristics, behavior problems, personal and social adjustments of children and youth with implications for secondary education and guidance programs. Also offered as Psychology 556.
561. **ADVANCED PROBLEMS IN SPECIAL REMEDIAL EDUCATION** 3 to 5 credits. Prerequisites: graduate status and permission of the instructor. A study of the educational programs, the supervision, the financial support, the state institutions and other agencies responsible for special and remedial education; specialized problems related to exceptional children; observation of specialized classes.
- (507)
562. **CURRICULUM AND PROBLEMS OF INSTRUCTION FOR THE SLOW LEARNER** 3 credits. Prerequisite: graduate status and teaching experience, or permission of the instructor. This course is concerned with the problems of diagnosis, class organization, selection of curriculum content and instructional aids, and with teaching the slow learner. Ways of meeting individual needs in special and regular classes are presented and evaluated.
- (525)
570. **FIELD PROJECT OR THESIS** 6 credits. Prerequisite: approval of the student's graduate committee. In this course graduate students undertake a field project or a research study under the direction of a faculty committee. The field project, report, or thesis must be written to conform to the standards given in Campbell's "Form Book for Thesis Writing." The field project or thesis may be done off-campus between periods of residence work; however, residence credit is allowed. Work on the field project or thesis should be started before the last quarter of graduate work.
571. **THEORY AND TECHNIQUE OF EDUCATIONAL MEASUREMENT** 3 credits. Prerequisite: Education 473 or permission of the instructor. An advanced course in the tools and methods of educational measurement. Consideration is given to the procedures used in the standardization of tests and in the study of test validity and reliability with special emphasis on research in the field.
575. **STATISTICAL INFERENCE FOR PSYCHOLOGY AND EDUCATION** 3 credits. Prerequisite: Education 373 or 473; open to senior psychology majors by permission of the instructor. A consideration of some advanced statistical methods with emphasis on the statistical inferences that may be drawn from the analysis of research data. Also offered as Psychology 575.

- 585. ADVANCED TECHNIQUES IN THE TEACHING OF READING** 3 credits. Prerequisites: Education 485 and teaching experience. This course deals with the following: recent research in the teaching of reading; principles of learning upon which modern reading methods are based; analysis of current reading texts and programs; measurement of reading achievement; evaluation of mechanical devices for the improvement of reading.
- 596. ADVANCED SUPERVISION AND LEADERSHIP IN OUTDOOR EDUCATION** 8 credits. (548) Prerequisites: Education 496, teaching experience, graduate standing, and permission of the Director of Student Teaching. This course is planned specifically as preparation for direction or supervision of an outdoor education school program or camp.

Summary of Enrollment

Resident

Summer Quarter, 1959.....	1826
Fall, Winter, Spring, 1959-60..... (minus duplicated names)	2954
<hr/>	
Total	4780
Correspondence	497
Evening	544
Extension	163
<hr/>	
TOTAL ENROLLMENT	5984

Campus School

Kindergarten through sixth grade, 1959-60	176
Summer Session, 1959	204
<hr/>	
Total	380
Deductions for names duplicated	19
<hr/>	
TOTAL ENROLLMENT, CAMPUS SCHOOL	361

Degrees and Certificates

Degrees granted from August, 1959, to June, 1960, inclusive:

Degree of Master of Education	46
Degree of Bachelor of Arts in Education	412
Degree of Bachelor of Arts	54
<hr/>	
Total	512

Certificates issued from August, 1959, to June, 1960, inclusive:

Three-Year Elementary Certificate	25
Provisional General Certificate	389
<hr/>	
Total	414

Recommended for certification to the State Superintendent of Public Instruction:

Standard General Certificate	172
------------------------------------	-----

INDEX

	Page		Page
Academic Advisement.....	58	Deficiencies, English.....	116
Academic Probation.....	40	Degree Requirements.....	63, 78
Academic Regulations.....	34	Degrees Granted 1959-1960.....	206
Accreditation of the College.....	25	Division of Graduate Study.....	71
Activities, Student.....	44	Economics, Business, and	
Administrative Officers.....	8	Government, Department of.....	107
Admission — Advance Standing.....	33	Economics Concentrations.....	110
Admission — Freshmen.....	32	Economics Courses.....	107
Admission — General Provisions.....	31	Education Courses.....	197
Admission to Graduate Standing.....	71	Education, Department of.....	196
Admission — Provisional.....	32	Employment, Part-Time.....	54
Advanced Placement, Mathematics.....	153	English Concentrations.....	123
Anthropology Courses.....	187	English Courses.....	118
Art Concentrations.....	100	English Deficiencies.....	116
Art Courses.....	96	English, Department of.....	116
Artist & Lecture Series.....	48	Enrollment Summary.....	206
Arts and Sciences Curriculum.....	29	Entrance Deficiencies.....	32
Arts and Sciences Program.....	78	Entrance Tests.....	31
Attendance Regulations.....	37	Examinations, Final.....	39
Audio-Visual Center.....	82	Extension Study.....	82
Auditors.....	37	Faculty - 1959-1960.....	10
Bachelor of Arts in Education,		Faculty Councils.....	23
Degree Requirements.....	63	Faculty - Emeriti.....	9
Bachelor of Arts,		Faculty, New Appointments, 1960.....	22
Degree Requirements.....	78	Fees.....	50
Biological Science Concentrations.....	106	Fees, Refund.....	52
Biology Courses.....	102	Finances, Student.....	50
Board of Education, State.....	7	Food Service.....	44
Board of Trustees.....	7	Foreign Language Concentrations.....	127
Board and Room.....	53	Foreign Language, Department of.....	124
Botany Courses.....	103	Foreign Language Education Courses.....	86
Business Education Concentrations.....	112	French Courses.....	124
Business Education Courses.....	111	General Certificate-Fifth Year.....	69
Buildings.....	26	General Education Courses.....	85
Calendar, Official.....	4	General Education Courses,	
Certificates Issued - 1959-1960.....	206	Required.....	64, 79
Certification, Teacher.....	61	General Science Courses.....	86
Chemistry Concentrations.....	181	Geography Concentrations.....	130
Chemistry Courses.....	180	Geography Courses.....	128
College Loan Fund.....	55	Geology Concentrations.....	134
College Objectives.....	27	Geology Courses.....	132
College Program.....	29	German Courses.....	124
Correspondence, Directions for.....	6	Government Concentrations.....	115
Correspondence Study.....	81	Government Courses.....	113
Costs, Estimated Total.....	54	Grade Point Averages.....	38
Costs, Living.....	53	Grade Points.....	38
Counseling.....	58	Grade Reports.....	38
Course Listings, Guide to.....	93	Grading System.....	37
Course Sequences.....	68	Graduate Study.....	71
Courses, Interdepartmental.....	85	Graduation, Application for.....	39
Courses, Numbering System.....	85	Health Education Courses.....	173
Credit by Examination.....	39	Health Examination.....	31
Credits, Definition of.....	35	Health Service.....	59, 83
Curricula.....	29	Health Science Courses.....	103
Deficiencies at Entrance.....	32	History of the College.....	25
Deficiencies, Mathematics.....	153	History Concentrations.....	138

Index Continued

	Page		Page
History Courses.....	135	Physical Science Courses.....	87
Home Economics Concentrations.....	144	Physics Concentrations.....	179
Home Economics Courses.....	140	Physics Courses.....	177
Honors Courses.....	86	Placement Office.....	59
Honors Program.....	30	Probation, Academic.....	40
Housing, Financial Arrangements.....	43	Professional Education Department.....	196
Housing, Married Students.....	43	Program of Arts and Sciences.....	78
Housing, Off Campus.....	42	Program of the College.....	29
Industrial Arts Concentrations.....	150	Program of Instruction.....	61
Industrial Arts Courses.....	145	Program of Teacher Education.....	61
Interdepartmental Concentrations.....	91	Psychological Services.....	59, 83
Interdepartmental Courses.....	85	Psychological Services, Staff.....	8
Junior College Curriculum.....	30	Psychological Concentrations.....	185
Junior College Program.....	81	Psychology Courses.....	181
Latin Courses.....	125	Recreation Courses.....	173
Librarians, Courses for.....	152	Recreational Program.....	49
Library.....	82	Refund of Fees.....	52
Library Science Concentrations.....	152	Registration, Late.....	34
Library Science Courses.....	151	Religious Organizations.....	47
Library Staff.....	8	Requirements, Physical Education.....	167
Living Costs.....	53	Residences, Student.....	41
Load, Academic.....	36	Resident Status.....	37
Loans.....	55	Russian Courses.....	125
Loans, Emergency.....	55	Scholarships.....	55
Loans, NDEA.....	55	Scholarship, Low.....	40
Majors, Broad Area.....	66	Scholarships, Music.....	56
Majors and Minors, Arts and Sciences.....	80	School Librarians, Preparation of.....	152
Majors and Minors, Teacher Education.....	65, 67	Sequence of Courses.....	68
Master of Education Degree.....	71	Social Studies Education Courses.....	90
Master's Degree, Candidacy for.....	73	Sociology Courses.....	186
Master's Degree - Options.....	74	Sociology-Anthropology Concentrations.....	189
Mathematics, Advanced Placement.....	153	Spanish Courses.....	125
Mathematics Concentrations.....	156	Special Students.....	37
Mathematics Courses.....	153	Speech Concentrations.....	195
Mathematics, Deficiencies.....	153	Speech Courses.....	190
Music Concentrations.....	163	Student Activities.....	44
Music Courses.....	158	Student Finances.....	50
Music Program.....	157	Student Living.....	41
Music Scholarships.....	56	Student Organizations.....	45
NDEA Loans.....	55	Student Personnel Services.....	57
Non-matriculated Students.....	33	Student Teaching.....	196
Nursing.....	81	Summary of Enrollment.....	206
Objectives of the College.....	27	Teacher Certification in Washington.....	61
Organizations, Religious.....	47	Teacher Education Curricula.....	29
Organizations, Student.....	45	Teacher Education Program.....	61
Orientation Program.....	57	Tests at Entrance.....	31
Part-Time Employment.....	54	Trustees, Board of.....	7
Personnel Services.....	30	Tuition.....	50
Philosophy Concentrations.....	165	Veterans.....	57
Philosophy Courses.....	164	Warning, Low Scholarship.....	41
Physical Education Concentrations.....	174	Welcome Week.....	34, 57
Physical Education Courses.....	167	Withdrawal from College.....	35
Physical Education Requirements.....	167	Withdrawal from Courses.....	35
		Zoology Courses.....	105

western washington college of education

bellingham, washington

